

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA00432SE

This certificate, issued to

J. P. Instruments
P.O. Box 7033
Huntington Beach, CA 92646

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)
Make: No. SA00432SE for a list of approved airplane
Model: models and applicable airworthiness regulations.

Description of the Type Design Change: Fuel flow transducer installed in accordance with J.P. Instruments (JPI) Fuel Flow Installation Manual, Report No. 503, Revision B, dated March 14, 1997, and manufactured in accordance with JPI Drawing List Report No. 500 Revision B, dated March 14, 1997.

Note: This STC requires the installation of either:

1. JPI Fuel flow option with the EGT-701 temperature indicating system per STC SA2586NM; or
2. JPI FS-450 fuel flow indicating system per STC SA00861SE.

Limitations and Conditions: Approval of this change in type design applies to the aircraft models listed on the AML only. This approval should not be extended to other aircraft of these models 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. SA00432SE 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: January 3, 1997

Date reissued:

Date of issuance: May 2, 1997

Date amended: December 18, 2000



By direction of the Administrator
Adrian Plus
(Signature)

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.

This certificate may be transferred in accordance with FAR 21.47.

**J.P. INSTRUMENTS FAA APPROVED MODEL LIST (AML) SA00432SE
FOR
INSTALLATION OF FUEL FLOW TRANSDUCER FOR THE EGT-701 FUEL FLOW OPTION**

Issue Date: May 2, 1997

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	AML REVISION DATE
1.	Aerostar (Piper)	PA-60-600, 601, 601P PA-60-602P, -700P	A17WE	FAR 23	7-16-99
2.	Aerostar (Piper)	650, 680, 700, 700A, 700CR with STC SA1658NM Machen engine Conversion	A17WE	FAR 23	7-16-99
3.	Aero Commander	100-180	1A21	CAR 3	5-31-01
4.	American Champion Aircraft Corp.	8KCAB	A21CE	FAR 23	10-9-97
5.	American Champion Aircraft Corp.	7GCBC, 7ECA, 7GCBA, 7GCAA, 7KCAB	A-759	CAR 4a	10-9-97
6.	American Champion Aircraft Corp.	8GCBC	A21CE	FAR 23	4-19-02
7.	American General Aircraft Holdings, Grumman	AA-5, AA-5A, AA-5B	A16EA	FAR 23	6-23-97
8.	American General Aircraft Holdings, Grumman	AG-5B	A16EA	FAR 23	10-9-97
9.	American General Aircraft Holdings, Grumman	AA-1, AA-1A, AA-1B, AA-1C	A11EA	FAR 23	4-19-2002
10.	American General Aircraft	GA-7 Twin	A17SO	FAR 23	5-31-01
11.	Aviat Aircraft Inc.	A-1, A-1A, A-1B	A22NM	FAR 23	4-19-02
12.	Beech Twin	D18S, D18C, E18S, C-45G, TC-45G, C-45H, TC-45H, TC-45J or UC-45J (SNB-5), RC-45J (SNB-5P), E182- 9700, G18S, JRB-6, 3N, 3NM, 3TM,	A-765	CAR 3	5-31-01
13.	Beech	35-C33A, E33A, E33C	3A15	CAR 3	5-31-01
14.	Beech	(YT-34) 45, (T-34A, B-45) A45, (T-34B) D45 Cont. E-225-8	5A3	CAR 3	5-2-97
15.	Beech	B23,C23	A1CE	CAR 3	6-23-97
16.	Beech	C24R, B24R	A1CE	CAR 3	6-5-00
17.	Beech	35, A35, B35, C35, D35, E35, F35, G35, 35R	A-777	CAR 3	5-2-97
18.	Beech	H35	3A15	CAR3	1-27-2003
19.	Beech	J35, K35, M35, N35	3A15	CAR 3	10-9-97

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20.	Beech	V35, V35A, V35B, 35-33, 35-A33, 35-B33, 35-C33, 35-C33A, S35, P35, N35 E33, E33A, E33C, F33, F33A, F33C, G33, 36, A36, A36TC, B36TC	3A15	CAR 3	5-2-97
21.	Beech	V35, V35A, V35B with Optional engine TSI0-520 per STC SA1035WE	3A15	CAR 3	5-31-01
22.	Beech	58, 58A	3A16	CAR 3	10-9-97
23.	Beech	58P, 58PA, 58TC, 58TCA	A23CE	FAR 23	6-23-97
24.	Beech	95-55, -A55, -B55, -B55A, -C55, C55A, D55, D55A, E55, E55A, 95-58, 58A	3A16	CAR 3	5-2-97
25.	Beech	60, A60, B60	A12CE	FAR 23	1-27-2003
26.	Beech	76	A29ce	FAR 23	1-27-2003
27.	Beech	95, B95	3A16	CAR 3	6-23-97
28.	Bellanca	14-19-2	1A3	CAR 3	4-19-02
29.	Bellanca	17-30	1A3	CAR 3	5-2-97
30.	Bellanca	17-31ATC	1A3	Far 23	7-16-99
31.	Boeing Stearman	75, A75, E75, A75L300, A75, B75, A75N1, A75JI	A-743	CAR 4a	6-23-97
32.	Cessna	120, 140, with 0-200 Conversion per STC SA547EA 140A, with 0-200 Conversion per STC SA547EA	A-768 A-5A2	CAR 3 CAR 3	5-31-01
33.	Cessna	150, 150A, B, C, D, E, F, G, H, J, K, L, M, A150K, A150L, A150M, 152, A152 150, 150A, B, C, D, E, F, G, H, J, K, L, M, A150K, A150L, A150M, 152, A152 per STC SA4795SW, SA3788NM	3A19	CAR 3	4-19-02
34.	Cessna	170, 170A, B	A-799	CAR 3	5-2-97
35.	Cessna Cessna	172, 172A, B, C, D, E, F, G, H, 172 I, K, L, M, N, P, Q	3A12 3A12	CAR 3	5-2-97
36.	Cessna	172R	3A12	FAR 23	10-9-97
37.	Cessna	172S	3A12	FAR 23	1-27-2003
38.	Cessna	172RG	3A17	CAR 3	6-23-97
39.	Cessna	R172E, F, G, H, J, K, 175, 175A, B, C, P172D	3A17	CAR 3	6-23-97
40.	Cessna	177, 177A, 177B	A13CE	FAR 23	6-23-97

**J.P. INSTRUMENTS FAA APPROVED MODEL LIST (AML) SA00432SE
FOR
INSTALLATION OF FUEL FLOW TRANSDUCER FOR THE EGT-701 FUEL FLOW OPTION**

Issue Date: May 2, 1997

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	AML REVISION DATE
41.	Cessna	177RG	A20CE	FAR 23	6-23-97
42.	Cessna	180, 180A, B, C, D, E, F, G, H, J, K	5A6	CAR 3	5-2-97
43.	Cessna	182, 182A, B, C, D, E, F, G, H, J, K, L, M, N, P, Q, R	3A13	CAR 3	5-2-97
44.	Cessna	182E, F, G, H, J, K, L, M, N, P, Q (Peterson, STC SA3825SW)	3A13	CAR 3	5-31-01
45.	Cessna	182T	3A13	CAR 3	5-31-01
46.	Cessna	T182T	3A13	CAR 3	5-31-01
47.	Cessna	182 Series Air Planes Corp, STC SA00152WI Engine IO-520 and IO-550	3A13	CAR3	6-5-00
48.	Cessna	182S	3A13	FAR 23	10-9-97
49.	Cessna	R182, T182, TR182	3A13	CAR 3	6-23-97
50.	Cessna	185, 185A, B, C, D, E, A185E, A185F	3A24	CAR 3	5-2-97
51.	Cessna	188, 188A, 188B, A188, A188A, A188B, T188C	A9CE	FAR 21	5-2-97
52.	Cessna	195, A, B	A-790	CAR 3	6-23-97
53.	Cessna	206, 206, P206A, B, C, D, E, TP206A, B, C, D, E, U206, U206A, B, C, D, E, F, G, TU206A, B, C, D, E, F, G	A4CE	CAR 3	5-2-97
54.	Cessna	206H	A4CE	CAR 3	5-31-01
55.	Cessna	T206H	A4CE	FAR 23	7-16-99
56.	Cessna	U206A, B, C, D, E, F, G. (with Lycoming TIO-540- series engine per STC SA2123NM)	A4CE	CAR 3	6-5-00
57.	Cessna	207, 207A, T207, T207A	A16CE	FAR 23	5-2-97
58.	Cessna	210, 210A, B, C, D, E, F 210-5, 210-5A, T210F, 210G, T210G, 210H, T210H, 210J, T210J, T210K, 210K, 210L, T210L, 210M, T210M, 210N, P210N, T210N, 210R, P210R, T210R	3A21	FAR 23	5-2-97
59.	Cessna	T303	A34CE	FAR 23	1-27-2003
60.	Cessna	310, C, D, E, F, G, H, E310H, 310I, J, K, L, N, P, Q, R 310J-1, E310J, T310P, Q, R, T310Q, 310R, T310R	3A10	CAR 3	5-2-97
61.	Cessna	320, A, B, C, D, E, F, 320-1, 335, 340, 340A	3A25	CAR 3	5-2-97
62.	Cessna	336	A2CE	CAR 3	5-2-97

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63.	Cessna	337, 337A, B, C, D, E, F, G, H, T337B, C, D, E, F, G, H, M337B, P337H, T337H-SP	A6CE	CAR 3	5-2-97
64.	Cessna	401, 401A, B, 402, 402A, B, C, 411, 411A, 414, 414A, 421, 421A 421B, 421C	A7CE	CAR 3	5-2-97
65.	Cirrus	SR-20	A00009CH	FAR 23	5-31-01
66.	Cirrus	SR-22	A00009CH	FAR 23	1-27-2003
67.	Commander	112, B, TC, TCA, 114, A, B, TC	A12SO	FAR 23	6-23-97
68.	EXTRA	EA-300, S, L, EA-300/200	A67EU	FAR 21.29 FAR 23	6-23-97
69.	EXTRA	EA-400	A43CE	FAR 23	4-19-02
70.	GENERAL AVIA	F20	A38EU	CAR 3	5-2-97
71.	GENERAL AVIA	F22B F22C	A75EU	FAR 23	10-9-97
72.	Grumman (Dennis Buehn)	HU-16C	A23NM	FAR 21.25	1-27-2003
73.	Helio (Alliance Aircraft)	H-295, HT-295, H-395	1A8	CAR 3	1-27-2003
74.	Twin Commander Aircraft Corp.	500-A, 685	6A1 2A4	CAR 3	5-2-97
75.	Jobmaster Company	DGA-15P (Army UC-70, Navy GH-1, GH-2,GH-3, NH-1)	A-717	CAR4a	10-9-97
76.	Lancair	LC40-550FG	A00003SE	FAR-23	5-31-01
77.	Maule	MX-7-180, A, B MXT-7-180, A, B	3A23	CAR 3	6-23-97
78.	Maule	MXT-7-160	3A23	CAR 3	10-9-97
79.	Maule	M-7-260	3A23	CAR 3	7-16-99
80.	Maule	M-7-260C, MT-7-260,	3A23	CAR 3	4-19-02
81.	Maule	M-4-210, C, S, T, M-5-210C	3A23	CAR 3	5-2-97
82.	Maule	M-5-235C	3A23	CAR 3	7-16-99
83.	Maule	M-7-235C	3A23	CAR 3	6-5-00
84.	Maule	M-4-220C	3A23	CAR 3	5-31-01

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85.	Maule	M-5-180C	3A23	CAR 3	5-31-01
86.	Maule	M-6-235	3A23	CAR 3	4-19-02
87.	Maule	MX-7-180C, AC	3A23	CAR 3	4-19-02
88.	Maule	M-7-235A, B, C, MT-7-235	3A23	CAR 3	4-19-02
89.	Prop-Jet inc. (Meyers)	200B, C, D	3A18	CAR 3	4-19-02
90.	Moravan (Zlin)	Z-143L	A76EU	FAR 23	4-19-02
91.	Revo Inc. LAKE	LA-4, LA-4-200 Lake Model -250	1A13	CAR 3 FAR 23	6-23-97
92.	Mooney	M20A, B, C, D, G, J, M, R	2A3	CAR 3	6-23-97
93.	Mooney	M20, E, F, M20K	2A3 2A3	CAR 3	5-2-97
94.	Mooney	M20S	2A3	CAR 3	4-19-02
95.	Mooney Rocket Eng. Conv.	M20K Rocket 305 (STC SA5691NM)	2A3	FAR 23	7-16-99
96.	Mooney Rocket Eng. Conv.	M20J Missile (STC SA 00472SE)	2A3	FAR 23	7-16-99
97.	Mooney	M22	A6SW	CAR 3	6-5-00
98.	Piper	PA-12, -12S	A-780	CAR 3	4-19-02
99.	Piper	PA-12,-12S, with Lycoming O-320 STC SA4-456	A-780	CAR 3	1-27-2003

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100.	Piper	PA-18, PA-18S, PA-18 "105" (Special), PA-18S "105" (Special) PA-18A, PA-18 "125" (Army L-21A)	1A2	CAR 3	5-31-01
		PA-18S "125", PA-18AS "125", PA-18 "135" (Army L-21B), PA-18A "135", PA-18S "135", PA-18AS "135", PA-18 "150", PA-18A "150", PA-18S "150", PA-18AS "150", PA-18A, PA-18A "135", PA-18A "150"	AR-7	CAR 8.10b	5-31-01
101.	Piper	PA-18A"150" PA-18"150" (Crosswinds STOL STC SA682AL) or (Penn-Yan, STC SA00035NY)	AR-7 1A2	CAR 8.10b CAR 3	5-31-01
102.	Piper	PA20, PA20S, PA20"115", PA20S"115", PA20"135", PA20S"135"	1A4	CAR 3	5-2-97
103.	Piper	PA22, PA22-108, PA22-135, PA22S-135, PA22S-150, PA22-160, PA22S-160	1A6	CAR 3	5-2-97
104.	Piper	PA 23, PA23-160, PAE23-250, PA23-250	1A10	CAR 3	6-23-97
105.	Piper	PA 23-235	1A10	CAR 3	4-19-02
106.	Piper	PA24, PA24-250, PA24- 260	1A15	CAR 3	5-2-97
107.	Piper	PA24-400	1A15	CAR 3	6-5-00
108.	Piper	PA28-140,-150,-151,-160,-161, -180, PA28S-160, -180 PA28R-180	2A13	CAR 3	6-23-97
109.	Piper	PA28-181, PA28R-200, PA28R-201, -201T, PA28-201T, PA28RT-201, PA28RT-201T	2A13	CAR 3	5-2-97
110.	Piper	PA28-235, -236	2A13	CAR 3	6-23-97
111.	Piper	PA30, PA39, PA40	A1EA	CAR 3	6-23-97
112.	Piper	PA31-350	A20SO	CAR 3 FAR 23	6-23-97
113.	Piper	PA31-325	A20SO	CAR 3	7-16-99
114.	Piper	PA31	A20SO	CAR 3	1-27-2003

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115.	Piper	PA32-300, PA32S-300, PA32R-301, PA32R-300, PA32-301	A3SO	CAR 3	5-2-97
116.	Piper	PA32RT-300	A3SO	CAR 3	10-9-97
117.	Piper	PA32-260 PA32RT-300T PA32R-301T, PA32-301T	A3SO	CAR 3	6-23-97
118.	Piper	PA34-200	A7SO	FAR 23	6-23-97
119.	Piper	PA34-200T, -220T	A7SO	FAR 23	5-2-97
120.	Piper Twin	PA44-180, -180T	A19SO	FAR 23	6-23-97
121.	Piper	PA46-350P	A25SO	FAR 23	6-23-97
122.	Piper	PA46-310P	A25SO	FAR 23	5-2-97
123.	Robinson Helicopter Co.	R22, R22 ALPHA, R22 BETA, R22 MARINER	H10WE	FAR 27	10-9-97
124.	Robinson Helicopter Co.	R44	H11NM	FAR 27	10-9-97
125.	Sky Enterprises (Republic)	RC-3	A-769	CAR 3	6-5-00
126.	PITTS (AVIAT) White Inter.Ltd.	S-2S, S-2B	A8SO	FAR 23	10-9-97
127.	Christen (AVIAT) White Inter.Ltd.	A-1, S-2B	A22NM	FAR 23	10-9-97
128.	Navion Aircraft Company LTD	Navion, Navion A, B, C, D, E, F, G With IO-520 Series eng.	A-782	CAR 3	6-23-97
129.	Navion Aircraft Company LTD	Navion, Navion A, B with IO-470 Series eng.	A-782	CAR 3	6-23-97
130.	Navion Aircraft Company LTD	Navion, Navion B, D, E	A-782	CAR 3	6-23-97
131.	Navion Aircraft Company LTD	Navion F, G, H	A-782	CAR 3	5-2-97
132.	Twin Commander Aircraft	500-S, -U with Merlyn STC SA5969NM	6A1	CAR 3	4-19-02
133.	S.O.C.A.T.A Aerospatale	TB10, TB20, TB21,200	A51EU	FAR 21.29	6-23-97
134.	Siai-Marchetti	F.260, F.260B, F.260C F260D, F.260E, F.260F	A10EU	FAR 23 CAR 10	10-9-97
135.	Siai-Marchetti	F20	A38EU	FAR 23 CAR 10	5-2-97
136.	Swift Museum	GC-1B (with Continental IO-360 series engine per STC SA53NW)	766	CAR4a	6-5-00

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137.	Weatherly	620B	A26WE	FAR 21.25(a)	7-16-99

Issue Date: May 2 1997

Revisions: June 23, 1997 (Rev B), October 9, 1997 (Rev C), July 16, 1999 (Rev D), June 5, 2000 (Rev E), May 31, 2001 (Rev F),
April 19, 2002 (Rev G), November XX, 2002 (Rev H)

AMENDED DATE _____

FAA Approved: _____

Acting Manager,
Seattle Aircraft Certification Office