Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-5489; AD 86-25-06

Airworthiness Directives; Bellanca Model 17-30, 17-30A, 17-31, 17-31A, 17-31TC and **17-31ATC** Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective December 22, 1986.

Regulatory Information

86-25-06 BELLANCA: Amendment 39-5489. Applies to the following models and serial numbered airplanes, certificated in any category, not equipped with an FAA approved drain valve for each wing main fuel tank and each wing auxiliary fuel tank:

MODEL	SERIAL NUMBERS (S/N)
17-30	All
17-30A	S/Ns 30-263 thru 30-977
17-31	All
17-31A	S/Ns 32-15 thru 32-172
17-31TC	All
17-31ATC	S/Ns 31-004 thru 31-155

Note: The serial numbers listed above may be prefixed by a two-digit number indicating the last two digits of the year of manufacture.

Compliance: Required within the next 50 hours time-in-service after the effective date of this AD, unless already accomplished.

To prevent engine power loss due to the accumulation of water or other contaminants in the fuel system, accomplish the following:

(a) For each wing main fuel tank and each wing auxiliary fuel tank not having an FAA approved drain valve of any style, install a flush quick drain valve as follows:

(1) Drain the fuel tank.

(2) Remove the fuel tank drain plug, AN 932-2, from the drain boss at the bottom aft portion of the fuel tank. For tanks comprised of interconnected cells, each cell having its own drain boss, remove the drain plug from the inboard cell of the tank.

(3) Install a flush quick drain valve, P/N F391-18 or equivalent.

Note: These pipe thread valves produced by Manufacturing Division, Inc. are available from Bellanca, Inc., Post Office Box 964, Alexandria, Minnesota 56308; Telephone (612) 762-1501.

(4) Refuel the tank and check for leaks.

(b) Fabricate and install a permanent placard in full view of the pilot, using letters with minimum 1/10 inch height, which states the following: "DRAIN ALL FUEL SUMPS BEFORE FIRST FLIGHT OF EACH DAY."

(c) The requirements of paragraph (b) of this AD may be accomplished by the holder of a pilot certificate issued under Part 61 of the Federal Aviation Regulations (FAR) on any airplane owned or operated by him. The person accomplishing these actions must make the appropriate aircraft maintenance record entry as prescribed by FAR 91.173.

(d) Airplanes may be flown in accordance with FAR 21.197 to a location where this AD may be accomplished.

(e) An equivalent method of compliance with this AD, if used, must be approved by the Manager, Chicago Aircraft Certification Office, FAA, 2300 East Devon Avenue, Des Plaines, Illinois 60018; Telephone (312) 694-7357.

This amendment becomes effective on December 22, 1986.

Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [64 FR 66747 11/30/99]

Docket No. 98-CE-87-AD; Amendment 39-11434; AD 99-24-10

RIN 2120-AA64

Airworthiness Directives; Precise Flight, Inc. Model SVS III Standby Vacuum Systems
PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to all aircraft equipped with Precise Flight, Inc. Model SVS III standby vacuum systems installed in accordance with the applicable supplemental type certificate (STC) or through field approval. This AD requires incorporating revised operating limitations for the affected standby vacuum systems into the airplane flight manual (AFM), and repetitively inspecting the push-pull cable, vacuum lines, saddle fittings, and shuttle valve for correct installation and damage (wear, chafing, deterioration, etc.). This AD also requires immediately correcting any discrepancy found and conducting a function test of the vacuum system after the inspections. This AD is the result of reports of shuttle valve failure and standby vacuum system malfunction on aircraft. The actions specified by this AD are intended to detect and correct problems with the standby vacuum system before failure or malfunction and to provide operating procedures for the pilot regarding the use and limitations of this system.

DATES: Effective January 14, 2000.
The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of January 14, 2000.

ADDRESSES: Service information that applies to this AD may be obtained from Precise Flight, Inc., 63120 Powell

Butte Road, Bend, Oregon 97701; telephone: (800) 547-2558. This information may also be examined at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 98-CE-87-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North
Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Ms. Dorothy Lundy, Aerospace Engineer, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW, Renton, Washington 98055-4065; telephone: (425) 227-2260; facsimile: (425) 227-1181.

SUPPLEMENTARY INFORMATION:

Events Leading to the Issuance of This AD

A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to all aircraft equipped with Precise Flight, Inc. Model SVC III standby vacuum systems installed in accordance with the applicable supplemental type certificate (STC) or through field approval was published in the **Federal Register** as a notice of proposed rulemaking (NPRM) on July 7, 1999 (64 FR 36618). The NPRM proposed to require incorporating revised operating limitations for the affected standby vacuum systems into the airplane flight manual (AFM), and repetitively inspecting the push-pull cable, vacuum lines, saddle fittings, and shuttle valve for correct installation and damage (wear, chafing, deterioration, etc.). The NPRM also proposed to require immediately correcting any discrepancy found and conducting a function test of the vacuum system after each inspection.

The NPRM was the result of reports of shuttle valve failure and standby vacuum system malfunction on aircraft.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposed rule or the FAA's determination of the cost to the public.

The FAA's Determination

After careful review of all available information related to the subject presented above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. The FAA has determined that these minor corrections will not change the meaning of the AD and will not add any additional burden upon the public than was already proposed.

Compliance Time of This AD

The compliance times of this AD are presented in calendar time. Although malfunction or failure of the standby vacuum systems is only unsafe while the aircraft is in flight, the condition is not a direct result of repetitive aircraft operation. The unsafe condition could exist on a standby vacuum system installed on an aircraft with only 50 hours time-in-service (TIS), but may not develop on another standby vacuum system installed on an aircraft until 1,000 hours TIS. The inspection compliance times are utilized to coincide with annual inspections so as to allow the owner/ operator of the aircraft to have the required action accomplished at a time when he/she has already scheduled maintenance activities.

Cost Impact

The FAA estimates that 10,000 standby vacuum systems will be affected by this AD, that it will take approximately 3 workhours per vacuum system to accomplish the actions, and that the average labor rate is approximately $60 an hour. Based on these figures, the total cost impact of this AD on U.S. operators is estimated to be $1,800,000, or $180 per airplane.

These figures only take into account the costs of the initial inspection and initial functional test of the standby vacuum systems; subsequent inspections and functional tests and any corrective actions are not included in the cost impact.

The FAA has no way of determining the number of repetitive inspections and functional tests each airplane owner/ operator will incur over the life of an airplane incorporating one of the affected standby vacuum systems. The FAA also has no way of determining the number of standby vacuum systems that will require corrective action based on the inspection results.

Regulatory Impact
This rule does not have Federalism implications as defined in Executive Order No. 13132. This means it does not have substantial direct effects 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. The FAA has not consulted with state authorities prior to publication of this rule. For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES".

List of Subjects in 14 CFR Part 39
Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

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

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. Section 39.13 is amended by adding a new airworthiness directive (AD) to read as follows:

Regulatory Information

99-24-10 PRECISE FLIGHT, INC.: Amendment 39-11434; Docket No. 98-CE-87-AD. Issued November 15, 1999.
Applicability: Model SVS III standby vacuum systems, installed on, but not limited to, the aircraft listed in the following chart. These systems can be installed either in accordance with the applicable supplemental type certificate (STC) or through field approval:

Affected STC	Make and Model Airplanes
SA2160NM	Raytheon Beech Models 23, A23, A23A, A23-19, 19A, B19, B19A, A23-24, B23, C23, A24, A24R, B24R, C24R, 35, A35, B35, C35, D35, E35, F35, G35, 35R, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A, F33C, G33, 36, A36, A36TC, B36TC, 4S(YT-34), A45(T-34A, B-45), D45(T-34B), and 77 Series
SA2161NM	Raytheon Beech Model V35B

SA2162NM	Cessna Models 120, 140, 140A, 150, 150A, 150B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, 150L, A150L, 150M, 152, A152, A150K, A150M, 170, 170A, 170B, 172, 172A, 172B, 172C, 172D, 172E, 172F (USAFT-41A), 172G, 172H(USAFT-41A), 172I, 172K, 172L, 172M, 172N, 172P, 172Q, 175, 175A, 175B, 175C, P172D, R172E (USAFT-41B, USAFT41-3, and USAFT-41D), R172F (USAFT-41D and USAFT-41C), R172G (USAFT-41D), R172H (USAFT-41D), R172J, R172K, 172RG, 177, 177A, 177B, 177RG, 180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, 180K, 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182RG, T182, T182RG, T182R, 185, 185A, 185B, 185C, 185D, 185E, A185E, A185F, 188, 188A, 188B, A188, A188B, T188C, 206, P206, P206A, P206B, P206C, P206D, P206E, TP206A, TP206B, TP206C, TP206D. TP206E, U206-A, U206-B, U206-C, U206-D, U206-E, U206-F, U206G, TU206-A, TU206-B, TU206-C, TU206-D, TU206-E, TU206-F, TU206-G, 207, 207A, T207, T207A, 210, 210A, 210B, 210C, 210D, 210E, 210F, 210-5 (205), 210-5A (205A), T210F, 210G, T-210G, 210H, T-210H, 210J, 205P, T-210J, 210K, T-210K, T210L, 210L, 210M, T210M, 210N, P210N, T210N, 205T, 210R, P210R, 205U, T210R, 210-5, 210-5A, 305A (USAF 0-1A), 305C (USAF 0-1E), 305D (USAF 0-1F), 305F, 305B (USAF T0-1D), 305E (0-1D or 0-1F), and 321 (Navy 0E-2)
SA2163NM	Cessna Model U206G
SA2164NM	Cessna Model 180Q
SA2166NM	Cessna Model 177
SA2167NM	The New Piper Aircraft, Inc. (Piper) Models L-14, PA-12, PA-12S, PA-14, PA-15, PA-16, PA-16S, PA-17, PA-18, PA-18A, PA-18S, PA-18-105 (Special), PA-18S-105(SP), PA-18-125 (Army L-21A), PA-18AS-125, PA-18S-125, PA-18-135, PA-18A-135, PA-18AS-135, PA-18S-135, PA-18-150, PA-18A-150, PA-18AS-150, PA-18S-150, PA-19 (Army L-18C), PA-19S, PA-20, PA-20S, PA-20-115, PA-20S-115, PA-20-135, PA-22, PA-22-108, PA-22-135, PA-22S-135, PA-22-150, PA-22S-150, PA-22-160, PA-22S-160, PA-24, PA-24-250, PA-24-260, PA-24-400, PA-25, PA-25-235, PA-25-260, PA-32-260, PA-32RT-300, PA-32RT-301T, PA-32-300, PA-32RT-300T, PA-32-301, PA-32S-300, PA-32R-301, PA-32-301T, PA-32R-300, PA-32R-301T, PA-28-140, PA-28-141, PA-28-150, PA-28-151, PA-28-160, PA-28S-160, PA-28-180, PA-28R-180, PA-28S-180, PA-28-235, PA-28S-235, PA-28-181, PA-28-161, PA-28R-200, PA-28R-201, PA-28R-201T, PA-28-236, PA-28RT-201, PA-28RT-201T, PA-28-201T, PA-36-285, PA-36-300, PA-36-375, PA-38-112, and PA-46-310P
SA2168NM	Mooney Models M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20M, and M22
SA2683NM	Aerocar, Inc. Model I Aerodifusion, S.L. Model Jodel D-1190S Aeromere, S.A. Model Falco F.8.L. Aeronautica Macchi S.P.A. Models AL60, AL60-B, AL60-F5, and AL60-C5 Aeronautica Macchi & Aerfer Model AM-3 Aeronca Inc. Models 15AC and S15AC Aerospatiale Model TB20 Trinidad Arctic Aircraft Co., Inc. Models S-1A, S-1A-65F, S-1A-85F, S-1A-90F, S-1B1(Army L-67 XL-6), and S-1B2 Avions Mudry et Cie Model CAP 10B American Champion Models (Bellanca, Aeronca) 7AC, 7ACA, S7AC (L-16A), 7BCM (L-16B), 7CCM, 7DC, S7DC, 7EC, S7EC, 7ECA, 7FC, 7GC, 7GCA, 7GCCA, 7GCB, 7GCBA, 7GCBC, 7HC, 7JC, 7KC, 7KCAB, 8KCAB, 8GCBC, 11AC, S11AC, 11BC, S11BC, 11CC, and S11CC Bellanca Aircraft Corporation Models 14-9, 14-9L, 14-12F-3, 14-13, 14-13-2, 14-13-3, 14-13-3W,

	14-19, 14-19-2, 14-19-3A, 17-30, 17-31, 17-31TC, 17-30A, 17-31A, and **17-31ATC** Biemond, C. Model Teal CB1 Board, G.R. Models Columbia XJL-1 and Bolkow Jr. Clark Aircraft, Inc. Models 12 and 1000 Falcon Aircraft Corporation Model F-1 Flug und Fahrzeugwerke AG Model AS 202/15 “Brand” Found Brothers Model FBA-2C Fuji Heavy Industries Models FA-200-160, FA-200-180, and FA-200-180AO Funk Aircraft Model Funk C Kearns, Edward Scott (Garcia, Henry S.) Model (Emigh) Trojan A-2 Swift Museum Foundation, Inc. Model (Globe) GC-1A, GC-1B Goodyear Aircraft Model GA-22A Great Lakes Aircraft Model 2T-1A-1 and 2T-1A-2 Grumman American Models G-164, G-164A, G-164B, AA-1, AA-1A, AA-1B, AA-1C, AA-5, AA-5A, and AA-5B Commander Aircraft (Gulfstream) Models 112, (112A, 112B, 112TC, 112TCA, 114, and 114A Helio Enterprises Models H-250, H-295 (USAF U-10D),H-391 (USAF YL-24), H-395 (SAF L-28A), H-395A, HT-295, and H-700 Prop-Jets, Inc. (Interceptor Corp., Aero Commander, Meyers) Models 200, 200A, 200B, 200C, and 200D C. Itoh Aircraft Maintenance & Engineering Co. LTD. Model N-62 Jamieson Corporation Model J-2-L1B Jodel, Avion Models D-140-B, DR-1050, D-1190, and 150 Lake Models C-1, C-2-IV, LA-4, LA-4-200, and LA-4-250 Luscombe Aircraft Corp. Models 8, 8A, 8B, 8C, 8D, 8E, 8F, T-8F, and 11A Maule Aerospace Technology Corp. Models Bee Dee M-4, M-4, M-4C, M-4S, M-4T, M-4-180C, M-4-180S, M-4-210, M-4-201C, M-4-210S, M-4-210T, M-4-220S, M-4-220T, M-5-180C, M-5-200, M-5-210C, M-5-210TC, M-T-220C, M-5-235, M-5-235C, M-6-180, M-6-235, M-7-235, MX-7-180, MX-7-235 Messerschmitt-Bolkow Models BO-209-150 FV&RV, BO209-160 FV&RV, BO-209, and 150OFF Nardi S.A. Model FN-333 Jimmie Thompson Enterprise (Navion Rangemaster Aircraft Corporation) Models Navion (L-17A) Navion A (L-17B, L-17C), Navion B, D, E, F, G, and H White International Ltd. Models (Pitts) S-1S, S-1T, S-2, and S-2A Procaer S.P.A. Models F 15/B, F 15/C, and F 15/E Gulfstream Aerospace Corporation (Rockwell) Models 111, 112, 112B, 112TC, 112TCA, and 114 Aermacchi S.p.A Models S.205, S.205-18F, S.205-18/R, S.205-20/F, S.205-20/R, S.205-22/R, S.208, S.208A, F.260, and F.260B Socata - Groupe Aerospatiale Models Rallye Series MS880B, MS885, MS892-A-150, MS892E-150, MS893A, MS893E, MS894A, MS894E, TB9,TB10, and TB21 Stinson Models 108-2 and108-3 Sud Aviation Models Gardan GY.80-1500, GY.80-160, and GY.80-180
SA2683NM (Cont'd.)	Taylorcraft Aircraft Company Models F19, F21, and F21A Univair Aircraft Corporation (Forney) Models F-1, F-1A, (ERCO)E, 415D, (ALON)A-2, A20a, (Mooney)M10, (Mooney) (ERCO) 415-C, and 415-CD Augustair, Inc. (Varga Aircraft Corporation) Models 2150, 2150A, and 2180

NOTE 1: The above list includes the aircraft where the Precise Flight, Inc. Model SVS III standby vacuum systems

could be installed through STC. This list is not meant to be exhaustive nor does it include all aircraft with the systems installed through field approval.

NOTE 2: This AD applies to any aircraft with a standby vacuum system installed that is identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For aircraft that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated in the body of this AD, unless already accomplished.

To detect and correct problems with the standby vacuum system before failure or malfunction and to provide operating procedures for the pilot regarding the use and limitations of this system, accomplish the following:

(a) Within the next 30 calendar days after the effective date of this AD, accomplish whichever (paragraph (a)(1) or (a)(2) below) of the following that applies:

(1) For airplanes with the affected standby vacuum system installed in accordance with the applicable STC, incorporate the applicable Precise Flight, Inc. Airplane Flight Manual Supplement (AFMS) for Standby Vacuum Systems (each document corresponds with the applicable STC as presented in the chart below) into the Airplane Flight Manual (AFM), including installing all placards specified in these AFMS's; or insert a copy of the Appendix to this AD into the AFM, including installing all placards specified in the Appendix:

Applicable STC	**AFMS Date**
SA2160NM	May 7, 1998
SA2161NM	August 6, 1998
SA2162NM	August 6, 1998
SA2163NM	August 6, 1998
SA2164NM	August 6, 1998
SA2166M	August 6, 1998
SA2167NM	August 6, 1998
SA2168NM	August 6, 1998
SA2683NM	August 6, 1998; or

(2) For airplanes with the affected standby vacuum system installed through field approval, insert the Appendix to this AD into the AFM, including installing all placards specified in the Appendix.

(b) Within the next 12 calendar months after the effective date of this AD, and thereafter at intervals specified in the following paragraphs, inspect the push-pull cable, vacuum lines, saddle fittings, and shuttle valve for correct installation and damage (wear, chafing, deterioration, etc.). Accomplish these inspections in accordance with Precise Flight Instructions for Continued Airworthiness (Section 3.3 of Installation Report No. 50050), Revision 25, dated August 26, 1996.

(1) Reinspect the push-pull cable, vacuum lines, and saddle fittings at intervals not to exceed 12 calendar months; and

(2) Reinspect the shuttle valve at intervals not to exceed 24 calendar months.

(c) Prior to further flight after each inspection required by paragraph (b) of this AD, accomplish the following in accordance with Precise Flight Instructions for Continued Airworthiness (Section 3.3 of Installation Report No. 50050), Revision 25, dated August 26, 1996.

(1) Correct any discrepancy found; and

(2) Conduct a function test of the vacuum system and assure proper function.

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) An alternative method of compliance or adjustment of the initial or repetitive compliance times that provides an equivalent level of safety may be approved by the Manager, Seattle Aircraft Certification Office (ACO), 1601 Lind Avenue, SW, Renton, Washington 98055-4065. The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

NOTE 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

(f) The inspections, corrections, and test required by this AD shall be done in accordance with Precise Flight Instructions for Continued Airworthiness (Section 3.3 of Installation Report No. 50050), Revision 25, dated August 26, 1996. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U. S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Precise Flight, Inc., 63120 Powell Butte Road, Bend, Oregon 97701. Copies may be inspected at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri 64106, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

(g) This amendment becomes effective on January 14, 2000.

APPENDIX TO AD 99-24-10

SYSTEM DESCRIPTION

A Precise Flight Standby Vacuum System may be installed to provide a temporary vacuum system in the event of a primary vacuum failure. The Standby Vacuum System operates on the differential between the intake manifold and ambient air pressure and is directed through a shuttle valve system to drive your flight instruments.

I. OPERATING LIMITATIONS

A. INSTRUCTIONS

1. The Standby Vacuum System is for emergency or standby use only and not for dispatch purposes.
2. Vacuum powered and/or Vacuum gyro directed autopilot operation may be unreliable when the Standby Vacuum System is the sole source of vacuum. Vacuum powered or vacuum gyro directed autopilot should be **OFF** when operating with a failed primary vacuum system.
3. The Supplemental Vacuum System is not designed to operate pneumatic de-ice systems. DO NOT operate a pneumatic de-ice system when operating with a failed primary vacuum system.
4. Above 10,000 ft. pressure altitude, engine power settings may have to be significantly reduced to provide adequate vacuum power for proper gyro instrument operation.
5. The following placards are required to be in full view of pilot:

APPENDIX TO AD 99-24-10 (Continued)

I. OPERATING LIMITATIONS (CONT.)

B. PLACARDS

Placard to be located on the push/pull control cable

Placard to be located around the LED for the pump inop warning light.

Placard to be placed in front and in full view of the pilot.

STANDBY VACUUM SYSTEM EQUIPPED: FOR
OPERATING INSTRUCTIONS AND LIMITATIONS
SEE SUPPLEMENT IN OWNERS MANUAL OR
PILOTS OPERATING HANDBOOK

I. OPERATING LIMITATIONS (CONT.)

B. PLACARDS

One of the following placards must be placed in full view of the pilot near the instrument vacuum indicator after appropriate entries have been made.

Approximate Standby Vacuum Available - Altitude - Power Chart for aircraft with Constant Speed Propeller - Maximum Continuous RPM.

PRESS ALT. (FT.)	RPM	MAN. PRESSURE	SVS VACUUM IN. HG MIN.
2000	Max. Cont.		
4000	Max. Cont.		
6000	Max. Cont.		
8000	Max. Cont.		
10,000	Max. Cont.		

Approximate Standby Vacuum Available - Altitude - Power Chart for aircraft with a Fixed Pitch Propeller

PRESS ALT. (FT.)	RPM	SVS VACUUM IN. HG MIN.
2000		
4000		
6000		
8000		
10,000		

II. OPERATING PROCEDURES

A. NORMAL PROCEDURES

1. GROUND CHECK

a. Cycle the Standby Vacuum Control Knob OUT - **ON** - , and return Control Knob IN - **OFF** - position.

2. BEFORE TAKEOFF

a. Idle Engine at low speed, momentarily pull the standby vacuum knob out - **ON** - and check vacuum gauge. Normally, the vacuum reading will be slightly higher. After checking system push Standby Vacuum System knob IN - **OFF** -. Check that vacuum gauge has returned to the previous reading.

3. ENROUTE

a. Regularly check vacuum gauge and monitor warning light for proper vacuum system operation.

B. EMERGENCY PROCEDURES

1. PRIMARY VACUUM FAILURE WARNING LIGHT ILLUMINATES

a. Pull the Standby Vacuum System knob OUT -ON- and adjust throttle setting as required to maintain adequate vacuum for the primary instruments - Suction Gauge Reading in the Green Arc - If necessary descend to a lower altitude to obtain a larger differential between manifold and ambient pressure. Vacuum power must be closely monitored by checking the vacuum gauge frequently.

b. The SVS is not designed for continued IFR flight. Immediate steps should be taken to return to VFR conditions or to land. If this is not possible, IFR flight should be continued only as long as necessary to return to VFR conditions or land the airplane.

WARNING: FAILURE OF THE VACUUM SYSTEM STILL CONSTITUTES AN EMERGENCY SITUATION REGARDLESS OF THE INSTALLATION OF THE SVS. IT MAY NOT BE POSSIBLE TO MAINTAIN A SAFE ALTITUDE AND MAKE USE OF THE SVS. IN SUCH A SITUATION THE AIRPLANE MUST BE FLOWN USING NON-VACUUM POWERED INSTRUMENTS.

c. If descent is impractical:

- Periodically and temporarily reduce power as required to provide adequate vacuum to the aircraft primary instruments.
- Reapply power as required, while comparing vacuum driven gyros against the Turn and Bank Indicator, Turn Coordinator, VSI and/or other flight instruments.
- When an obvious discrepancy is noted between the vacuum driven instruments and other flight instrumentation, Periodically and temporarily reduce power as required to provide adequate vacuum to the aircraft primary instruments.

III. PERFORMANCE

NO CHANGE

Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [65 FR 12463 3/9/2000]

Docket No. 98-CE-88-AD; Amendment 39-11621; AD 98-21-21 R1

RIN 2120-AA64

Airworthiness Directives; Bob Fields Aerocessories Inflatable Door Seals

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

ACTION: Final rule

SUMMARY: This amendment revises Airworthiness Directive (AD) 98-21-21, which currently requires de-activating the electric door seal inflation system for all aircraft equipped with Bob Fields Aerocessories inflatable door seals. Since issuance of that AD, the manufacturer has developed a modification that would allow these electric door seal inflation systems to remain in service, and the Federal Aviation Administration (FAA) has approved this modification. This AD requires incorporating this modification as a method of complying with the current AD, and will exclude those airplanes with manual door seal inflation systems from the AD requirements of de-activating the system. The actions specified by this AD are intended to prevent smoke and a possible fire in the cockpit caused by

overheating of the electric door seal inflation systems, which could result in passenger injury.

DATES: Effective May 1, 2000.

ADDRESSES: Service information that relates to this AD may be obtained from Bob Fields Aerocessories,
340 East Santa Maria St., Santa Paula, California 93060; telephone: (805) 525-6236; facsimile: (805) 525-5286. This
information may also be examined at the Federal Aviation Administration (FAA), Central Region, Office of the Regional
Counsel, Attention: Rules Docket No. 98-CE-88-AD, 901 Locust, Room 506, Kansas City, Missouri 64106.

FOR FURTHER INFORMATION CONTACT: George Y. Mabuni, Aerospace Engineer, FAA, Los Angeles Aircraft
Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712; telephone: (562) 627-5341;
facsimile: (562) 627-5210.

SUPPLEMENTARY INFORMATION:

Events Leading to the Issuance of This AD

A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to all aircraft equipped with Bob Fields Aerocessories inflatable door seals that are installed in accordance with either the applicable Supplemental Type Certificate (STC) or through field approval was published in the Federal Register as a notice of proposed rulemaking (NPRM) on October 29, 1999 (64 FR 58359). The NPRM proposed to revise AD 98-21-21, Amendment 39-10844 (63 FR 55321, October 15, 1998). AD 98-21-21 currently requires de- activating the electric door seal inflation system, fabricating and installing a placard specifying that the system is inoperative, and inserting a copy of the AD into the Limitations Section of the airplane flight manual (AFM).

AD 98-21-21 only applies to those aircraft equipped with the Bob Fields Aerocessories inflatable door seals. With this in mind, the owner/operator also has the option of removing all provisions of the Bob Fields Aerocessories inflatable door seals installation, and installing original equipment manufacturer door seals or an FAA-approved equivalent that is of different design than the referenced Bob Fields Aerocessories inflatable door seals.

The NPRM proposed to retain the requirements of the existing AD, would exclude those airplanes incorporating a manual inflatable door seal system from the system de-activation requirements, and would provide the option of incorporating one of the modifications referenced in Bob Fields Aerocessories Service Bulletin No. BFA-001, Date: November 3, 1998, as a method of accomplishing

the AD.

The NPRM was the result of the manufacturer developing a modification that would allow these electric door seal inflation systems to remain in service, and the Federal Aviation Administration (FAA) approved this modification.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposed rule or the FAA's determination of the cost to the public.

The FAA's Determination
After careful review of all available information related to the subject presented above, the FAA has determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. The FAA has determined that these minor corrections will not change the meaning of the AD and will not add any additional burden upon the public than was already proposed.

Cost Impact
The FAA does not know the number of aircraft that have the affected electric door seal inflation systems installed. The FAA estimates that it will take approximately 3 workhours per airplane to accomplish the optional modifications that will allow these systems to be put back in service, at an average labor rate of approximately $60 an hour. Based on these figures, the total cost impact of the optional modification in this document on U.S. operators is estimated to be $180 per airplane aircraft equipped with Bob Fields Aerocessories inflatable door seals.

Regulatory Impact
These regulations 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, the FAA has 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 Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES".

List of Subjects in 14 CFR Part 39
Air transportation, Aircraft, Aviation safety, Safety.

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

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. Section 39.13 is amended by removing Airworthiness Directive (AD) 98-21-21, Amendment 39-10844 (63 FR 55321, October 15, 1998), and adding a new AD to read as follows:

Regulatory Information

REVISION

98-21-21 R1 BOB FIELDS AEROCESSORIES: Amendment 39-11621; Docket No. 98-CE-88-AD; Revises AD 98-21-21, Amendment 39-10844.

Applicability: Electric inflatable door seals, installed either in accordance with the applicable supplemental type certificate (STC) or through field approval, that are installed on, but not limited to, the following aircraft:

Affected STC	Make and Model Aircraft Affected
SA3735NM	Cessna Models 170, 170A, and 170B Airplanes
SA4136WE	Cessna Models 310, 310A, 310B, 310C, 310D, 310F, 310G, 310H, 310I, 310J, 310K, 310L, 310N, 310P, 310Q, 310R, T310P, T310Q, and T310R Airplanes
SA2226NM	Cessna Models P210N and P210R Airplanes
SA3736NM	Cessna Models 185, 185A, 185B, 185C, 185D, A185E, and A185F Airplanes
SA4177WE	Cessna Models 175, 175A, 175B, and 175C Airplanes
SA4212WE	Cessna Models 210, 210A, 210B, 210C, 210D, 210E, 210F, 210G, 210H, 210J, 210K, 210L, 210M, 210N, T210F, T210G, T210H, T210J, T210K, T210L, T210M, T210N, 210-5 (205), and 210-5A (205A) Airplanes
SA4283WE	Cessna Models 172, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 172I, 172K, 172L, 172M, and 172N Airplanes
SA4284WE	Cessna Models 180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180J, and 180K Airplanes
SA4285WE	Cessna Models 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 182P, 182Q, R182, and TR182 Airplanes
SA4286WE	Cessna Models 206, P206, P206A, P206B, P206C, P206D, P206E, TP206A, TP206B, TP206C, TP206D, TP206E, U206, U206A, U206B, U206C, U206D, U206E, U206F, U206G, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, and TU206G Airplanes
SA4287WE	Cessna Models 320, 320A, 320B, 320C, 320D, 320E, 320F, and 320-1 Airplanes

SA4180WE	Raytheon (Beech) Models H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A, F33C, G33, 36, A36, A36TC, and B36TC Airplanes
SA4184WE	Raytheon (Beech) Models 95, B95, B95A, E95, 95-55, 95-A55, 95-B55, 95-B55A, 95-B55B, 95-C55, D55, E55, 56TC, 58, and 58A Airplanes
SA4239WE	Raytheon (Beech) Models 58P, 58PA, 58TC, and 58TCA Airplanes
SA4240WE	Raytheon (Beech) Models 50, B50, C50, D50, D50A, D50B, D50C, D50E, D50E-5990, E50, F50, G50, H50, and J50 Airplanes
SA4282WE	Raytheon (Beech) Models 35, A35, B35, C35, D35, E35, F35, G35, and 35R Airplanes
SA4178WE	Mooney Models M20, M20A, M20C, M20D, M20E, M20F, M20G, M20J, and M20K Airplanes
SA4234WE	The New Piper Aircraft, Inc. (Piper) Models PA-34-200, PA-34-200T, and PA-34-220T Airplanes
SA4179WE	Piper Models PA-24, PA-24-250, PA-24-260, and PA-24-400 Airplanes
SA4235WE	Piper Models PA-44-180 and PA-44-180T Airplanes
SA4236WE	Piper Models PA-28-140, PA-28-150, PA-28-160, PA-28-180, PA-28-235, PA-28-151, PA-28-181, PA-28-161, PA-28-236, PA-28-201T, PA-28S-160, PA-28S-180, PA-28R-180, PA-28R-200, PA-28R-201, PA-28R-201T, PA-28RT-201, and PA-28RT-201T Airplanes
SA4237WE	Piper Models PA-23, PA-23-160, PA-23-235, PA-23-250, and PA-E23-250 Airplanes
SA4238WE	Piper Models PA-30, PA-39, and PA-40 Airplanes
SA4385WP	Piper Models PA-31, PA-31-300, PA-31-325, and PA-31-350 Airplanes
SA4288WE	Piper Models PA-32-260, PA-32-300, PA-32S-300, PA-32-301, PA-32-301T, PA-32R-300, PA-32R-301, PA-32R-301T, PA-32RT-300, and PA-32RT-300T Airplanes
SA2511NM	Bellanca Models 17-30, 17-31, and 17-31TC Airplanes
SA2510NM	Bellanca Models 17-30A, 17-31A, and **17-31ATC** Airplanes
SA4316WE	Wing Aircraft Company Model D-1 Airplanes

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision that has the affected inflatable door seals installed, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (f) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated in the body of this AD, unless already accomplished.

To prevent smoke and a possible fire in the cockpit caused by overheating of the electric door seal inflation systems, which could result in passenger injury, accomplish the following:

(a) Prior to further flight after October 30, 1998 (the effective date of AD 98-21-21), deactivate the electric door seal inflation system by accomplishing the following:

(1) Disconnect the battery.

(2) Locate the air pump and identify the power wire to the air pump.

(3) Trace the power wire to its connection to the airplane's original electrical power system. Disconnect the power wire at its attachment to the airplane's electrical power system and stow the wire end.

(4) For non-pressurized airplanes, fabricate a placard that incorporates the following words utilizing letters that are at least 0.10-inch in height, and install this placard on the instrument panel within the pilot's clear view:

"ELECTRIC DOOR SEAL INFLATION SYSTEM INOPERATIVE"

(5) For pressurized airplanes or for airplanes that do not have an operating manual door seal inflation system, fabricate a placard that incorporates the following words utilizing letters that are at least 0.10-inch in height, and install this placard on the instrument panel within the pilot's clear view:

"ELECTRIC DOOR SEAL INFLATION SYSTEM INOPERATIVE. THIS AIRPLANE CAN ONLY BE OPERATED IN UNPRESSURIZED FLIGHT"

(6) Reconnect the battery before returning to service.

(b) Prior to further flight after October 30, 1998 (the effective date of AD 98-21-21), insert a copy of this AD into the Limitations Section of the airplane flight manual (AFM).

NOTE 2: The prior to further flight compliance time of paragraphs (a) and (b) of this AD is being retained from AD 98-21-21. **The only substantive difference between this AD and AD 98-21-21 is the addition of the alternative method of compliance referenced in paragraph (c) of this AD.**

NOTE 3: This AD only applies to those aircraft equipped with the Bob Fields Aerocessories inflatable door seals. With this in mind, the owner/operator also has the option of removing all provisions of the Bob Fields Aerocessories inflatable door seals installation, and installing original equipment manufacturer door seals or an FAA-approved equivalent that is of a different design than the referenced Bob Fields Aerocessories inflatable door seals.

(c) One of the following actions may be accomplished as an alternative method of compliance to the requirements of paragraphs (a) and (b) of this AD. No further action is required by this AD as long as one of these configurations remains incorporated on the aircraft.

(1) Modify the electric door seal inflation system in accordance with the procedures in Bob Fields Aerocessories Service Bulletin No. BFA-001, Date: November 3, 1998; or

(2) Install a manual door seal inflation system instead of an electric system. Aircraft with existing manual systems as of the effective date of this AD are excluded from the requirements of paragraphs (a) and (b) of this AD.

(d) As of the effective date of this AD, no person may install, on any aircraft, a Bob Fields Aerocessories electric door seal inflation system unless the actions specified in Bob Fields Aerocessories Service Bulletin No. BFA-001, Date: November 3, 1998, are incorporated.

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(f) An alternative method of compliance or adjustment of the compliance times that provides an equivalent level of safety may be approved by the Manager, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Blvd., Lakewood, California 90712.

(1) The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

(2) Alternative methods of compliance approved in accordance with AD 98-21-21 are considered approved as alternative methods of compliance for this AD.

NOTE 4: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

(g) All persons affected by this directive may obtain copies of the document referred to herein upon request to Bob Fields Aerocessories, 340 East Santa Maria St., Santa Paula, California 93060; or may examine this document(s) at the FAA, Central Region, Office of the Regional Counsel, Room 506, 901 Locust, Kansas City, Missouri 64106.

(h) This amendment revises AD 98-21-21, Amendment 39-10844.

(i) This amendment becomes effective on May 1, 2000.

Footer Information

Issued in Kansas City, Missouri, on March 2, 2000.
Michael Gallagher,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [61 FR 46538 NO. 172 09/04/96]

Docket No. 95-CE-54-AD; Amendment 39-9731; AD 96-18-07

RIN 2120-AA64

Airworthiness Directives; Bellanca, Incorporated Models 17-30, 17-30A, 17-31, 17-31A, 17-31TC, and **17-31ATC** Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to Bellanca, Incorporated (Bellanca) Models 17-30, 17-30A, 17-31, 17-31A, 17-31TC, and **17-31ATC** airplanes. This action requires repetitively inspecting, testing, and possibly replacing the nose landing gear (NLG) strut and brackets. A collapse of a Bellanca airplane's NLG during a landing prompted this action. The actions specified by this AD are intended to prevent possible failure of the nose landing gear, which, if not detected and corrected, could result in loss of control of the airplane during landing operations.

DATES: Effective October 25, 1996.
The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of October 25, 1996.

ADDRESSES: Service information that applies to this AD may be obtained from Bellanca, Incorporated, P.O. Box 964, Alexandria, Minnesota 56308; telephone (612) 762-1501. This information may also be examined at the Federal Aviation Administration (FAA), Central Region, Office of the

Assistant Chief Counsel, Attention: Rules Docket 95-CE-54-AD, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Steven J. Rosenfeld, Aerospace Engineer, Chicago Aircraft Certification Office, 2300 East Devon Avenue, Rm. 232, Des Plaines, Illinois 60018; (847) 294-7030; facsimile (847) 294-7834.

SUPPLEMENTARY INFORMATION: A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to Bellanca Models 17-30, 17-30A, 17-31, 17-31A, 17-31TC, and **17-31ATC** airplanes was published in the **Federal Register** on January 22, 1996 (61 FR 1532). The action proposed to require repetitively inspecting, testing, and possibly replacing the nose landing gear (NLG) strut and brackets. Accomplishment of the proposed action would be in accordance with Bellanca Service Letter (SL) B-107, dated September 20, 1995.

Interested persons have been afforded an opportunity to participate in the making of this amendment. No comments were received on the proposed rule or the FAA's determination of the cost to the public.

After careful review of all available information related to the subject presented above, the FAA has determined that air safety and the public interest require the adoption of the rule proposed except for minor editorial corrections. The FAA has determined that these minor corrections will not change the meaning of the AD and will not add any additional burden upon the public than was already proposed.

The FAA estimates that 1,109 airplanes in the U.S. registry will be affected by this AD, that it will take approximately 24 workhours per airplane to accomplish the required action, and that the average labor rate is approximately $60 an hour. Parts cost approximately $160 per airplane. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be $1,774,400 or approximately $1,600 per airplane. Bellanca has informed the FAA that no parts have been distributed to owners/operators for this replacement; therefore, this figure is based on the assumption that no owners/operators have accomplished the proposed inspection, testing, and replacement. In addition, the FAA has no way of determining the number of repetitive inspections each owner/operator will incur prior to replacing the bracket.

The regulations adopted herein will not have substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

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 Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket.

A copy of it may be obtained by contacting the Rules Docket at the location provided under the caption "ADDRESSES".

List of Subjects in 14 CFR Part 39
Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

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

PART 39 - AIRWORTHINESS DIRECTIVES
1. The authority citation for part 39 continues to read as follows:
Authority: 49 USC 106(g), 40113, 44701.

Section 39.13 - [AMENDED]
2. Section 39.13 is amended by adding a new airworthiness directive (AD) to read as follows:

Regulatory Information

96-18-07 BELLANCA, INCORPORATED: Amendment 39-9731; Docket No. 95-CE-54-AD.

Applicability: The following airplane models and serial numbers, certificated in any category:

Model	Serial Numbers
17-30	(30123 through 30262)
17-30A	(30263 through 78-30905, except 76-30824)
17-31	(32-1 through 32-14)
17-31A	(32-15 through 78-32172)
17-31TC	(31001 through 31003)
17-31ATC	(31004 through 79-31155)

NOTE 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (g) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required initially upon accumulating 500 hours time-in-service (TIS) or within the next 50 hours TIS after the effective date of this AD, whichever occurs later, unless already accomplished, and

thereafter as indicated in the body of this AD.

To prevent failure of the nose landing gear (NLG), which, if not detected and corrected, could result in loss of control of the airplane during landing operations, accomplish the following:

(a) Inspect the NLG drag strut brackets for cracks or bends in accordance with the instructions in section 4, NLG DRAG STRUT BRACKET INSPECTION, of Bellanca Service Letter (SL) B-107, dated September 20, 1995. Prior to further flight, replace any cracked or bent bracket with a part number (P/N) 194650-0 (right side) bracket or a P/N 194383-0 (left side) bracket in accordance with the instructions in section 5, INSTALLATION NEW BRACKETS, of Bellanca SL B-107, dated September 20, 1995.

(b) Inspect the NLG installation, including the upper and lower leg assemblies, upper and lower drag struts, over-center spring assembly, and engine mount for corroded or worn bolts in accordance with the instructions in Section 6, NLG DRAG STRUT INSPECTION, of Bellanca SL B-107, dated September 20, 1995. Prior to further flight, replace any corroded or worn bolts.

(c) Check the NLG drag strut rigging, the overcenter of the drag strut, and the NLG cylinder actuator stroke limit, and adjust any discrepancies in accordance with the applicable instructions contained in the following:

(1) Section 7, PRELIMINARY NLG DRAG STRUT RIGGING CHECK (including section 7.1, Preliminary Nose-Wheel-In-The-Well Test, and section 7.2, Preliminary NLG Cylinder Down Test), of Bellanca SL B-107, dated September 20, 1995.

(2) Section 8, DRAG STRUT OVERCENTER TEST AND ADJUSTMENT, of Bellanca SL B-107, dated September 20, 1995.

(3) Section 9, NLG CYLINDER DOWN TEST AND ADJUSTMENT, of Bellanca SL B-107, dated September 20, 1995.

(d) If any discrepancies are found during any of the checks accomplished as required by paragraph (c) of this AD, and the right side NLG drag strut bracket has not been replaced with P/N 194650-0 (accomplished as possible requirement of paragraph (a) of this AD), accomplish the following:

(1) Reinspect the NLG drag strut brackets for cracks or bends at intervals not to exceed 50 hours TIS in accordance with Section 4, NLG DRAG STRUT BRACKET INSPECTION, of Bellanca SL B-107, dated September 20, 1995.

(2) Prior to further flight, replace any cracked or bent bracket with a P/N 194650-0 (right side) bracket or a P/N 194383-0 (left side) bracket in accordance with the instructions in section 5, INSTALLATION NEW BRACKETS, of Bellanca SL B-107, dated September 20, 1995. Installing the P/N 194650-0 (right side) bracket eliminates the repetitive inspection requirement in paragraph (d)(1) of this AD.

(3) The P/N 194650-0 (right side) bracket may be installed at any time to eliminate the repetitive inspection requirement of this AD.

(e) Check the NLG retraction (NLG-In-The-Well Test) in accordance with the instructions in Section 10, NLG-IN-THE-WELL TEST AND NLG CYLINDER MODIFICATION, of Bellanca SL B-107, dated September 20, 1995. If the nose gear cylinder rod motion is greater than 0.015 inches, prior to further flight, replace the cylinder internal stroke limiting sleeve with a new sleeve, P/N 195577-4, in accordance with the instructions in Section 10, NLG-IN-THE-WELL TEST AND NLG CYLINDER MODIFICATION, of Bellanca SL B-107, dated September 20, 1995.

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(g) An alternative method of compliance or adjustment of the initial or repetitive compliance times that provides an equivalent level of safety may be approved by the Manager, Chicago Aircraft Certification Office, 2300 East Devon Avenue, Rm. 232, Des Plaines, Illinois 60018. The request shall be forwarded through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Chicago Aircraft Certification Office.

NOTE 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Chicago Aircraft Certification Office.

(h) The inspections, modifications, and replacements required by this AD shall be done in accordance of Bellanca Service Letter B-107, dated September 20, 1995. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bellanca, Incorporated, P.O. Box 964, Alexandria, Minnesota 56308; telephone (612) 762-1501. Copies may be inspected at the FAA, Central Region, Office of the Assistant Chief Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(i) This amendment becomes effective on October 25, 1996.

Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-6446; AD 90-02-17

Airworthiness Directives; BELLANCA, INCORPORATED Models 14-19-3, 14-19-3A, 17-30, 17-31 and 17-31TC, 17-30A, 17-31A and **17-31ATC** Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective February 5, 1990.

Regulatory Information

90-02-17 BELLANCA, INCORPORATED: Amendment 39-6446.

Applicability: Models 14-19-3, 14-19-3A, 17-30, 17-31 and 17-31TC (all serial numbers (S/N)), 17-30A

(S/N 30263 through 89-301007), 17-31A (S/N 32-15 through 78-32-172) and **17-31ATC** (S/N 31004 through 79-31155) airplanes certificated in any category.

Compliance: Required as indicated in the body of the AD, unless already accomplished.

To prevent the collapse of the main landing gear which could result in substantial airframe damage, accomplish the following:

(a) Upon the accumulation of 500 hours total time-in-service (TIS), or within the next 100 hours TIS after the effective date of this AD, whichever occurs later, and each 100 hours TIS thereafter, inspect the left and right drag strut landing gear fitting assemblies, Part Number (P/N) 194153-10, for cracks, deformations, or failures as follows:

NOTE 1: This information is also contained in Bellanca Service Letter B-106, dated September 26, 1989. Penetrant inspection techniques are described in FAA Advisory Circular (AC) 43-3, "Nondestructive Testing in Aircraft." These inspections can be conducted with the fitting assemblies installed on the airplane. Do not apply loads to the landing gear components, particularly the drag strut, as it is possible to move the drag strut to overcenter and cause the landing gear to collapse.

(1) Place jacks or other workstands under the airplane at locations specified in the Bellanca Service Manual to prevent accidental landing gear collapse during this inspection.

(2) Figure 1 to this AD describes the 194153-10 fitting assembly. Clean the aft face of the -1 fitting with Stoddart solvent and a brush.

(3) Inspect for cracks adjacent to the welds which join the -1 fitting to the -2 fitting and -3 brace near the lower aft attachment bolt holes using liquid penetrant inspection techniques and a magnifying glass. If any crack is found, prior to further flight replace the assembly with a new fitting assembly, P/N 194153-30 or P/N 194153-40, as applicable.

(4) Lay a straight-edge along side the lower aft attachment bolts, in accordance with Figure 2 and, using a feeler gage or wire gage of .030 inch thickness, look for any evidence of local deformation (dimpling) in the -1 fitting. If any deformation greater than .030 inches is found, prior to further flight replace the assembly with a new fitting assembly, P/N 194153-30 or P/N 194153-40, as applicable.

NOTE 2: The -30, -40 assemblies can be distinguished from a -10 assembly by measuring the -1, -2, fitting and -3 brace part thickness: -10 part thickness is 0.062 inches, -30, -40 parts thickness is 0.100 inches. A 0.040 Shim (P/N 194167-2 Shim Spar Bracket) is available to provide proper fit between the 194153 fitting assembly and the forward spar.

(5) Check and adjust, as required, the drag strut for correct overcenter using the appropriate procedures in the Bellanca Service Manual.

(6) If the inspections specified above do not indicate any evidence of cracks or local deformation in the -1 fitting, apply zinc chromate or Epibond primer, as necessary, to protect the part and repeat these

inspections as specified above.

(7) The repetitive inspections specified above are not required on the P/N 194153-30 or P/N 194153-40 assemblies.

(b) Airplanes with cracked or deformed fittings may be flown with a special flight permit in accordance with FAR 21.197 to a location where this AD may be accomplished providing that no crack is found during the inspection of paragraph (a)(3) that exceeds 3/8 in. length, or no deformation is found during the inspection of paragraph (a)(4) that is great enough to cause the overcenter of the drag strut to be out of tolerance. In these cases, no special flight permit is allowed.

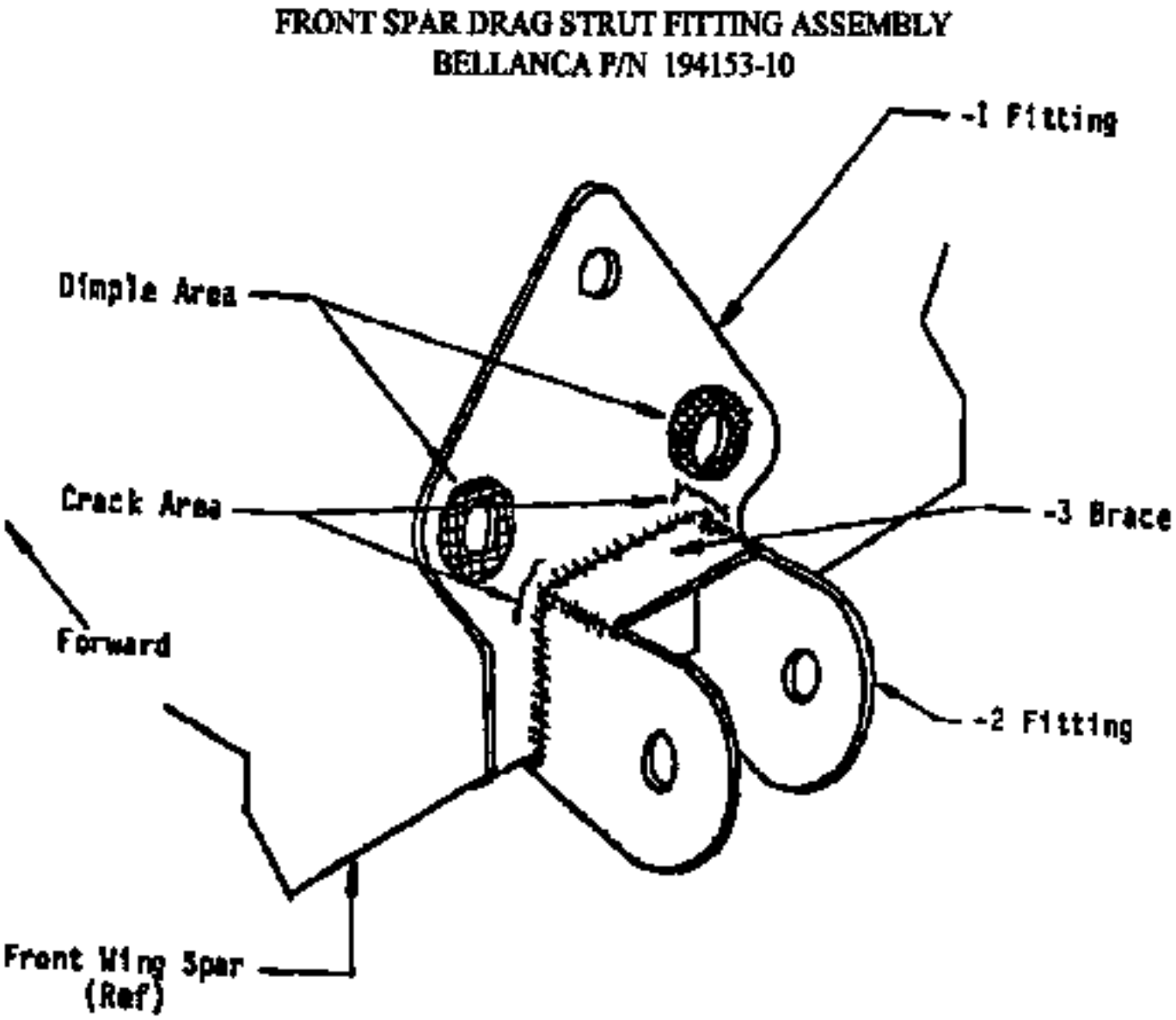
(c) An alternate method of compliance or adjustment of the initial and repetitive compliance times, which provides an equivalent level of safety, may be approved by the Manager, Chicago Aircraft Certification Office, 2300 E. Devon Avenue, Des Plaines, Illinois 60018.

NOTE 3: The request should be forwarded through an FAA Maintenance Inspector, who may add comments and send it to the Manager, Chicago Aircraft Certification Office.

All persons affected by this directive may obtain copies of the documents referred to herein upon request to Bellanca, Inc.; P.O. Box 964, Alexandria, Minnesota 56308; Telephone (612) 762-1501; or may examine these documents at the FAA, Central Region, Office of the Assistant Chief Counsel, Room 1558, 601 E. 12th Street, Kansas City, Missouri 64106.

This amendment (39-6446, AD 90-02-17) becomes effective on February 5, 1990.

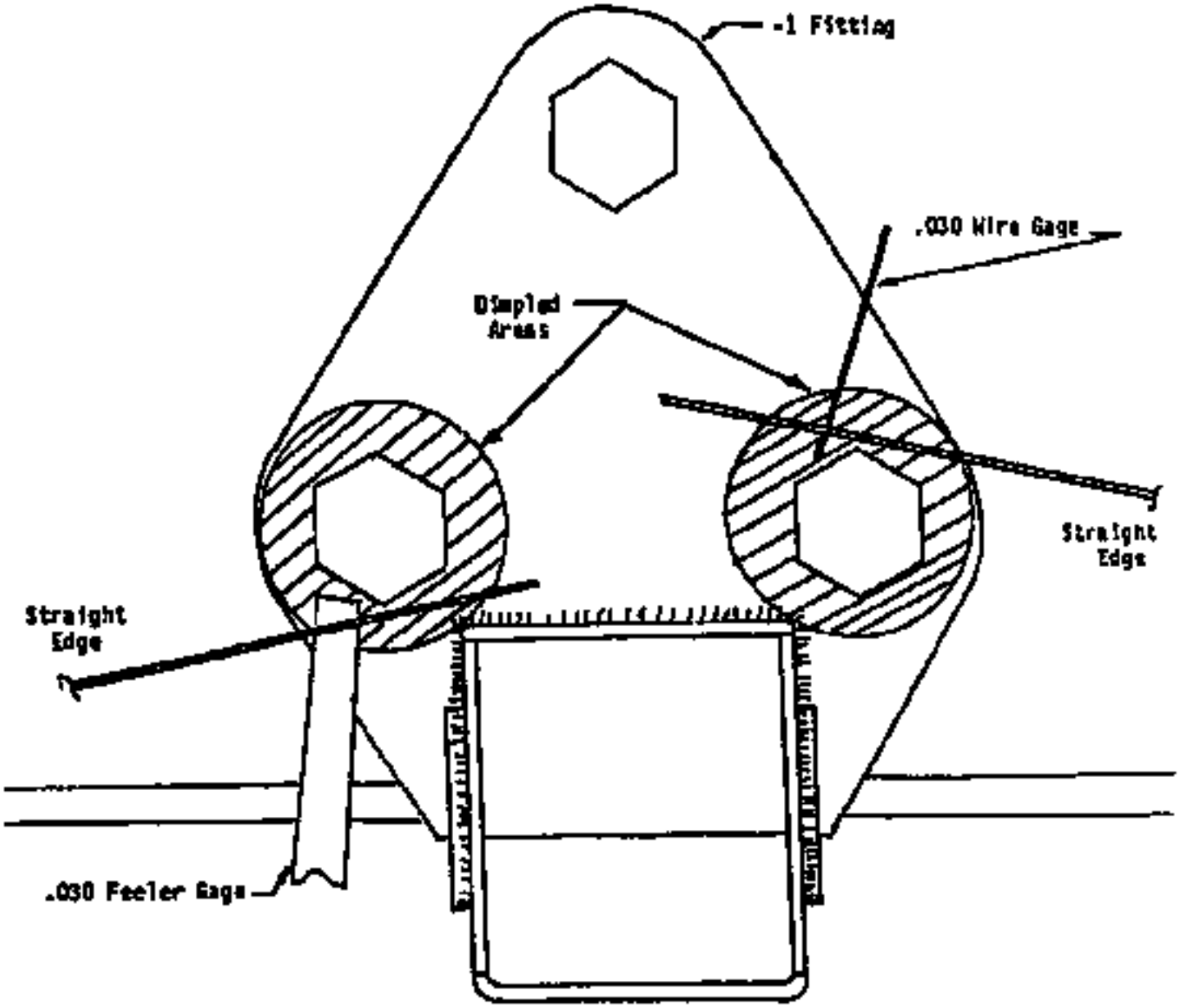
FIGURE 1



AD 90-02-17

FIGURE 2

EXAMPLES OF MEASURING DEPTH OF DIMPLED AREAS



Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-2713; AD 76-08-04

Airworthiness Directives; Bellanca Model: 14-19, 14-19-2, 14-19-3, 14-19-3A, 17-30, 17-30A, 17-31, 17-31A, 17-31TC and **17-31ATC** Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective September 9, 1976.

Regulatory Information

76-08-04 BELLANCA: Amendment 39-2583 as amended by Amendment 39-2713. Applies to Bellanca Models: 14-19, 14-19-2, 14-19-3, 14-19-3A, 17-30, 17-30A, 17-31, 17-31A, 17-31TC and **17-31ATC** certificated in all categories.

Compliance required as indicated.

To detect deterioration in wood wing, accomplish Part I and Part II of Bellanca Aircraft Corporation Service Letter No. 87A dated April 12, 1976, as follows:

(a) For airplanes which have been produced prior to the preceding eleven months comply with Part I within the next 10 hours time in service, or within the next 30 days, whichever occurs first after the effective date of this Airworthiness Directive, unless already accomplished.

(b) Comply with Part II not later than 13 months after the effective date of this AD.

(c) After the initial inspection specified in (a), comply with Part I at each annual inspection required by Federal Aviation Regulations Part 91.

If wood deterioration is detected, repair must be accomplished in accordance with FAA Approved Standard Practice AC 43-13-1A or FAA approved equivalent and/or manufacturer's recommendations prior to further flight except that the airplane may be flown in accordance with FAR 21.197 to a base where the repair can be performed.

The manufacturer's Service Letter No. 87A identified and described in this directive is incorporated herein pursuant to 5 U.S.C. 552 (a)(1). All persons affected by this directive who have not already received the documents from the manufacturer may obtain copies upon request from Bellanca Aircraft Corporation, Box 624, Municipal Airport, Alexandria, Minnesota 56308.

These documents may also be examined at the office of Regional Counsel, Great Lakes Region, 2300 East Devon Avenue, Des Plaines, Illinois 60018 and at FAA Headquarters, 800 Independence Avenue, S. W., Washington D.C. A historical file on this AD which includes the incorporated material in full is maintained by the FAA at its headquarters in Washington D.C. and at the Great Lakes Region Engineering and Manufacturing Branch, 2300 East Devon Avenue, Des Plaines, Illinois 60018.

Amendment 39-2583 became effective April 22, 1976.
This amendment 39-2713 becomes effective September 9, 1976.

Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-5684; AD 87-11-01 R1

Airworthiness Directives; Bellanca Model 17- 30, 17-30A, 17-31, 17-31A, 17-31TC, and **17-31ATC** Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective August 28, 1987.

Regulatory Information

87-11-01 R1 BELLANCA: Amendment 39-5624 as amended by Amendment 39-5684. Applies to Models 17- 30, 17-30A, 17-31, 17-31A, 17-31TC, and **17-31ATC** (all serial numbers) airplanes certificated in any category.

Compliance: Required as indicated, unless already accomplished.

To preclude engine power loss due to either the accumulation of water or other contaminants in the fuel system or due to mismanagement of available fuel resources caused by lack of pilot familiarity with the airplane fuel system design and operating procedures, accomplish the following:

(a) For all airplanes, within the next 30 days after the effective date of this AD or at the next annual inspection, whichever occurs later, and thereafter at each annual inspection, inspect the fuel filler caps and fuel filler well (scupper) drains in accordance with the instructions contained in Section II of Bellanca Service Letter No. B-105, dated February 2, 1987.

(b) For Bellanca Models and Serials identified in Table 1., within the next 30 days after the effective date of this AD, accomplish the following:

(1) Install the appropriate AFM revision, as specified in Table 1.

(2) Install permanent placards which state the following at the specified airplane locations:

(i) For Models 17-30 and 17-30A, on the instrument panel adjacent to the auxiliary fuel pump switch: "USE TO RESTORE FUEL PRESSURE AND RELEASE TO PREVENT ENGINE FLOODING."

(ii) On the instrument panel adjacent to the fuel quantity gauges: "FUEL GAUGES READ QUANTITY IN TANK SELECTED, MAIN FUEL TANK GAUGE INOPERATIVE WHEN AUXILIARY TANK SELECTED. FUEL REMAINING IN SELECTED TANK CANNOT BE USED SAFELY IN FLIGHT WHEN GAUGE READS ZERO."

(iii) On the console adjacent to the fuel selector valve (on airplanes with a 58 gallon capacity fuel system):

"LEFT TANK: 15.5 GALLONS
RIGHT TANK: 15.5 GALLONS
AUXILIARY TANK: 20 GALLONS
USE AUX. TANK IN LEVEL FLIGHT ONLY."

(3) Placards specified in (b)(2)(i), (b)(2)(ii), and (b)(2)(iii) may be fabricated and installed using letters with minimum 1/10 inch height.

NOTE: The AFM revisions specified above (and associated placards) are available at a nominal cost from Bellanca, Inc., P.O. Box 964, Alexandria, Minnesota 56308; Telephone (612) 762-1501. The placards are revised versions of existing placards. The existing placards may either be removed and discarded or overlaid by the corresponding revised placard. The placard specified in paragraph (2)(iii) deletes information which was contained in the placard being replaced. This information, however, is presented more clearly in the placard of paragraph (2)(ii) which is a new placard for the airplanes to which paragraph (2)(iii) applies.

(c) The requirements of paragraph (b) of this AD may be accomplished by the holder of a pilot certificate issued under Part 61 of the Federal Aviation Regulations (FAR) on any airplane owned or operated by him, provided the airplanes are not used in air taxi operations. The person accomplishing these actions must make the appropriate aircraft maintenance record entry as prescribed by FAR 91.173.

(d) Airplanes may be flown in accordance with FAR 21.197 to a location where this AD may be accomplished.

(e) An equivalent means of compliance with this AD may be used if approved by the Manager, Chicago Aircraft Certification Office, FAA, 2300 East Devon Ave., Des Plaines, Illinois 60018; Telephone (312) 694-7357.

All persons affected by this directive may obtain copies of the document(s) referred to herein upon request to Bellanca, Inc., P.O. Box 964, Alexandria, Minnesota 56308; or may examine the document(s) referred to herein at FAA, Office of the Regional Counsel, Room 1558, 601 East 12th Street, Kansas City, Missouri 64106.

Amendment 39-5624 became effective June 22, 1987.

This amendment, 39-5684, becomes effective on August 28, 1987.

Table 1.
Serial Numbers (may be AFM Revision Model prefixed with year of manufacture) to be installed.

17-30	30001 - 30262	Rev. 15, dtd. 2/2/87
-30A	30263 - 30514 (except 30498)	Rev. 6, dtd. 2/2/87
-31	32-1 - 32-14	Rev. 2, dtd. 2/2/87
-31A	32-15 - 32-102	Rev. 8, dtd. 2/2/87
-31TC	31001 - 31003	Rev. 2, dtd. 2/2/87
-31ATC	31004 - 31046	Rev. 8, dtd. 2/2/87

Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-2242; AD 75-11-06

Airworthiness Directives; Bellanca Model 17-31, 17-31TC, 17-31A and 1731ATC Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective June 25, 1975.

Regulatory Information

75-11-06 BELLANCA: Amendment 39-2209 as amended by Amendment 39-2242. Applies to the following airplanes:

17-31	:	S/N 32-1

17-31TC	:	All serials
17-31A	:	S/N 32-21 through 75-32-159 except S/N 32-25
17-31ATC	:	S/N 31004 through S/N 75-31116

Compliance: Required within the next 25 hours time in service after the effective date of this AD. The airplane may be flown to a facility where the modification can be accomplished after the expiration of the 25 hours time in service after the effective date of the AD. To prevent possible engine power failure accomplish the following as appropriate:

A. Models Up To But Not Including 1973 Models*
The check valve (P/N 19121-206**) is located on the diagonal on the forward wing truss under R/H front seat; the following procedure is to be used.

1. Remove right front seat, lift up carpet and remove plywood cover.

2. Remove check valve.

3. Disassemble the check valve, remove the internal check ball and reassemble the valve without the internal check ball. Remove the Bellanca placard showing the valve as P/N 19121-206 and remark the valve housing with a yellow stripe through the AN part number.

4. Reinstall the valve in the vapor return line.

5. Make appropriate log book entries.

B. 1973 Model Aircraft*
The check valve (19121-206**) is located under right floorboard; the following procedure is to be used:

1. Remove: right front seat forward stop and seat, floor mat, right kick panel, right half of heel plate, metal cover over fuel selector, and right floorboard.

2. Remove check valve.

3. Disassemble the check valve, remove the internal check ball and reassemble the valve without the internal check ball. Remove the Bellanca placard showing the valve as P/N 19121-206 and remark the valve housing with a yellow stripe through the AN part number.

4. Reinstall the valve in the vapor return line.

5. Reverse Step 1 to complete operation.

6. Make appropriate log book entries.

C. 1974 and 1975 Model Aircraft*

The check valve (19121-206**) is located under right floorboard; the following procedure is to be used:

1. Remove: right front seat forward stop and seat, floor mat, right cabin heat fresh air deflector, seat adjuster mechanism, metal cover over fuel selector, and right floorboard.

2. Remove check valve.

3. Disassemble the check valve, remove the internal check ball and reassemble the valve without the internal check ball. Remove the Bellanca placard showing the valve as P/N 19121-206 and remark the valve housing with a yellow stripe through the AN part number.

4. Reinstall the valve in the vapor return line.

5. Reverse Step 1 to complete procedure.

6. Make appropriate log book entries.

*Identify aircraft model year by referring to first two digits in serial number for 1973, 1974 and 1975 aircraft; aircraft serial numbers prior to 1973 were not coded to year.

**The check valve is a small 13/16 inch diameter by 1 3/4 inch long (plus fitting) AN valve located in the vapor return line between the fuel selector and the firewall. The valve may be positively identified by noting the Bellanca placard rework number 19121-206 located after AN in lieu of the AN number.

Amendment 39-2209 became effective May 22, 1975.
This amendment 39-2242 becomes effective June 25, 1975.

Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-1599; AD 73-05-02

Airworthiness Directives; Bellanca Model 17-30A, Model 17-31A, and Model **17-31ATC** Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective March 7, 1973.

Regulatory Information

73-05-02 BELLANCA: Amdt. 39-1599. Applies to Model 17-30A, Serial Numbers 30346 through 73-30496; Model 17-31A, Serial Numbers 32-37 through 73-32-97; and Model **17-31ATC**, Serial Numbers 31015 through 73-31045, certificated in all categories.

Compliance required as indicated, unless already accomplished.

To prevent possible failure of the rudder control system, accomplish the following:

(A) Within the next 10 hours time in service after the effective date of this airworthiness directive, unless already accomplished, and thereafter at intervals not to exceed 25 hours time in service from the last inspection, inspect the rudder pedal shaft assemblies, Part Numbers 195266, 195268, 195270 and 195272, equipped with brakes where the vertical tube is welded to the horizontal tube for evidence of cracks or other failures in accordance with Bellanca Service Letter No. 77 dated February 10, 1973, or later approved revisions, or an equivalent approved by the Chief, Engineering and Manufacturing Branch, Great Lakes Region. All shaft assemblies found cracked must be replaced prior to further flight with a new part of the same number utilizing a horizontal tube having a .058" wall thickness.

(B) Within the next 100 hours time in service after the effective date of this airworthiness directive unless already accomplished, replace all rudder shaft assemblies, Part Numbers 195266, 195268, 195270, and 195272, on which rudder/brake pedals are installed having .049" thick horizontal tube walls with a new assembly of the same part number utilizing a horizontal tube having a .058" wall thickness in accordance with Bellanca Service Letter No. 77 dated February 10, 1973, or later FAA approved revisions, or an equivalent approved by the Chief, Engineering and Manufacturing Branch, Great Lakes Region. Rudder pedal shaft assemblies not having the brake pedal installed are not affected by this airworthiness directive.

(C) The repetitive inspections of paragraph (A) of this airworthiness directive are no longer required when compliance with paragraph (B) of this airworthiness directive is accomplished.

(D) Aircraft Serial Numbers 73-30497 through 73-30509, 73-32-98 through 73-32- 100 were produced with .049" wall tubes but with a reinforcement gusset added and are exempt from this airworthiness directive unless the rudder pedals have been replaced during the service life of these aircraft.

This amendment becomes effective March 7, 1973.

Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-1373; AD 72-01-03

Airworthiness Directives; Bellanca Model 17-30A, 17-31A, and **17-31ATC** Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective January 5, 1972.

Regulatory Information

72-01-03 BELLANCA: Amdt. 39-1373. Applies to Models 17-30A (Serial Numbers 30394, 30395, 30396, 30397, 30398, 30399, 30400, 30401, 30402, 30403 and 30405); 17-31A (Serial Number 32-53); and **17-31ATC** (Serial Numbers 31022, 31023, 31024 and 31025) Airplanes.

Compliance: Required as indicated, unless already accomplished.

To prevent loss of engine power due to fuel starvation, accomplish the following:

Prior to next flight replace hose Aeroquip P/N 359-8D-0153, located between the firewall and engine driven fuel pump, with hose Bellanca P/N 198003-10, or an equivalent method of compliance approved by the Chief, Engineering and Manufacturing Branch, FAA, Central Region.

Bellanca Service Letter No. 68 dated December 3, 1971, pertains to this subject.

This amendment becomes effective January 5, 1972, to all persons except those to whom it was made effective by telegram dated December 17, 1971.

Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-2372; AD 75-20-06

Airworthiness Directives; Bellanca Model 17-30, 17-30A, 17-31, 17-31TC, **17-31ATC**, 14-19-3A, and 17-31A Airplanes

PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT

DATES: Effective September 26, 1975.

Regulatory Information

75-20-06 BELLANCA: Amendment 39-2372. Applies to Model 17-30, 17-30A (S/N 30263 through S/N 76-30811), 17-31, 17-31TC, **17-31ATC** (S/N 30004, S/N 31004 through S/N 76-31124), 14-19-3A, and 17-31A (S/N 32-15 through S/N 76-32-163) airplanes certificated in all categories.

Compliance required upon accumulation of 300 hours time in service or within the next 25 hours time in service from the effective date of this Airworthiness Directive (whichever occurs later) unless already accomplished, and thereafter at intervals not to exceed 100 hours time in service from the last inspection until Bellanca Kit SK1234789-0004 is accomplished.

To detect cracks in either vertical side fuselage tube (F. S. 7), which is adjacent to the horizontal stabilizer carry-through, in the area near the upper fuselage longeron, accomplish the following:

A. Inspect the vertical tube for circumferential cracks at the upper weld, and between the upper weld and the horizontal stabilizer carry-through tube, all around the tube.

B. If cracks are found, repair and modify in accordance with Bellanca Kit SK1234789-0004 or an equivalent approved by the Chief, Engineering and Manufacturing Branch, Great Lakes Region, before further flight, except that the airplane may be flown, in accordance with FAR 21.197, to a base where the repair can be performed.

C. If no cracks are found, no further action is required until the next inspection.

Bellanca Service Letter No. 85 or 85A pertains to this same subject.

This amendment becomes effective September 26, 1975.

Footer Information

Comments

Airworthiness Directive

Federal Register Information

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Amendment 39-1129; AD 70-26-02

Airworthiness Directives; WOODWARD: Applies to Woodward Propeller Governors

PDF Copy (If Available):

Preamble Information

DATES: Effective December 27, 1970.

Regulatory Information

70-26-02 WOODWARD: Amdt. 39-1129. Applies to Woodward propeller governors of the following listed models having serial numbers below 992601 which were manufactured prior to 1970 used on single, reciprocating engine aircraft: Woodward Governor Models 210452, A210452, B210452, C210452, D210452, E210452, F210452, G210452, H210452, J210452, K210452, L210452, M210452,

P210452, 210453, 210458, 210460, B210460, 210462, A210462, 210472, and C210472. Date of manufacture can be determined from a decal attached to the governor body which shows the quarter and the year. Example: "1Q70" indicates first quarter 1970.

Compliance: Required within the next 50 hours' time in service after the effective date of this AD, unless previously accomplished.

To prevent loss of propeller control accomplish the following or an equivalent procedure approved by the Chief, Engineering and Manufacturing Branch, FAA, Central Region.

A. Inspect the propeller governor lever arm for security and engagement on the speed control shaft as follows:

1. Inspect axial security by applying, alternately, in both directions, a manual force of 5 to 10 pounds to the lever arm directly in line with the axis of the shaft. Do not mistake end play of the shaft in the governor cover for a loose lever.

2. Inspect rotational security by observing the arm and shaft while the cockpit propeller control is moved from full increase to full decrease and back to full increase RPM positions.

3. Inspect axial location of lever arm and offset lever arm extension on the shaft. On those installations which use an offset extension which bolts to the outboard face of the lever arm and has an alignment hole for locating on the shaft, the shaft must protrude through the full thickness of the extension. When no extension is used the shaft must protrude beyond the lever arm by at least .050 inch.

B. If the inspections in accordance with Paragraphs A1 and A2 disclose movement of the lever arm relative to the shaft or if the location of the arm or extension do not meet the limits defined in Paragraph A3 proceed as follows:

1. Remove arm from shaft and inspect serrations on both parts for wear and damage. Before removing arm, provisions, such as match-marking, should be made to assure reinstallation in the same circumferential location of the shaft. Later design shafts have a retaining ring and groove at the end of the shaft serrations to provide positive retention of the lever arm. To remove the arm from these shafts move the arm toward the governor cover until the retainer is exposed, then remove retainer.

2. If the serrations are damaged or excessively worn, replace the governor with a serviceable unit.

3. If the serrations are in satisfactory condition replace the lever arm on the shaft in its original circumferential location. If retainer ring was removed pursuant to Paragraph B1 reinstall it. Position axially on shaft to maintain .020 to .045 inch clearance between bottom side of lever arm and the top of governor cover at the maximum RPM setting. Torque the clamping screw in the lever arm to 33 to 38 inch pounds. (This value is specified in Woodward Overhaul Bulletin 33017A.) Recheck security per Paragraph A and if tight, safety the clamping screw with AMS 5685 .024-.026 wire or equivalent, taking care that the wire will not interfere with the aircraft manufacturer's lever arm extension.

4. Assure security of aircraft linkage to governor. If any aircraft linkage settings were changed as a result of work performed above, check rigging in accordance with the aircraft manufacturer's instructions.

Woodward FAA-approved Service Bulletin No. 33534 or later FAA-approved revisions pertain to this subject.

NOTE: The above listed governors may be installed on the following single, reciprocating engine aircraft but this listing is not all inclusive:

BEECH Models E33, F33, E33A, E33C, F33A, F33C, 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, H35, J35, K35, M35, N35, P35, S35, V35, V35A, V35B, 36 and A36 airplanes.

BELLANCA Models 14-19-3A, 17-30, 17-30A, 17-31, 17-31A, 17-31TC, **17-31ATC** airplanes.

CESSNA Models 180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182K, 182L, 182M, 182N, 185, 185A, 185B, 185C, 185D, 185E, A185E, 188, A188, 188A, A188A, 206, U206, P206, U206A, P206A, P206B, TU206A, TU206B, TP206A, TP206B, U206B, P206C, TP206C, P206D, TP206D, P206E, TP206E, U206C, TU206C, U206D, TU206D, U206E, TU206E, 207, T207, 210B, 210C, 210-5(205), 210-5A(205A), 210D, 210E, T210F, 210F, T210G, T210H, 210G, 210H, T210J, 210J, 210K and T210K airplanes.

MAULE Models M-4-210, M-4-210C, M-4-210S, M-4-210T, M-4-220, M-4-220C, M-4-220S, M-4-220T and M-4-180 airplanes.

MOONEY Models M20C and M20D airplanes.

NAVION H Model airplanes.

This amendment becomes effective December 27, 1970.

Footer Information

Comments