

LUFTFARTSVERKET
Hovedadministrasjonen
Luftfartsinspeksjonen
Postboks 8124 Dep., 0032 Oslo
Telefon : 22 94 20 00
Telefax : 22 94 23 91
Tlgr. : CIVILAIR OSLO
Teleks : 71032 enfb n



LUFTDYKTIGHETSPÅBUD (LDP)

TILBEHØR

PRECISE FLIGHT - 1

Med hjemmel i lov om luftfart av 16. desember 1960 §§ 214 og 43, jfr. kgl. res. av 8. desember 1961, litra K, og Samferdselsdepartementets bemyndigelse av 23. mars 1964, fastsetter Luftfartsverket følgende forskrift om luftdyktighet.

93-063 UTSKIFTING AV "PULSELITE" ENHETER

Påbudet gjelder:

Alle luftfartøy som har installert Precise Flight, Inc. "pulselite" enheter, modell 1210-2405-2; med serienummer X00150 t.o.m. X01371, samt alle mindre luftfartøy som har fått installert "pulselite" enheter i samsvar med STC SA4005NM.

Påbudet omfatter:

For å hindre røyk i cockpit som følge av at "pulslite" enheter har blitt overhetet pga. underdimensjonerte transistorer, skal følgende tiltak utføres i samsvar med Precise Flight, Inc., Service Bulletin No. PL9303001, datert 10.03.93:

- 1 Fjern Precise Flight, Inc. "pulselite" enheter av modell 1210-2405-2 fra luftfartøyet, eller
- 2 Bytt ut Precise Flight, Inc. "pulselite" enheter av modell 1210-2405-2 med forbedret "pulselite" enheter av modell 1210-2405-2A.

Anm.: Installasjon av "pulselite" enheter modell 1210-2405-2 på noe luftfartøy er ikke tillatt.

Tid for utførelse:

Innen 01.10.94.

Referanse:

FAA AD 93-12-04.

01.10.93

LUFTDYKTIGHETSPÅBUD

MERK! For at angjeldende flymateriell skal være luftdyktig må påbudet være utført til rett tid og notat om utførelsen ført inn i vedkommende journal med henvisning til denne LDPs nummer.

Luftfartstilsynet
1. tilsynsavdeling
Postboks 8050 Dep., 0031 Oslo
Besøksadresse:
Rådhusgata 2, Oslo
Telefon : 23 31 78 00
Telefax : 23 31 79 96
e-post: postmottak@caa.dep.no

LUFTDYKTIGHETSPÅBUD (LDP)

MOTORDREVNE
LUFTFARTØY

PRECISE FLIGHT-2

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, kap. XV § 15-4 jf. kap. IV § 4-1 og Samferdselsdepartementets bemyndigelse av 25. mars 1994, fastsetter Luftfartstilsynet følgende forskrift om luftdyktighet.

2000-009 STANDBY VAKUUM SYSTEM

Påbudet gjelder:

Precise Flight Inc. Model SVS III Standby Vakuum System installert i henhold til FAA AD 99-24-20.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av FAA AD 99-24-20.

Tid for utførelse:

Til de tider som beskrevet i vedlagte kopi av FAA AD 99-24-20, med virkning fra denne LDP's gyldighetsdato.

Referanse:

FAA AD 99-24-20.

Gyldighetsdato:

2000-02-07.

AIRWORTHINESS DIRECTIVE



REGULATORY SUPPORT DIVISION
 P.O. BOX 26460
 OKLAHOMA CITY, OKLAHOMA 73125-0460

U.S. Department
 of Transportation
**Federal Aviation
 Administration**

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

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

Selected STC	Make and Model Airplanes
SA2683NM	<p> 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 Biamond, 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 and 108-3 Sud Aviation Models Gardan GY.80-1500, GY.80-160, and GY.80-180 </p>

Affected STC	Make and Model Airplanes
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

PRECISE FLIGHT, INC.
AFMS for STANDBY VACUUM SYSTEM

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 LIMITATIONSA. 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)

PRECISE FLIGHT, INC.
AFMS for STANDBY VACUUM SYSTEM

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

APPENDIX TO AD 99-24-10 (Continued)

PRECISE FLIGHT, INC.
AFMS for STANDBY VACUUM SYSTEM

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		

APPENDIX TO AD 99-24-10 (Continued)

PRECISE FLIGHT, INC.
AFMS for STANDBY VACUUM SYSTEM

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.

APPENDIX TO AD 99-24-10 (Continued)PRECISE FLIGHT, INC.
AFMS for STANDBY VACUUM SYSTEM**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

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.

Luftfartstilsynet
1. tilsynsavdeling
Postboks 8050 Dep., 0031 Oslo
Besøksadresse:
Rådhusgata 2, Oslo
Telefon : 23 31 78 00
Telefax : 23 31 79 96
e-post: postmottak@caa.dep.no

LUFTDYKTIGHETSPÅBUD (LDP)

TILBEHØR

PRECISE FLIGHT- 3

Med hjemmel i lov av 11. juni 1993 nr. 101 om luftfart, kap. XV § 15-4 jf. kap. IV § 4-1 og Samferdselsdepartementets bemyndigelse av 25. mars 1994, fastsetter Luftfartstilsynet følgende forskrift om luftdyktighet.

2005-052 "STANDBY VACUUM SYSTEMS"

Påbudet gjelder:

"Precise Flight Inc. Model SVS I and Model SVS IA Standby Vacuum-Systems" installert i luftfartøy som beskrevet i FAA AD 2005-11-05.

Påbudet omfatter:

Utfør tiltak som beskrevet i vedlagte kopi av FAA AD 2005-11-05.

Tid for utførelse:

Til de tider som beskrevet i vedlagte kopi av FAA AD 2005-11-05, med virkning fra denne LDP's gyldighetsdato.

Referanse:

FAA AD 2005-11-05.

Gyldighetsdato:

2005-11-01.

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

CORRECTION: In today's, June 7, 2005, Federal Register (FR) on pages 32992 and 32994, there are typos in the Directorate Identifier number of AD 2005-11-05. The correct directorate identifier number should be "2004-CE-30-AD". The Government Printing Office will issue a correction to this AD in the FR. We have corrected this copy.

2005-11-05 Precise Flight, Inc.: Amendment 39-14107; Docket No. FAA-2004-19354; Directorate Identifier 2004-CE-30-AD.

When Does This AD Become Effective?

- (a) This AD becomes effective on **July 18, 2005**.

What Other ADs Are Affected by This Action?

- (b) None.

What Airplanes Are Affected by This AD?

(c) This AD affects Models SVS I and SVS IA standby vacuum systems (SVS), installed on, but not limited to, the following aircraft that are certificated in any category. These systems can be installed under the applicable supplemental type certificate (STC) or through field approval:

Affected STC	Make and model/series aircraft
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 Series 77.
SA2161NM	Raytheon Beech Model V35B.
SA2162NM	The Cessna Aircraft Company Models 321 (Navy OE-2), 172N, 172P, 172D, 172M, 172L, 172I, 172H (USAF T-41A), 172F (USAF T-41A), 172E, 172C, 172, 172Q, 172B, TR182, T182, 305B (Military T0-1D, 0-1D, 0-1F), R172E Series, 175C, 175B, 175A, R172F (USAF T-41D), P172D, 150, 150A, 150C, 150B, 150D, A152, A150M, 150M, 152, A150L, 150K, 150J, 150H, 150G, 150F, 210-5 (205), 210-5A (205A), T210R, P210R, T210N, 210N, P210N, 210M, T210L, 210K, T210K, 210J, T210H, 210H, T210G, T210F, 210F, 210D, 210C, 210B, 210A, 210L, 210, A185F, A185E, 185E, 185C, 185B, 185A, 185, 140A, 305A (USAF 0-1A), 305C (USAF 0-1E), 305D (USAF 0-1G), 305F, 120, 170B, 170A, 170, 207A, T207, 207, 206, P206B, P206,

SA2162NM (continued)	P206C, TU206A, TU206G, TU206E, TU206C, P206D, U206G, U206F, U206E, U206D, U206C, U206A, TP206E, TP206D, TP206C, TP206A, P206E, TU206D, T188C, A188B, A188, 188A, and 188.
2164NM	The Cessna Aircraft Company Model 180A.
SA2167NM	The New Piper Aircraft, Inc. Models PA-16S and PA-16, Series PA-24, Models PA-24-400, PA-24-250, PA-24, PA-24-260, PA-18S-“135”, PA-18-“105”(Special), PA-18AS-“135”, PA-18A-“135”, PA-18-“150”, PA-19S, PA-19 (Army L-18C), PA-18S-“150”, and PA-18-“135”(Army L-21B), Series PA-18, Models PA-18-“125”(Army L-21A), PA-18S, PA-18A, PA-18, and PA-18S-“125”, Series PA-19 and PA-20, Models PA-20, PA-20S, PA-20-“135”, PA-20-“115”, and PA-22S-160, Series PA-22, Models PA-22-160, PA-22S-150, PA-22-150, PA-22, PA-22-108, PA-22-135, and PA-22S-135, Series PA-28, Model PA-28R-200, Series PA-28S and PA-28R, Models PA-28-236, PA-28-201T, PA-28R-180, PA-28RT-201T, PA-28RT-201, PA-28R-201, PA-28-181, PA-28S-180, PA-28R-201T, PA-28S-160, PA-28-235, PA-28-180, PA-28-161, PA-28-160, PA-28-151, PA-28-150, and PA-28-140, Series PA-25 (Normal Category (Cat.)), Models PA-25-260 (Normal Cat.), PA-25-235 (Normal Cat.), PA-25 (Normal Cat.), L-14, PA-12S, PA-12, PA-14, PA-15, PA-17, PA-38-112, PA-46-310P, and PA-32-260, Series PA-32 and PA-32R, Models PA-32-300, PA-32-301T, PA-32-301, PA-32R-301T, PA-32R-301(HP), PA-32R-301(SP), PA-32RT-300T, PA-32RT-300, PA-32R-300, and PA-32S-300, Series PA-36, Models PA-36-375 (Normal Cat.), PA-36-300 (Normal Cat.), and PA-36-285 (Normal Cat.)
SA2168NM	Learjet Inc. Model Learjet 24D Mooney Aircraft Corporation Models M20C, M20M, M20K, M20J, M20G, M20B, M20A, M20, M20F, M20E, and M22.
SA2683NM	Aermacchi S.p.A. Models F.260, F.260B, S.205-22/R, S.205-18/F, S.205-18/R, S.205-20/F, S.205-20/R, S.208A, and S.208 Aerocar, Incorporated 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 S.p.A. & AerferIndustrie Aerospaziali Meridionali S.p.A. Model AM-3 Aeronca Aircraft Corporation Models S15AC and 15AC Ag Cat Corporation Models G-164B, G-164, and G-164A Alliance Aircraft Group, LLC Models H-395 (USAF L-28A or U-10B), H-250, H-295 (USAF U-10D), HT-295, H-391 (USAF YL-24), H-391B, H-700, and H-395A American Champion Aircraft Corp. Models 7AC, 7FC, 7ACA, S7AC, 7BCM (L-16A), 7CCM (L-16B), 7DC, S7DC, 7EC, S7EC, 7ECA, 7GC, 7GCA, 7GCAA, 7GCB, 7GCBA, 7GCBC, 7HC, 7JC, 7KC, 7KCAB, 11BC, S11AC, S11BC, 11AC, 11CC, S11CC, 8KCAB, and 8GCBC Arctic Aircraft Company, Inc. Models S-1A, S-1A-65F, S-1A-85F, S-1A-90F, S-1B2, S-1B1 (Army L-6), and S-1B1 (Army XL-6) Augustair, Inc. Models 2150A, 2180, and 2150 Avions Jodel Models D-1190, 150, D-140-B, and DR-1050 Bellanca Aircraft Corporation Models 14-19-2, 14-19-3A, 17-30, 17-31, 17-31TC, 14-9, 14-9L, 14-12F-3, 14-13, 14-13-2, 14-13-3, 14-13-3W, 17-30A, 17-31A, and 17-31ATC Biemond, C. Model Teal CB1 Board, G.R. Model Columbia XJL-1 Booth, Lee F. dba Taylorcraft Aerospace Models F21, F21A, and F19 Chaparral Motors, Inc. Models 2T-1A-1 and 2T-1A-2 Clark Aircraft, Inc. Models 12 and 1000 Commander Aircraft Company Models 114A, 112, 112B, 112TCA, 114, and 112TC C. Itoh Aircraft Maintenance and Engineering Co., Ltd. Model N-62 DaimlerChrysler Aerospace AG Models Bolkow Jr., BO-209-150 FV & RV, BO-209-160 FV & RV, and BO-209-150 FF Flugzeugwerke Altenrhein AG (FFA) Model AS 202/15 “BRAVO” Found Brothers Aviation Limited Model FBA-2C Fuji Heavy Industries, Ltd. Models FA-200-180AO, FA-200-180, and FA-200-160 Funk Aircraft Company Model Funk C Goodyear Aircraft Corporation Model GA-22A

SA2683NM (continued)	Gulfstream Aerospace Corporation Model 111 Jamieson Corporation, The Model J-2-L1B Kearns, Edward Scott Model Trojan A-2 Luscombe Aircraft Corporation Model 11A Luscombe, The Don, Aviation History Foundation, Inc. Models T-8F, 8A, 8E, 8D, 8B, 8, 8F, and 8C Maule Aerospace Technology, Inc. Models Bee Dee M-4-210, Bee Dee M-4-180S, Bee Dee M-4-180C, Bee Dee M-4T, Bee Dee M-4-210S, Bee Dee M-4S, Bee Dee M-4-210T, Bee Dee M-4-210C, Bee Dee M-4-220S, Bee Dee M-4-220T, Bee Dee M-5-180C, Bee Dee M-5-200, Bee Dee M-5-210TC, Bee Dee M-7-235, Bee Dee M-6-235, Bee Dee M-4C, Bee Dee M-5-220C, Bee Dee M-5-235C, Bee Dee M-6-180, Bee Dee M-5-210C, Bee Dee MX-7-235, Bee Dee M-4, MX-7-160C, Bee Dee M-7 Series, Bee Dee MXT-7-180, Bee Dee MT-7-235, Bee Dee M-8-235, Bee Dee MX-7-160, Bee Dee MXT-7-160, Bee Dee MX-7-180A, Bee Dee MXT-7-180A, Bee Dee MX-7-180B, Bee Dee M-7-235B, Bee Dee M-6 Series, Bee Dee MX-7 Series, Bee Dee M-7-235C, Bee Dee M-4 Series, Bee Dee M-8 Series, Bee Dee MX-7-180C, Bee Dee M-7-260C, M-7-260, MT-7-260, Bee Dee MX-7-180, and Bee Dee M-7-235A Nardi S.A. Model FN-333 Navion Aircraft Company, Ltd. Models Navion (L-17A), Navion A (L-17B), Navion A (L-17C), Navion B, Navion D, Navion E, Navion F, Navion G, and Navion H Procaer Progetti Costruzioni Aeronautiche Models F 15/C, F 15/B, and F 15/E Prop-Jets, Inc. Models 200, 200A, 200B, 200C, and 200D REVO, Incorporated Models Lake LA-4-200, Colonial C-1, Colonial C-2, Colonial Lake Model 250, and Lake LA-4 Sky International Inc. Models S-1S, S-2A, S-2, and S-1T SOCATA—Groupe Aerospatiale Models MS880B, MS885, MS892A-150, MS892E-150, MS893A, MS893E, MS894A, MS894E, TB10, TB20, TB21, and TB9 Sud Aviation Models Gardan GY.80-160, Gardan GY.80-150, and Gardan GY.80-180 Swift Museum Foundation, Inc. Models GC-1A and GC-1B Tiger Aircraft LLC Models AA-1, AA-1A, AA-1B, AA-1C, AA-5, AA-5A, and AA-5B Univair Aircraft Corporation Models 415-C, 415-CD, 108-2, 108-3, and F-1 Univair Aircraft Corporation Models F-1A, E, 415D, M10, A-2-A, and A-2 Wright, Jr., Elzie Model F-1.
SE1779NM	Textron Lycoming, AVCO Corporation Series IGO-540, IO-320, IGSO-540, O-290, GSO-580, O-320, IGO-480, GO-480, GSO-435, O-435, SO-580-A1A, SO-580-A1B, SO-580, O-540, VO-540, TIO-541, TIO-360, TO-360, and LTO-360.
SE1780NM	Curtiss-Wright Corporation Models A70 and A70-2 Teledyne Continental Motors Series TSIO-470, A-65, A-75, C75, C-125, C-115, Models A100-1 and A100-2, Series E-165, E-185, O-200, C90, C145, O-300, E-225, O-470, IO-470, Models FSO-470A, FSO-526A, FSO-526-C, Series GO-300, Models GSO-526-A and 6-260-A, Series IO-360, Models 6-320-B, GIO-470-A, T6-320-A, IO-346-B, and IO-346-A, Series IO-520, GTSIO-520, TSIO-520, TSIO-360, and LTSIO-360.

Note: This AD affects Models SVS I and SVS IA only. The Model SVS III is addressed by AD-99-24-10, Amendment 39-11434 (64 FR 66747, November 30, 1999).

What Is the Unsafe Condition Presented in This AD?

(d) This AD is the result of several reports of failed shuttle control valves of the SVS and one report of an airplane crash with a fatality in which improper use of the SVS was a factor. The actions specified in this AD are intended to correct problems with the SVS before failure or malfunction during instrument flight rules (IFR) flight that can lead to pilot disorientation and loss of control of the aircraft.

What Must I Do To Address This Problem?

(e) To address this problem, you must do the following:

Actions	Compliance	Procedures
(1) Incorporate the airplane flight manual supplement (AFMS) in the airplane flight manual with the appropriate revision in the FAA-approved airplane flight manual (AFM).	Within 30 days after July 18, 2005 (the effective date of this AD), unless already done.	Not applicable.
(i) The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may do the flight manual changes requirement of this AD.		
(ii) Make an entry in the aircraft records showing compliance with this portion of the AD following section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).		
(2) Install placards described in the AFMS	Before further flight after incorporating the AFMS in the FAA-approved airplane flight manual (AFM) required by paragraph (e)(1) of this AD.	Follow the MANUAL VALVE Standby Vacuum System AFM SUPPLEMENT, dated February 4, 2000.
(3) Upgrade the Model SVS I or SVS IA SVS to the Model VI SVS, install the appropriate placards, and add the installation report including the instructions for continued airworthiness (ICA) to the maintenance schedule for the aircraft. (4) Do not install any Model SVS I or SVS IA SVS without also doing the actions required by paragraphs (e)(1), (e)(2) and (e)(3) of this AD.	Within 1 year after July 18, 2005 (the effective date of this AD), unless already done. As of July 18, 2005 (the effective date of this AD).	Follow Precise Flight, Inc. Installation Report No. 08074, Standby Vacuum System Model VI Upgrade Kit, dated January 7, 2000. Not applicable.

May I Request an Alternative Method of Compliance?

(f) You may request a different method of compliance or a different compliance time for this AD by following the procedures in 14 CFR 39.19. Unless FAA authorizes otherwise, send your request to your principal inspector. The principal inspector may add comments and will send your request to the Manager, Seattle Aircraft Certification Office (ACO), FAA. For information on any already approved alternative methods of compliance, contact Mr. Tin Truong, Aerospace Engineer, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4065; telephone: (425) 917-6486; facsimile: (425) 917-6590.

Does This AD Incorporate Any Material by Reference?

(g) You must do the actions required by this AD following the instructions in Precise Flight, Inc. Installation Report No. 08074, Standby Vacuum System Model VI Upgrade Kit, dated January 7, 2000 and the MANUAL VALVE Standby Vacuum System AFM SUPPLEMENT, dated February 4, 2000. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get a copy of this service information, contact Precise Flight, Inc., 63354 Powell Butte Road, Bend, Oregon 97701, telephone: (800) 547-2558; facsimile: (541) 388-1105; electronic mail: preciseflight@preciseflight.com; Internet: <http://www.preciseflight.com/svs.html>. To review copies of this service information, go to the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html or call (202) 741-6030. To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-2004-19354; Directorate Identifier 2004-CE-30-AD.

Issued in Kansas City, Missouri, on May 25, 2005.

David R. Showers,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 05-10864 Filed 6-6-05; 8:45 am]

BILLING CODE 4910-13-P