Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA2167NM

This certificate, issued to

Precise Flight, Inc. 63120 Powell Butte Rd. Bend, OR 97701

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part *of the *Regulations.

Original Product — Type Certificate Number:

*See attached FAA Approved Model List (AML)
No. SA2167NM for list of approved airplane models

Model:

and applicable airworthiness regulations

Description of the Type Design Change: Installation of Precise Flight, Inc. Stand-By Vacuum System (SVS) in accordance with the appropriate Precise Flight, Inc. Engineering Drawing listed on FAA Approved Model List No. SA2167NM, dated May 4, 2000, or later FAA approved revision.

NOTE: As a prerequisite to this change, the engine must be modified in accordance with Precise Flight, Inc. STC No. SE1779NM or SE1780NM, dated April 21, 2000, or later FAA approved revision. Also, modified aircraft must be equipped with a vacuum indicator.

Limitations and Conditions: Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to other aircraft of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this certificate, AML No. SA2167NM and the appropriate FAA Approved Flight Manual Supplement (AFMS) listed on AML No. SA2167NM must be maintained as part of the permanent records for the modified aircraft.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application:

October 31, 1983

Date of issuance: November 7, 1983

Date reissued:

Date amended:

December 16, 1983; December 7, 1984;

August 17, 1989; May 4, 2000

SEANL AVIATOR OF TOMINISTRATION

Acting Manager, Seattle Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

FAA APPROVED MODEL LIST (AML) NO. SA2167NM PRECISE FLIGHT, INC.

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INSTALLATION OF PRECISE FLIGHT STANDBY VACUUM SYSTEM

Issue Date: December 7, 1984

	AML	Amdt.	Date	5/4/2000			5/4/2000							5/4/2000					5/1/2000							
Drawing*	n 1		REV		Rev, dated 3/10/2000	Rev. 25, dated 8/26/99		Rev, dated 3/10/2000	Poy - Vated 12/22/1999	ויפי, ממוכש וביבבי וכסס					Bev - dated 3/10/2000	000000000000000000000000000000000000000	Rev 25 dated 8/26/99			Rev, dated 3/10/2000	7,000	Kev, dated 12/22/1999				
FAA Approved Drawing*			Number	SVS III Engineering Drawing	0000000	Alla Installation Report No. 50050	SVS V Engineering Drawing	0000\0000	And	Installation Report No. 00072				SVS III Engineering Drawing			Alla Installation Benort No. 50050	illotaliation (vepor vecos)		SVS V Engineering Drawing 000V0000	And	Installation Report No. 08072	E			
Cuclario Concession	FAA Approved All plane Flight Manual	Supplement*		Supplemental Flight	Manual for SA2167NM	dated 8/11/99. (5V5 III)	Supplemental Flight	Manual for Push	Operated Cable Valve	dated 2/4/2000. (5V5 V)	Supplemental Flight	Manual for Pull	Operated Cable Valve	Gated 2/4/2000. (3V3 V)	Supplemental Filght	Manual for SAZ16/NM	dated 8/11/99. (5V5 III)			Supplemental Flight Manual for Push	Operated Cable Valve	dated 2/4/2000. (SVS V)	OR	Supplemental Flight Manual for Pull	Operated Cable Valve	dated 2/4/2000. (SVS V)
	Certification	Basis for	Alteration	CAR 4a	9		CAR 4a	5		27 -				0	CAR 3	CAR 3	CAR 3	CAR 3	CAR 3	CAR 3	CAR 3		CAR 3	CAR 3	0	CARS
	Original	Cortificate	Nimber	760			760	2			·				780	797	800	1A1	805	780	797		800	1A1	1	802
		#0202	Model	1-14			14	<u>†</u>							PA-12, -12S	PA-14	PA-15	PA-16, -16S	PA-17	PA-12, -12S	PA-14		PA-15	PA-16, -16S		PA-17
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FAA APPROVED MODEL LIGIT (AML) NO. SA2167NM PRECISE FLIGHT, INC.

For INSTALLATION OF PRECISE FLIGHT STANDBY VACUUM SYSTEM

AML Amd+	Date	5/4/2000	0002/4/0												00000	0/4/2000			2					-				
d Drawing*	REV		Rev., dated 3/10/2000		Rev. 25, dated 8/26/99								(*)			Rev., dated 3/10/2000		Rev, dated 12/22/1999										
FAA Approved Drawing*	Number	SVS III Engineering Drawing	0000,000	Installation Bonort No. 50050	installation Report No. 50050										SVS V Engineering Drawing	0000000	And	mstallation Report No. 08072			12				9			
FAA Approved Airplane Flight Manual Supplement*		Supplemental Flight	Manual for SA2167NM dated 8/11/99 (SVS III)	(10 AO) (10 AO III)											ght		Operated Cable Valve		Supplemental Flight	Manual for Pull	Operated Cable Valve	dated 2/4/2000. (SVS V)						
Certificatio	Basis for Alteration	CAR 3													CAR 3													
Original Type Certificate Number		1A2							9						1A2									- 12				
Aircraft	Iapoki	PA-18, -18A,	SPECIAL),	-18S-105 (SP),	-18-125 (ARMY L-	21A), -18AS-125	-18S-125,	-18-135,	-18A-135,	-18AS-135,	-18-150, -18A-150,	-18AS-150,	-18S-150, -19	(ARMY L-18C), -19S	PA-18, -18A,	-18S, -18-105 (SPECIAL)	-18S-105 (SP)	18-125 (ARMY L-	21A),	-18AS-125,	-18S-125,	-18-135,	-18A-135,	-18AS-135,	-18-150, -18A-150,	-18AS-150,	-18S-150, -19	(ARMY L-18C), -19S
Aircraft	Mana	Piper	Corp.											+	-	Corp						•	-	-		<u> </u>	1)
<u>4</u>															9													

FAA APPROVED MODEL LIST (AML) NO. SA2167NM PRECISE FLIGHT, INC.

For

INSTALLATION OF PRECISE FLIGHT STANDBY VACUUM SYSTEM

IVV	Amdt.	Date	5/4/2000			5/4/2000									5/4/2000				5/4/2000								
Drawing*		REV		Rev, dated 3/10/2000	Rev. 25, dated 8/26/99		Rev, dated 3/10/2000		Rev, dated 12/22/1999				8			Rev, dated 3/10/2000		Rev. 25, dated 8/26/99		Rev, dated 3/10/2000		Rev, dated 12/22/1999					
FAA Approved Drawing*		Number	SVS III Engineering Drawing	0000\0000	And Installation Report No. 50050	SVS V Engineering Drawing	0000000	And	Installation Report No. 08072		58.				SVS III Engineering Drawing	0000000	And	Installation Report No. 50050	SVS V Engineering Drawing	0000000	And	Installation Report No. 08072			2		
FAA Approved Airplane	Flight Manual Supplement*		Supplemental Flight	Manual for SA2167NM	dated 8/11/99. (SVS III)	Supplemental Flight	Manual for Push	Operated Cable Valve	dated 2/4/2000. (SVS V)	30 20 20 20 20 20 20 20 20 20 20 20 20 20	Supplemental Flight	Manual for Pull	Operated Cable Valve	dated 2/4/2000. (SVS V)	Supplemental Flight	Manual for SA2167NM	dated 8/11/99. (SVS III)		Supplemental Flight	Manual for Push	Operated Cable Valve	dated 2/4/2000. (SVS V)	OR	Supplemental Flight	Manual for Pull	Operated Cable Valve	dated 2/4/2000. (SVS V)
Contification	Basis for	Alteration	CAR 3			CAR 3				2000					CAR 3				CAR 3								
Original	l ype Certificate	Number	1A4			1A4									146				1A6		V						
	Aircraft	Model	PA-20, -20S,	-20-115, -20S-115,	-20-135	PA-20, -20S.	-20-115, -20S-115,	-20-135							PA-22, -22-108,	-22-135, -22S-135,	-22-150, -22S-150,	-22-160, -22S-160	PA-22, -22-108,	-22-135, -22S-135,	-22-150 -22S-150.	-22-160, -22S-160	,				
	Aircraft	Make	Piper	Aircraft	Corp.	Piner	Aircraft	Corp.							Piper	Aircraft	Corp.		Piper	Aircraft	Corn	<u>.</u>					
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FAA APPROVED MODEL LIST (AML) NO. SA2167NM PRECISE FLIGHT, INC.

For INSTALLATION OF PRECISE FLIGHT STANDBY VACUUM SYSTEM

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1987	AML	Amdt.	חמוני	5/4/2000			5/4/2000							5/4/2000				5/4/2000								
Issue Date: December 7, 1984	Drawing*	REV	21.	Rev dated 3/10/2000		Rev. 25, dated 8/26/99	Rev - dated 3/10/2000		Rev, dated 12/22/1999						Rev, dated 3/10/2000		Rev. 25, dated 8/26/99		Rev, dated 3/10/2000		Rev, dated 12/22/1999	2				
	FAA Approved Drawing*	Number	CVC III Engineering Organia	000V0000	And	Installation Report No. 50050	SVS V Engineering Drawing 000V0000	And	Installation Report No. 08072					SVS III Engineering Drawing	0000\0000	And	Installation Report No. 50050	SVS V Engineering Drawing	0000,000	And	Installation Report No. 08072					
	FAA Approved Airplane Flight Manual	Supplement*	Supplemental Flight	Manual for SA2167NM	dated 8/11/99. (SVS III)	8	Supplemental Flight Manual for Push	Operated Cable Valve	dated 2/4/2000. (SVS V)	NO N	Supplemental Flight Manual for Pull	Operated Cable Value	dated 2/4/2000. (SVS V)	Supplemental Flight	Manual for SA2167NM	dated 8/11/99. (SVS III)		Supplemental Flight	Manual for Push	Operated Cable Valve	dated 2/4/2000. (SVS V)	OR	Supplemental Flight	Manual for Pull	Operated Cable Valve	ualed 2/4/2000. (Ovo v)
	Certification	Basis for Alteration	CAR 3)			CAR 3							CAR 3				CAR 3								
	Original Type Certificate	Number	1A15) :			1A15							2A8				2A8								
	# · · · · · · · · · · · · · · · · · · ·	Model	PA-24 -24-250	-24-260, -24-400			PA-24, -24-250, -24-260, -24-400							PA-25, -25-235,	-25-260			PA-25, -25-235,	-25-260		2					
	† () () ()	Make	Piper	Aircraft	Corp.		Piper Aircraft	Corp.						Piper	Aircraft	Corp.		Piper	Aircraft	Corp.				•		
		Item	7				12							5				4						-		1

FAA APPROVED MODEL LIST (AML) NO. SA2167NM PRECISE FLIGHT, INC.

For

INSTALLATION OF PRECISE FLIGHT STANDBY VACUUM SYSTEM

5/4/2000 5/4/2000 Date Amdt. AML Issue Date: December 7, 1984 Rev.-, dated 12/22/1999 Rev.-, dated 3/10/2000 Rev. 25, dated 8/26/99 Rev.-, dated 3/10/2000 REV FAA Approved Drawing* Installation Report No. 50050 Installation Report No. 08072 SVS III Engineering Drawing SVS V Engineering Drawing Number 0000\0000 0000\0000 And FAA Approved Airplane dated 2/4/2000. (SVS V) dated 2/4/2000. (SVS V) dated 8/11/99. (SVS III) Manual for SA2167NM Operated Cable Valve Operated Cable Valve Supplemental Flight Supplemental Flight Supplemental Flight Flight Manual Supplement* Manual for Push Manual for Pull Certification Alteration Basis for CAR 3 CAR 3 Certificate Original Number A3S0 A3S0 Aircraft Model -32RT-301T, -32RT-300T, -32RT-300T, -32RT-301T PA-32-260, -32RT-300, PA-32-260, -32RT-300, -32R-301T -32R-301T -32R-301, -32R-300, -32R-301, -32S-300-32-301T, -32S-300[°] -32-301T, -32R-300, -32-300,-32-300, -32-301, -32-301, Aircraft Aircraft Aircraft Make Piper Corp. tem 16

FAA APPROVED MODEL LIST (AML) NO. SA2167NM PRECISE FLIGHT, INC.

For INSTALLATION OF PRECISE FLIGHT STANDBY VACUUM SYSTEM

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AML	Amdt. Date	5/4/2000												5/4/2000											
Drawing*	REV		Rev., dated 3/10/2000	Rev. 25, dated 8/26/99						- 304					Rev., dated 3/10/2000		Rev. A, dated 12/22/1999								
FAA Approved Drawing*	Number	SVS III Engineering Drawing	0000000	And Installation Report No. 50050										SVS V Engineering Drawing	0000000	And	Installation Report No. 08072							-	
FAA Approved Airplane Flight Manual	Supplement*	Supplemental Flight	Manual for SAZ16/NM	dated 8/11/99. (SVS III)										Supplemental Flight	Manual for Push	Operated Cable Valve	dated 2/4/2000. (SVS V)	OR	Supplemental Flight	Manual for Pull	Operated Cable Valve	dated 2/4/2000. (SVS V)			
Certification	Basis for Alteration	CAR 3		-										CAR 3											
Original Type	Number	2A13-38												2A13-38											
	Aircraft Model	PA-28-140,	-28-141, -28-150,	-28-151, -28-160, -28-180, -28R-180,	-28S-180, -28-235,	-28-181, -28-161,	-28R-200,	-28R-201,	-28R-201T,	-28-236,	-28RT-201,	-28RT-201T,	-28-201T	PA-28-140,	-28-141, -28-150,	-28-151, -28-160,	-28-180, -28R-180,	-28S-180, -28-235,	-28-181, -28-161,	-28R-200,	-28R-201,	-28R-201T,	-28-236,	-28RT-201,	-28RT-201T, -28-201T
8	Aircraft Make	Piper	Aircraft	Corp.										Piper	Aircraft	Corp.	8								
	Item	17												18											

FAA APPROVED MODEL LIST (AML) NO. SA2167NM PRECISE FLIGHT, INC.

INSTALLATION OF PRECISE FLIGHT STANDBY VACUUM SYSTEM

-AA Approved: // A flare / Whitesting Manager, Seattle Aircraft / Certification Office Amended: May 4, 2000

FAA Approved:

Page 7 of 7

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SE1779NM

This certificate, issued to

Precise Flight, Inc. 63120 Powell Butte Rd. Bend, OR 97701

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 33 of the Federal Aviation

Original Product—Type Certificate Number:

*See attached FAA Approved Model List (AML) No. SE1779NM for list of approved airplane models and applicable airworthiness regulations

Description of the Type Design Change: Installation of Precise Flight, Inc. Standby Vacuum System SVS III, in accordance with Engineering Drawing 000V0000, Revision -, dated March 10, 2000, and Installation Reprot No. 50050, Revision 25, dated August 26, 1999, or later approved revision. Or Installation of Precise Flight, Inc. SVS V, in accordance with Precise Flight, Inc. Engineering Drawing 000V0000, Revision -, dated March 10, 2000 and Installation Instructions 08072, Revision -, dated December 12, 1999, or later FAA approved revision.

Limitations and Conditions: Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to other aircraft of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this certificate, Addendum No. SE1779NM, and FAA approved AML No. SE1779NM, December 30, 1983, or later FAA approved revision, must be maintained as part of the permanent records for the modified aircraft.

If the holder agrees to permit another person to use this certificate to after the product, the holder shall give the

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the

Date of application: Date of issuance:

December 13, 1982

December 28, 1982

Date reissued:

Date amended:

December 30, 1983; January 31, 1985;

July 25, 1990; January 31, 1991

April 21, 2000



y direction of the Administrator

Acting Manager, Seattle Aircraft Certification Office

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

United States of America

Department of Transportation—Federal Abiation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SE1779NM

SUPPLEMENTAL TYPE CERTIFICATE ADDENDUM NO. SE1779NM

The conditions and limitations of Type Certificate Data Sheet as listed in the attached AML apply except where superseded by the following:

This Supplemental Type Certificate Data Sheet, which is part of STC SE1779NM, prescribes the conditions and limitations under which the product for which the STC was issued meets the airworthiness requirements of the Federal Aviation Regulations:

SUPPLEMENTAL TYPE CERTIFICATE HOLDER: Precise Flight, Inc.

Engines:

Fuel:

Engine Limits:

Placards:

Lycoming

See Type Certificate Data Sheet

See Type Certificate Data Sheet

Placards and Operating Limits on appropriate Type Certificate Data Sheet apply except as noted herein:

The following placard is mandatory on aircraft that are required to have POH/AFM's and must be located near instrument suction gauge in full view of pilot:

STANDBY VACUUM SYSTEM: FOR OPERATING INSTRUCTIONS AND LIMITATIONS SEE SUPPLEMENT IN OWNER'S MANUAL OR PILOT'S OPERATING HANDBOOK

NOTE:

This STC covers modification of the engine only. Installation of this system in an aircraft requires aircraft installations approval and associated Airplane Flight Manual and Pilot Operating Handbook Supplement for the installation.

For those airplanes which do not have an AFM/POH, the placards provided in each Precise Flight, Inc. Installation Kit must be installed with the modification.

-END-

APPROVED MODEL LIST NO. SE1779NM PRECISE FLIGHT STANDBY VACUUM SYSTEM LIST OF ACTIVE PAGES

PAGE	AMENDMENT DATE
1 2 1	08/22/90 12/28/82 12/28/82

FAA Approved:

Assistant Manager, Seattle
Aircraft Certification Office

Amended: September 9, 1990

PRECISE FILIGHT

FAA APPROVED MODEL LIST (AML) NO. SE1779NM

FOR

31, 1989	AM	AMENDMENT	4-11-83						5-10-85	8-22-90			
ISSUE DATE: OCTOBER 31,	AFM	SUPPLEMENT NUMBER/DATE	12-28-82										2 4
(svs)	FAA SEALED DRAWING/ DRAWING LIST	REVISION NO. AND DATE						u č					
JULIM SYSTEM (FAA DRA DRAW I	NUMBER	LYC. SVS 0010	LYC. SVS 0010	LYC. SVS 0010	LYC. SVS 0010	LYC. SVS 0010	LYC. SVS 0010	LYC. SVS 00 10	LYC. SVS 0010	LYC. SVS 0010	LYC. SVS 0010	
INSTALLATION OF STANDBY VACUUM SYSTEM (SVS)	CERT IF ICAT ION BAS IS	FOR ALTERATION	CAR 13 and T.C. E-223	CAR 13 and T.C. E-223	CAR 13 and T.C. E-274	CAR 13 and T.C. 1E12	CAR 13 and T.C. E-277	CAR 13 and T.C. 227	CAR 13 and T.C. E-286	CAR 13 and T.C. E1CE	CAR 13 and T.C. E-16EA	. CAR 13 and T.C. E-26EA	
INS	OR IG INAL TYPE	CERT IF ICATE NUMBER	E-223	E-229	E-274	1E12	E-277	227	E-286 Æ10	E 10E	E-16EA	E26EA	
		A IRCRAFT MODEL	0-235 Series	0-290	0-320	10-320	0-340	0-350	0-360 L0-360 10-360 L10-360	AE 10-360	110-360	T0-360 LT0-360	
		A IRCRAFT MAKE	LYCOMING										
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PAGE 1 OF 3

PRECISE PLIGHI

FAA APPROVED MODEL LIST (AML) NO. SE1779NM

FOR

(SVS)
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AML AMENDMENT DATE SSUE DATE: OCTOBER 31, 1989 AFM SUPPLEMENT NUMBER/DATE 12-28-82 REVISION NO. AND DATE FAA SEALED DRAWING/ DRAWING LIST LYC. SVS 00 10 LYC. SVS 0010 LYC. SVS 00 10 NUMBER LYC. SVS 00 10 CAR 13 and T.C. E-304 CAR 13 and T.C. E-228 CAR 13 and T.C. E-276 CAR 13 and T.C. E-275 CAR 13 and T.C. E-295 CAR 13 and T.C. IE11 CAR 13 and T.C. E284 CAR 13 and T.C. 1E4 CAR 13 and T.C. 1E7 CERT IF ICAT ION BAS IS FOR ALTERATION OR IGINAL TYPE CERT IF ICATE NUMBER E-295 E-276 E-275 E-284 E-228 <u>#</u> E304 **E4** 1E7 G0-480,1G0-480, GS0-480 0-480 A IRCRAFT MODEL 1650-480 IGS0-540 160-540 GS0-435 0-540-9 10-540 0-43E G0-435 0-540 LYCOM ING A IRCRAFT MAKE

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PAGE 2 OF

PRECISE F'-GHT

FAA APPROVED MODEL LIST (AML) NO. SE1779NM

FOR

INSTALLATION OF STANDBY VACUUM SYSTEM (SVS)

31, 1989	BIV	AMENDMENT								
ISSUE DATE: OCTOBER 31, 1989	AFU	SUPPLEMENT NUMBER/DATE	12–28–82							
(c/c)	FAA SEALED DRAWING/ DRAWING LIST	REVISION NO. AND DATE			<i>t</i>					12.
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CAC STREET SI	CERT IF ICATION BAS IS	FOR ALTERATION	CAR 13 and T.C. E14EA	CAR 13 and T.C. E10EA	CAR 13 and T.C. E19EA	CAR 13 and T.C. E-256	CAR 13 and T.C. E-285	CAR 13 and T.C. 1E15		
	OR IG INAL TYPE	CERT IF ICATE NUMBER	E 14EA	E 10EA	E 19EA	E-256	E-285	JE 15		
		A IRCRAFT MODEL	T10-540 LT10-540	T10-541	T160-541	630-580	S0-580	10-720		
		A IRCRAFT MAKE	LYCOMING							
		ITEM	70	21	22	23	24	25		

PAGE 3 OF 3

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MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

TOT CACIT SU	ich violation (Sect	ion 901 Federal Avi	ation A	ct of	1958).					7.1000
	Make	PIPER				Model	PA-28F	R-200		
1. Aircraft	Serial No.	28R-763503	34			Nationa	ality and Registrati	on Mark	200**	
	Name (As show	n on registration ce		-			U.S.A.		389X	
	5000 0000			re)		2 common	s (As shown on reg		certificate)	
2. Owner	Squie	r, William H.	•				171 Wesley R loomfield, N		69-9533	
				3.	For FAA Use Or	nly				
St 842							-			
· · · · · · · · · · · · · · · · · · ·	T			4.	Unit Identification	on			5. Type	
Unit	N	1ake			Model		Serial No).	Repair	Alteration
AIRFRAME			As des	cribe	d in Item 1 above	e)	***************************************			Х
POWERPLANT						7				
PROPELLER										
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D. I certify the have been furnished	at the repair and/o n made in accorda herein is true and	or alteration made to nce with the require correct to the best	the un ements of my	it(s) i of Pa know	identified in item art 43 of the U.S. rledge.	4 above Federal	and described on the Aviation Regulation	ne reverse ons and th	orattachmer at the inform	nts hereto ation
ate	,			Sign	nature of Author	ized Indi	vidual			
9,	17/98						N. Squi			
			7. Ap	prova	al for Return To	Service				
Pursuant to t	he authority give of the Federal Av	n persons specified riation Administration	helov	, the	unit identified	in item 4	was inspected in	the mani	ner prescribe	d by the
FAA Inspe	Flt. Standards ector	Manufacturer		Inspe	ection Authorizati		Other (Specify)			
	Designee X	Repair Station		Perso Cana	on Approved by T ada Airworthiness	ransport Group				
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AA Form 337 (12-88)				(X)	0				

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

tion of	Work Accomplished is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.
Re	moved Prestolite starter.
	stalled Sky-Tec M/N 149-12PM starter I/A/W manufacturer's installation instructions d S.T.C. # SE00218NY.
Те	sted per manufacturer's instructions: OK.
Ai	rcraft Log Books, Equipment List and Weight & Balance Data Updated.
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P. C

U.S. Department of Transportation Federal Aviation Administration

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020

For FAA Use Only

Office Identification

AEA-FSD0-23

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

						·				
1 Alucati	Make	PIPER			Model	PA-28R	-200			
1. Aircraft	Serial No.	28R-763503	84		National	Nationality and Registration Mark U.S.A. N4389X				
	Name (As shown	on registration ce	rtificate)	Address	(As shown on reg	istration c	ertificate)		
				,		71 Wesley R				
2. Owner	Squier,	, William H.			No. 17,000	12의 이번 2020		.0 0533		
					BI	comfield, N	Y 1446	9-9533		
		r - 1ish 000	vicable.	3. For FAA Use Or This approval is only to	nly					
la .	the above described	erein complied with approper in complete with approper in and is approved aircraft subject to con a authorized in FAR-43. 1997 APPROVING	formity .7.	and serial number.		Fair-23				
	T			4. Unit Identificati	on			5. Type		
Unit	Ma	ike		Model		Serial No		Repair	Alteration	
AIRFRAME	******	(As desc	ribed in Item 1 abov	re) •••••				х	
POWERPLANT										
PROPELLER				**						
	Туре	,								
APPLIANCE								*		
AFFLIANCE	Manufacturer			a o						
			6	. Conformity Stater	nent				-	
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	Wesley Rd.			Certificated Rep					ı	
Bloom	field, NY 14	1469-9533		Manufacturer	Jan Station					
have bee	hat the repair and/o n made in accordar d herein is true and	nce with the requir	rements	it(s) identified in iter of Part 43 of the U.S						
Date				Signature of Author	orized Ind	ividual A				
(0/8/97			Will	N	Serie		12836	590	
			7. Ap	proval for Return To	Service					
	the authority giver or of the Federal Av					4 was inspected in	n the man	ner prescrib	ed by the	
	A FIt. Standards pector	Manufacturer		Inspection Authorize	ation	Other (Specify)				
1 1	A Designee X	Repair Station		Person Approved by Canada Airworthine	ss Group	21		<u></u>		
Date of Approv	val or Rejection	Certificate or		Signature of Agthe	rized Indi	vidual				
6-8-9	" 7	Designation No.	?L	Kirland	Tende	1154402	2.10			

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Removed: King model KT-76 transponder, mounting tray, antenna and antenna cable.

Installed: King model KT-76A transponder, s/n 113236, mounting tray, antenna cable, and King model KA-60, s/n 112606 antenna I/A/W manufacturer's Installation Manual, No. 006-00143-0005, Revision 5, Dated 4/15/94.

Removed: p/n H23-1 nav antenna coupler.

Installed: p/n H21-1 nav antenna coupler.

Installed Comant p/n CI-104 glide slope antenna I/A/W manufacturer's installation instructions.

I/A/W FAR 23.1301, the installation was checked and functionally tested per manufacturer's Installation Manual and found to operate as prescribed.

I/A/W FAR 23.1351, electrical system load was checked. Maximum continuous electrical load was found to be less than 80% of alternator rated maximum output.

I/A/W FAR 23.1431, all radios and electronic equipment were checked for interference. No equipment exibited any symptom of interference from any other equipment.

The above installation was static load tested following AC 43.13 - 2A paragraphs 2 &3 to the following:

Up:

3.0g

Down:

6.6g

Forward:

9.0g

Side-to-side:

1.5g

No permanent deformation of structure was evident.

Logbooks, equipment lists, weight and balance	locuments updated as necessary.
EN	D



Federal Aviation Administration

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appe and disposition of this form. This report is required by law (49 U.S.C. for each such violation (Section 901 Federal Aviation Act of 1958).	421) Failure to report can regult in a civil populty makes
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for each s	sition of this form. uch violation (Sec	This report is require tion 901 Federal Avi	ed by law ation Ac	v (49 ct of	U.S.C. 1421). Fail 1958).	lure to re	eport can result in	a civil pena	alty not to ex	ceed \$1,000
-	Make					Model	-			
1. Aircraft PIPER							PA-28R-200			
	Serial No.	Nationality and Registration Mark U.S.A. N4389X						-		
	Name (As sho	wn on registration ce	ertificate	e)	1,	Address	(As shown on reg	istration (certificate)	
2. Owner	SQUIER, W	ILLIAM H.					3171 Wesley		certificate)	
							Bloomfield,		ork 14469	9
				3.	For FAA Use Onl	у				
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				4.	Unit Identification	1			5. Type	
Unit		Make			Model		Serial No).	Repair	Alteration
AIRFRAME (As de			As desc	ribe	d in Item 1 above,)	~~~~~~	2		XX
POWERPLANT	-									
PROPELLER										
	Туре									-
APPLIANCE	Manufacturer								34	
			6.	. Co	nformity Stateme	nt			<u> </u>	
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		ew York 14469		Certificated Repair Station						
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		or alteration made to ance with the requir d correct to the best				l above a Federal	and described on the Aviation Regulation	ne reverse ons and th	or attachmen at the inform	nts hereto nation
Date				Sign	nature of Authoriz	zed Indi	vidual			
June	e 5 , 1996				William	1.	feries			
					al for Return To S					•
Pursuant to Administrat	the authority giver of the Federal A	en persons specifie viation Administrati	d below on and i	, the	unit identified in	n item 4	was inspected in	the man	ner prescribe	ed by the
	A Fit. Standards pector	Manufacturer		Inspe	ection Authorizatio	on	Other (Specify)			-
	A Designee	Repair Station		Perso Cana	on Approved by Tr ada Airworthiness	ansport Group				
	val or Rejection	Certificate or Designation No.		Sign	ature of Authoriz	ed Indiv	ridual / A			
IUNE >	, 1996	BRERIYYI			delle	Zu.	O. Sarla. L	_		
AA Form 337	(12-88)				//// =	7.	- Carriago			

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Removed Piper optional equipment EGT Gauge and Probe.
Installed Insight Instrument Corp. Model No. 602 Graphic Engine Monitor, P/N1261, S/N 9016 in accordance with Supplemental Type Certificate(STC)#SA157NE per manufacturer's Installation Manual, Ver. 2.2, Dated 4/15/94. Airplane Flight Manual Supplement#1, rev. 5/6/85, added to Airplane Flight Manual I/A/W STC.

I/A/W FAR 23.1301, the installation was checked and functionally tested per manufacturer's Installation Manual and found to operate as prescribed.

I/A/W FAR 23.1351, electrical system load was checked. Maximum continuous electrical load was found to be less than 80% of alternator rated maximum output.

I/A/WFAR 23.1431, all radios and electronic equipment were checked for other ference. No equipment exibited any symptom of interference from any other equipment.

The above installation was static load tested following AC 43.13-2A paragraphs 2 & 3 to the following:

Up: 3.0g
Down: 6.6g
Forward: 9.0g
Side-to-side:: 1.5g

No permananent deformation of structure was evident.

Logbooks, equipment lists, weight and balance documents updated as necessary.

-----END------END-------

Supplemental Type Certificate

Number

This certificate; issued to

Insight Instrument Corporation Box 194, Ellicott Station Buffalo, New York 14205-0194

cortifies that the change in the type design for the following product with the limitations and conditions

therefor as specified hereon meets the sirworthiness requirements of Part 3/23 of the Civil Air

Federal Aviation

Regulations.

Original Product - Type Certificate Number:

See Master Eligibility List

Model: See STC Continuation Sheet, Page 3

Description of Type Design Change:

1. Installation of Graphic Engine Monitor (G.E.M.) System Model GEM-602 S/N 403 and subsequent in accordance with Insight Instrument Corporation (I.I.C.) Manual "Installing the G.E.M." dated September 1, 1982.

2. GEM-603, S/N 001126 and subsequent installed in accordance with I.I.C. Manual

"Installing the G.E.M.", Drawing 8258, dated February 1, 1985.

3. Installation of GEM-602 and GEM-603 in accordance with I.I.C. Manual "Installing the G.E.M." Drawing 8258 version 2.1.

Limitations and Conditions:

Insight Instrument Corporation Airplane Flight Manual Supplement No. 1, Revision No.

3, FAA approved May 6, 1985, is required with this installation. Beech 33, 35 and 36 series aircraft may also use AFMS No. 1, FAA approved August 30, 1983.

2. This instrument is approved as optional equipment only and shall not replace any othe required instrument. (See STC Continuation Sheet, Page 2)

This cortificate and the supporting date which is the basis for approval shall remain in effect until sur-

rendered; suspended; revoked; or a termination date is otherwise established by the Administrator of the

Federal Aviation Administration.

Date of application:

March 30, 1983

Sale ressued:

Dale of issuance:

June 4, 1983

Tale amended: 8/30/83, 10/13/83, 6/14/85, 1/29/88

10/31/89

By direction of the Administrator

Irwin N. BrumesSignature)

Manager, New York Aircraft

Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

United States of America

Department of Transportation—Kederal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number

SA157NE

Date amended: October 31, 1989

Limitations and Conditions: (continued)

- 3. Each aircraft installation shall be ground and flight checked, and calibrated in accordance with the requirements given on pages 4 and 5 of the I.I.C. "Installing the Graphic Engine Monitor" manual Drawing 8258 version 2.1.
- 4. This approval should not be incorporated in any aircraft of these specific models on which other approved modifications are incorporated, unless it is determined that the interrelationship between this change and any of those previously incorporated approved modifications will not introduce any adverse effect upon the airworthiness of the aircraft.

(See the following STC Continuations Sheets for Master Eligibility List)

. . . END . . .

United States of America

Department of Transportation—Rederal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number

SAI57NE

Date amended: October 31, 1989

Master Eligibility List

Insight Instrument Corporation Model 602 (Dwg. List 8200, 5/4/83) and Model 603 (Dwg. List 8260, 4/16/85)

Graphic Engine Monitor System Installation

Make	<u>Model</u>	Type Certificate
Cessna	310 - all 320 - all 336 - all 337 - all 340 - all 401 - all 402 - all 404 - all 411 - all 414 - all 421 - all 425 - all	3A10 3A25 A2CE A6CE 3A25 A7CE A7CE A7CE A7CE A7CE A7CE A7CE
Partenavia	P68C	A31EU
Piper	PA-18 - all PA-23 - all PA-24 - all PA-28 - all PA-30 - all PA-31 - all PA-32 - all PA-34 - all PA-39 - all PA-44 - all PA-46 - all PA-60 - all	1A2 1A10 1A15 2A13 A1EA A8EA A3SO 1E10 A1EA A23SO A25SO A17WE
Pitts Pitts	S1 - all S2 - all	A8SO A8SO

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

中

Department of Transport

Supplemental Type Certificate

This approval is issued to:

Insight Instrument Corporation

Box 122, Fort Erie, Ontario

L2A 5M6 Canada

Number: SA03-35

Issue No.:

Approval Date:

April 24, 2003

Issue Date:

April 24, 2003

Responsible Office:

Ontario

Aircraft/Engine Type or Model:

See Eligibility List

Canadian Type Certificate or Equivalent:

See Eligibility List

Description of Type Design Change:

Installation of Graphic Engine Monitors, Model GEM-610 and

GEMINI-1200

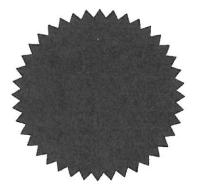
Installation/Operating Data, Required Equipment and Limitations:

Installation of the Graphic Engine Monitor (G.E.M.) System Model GEM-610 and GEMINI-1200 must be in accordance with GEM Series Installation Manual, Drawing 8258, Version 3.0, dated May 1996.

Operation must be in accordance with Insight Instrument Corporation Flight Manual Supplement FMS610/1200, Revision "-", approved April 24, 2003, or later Transport Canada approved revision.

Maintenance must be in accordance with Insight Instrument Corporation Instructions for Continued Airworthiness Graphic Engine Monitor, Amendment N/C, accepted April 24, 2003, or later Transport Canada accepted revision.

(See continuation sheets)



Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated will not adversely affect the airworthiness of the modified product.

> Wladan Vujošević Vladan Vujošević For Minister of Transport

> > Canadä



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Supplemented Type Certificate

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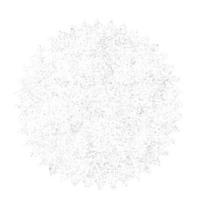
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of Transportation Federal Artation Administration

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

for each	h such violati	ion (S	ectio	n 901 Federal Avia	tion A	ot of 1958).			112		
F 10	Make	104	20.03	eksterialis ir			Model	A 202 200			
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Serial No. 28R-7635034							ty and Registration	n Mark 89X			
	Name	(As sh	nown	on registration ce	rtificat	e) .	Address (As shown on reg		ertificate)	
2. Owner				re, William			31	71 Wesley	Rd.		
z. Owner		24	CALIn J.	. 69 112424	11.0		Ho	lcomb, N.Y	• 144	469	
						3. For FAA Use O	nly				
	airworth the else inspects	va dece on by a	iquini Shibed paraci	erein complied frish eppl conts and is approved a aircraft subject to conf a authorized in FAR-43.7 APPROVING IN	nly for ormity	This environ the got for this number of building and some number.	Derges				
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Unit			Ma	ike .		Modei		Serial No		Repair	Alteration
AIRFRAME		~	***	·························(As des	cribed in Item 1 abov	(e) •••••	***********			XX
POWERPLA	ANT										
PROPELLE	R										
APPLIANCI	Type Manufa	acture	r					307			
					6	. Conformity Stater	nent				
A. Agency	y's Name and	Addr	ess			B. Kind of Agency			C. Certi	ficate No.	
	R-Tech					U.S. Certificated	Mechanic				
Ge	nesee C	oun	ty	Airport		Foreign Certific	ated Mechar	nic ,			
	st Sail					XX Certificated Rep	air Station		9	QJR698R	
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nave	been made i	n acco	ordar	r alteration made to nce with the require correct to the best	ements	nit(s) identified in iter of Part 43 of the U.S knowledge.	n 4 above a S. Federal /	nd described on the Aviation Regulation	ne reverse ons and th	or attachment at the inform	nts hereto ation
Date				4		Signature of Autho	rized Indiv	idual			
	12-	12-9	95			Kuhu Sud	.s		1 1	5440210	
					7. Ap	proval for Return To	Service			J lean , a	
Pursuan Adminis	t to the auth trator of the f	ority Federa	giver al Av	n persons specifie iation Administrati	d belov	v, the unit identified is 🛭 APPROVEI	l in item 4	was inspected in	the man	ner prescribe	ed by the
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NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

3.	Description of Work Accomplished (If more space is required, attach additional sheets, identify with aircraft nationality and registration mark and date work completed.)
	Installed Insight Strike Finder p/n 2000-021-009 s/n 4279 display unit. Installed Strike Finder Sensor p/n 2000-022 s/n 4464 IAW the manufacturer's installation manual. As per FAR 23.1351, electrical load was checked. Maximum continuous load does not exceed 80% of alternator output.
	The above installation has been static load tested to the following:
	3 g up
	9 g forward
	6 g down
	1.5 g side-to-side
	and was found to meet FAR 23.1561 requirements. No permanent deformation of structure was evident.
	The above installation has been functionally checked in accordance with manufacturers instructions and found to meet FAR 23.1301 and FAR 23.1431 requirements. All log books, equipment lists, weight and balance documents have been updated as needed.
	-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+



of Iransportation Federal Aviation Administration MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

iNSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

ior each su		ion 901 Federal Avi									
2.320		-2157-137 lies	C Dali		Marko de		1-57800 -180	le. de :		4-3-5	
1. Aircraft	Piper Serial No.			PA-28R-200					.4. *		
		62502/					lity and Registra	tion Mark	Œ.		
		635034 on on registration co					4389X				
2. Owner	William H		ertifica	Address (As shown on registration certificate) 3171 Wesley Road Holcomb, N.Y. 14469							
				3. F	or FAA Use Onl	ly					
	T			4. U	Init Identification	n			5. Type		
Unit	Λ.	1ake			Model		Serial I	No.	Repair	Alteration	
AIRFRAME	(As de			scribed	in Item 1 above)	***************************************	~		X	
OWERPLANT											
PROPELLER											
APPLIANCE	Type Manufacturer							<i>y</i>			
	Wandlacture	1				-			v.		
				6. Con	formity Stateme	ent				J	
	ame and Address			B. K	and of Agency			C. Certi	ficate No.		
Boshart E	nterprises	and Aircraft			U.S. Certificated N	Mechanic					
Services,					Foreign Certificate		inic	B3ED	1 /. /. т		
	ounty Airpo			X Certificated Repair Station				DZEK.	B2ER144J		
	N.Y. 14020				Manufacturer						
		or alteration made to nnce with the requir I correct to the best				4 above a Federal	and described on Aviation Regula	the reverse tions and th	or attachme at the inform	nts hereto nation	
Date				Signa	ature of Authoria	zed Indi	vidual	. ^			
October 8	, 1994					Jeff	7.6	molar	Walley Co.		
					for Return To S						
Pursuant to t	he authority give of the Federal A	n persons specified viation Administration	d belov	w, the	unit identified in 啓 APPROVED	n item 4 □ RI	was inspected EJECTED	in the man	ner prescribe	ed by the	
Y FAA Inspe	Flt. Standards ector	Manufacturer		Inspec	ction Authorizatio	on	Other (Specify)			
	Designee X	Repair Station		Person	n Approved by Tr da Airworthiness	ransport Group					
ate of Approva		Certificate or Designation No.	•	+	ture of Authoriz		ridual 7	1 .			
October 8	, 1994	B2ER144J			Va	JJ.	The O. hal	a. 1			
AA Form 337	12.801		-	d	77			WW/T			

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

Removed H with Hart	artzell Model zell HC-C3YK-	L HC-C2YK-1 -1RF/F7282.	and replace	ed with Hartz	zell HC-C2	2YK-1 and				
Work done	I/A/W instal	llation instructions #6. STC addemdum added to aircraft								
flight ma	nual and tach	nometer, r	e-labeled I/	A/W instruct	cion 4.	5.764 - 2.67				
Weight an	d balance par	pers update	d.							
			END							
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	*									
	$w_{i_1} = c_{i_2}$		163							
				©						
						t.				

Department of Transportation—federal Aviation Administration

Supplemental Type Certificate

Number

SA4528NM

This cortificate; issued to

Hartzell Propeller, Inc. One Propeller Place Piqua, OH 45356-2634

cortifies that the change in the type design for the following product with the limitations and conditions

therefor as specified horson meets the airworthiness requirements of Part 3 afthe Civil Air

See Type Certificate Data Sheet No. 2A13 for complete certification basis.

Original Product - Trype Cortificato Number:

2A13

Piper

Model: PA-28R-180, PA-28R-200, PA-28R-201,

PA-28RT-201

Description of Trype Design Chango:

Installation of a Hartzell HC-C3YR-1RF/F7282 constant speed propeller and Hartzell 835-47(P) or 835-52(P) spinner, in accordance with either Robert A. Craner Installation Instructions No. 6, dated November 28, 1989 or Hartzell Instructions For Installation dated March 31, 1993, or later FAA approved revision.

Limitations and Conditions:

1. Compatibility of this design change with previously approved modifications must be determined by the installer.

(See Continuation Sheet Page 3 For Additional Limitations.)

This cortificate and the supporting date which is the basis for approval shull romain in effect until surwondored, suspended, roucked, or a termination date is showing established by the Administrator of the Federal Disation Administration.

Date of application: 7/5/88

Glaberfissiones: 1/26/89

- Vale risend: -12/21/92

Tale proceed: 12/14/89; 2/10/95;

Thaddeus D. Krolicki, Jr Manager, Propulsion Branch

Chicago Aircraft/Gertification Office

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

Haird Scars of America

Department of Transportation—Federal Abiation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number

SA4528NM

Date Amended:

July 24, 1996

LIMITATIONS AND CONDITIONS (continued):

- 2. Robert A. Craner Airplane Flight Manual Supplement No. 6, dated November 30, 1989, or Hartzell Airplane Flight Manual Supplement dated February 10, 1995, or later FAA approved revision is required with this installation.
- Propeller and Propeller Limits:

Hartzell HC-C3YR-1RF/F7282 constant speed.

Hub Model: HC-C3YR-1RF Blade Model: F7282

Diameter: 74" Maximum

73" Minimum

Pitch Settings at 30" Station

Low:

PA-28R-180 11.8° ± 0.2°

PA-28R-200 12.5° ± 0.2°

PA-28R-201 12.5° ± 0.2°

PA-28RT-201 12.5° ± 0.2°

High:

30° ± 0.5°

- 4. Avoid continuous operation below 15 inches manifold pressure between 1950 and 2350 RPM.
- 5. Tachometer:

Normal operating range

(Green Arc) 500 to 2700 RPM.

Maximum continuous power (Red Radial) 2700 RPM.

Note 1. Noise Characteristics:

This modification did not increase the noise level and was not considered an "acoustical change" as defined in Paragraph 21.93(b), Amendment 21.63, of the Federal Aviation Regulations.

HARTZELL PROPELLER INC. TOP PROP PERFORMANCE CONVERSIONS



One Propeller Place Piqua, Ohio 45356-2634 U.S.A.

Phone: 937-778-4201

Authorization For Use of STC Document

This Supplemental Type Certificate is the property of Hartzell Propeller, Inc. Hartzell Propeller, Inc. authorizes the use of the STC data only for the aircraft specified below. Any use of this STC beyond the aircraft specified below is a violation of proprietary laws and is subject to legal action.

Please keep the STC, installation instructions, Flight Manual Supplement, and this authorization sheet, in a secure location. There will be a charge for issuing replacement documents.

STC Number:

SA4528NM

Aircraft Model:

PA28R-200

Serial Number:

28R-7635034

Aircraft Registration:

N4389X

Date Issued:

09/02/98

Issued by:

Becky Drinnen

Sales Representative, Hartzell Top Prop

Performance Conversions

Hartzell Customer Reference:

9805510 / Banyan

11/5/97



MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instru	ctions
and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed the company of	\$1.000
for each such violation (Section 901 Federal Aviation Act of 1958).	¢1,000

for each su	ch violation (Sec	tion 901 Federal Av	iation A	ct of	1958).		· Wally or the	and the state of			
1. Aircraft	Make Piper	51.453- 51.453-			armo yan	Model Pa	A-28R-200	1, 119		LL (g)	
ele a	Serial No. 28R-7	635034		Nationality and Registration Mark N4389X							
2. Owner	Name (As sho William H	wn on registration o	ertificat	te)		N4389X Address (As shown on registration certificate) 3171 Wesley Road Holcomb, N.Y. 14469					
				3	For FAA Use O	l			4		
		9					,				
				4.	Unit Identificati	on			5. Type		
Unit		Make			Model		Serial No).	Repair	Alteration	
AIRFRAME			d in Item 1 abov	(e)	·····			х			
OWERPLANT				3.40							
PROPELLER				2000							
APPLIANCE	Type Manufacturer				У.		E.				
-			<u> </u>	6. Co	nformity Staten	nent .					
	ame and Addres		•		Kind of Agency			C Certi	ficate No.		
Boshart Er	nterprises	and Aircraft			U.S. Certificated			O. Octa	noute 140.		
Services,		one of the second			Foreign Certifica	ated Mecha	inic				
Batavia, N	ounty Airpo N.Y. 14020			X Certificated Repair Station B2ER			R144J				
Have bee	ii iiiade iii accoit	or alteration made lance with the required correct to the bes	rements	OIP	art 43 of the LLS	4 above a 5. Federal	and described on the Aviation Regulation	ne reverse ons and th	or attachmen at the inform	nts hereto lation	
October	8, 1994			Sign	nature of Autho	rized Indi	vidual	lad			
					al for Return To		- POAR	ZWW. V			
Pursuant to Administrato	the authority giver of the Federal A	en persons specific Aviation Administrat	ed below ion and	w, the	unit identified	in item 4	was inspected in EJECTED	the man	ner prescribe	ed by the	
	Flt. Standards ector	Manufacturer		Insp	ection Authoriza	tion	Other (Specify)				
FAA		Repair Station		Pers Cana	on Approved by ada Airworthines	Transport s Group	27				
Date of Approve		Certificate or Designation No.		Sign	ature of Author	ized Indiv	ridual				
October 8	, 1994	B2ER144J			Kidd	7	L O Jasta.	L			
AA Form 337	12-88)				000	2					

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

Install Starter	new Coo contact	per battery Cable or to starter cab	es, battery cont ole and starter	actor to s ground cal	starter ole.	contactor	cable.	Majorak
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Weight a	nd balar	nce updated.						
		***	END				W 150	* . *

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			☐ Additional Sheets Are					

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA3531NM

BOGERT AVIATION Rt. 1 Box 1676 Prosser, WA 99350

This certificate, issued to Bogert Aviation

corlifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the sirunthiness requirements of Part * Regulations.

Original Product - Type Certificate Number: * Make: *

(AML) No. SA3531NM for list of approved airplane models and applicable airworthings many

Middle *

airworthiness regulations.

Description of Type Design Change: Installation of copper electrical cables in accordance with Bogert Aviation Installation Instructions as listed on AML No. SA3531NM, or later FAA approved revision.

Limitations and Conditions: Approval of this change in type design applies to the above model aircraft only. This approval should not be extended to aircraft of this model on which other previously approved modifications are incorporated unless it is determined that the relationship between this change and any of those other previously approved modifications, including changes in type design, will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate and FAA Approved Model List (AML) No. SA3531NM amended April 10, 1989, or later FAA approved revision, must be maintained as part of the permanent records for the modified aircraft. This certificate and the supporting data which is the basis for approval shall remain in effect until sur-

rendered, suspended, revoked, or a termination date is atherwise established by the Administrator of the

Federal Aviation Administration.

Late of application May 27, 1986

Gale of issuance July 15, 1986

Jule rissued:

Tole unrended: April 10, 1989

By direction of the Administrator

Steward 2 Miching (Signature)

Acting Assistant Manager, Seattle Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or improvement not exceeding 3 years, or both

FAA APPROVED HODEL LIST (AML) NO. SA3531UH

BOGERT AVIATION

FOR

INSTALLING COPPER ELECTRICAL CABLES

Issue Date: July 15, 1986 INSTALLATION CERTIFICATION ORIGINAL AML INSTRUCTIONS
REVISION NO.
ER AND DATE AFM BASIS TYPE CERTIFICATE AMENDMENT SUPPLEMENT FOR AIRCRAFT AIRCRAFT NUMBER/DATE DATE NUMBER ALTERATION NUMBER MAKE MODEL ITEM N/A 6/25/86 FAR 23 and Amendments listed in TCDS A7SO A7S0 PA34-200/ Piper -200T/ & PA34-220T PA28-140/ -150/-160/ -180/-235/ -151/-161/ -181/-236/ -201T, and PA28R-180/ -200/-201/ N/A 9/9/86 CAR 3 and Amendments listed in TCDS 2A13 6/25/86 2-2 2A13 2 Piper -201T, and PA28RT-201/ -201T 9/9/86 N/A 7/23/86 CAR 3 2-3 1 A2 PA-18 3 Piper Series 9/9/86 N/A 7/23/86 CAR 3 2-3 Piper PA-20 144 4 Series

Page 1 of 7

						Issu	Date: July 15	1986
	TYPE		CERTIFICATION BASIS		ALLATION RUCTIONS REVISION NO.	AFM SUPPLEMENT	AML AMENDMENT	
ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	CERTIFICATE NUMBER	FOR ALTERATION	NUMBER	AND DATE	NUMBER/DATE	DATE
5	Piper	PA-22 Series	146	CAR 3 dated 11/1/49 & amendments 3-1 thru 3-6.	2-3	7/23/86	N/A	9/9/86
6	Piper	PA-24, PA-24-250/ -260/-400	1A15	CAR 3 dated 11/1/49 & amendments 3-1 thru 3-12.	2-4	7/31/86	n/A	7/16/87
7	Piper	PA-32-300/ -301/-301T, PA-32R-300/ -301/-301T/ and PA-32RT-300/ -300T	A3SO .	CAR 3 dated 5/15/56 thru Amendment 3-8 & TCDS A3SO	2-10	9/20/86	N/A	7/16/87
8	Piper	PA-30	A1EA	CAR 3 dated 5/15/56 thru Amendment 3-6 dated 9/31/61, & Para. 3.705(a) of Amendment 3-7 dated 5/3/62. Also FAR 23.1557(e)(1) of Amendment 23-7 dated 9/14/69.	2-9	9/20/86	n/A	9/29/86



MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed \$1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

\$ ***		AL.CA ESE S D DIRECTO		Model PA-28R-200 PA-28							
1. Aircraft	Serial No.	635034	3.04		Natio	nality and Registrati N4389X	and Registration Mark				
2. Owner	Name (As show William H.	n on registration cer		Address (As shown on registration certificate) 3171 Wesley Road Holcomb, N.Y. 14669							
		-		3.	For FAA Use Only		-				
# = 											
	T			4.	Unit Identification			5. Type			
Unit	Unit Make				Model	Serial N	0.	Repair	Alteration		
AIRFRAME		(A	s desc	cribe	d in Item 1 above) 🟎		Х				
OWERPLANT						·					
PROPELLER			18		*						
APPLIANCE	Type Manufacturer		1								
	.,.				:	<u> </u>					
A. Agency's N	lame and Address		- 6	1	nformity Statement Kind of Agency		10.0-1	<i>(</i> :			
	nterprises a	nd Aircraft		J.	U.S. Certificated Mecha	nic	C. Certi	ficate No.			
Services,	Inc.	and infectable			Foreign Certificated Med		1				
Genesee C	ounty Airpor	t		X	Certificated Repair Stati	on	B2EF	R144J			
Batavia,	N.Y. 14020				Manufacturer		<u> </u>				
nave bee	II IIIaue III accorda	or alteration made to nce with the requirer correct to the best of	ments	OI P	identified in item 4 abov art 43 of the U.S. Feder rledge.	e and described on t al Aviation Regulati	the reverse ons and th	or attachme at the inform	nts hereto nation		
Date October 8	8, 1994			Sigi	nature of Authorized In	ndividual (- 1				
			7. Ap	prova	al for Return To Service	M. W. W.	ut:				
Pursuant to Administrate	the authority give		below	v. the	unit identified in iten		n the man	ner prescrib	ed by the		
FAA	Fit. Standards ector	Manufacturer			ection Authorization	Other (Specify)		W a second of			
	Designee	Repair Station		Pers Cana	on Approved by Transportation	ort ·					
Date of Approv	al or Rejection	Certificate or Designation No. B2ER144J	•		lature of Authorized In						

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

agh auguviol agun (12 graph 93). Feithfall Anistlein Auf et 1856).

Remove left wing from aircraft. Diassemble, replace rib sta 49.25 and sta 69.24, replace upper and lower spar caps. Aft, inboard spar and inboard aft skin assemblies.

Riviting done using original manufacturers rivit size and spacing. Installation made using AC43.13-1A para 99 and 100 as guidelines.

Removed right wing from aircraft. Disassemble and replace rib sta 49.25, sta 69.24 and sta 86.03, replace aft inboard spar, aft inboard skins and bottom aft center skin.

Left fuel cell repaired by Skycraft, Inc. see 337 for repair.

Aircraft reassembled, painted and re-rigged I/A/W Piper Service Manual P/N 753-586

Landing gear installed, rigged and retraction test performed.

Aircrft was test flown I/A/W FAR 91.407 para(b).

END



of Transportation
Federal Aviation
Administration

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

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for each su	ich violation (Sectio	n 901 Federal Aviat	ion Ac	1 01 13							
	Make	PIPER				Model		28R-20	01		
1. Aircraft	Serial No.	8R-76 3S	TO 3	34		Nationality and Registration Mark USA N4389X					
2. Owner		on registration cer				Address (As shown on reg	istration c	ertificale)		
				3. F	or FAA Use O	nly					
									Y		
				4. L	Init Identificati	on			5. Type		
Unit	Ma	ake			Model		Serial No).	Repair	Alteration	
AIRFRAME		(A	As desc	cribed	I in Item 1 abov	(e)			Х		
POWERPLANT											
PROPELLER										2	
APPLIANCE	Type Manufacturer		٠.	3 1							
	'		- 6	. Co	nformity State	ment					
A Agency's	Name and Address			B. I	Kind of Agency	/		C. Certi	ficate No.		
A figure/	KENNETH MA	ADCCVE		X	U.S. Certificate	d Mechanic		_			
1	RR#2, BOX BORDENTOW	418B)5	-	Foreign Certificated Mechanic 2 Certificated Repair Station Manufacturer						
1 bo	that the repair and/o en made in accorda ed herein is true and	nce with the recuire	Sinenio	know	dentified in ite art 43 of the U. ledge.	J. 1 50014.		the reverse ons and th	or attachme	nts hereto nation	
Date	12-7-9	92		Sigi	nature of Auth	est inci	PM	en	fllh		
			7. Ap	provi	for Return T	o Service					
Pursuant to	o the authority give tor of the Federal Av	n persons specified viation Administration	belov on and	w, the	unit identifie	d in item ∈			ner prescrib	ed by the	
FA	A Fit. Standards spector	Manufacturer	x		ection Authoriz	ation	Other (Specify)	,			
	A Designee	Repair Station		Can	on Approved b	ss Group			-A		
	oval or Rejection 2-7-92	Certificate or Designation No. 2237013	3	Sign	nature of Author	orized Indi	PM	Mi	All		

Weight and balance or operating limitation changes shall be entered in the analoguate aircraft record. An alteration must be compatible with all previous afterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished
(If more space is required, attach additional sheets, Identify with aircraft nationality and registration mark and date work completed.)

W250456AD4-4.5 RIVETS AS ORIGINAL.

MSPECTED TANKS. REPAIRS AND/OR REPLACEMENT OF PARTS AS DETAILED USING INSPECTED TANKS. REPAIRS AND/OR REPLACEMENT OF PARTS AS DETAILED OPENED ONE OF ATORES OF ATORED OF AND OF PARTS AS DETAILED OF ATORED OF ATO

STAMPED ON SKIN & BULKHEAD.

S. CHAP. 14, SEC. 2, PAR 710. TANKS ARE COMPONENT PARTS, NOT
ALL METAL WORK REPFORMED IN ACCORDING S/N 4827L----

TOG 8 COMPLETE THE FOLLOWING: IN ALE ENTRY IN AIRCRAFT INSTALL IN AIRCRAFT

☐ Additional Sheets Are Attached

TANKS INSTALLED IN A/C BY:

SIGNATURE # _______T.A.T. ______NOTHING FOLLOWS.



MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020

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				901 Federal Avia				illure to re	port carriesurina	civii peria	ity not to exc	ccα ψ1,000	
		Make						Model					
		Pip	er					Р	A 28-200R				
1. Air	craft	Serial No.	<u>Cr</u>		-	ve e	75 = 55 - 55 Miles		ity and Registratio	n Mark			
			7	25024									
				535034	utificata	1			(As shown on regi		ortificato)		
		Name (As she	own	on registration ce	rincate,	,		Address	(As shown on regi	Stration	erincate)		
2. Ov	vner	Arti	sar	n Flying C	lub,	II	Inc. P.O. Box 15482 Rochester NY 14615						
						3. F	or FAA Use O	nly		-			
			8.1	airworthiness requ	uirements bed aircra erson auth	and is oft sub orized	ed with applicable approved only for ject to conformity in FAR 43.7. PPROVING INSP	this aircr and seria	proval is only for raft make, model al number.	ngh	2.7		
						4. L	Init Identificati	on	7.0	2000	5. Type		
l	Jnit		Ма	ke	-		Model		Serial No). 11 mm	Repair	Alteration	
AIRFR	AME	~~	•••		As desc	ribec	l in Item 1 abo	/e) •••••		= v 1		XX	
POWE	RPLANT			2 8			nger - s #	-	F		н		
PROP	ELLER							4			X2		
		Туре	Ţ									11	
APPLI	ANCE	Manufacturer	r										
					6	. Co	nformity State	ment					
A. Ag	gency's N	lame and Addre	ess			B.	Kind of Agenc	У .		C. Certi	ficate No.		
							U.S. Certificate	d Mechanic	0				
G	reen1	leaf Flig	ght	Serv. In	C.		Foreign Certific	cated Mech	anic	1			
2	74 Mi	.11 Road				X Certificated Repair Station				GFPF	8498-K		
R	oches	ster NY	1	4626		Manufacturer				0111			
	have bee	n made in acco	ordar		ements	of P	art 43 of the U.		and described on t I Aviation Regulati				
Date	Se	eptember	10), 1991	-	\$ig	nature of Auth	grized ind	lividua	ien	94		
					7. Ap	prov	al for Return T	o Service		0			
				n persons specification Administrat			e unit identifie		4 was inspected i	n the mar	ner prescrib	ped by the	
	FAA	A FIt. Standards pector		Manufacturer			ection Authoriz	ation	Other (Specify)				
BY	FAA	A Designee	X	Repair Station			son Approved b ada Airworthin		rt		- 4	1.50	
Date	of Approv	val or Rejection		Certificate or Designation No.		\$ig	nature of Auth	prized Ind	-VA	-		2	
9	-19	-91		GFPR 49	8K	K	obect	K.	Gren	ing	H		

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

ALTITUDE REPORTER

INSTALL NARCO AR-850 ENCODER, UNIT MOUNTED BEHIND INSTRUMENT PANEL ON BRACKET ON FIRE WALL .

UNIT INSTALLED AND CONNECTED TO ELECT SYSTEM PER. MFGS. INSTRUCTIONS.

INSTALLATION CONFORMS TO A.C.43-13-2A PARA 2D 12 & 21.

FUSES & SWITCHES FOR UNIT PLACARDED AS TO FUNCTIONS & RATINGS.

STATIC SYSTEM LEAK TEST SATISFACTORY.

W & B UPDATED PER THIS INSTALLATION.

ENCODER REQUIRES CALIBRATION PER F.A.R 217-B

a.) encoder disabled by removing and tying back elect plug

inspection by a person authorized in FAR

- b.) encoder not to be used untill correspondence check test completed.
- c.) encoder placarded "do not use ".

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)

Form Approved Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION

NSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

								de les des des estados		
	MAKE Piper				MODEL	PA28R-200				
1. AIRCRAFT	SERIAL NO.				NATIONA	LITY AND REGIS	TRATION M.	ARK		
		R-7635034				N4389X		100		
	NAME (As shown	on registration certi	ificate)		stration certi	ficate)				
2. OWNER	Artisan Fly	ying Club In	c.			Ridge Static				
				COL		ster, N.Y.	14615			
			3	o. FUR	R FAA USE ONLY					
		4 1	JNIT IDI	FNTIFI	CATION			T .	ГҮРЕ	
								- ··	ALTER-	
UNIT	M	AKE			MODEL	SERIAL	NO.	REPAIR	ATION	
AIRFRAME	******	••••••	(As de	scribe	d in item 1 above)	***************************************	••		Х	
			1					-		
POWERPLA	NT									
						. 1				
1										
OPELLER	7-									
	TVAF		-							
	TYPE									
APPLIANCE	MANUFACTURER	NUFACTURER								
			6.	CONF	DRMITY STATEMENT		,			
A	. AGENCY'S NAME	AND ADDRESS	1110001-00	-	B. KIND OF AC		C. CEI	RTIFICATE	NO.	
Page	Avjet Corp.			-	U.S. CERTIFICATED MECHAN		-			
	Scottsville	Rd.		X	CERTIFICATED REPAIR STATIS		3	3964		
Roch	ester, N.Y. 1	4624		X	MANUFACTURER		, ,	J04		
D I cert	ify that the repair as	nd/or alteration t	nade to	the	unit(s) identified in its	em 4 above and	described o	n the rev	erse or	
attach	ments hereto have be	een made in accor	dance v	with t	the requirements of Part	43 of the U.S.	Federal Avia	tion Regu	lations	
	at the information i	urnished herein is	s true a		orrect to the best of my					
DATE		7		SIG	NATURE OF AUTHORIZ	ED INDIVIDUAL	1			
7-23	8–86				Khohe !	Molanch				
	1.	. 7	. APPRO	VAL I	FOR RETURN TO SERVICE					
Pursuant	to the authority give	en persons specifie	d belov	v, the	unit identified in item	4 was inspected REJECTED	n the mann	er prescril	ed by	
						OTHER (Specify)				
	AA FLT. STANDARDS NSPECTOR	MANUFACTURER		INSP	ECTION AUTHORIZATION					
BY	AA DESIGNEE X	REPAIR STATION		100000000000000000000000000000000000000	ADIAN DEPARTMENT					
				OF .	AIRCRAFT					
TE OF A	APPROVAL OR	CERTIFICATE OR		SIG	NATURE OF AUTHORIZ					
LJECTION	7-23-86	3964	140.		Andre 14p	luchal				
		3704		1/	//	-			8320)	

Veight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with air-craft nationality and registration mark and date work completed.)

Installed the following equipment

- 1. King glideslope receiver M/N KN-75, pn 066-1063-00, sn 15119.
- 2. King Vor/Loc converter and glideslope indicator M/N KI-209, pn 066-3056-01, sn 19219.
- 3. Wiring harness and coax cable.
- Installed equipment in the space provided on the left center side of instrument panel and tail area Sta. 59.5, Sta. 189.4 and Sta. 124.45.
- Aircraft equiped with one (1) 60 amp alternator. The maximum continuous load with standard and optional equipment installed is well within 100% of normal output.
- The above installation were static load tested with 3 g up, 9 g forward, 6.6 g down and 1.5 g side loads, and were found to meet FAR 23.561 (or 25.561) requirements. No permanent deformation of structure was evident.
- The above installations have been functionally checked in accordance with manufacturer's instructions and found to meet FAR 23,1301 (or 25,1301) requirements.
- All work was accomplished according to AC 43.13-1A and AC 43.13-2.
- The weight and balance and equipment list have been altered to reflect the above changes.

DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

MAJOR REPAIR AND ALTERATION

Form Approved Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION

		owerplant, Pro							
INSTRUCTI	ONS: Print or typons and disposition	e all entries. See F	AR 43	.9, FAR 43 Appe	ndix B, and A	C 43.9-1 (or su	ibsequent i	evision the	ereof)
	MAKE F	iper			MODEL	Pa28R		-	
AIRCRAFT	SERIAL NO. 28	BR7635034			ARK				
	NAME (As shown of	n registration certific	ate)		ADDRESS (As	shown on registrated	ration certif	îcate)	
OWNER		Tlying Club		2.4	Rochest	ter, N.Y.	1461	1.5	
			3.	FOR FAA USE ON	LY				
									u .
		4. UN	IT IDEN	NTIFICATION				5.	TYPE
UNIT					-	SERIAL N	١٥.	REPAIR	ALTER- ATION
IRFRAME	******	•••••••••••••••••••••••••••••••••••••••	As desc	cribed in item 1 a	oove)		•		X
OWERPLANT	,			,					
ROPELLER			8 7 2 7	it i y a w	s	9			
APPLIANCE	MANUFACTURER					s file			
	1		6.	CONFORMITY STAT	MENT				
	AGENCY'S NAME	AND ADDRESS		B. K	ND OF AGE	NCY	C. CI	RTIFICATE	NO.
Dale &	r-Aire Inc & Mackey R rt, N.Y.			FOREIGN CER	ATED MECHANIC TIFICATED MECHA REPAIR STATION ER	ANIC		1186	
D. I certify attachm and that	y that the repair a tents hereto have l to the information	and/or alteration moeen made in accord furnished herein is	ade to lance v true a	and correct to the	best of my k	nowledge.	described Federal Avi	on the reviation Reg	verse or ulations
DATE	4/27/84	7.	APPRO	SIGNATURE OF	-	welst			
Pursuant to	o the authority givistrator of the Fed	ven persons specified eral Aviation Admin	belov	w, the unit identi	fied in item 4 PROVED	1	in the man	ner prescr	ibed by
FA	AA FLT. STANDARDS	MANUFACTURER		INSPECTION AUTHO		OTHER (Specify)			
BY	AA DESIGNEE X	REPAIR STATION		OF TRANSPORT IN OF AIRCRAFT	ISPECTOR				
DEJECTION	PPROVAL OR 4/27/84	CERTIFICATE OR		SIGNATURE O		Moli			

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. DESCRIPTION OF WORK ACCOMPLISHED (If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

- 1. Install Trans Cal Encoder.
- 2. All installation methods and techniques are in accordance with AC 43.13-2A and have been static loaded as per Chapter #1 Paragraph #2 of AC 43.13-2A. After these loads were applied there was no evidence of distoration or permanent set in this installation.
- 3. Wire size, protective devices, routing and security of the electrical system are in accordance with applicable paragraphs of Chaptr #11 of A3.13-1A.
- 4. Total continuous current draw does not exceed 80% of the load factor.
- 5. This equipment has been functionally & flight tested and performs in accordance with manufacturer's specifications.
- 6. Weight & Balance Data is entered in Log Book.