United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA4302NM

This certificate, issued to Electronics International, Inc.

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 Gerlificate Number: * * See attached Approved Model List (AML) No.

Make: * SA4302NM for list of approved airplane models

Model: * and applicable airworthiness regulations.

Description of Type Design Change: Installation of Electronics International, Inc. Model SR-8 or Model US-8 Digital Automatic Engine Analyzer (THE SMART SCANNER) in accordance with Electronics International, Inc. Installation Instructions No. II 012881, dated 1/28/88 (for SR-8), or Installation Instructions No. II 072091, dated July 20, 1989 (for US-8), or later FAA approved revisions.

NOTE: The Model SR-8 and Model US-8 listed here are designed as engine analyzers and are not primary instruments.

Limitations and bounditions: 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 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. SA4302NM, and the above mentioned Installation Instructions 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 otherwise established by the Administrator if the

Federal Aviation Administration.

Date of application: February 25, 1988

Date of issuance: April 21, 1988

Sale ressued:

Tale amended: October 13, 1989

By direction of the Administrator

Stewart K Miller (Signature)

Assistant 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.

Installation Of Electronics International Digital Automatic Engine Analyzers

		Aircraft Model	Original Type	Certification Basis for Alteration	FAA Sealed Drawings		Installation Instructions		AML
Item	Aircraft Make		Certificate Number		Number	Rev. No.	Number	Date	Amend. Date
					TD031381	C 10/6/89	I I 012881 I I 072091	1/28/88 7/20/89	
1.	Aerocar Inc.	1	4A16	CAR 3	ji	п	н	II	10/13/89
2.	Aeronca Inc. (also see trytek)	C-2 Series C-3 Series K&50 Series L Series	ATC 351 A 396 688, 676 ATC 596 & 614 A802	ATC 351 Aero Bul. 7-A 688, 676 ATC 596 & 614 CAR 3	11	11	II	11	H
3.	Aero- spatiale (Also see Socata)	SE 3160 Alovette- III SA 315 Series SA 316 Series SA 319 Series 262A Series SN-601 SA-350 & 360 Series SA-365 Series	H1 IN H1 IN H1 IN H1 IN H1 IN A6 EU A37 EU H8 EU H10 EU	CAR 10 CAR 10 CAR 10 CAR 10 CAR 10 CAR 10 FAR 21.29 FAR 21.29 FAR 21.29	11	ıı	11	II	5/11/92
4.	Aircraft Associates Inc.	J-2	ATC 620	ATC 620	II	ы	31	i1	10/13/89
5.	Air Tractor Inc.	AT-300, -300,-302, -400	A9SW	FAR 21.25 (a)(1)	TD121161				5/11/92
6.	Artic Air- craft Co.	S-1A Series S-1B Series	A737 A754	CAR 4a	п	н	П	И	10/13/89
7.	Ayres Corp.	S-2R S Series 600 Series S2RSeries	A3SW A4SW 2A9 2A7 A3SW	CAR 3 CAR 8 CAR 8.10(a)(1) CAF 8.10(a)(1) CAR 3	u	ш	11	а	5/11/92
8.	Ballauer	Funk Series	2-564	CAR 04.031	61	II	li .	"	10/13/89
9.	Balloon Works, The	Fire Flys	A14S0	FAR 31	"	11	п	ıı	11

for Installation Of Electronics International Digital Automatic Engine Analyzers

			Original	Certification	FAA Seale	ed Drawings	Installation		
	Aircraft	Aircraft	Type Certificate	Basis for			Instructions		AML Amend.
Item	Make	Model	Number	Alteration	Number	Rev. No.	Number	Date	Date
					TD031381	C 10/6/89	11012881 11072091	1/28/88 7/20/89	
10.	Beech Aircraft Corp.	B17B,B17L, SB17L B17R C17B,C17L C17R 18 Series 19,23,24 Series 33,35,36	ATC 560 ATC 579 ATC 602 ATC 604 A-757, -765, A1CE	CAR 4a CAR 4a CAR 4a CAR 4a CAR 4a CAR 4a	и	п	I)	п	03/05/93 10/13/89
·		Series 45 Series 50 Series 60 Series 65, 70, 90 Series 76 Series 77 Series F90 Series 95,55,56, 58 Series 99, 100 Series 200 Series 300,1900,&	3A15 5A3 5A4 A12CE 3A2O A29CE A30CE A31CE 3A16 A23CE A14CE A24CE	CAR Part 3 Car Part 03 CAR Part 3 FAR Part 23 CAR 3 Part 23 Part 23 Part 23 CAR Part 23 FAR Part 23 FAR Part 23					
		1900C Series	A24CE	FAR Part 23					5/11/92
11.	Bell Heli- copter Textron	47 Series 204&205 Series 212 Series 214 Series 222 Series 206 Series	H-1, 2H3, 2-H1 H1 SW H4 SW H6 SW H9 SW H2 SW	FAR Part 23 CAR 7 FAR Part 29 FAR Part 29 FAR Part 29 CAR 6	н	п	II	11	10/13/89 5/11/92
12.	Bellanca Aircraft Corp.	7 Series 11 Series 14, 17, Series 8 Series 300 Series 400 Series	A-759, A-761, 796 A-18CE A21CE ATC328 ATC319	CAR 4a CAR 4a CAR 3 FAR Part 23 FAR Part 23 ATC328 ATC319	н	tł	н	If	10/13/89
13.	British Aerospace	Twin Pioneer Series 2&3 Beagle B206 Series 1&2 Beagle B121 Series 1,2,&3	7A7 A11EU A22EU A22CE	CAR 10 FAR 21.29 (CAR 3) FAR 21.293 (FAR 23)	11	b1	II	11	10/13/89
14.	Camair Aircraft Corp.	Navion 480	2A2	CAR 3	и	11	" "	11	5/11/92

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			Original Type	Certification Basis	FAA Sealed Drawings		Installation Instructions		AML Amend
İtem	Aircraft Make	Aircraft Model	Certificate Number	for Alteration	Number	Rev. No.	Number	Date	Amend. Date
					TD031381	C 10/6/89	II012881 II072091	1/28/88 7/20/89	
15.	Cessna Aircraft (Also see Reims)	120,140 Series 150, 152 Series 170 Series 177 Series 180 Series 182, 185 Series 188 Series 190,195 Series 206 Series 207 Series 210 Series 210 Series 310 Series 320, 335, 340 Series 336, 337, 401, 402, 411, 414, 421, 425 Series	A768, 5A2 3A19 A799 3A12, 3A17 A13CE,A2OCE 5A6 3A13, 3A24 A-761 A9CE A-790 A4CE A16CE 3A21 5A5, 3A14 3A10 3A25 A2CE A6CE	CAR 4a CAR 3(CAR 4a) CAR Part 3 CAR Part 03 CAR Part 23 CAR Part 3 CAR Part 3 CAR Part 3 CAR Part 23 CAR Part 3	II	tt.	11	11	10/13/89 " 03/05/93 10/13/89
16.	Christen Industries	S-1,S-2, Series (Pitts)	A25CE A8SO	FAR Part 23 FAR 21 (FAR 23)		ŧı	н	11	5/11/92
17.	Child Doyle F.	S-1, S-2 Series (Pitts)	A8S0	FAR 21 (FAR 23)	Ħ	п	61	11	10/13/89
18.	Consoli- dated Aeronautic	Colonial C. Series, Lake LA Series	1A13	CAR 03	"	41	II	u)1
19.	De Havilland	DH Series DHC Series	A8EU 2-439 2-393 7A10 A-816 A-807 A9EA AR-33 AR-13	FAR 21.29 FAR 21.29 FAR 21.29 CAR 10 CAR 10 CAR 8 CAR 8 CAR 8	DI .	11	N	u	1/10/91 5/11/92 " " 1/10/91 5/11/92
20.	Enstrom Heli- copters	F Series 280 Series	HICE	CAR Part 6	11	11	II	IÈ	10/13/89

for Installation Of Electronics International Digital Automatic Engine Analyzers

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Item	Aircraft Make	Aircraft Model	Certificate Number		Number	Rev. No.	Number	Date	Amend. Date
					TD031381	C 10/6/89	11012881 11072091	1/28/88 7/20/89	
21.	Great Lakes	2T Series	ATC354 ATC-167 2-3339 ATC228 A18EA	ATC354 ATC-167 2-3339 ATC228 FAR 23	žI	13	31	и	5/11/92 10/13/89
22.	Gulfstream Aerospace	111 Series 112 Series 114 Series	11SO A12SO A12SO	FAR 23 (FAR 36)	п	11	11	ti .	5/11/92
23.	Gulfstream American Commander Division	Grumman: G-164 Series G Series AA Series GA Series 500 Series	1A16 1A17, A12EA A11EA A16EA A17SO 6A1 A11SO	CAR 8.10 (a)(1) CAR 4b FAR 23 FAR 23 CAR 3 FAR 23	If	П	II	n	10/13/89 5/11/92
		112Series, 114Series	A12S0	(Far 21) FAR 23 (Far 36)					н
24.	Helio Air- craft LTD (Navion)	H-250 H-295 HT-295 H-391 H-3918 H-395 H-395A	1A8 1A8 1A8 1A8 1A8 1A8	CAR 3	II	"	at .	II	5/11/92 10/13/89
25.	Hiller Aviation	UH-12 Series	6H1, 6H2, 4H10, 4H11, H1WE	CAR 6	11	u	11	"	11
26.	Huges Helicopter s	300 Series 269 Series	4H12	CAR Part 6	lt.	lt .	u	bf	11
27.	Hynes	H-2, H-4	2H2	CAR Part 6	п	11	и	н	я
28.	Industrie Aeronautic he E Meccaniche (See Piaggio)	PD 808/526 P.166 Series	A12EU 7A4	FAR 21.29	"	11 11	11	11	3/05/93
29.	Lake	See con- solidated Aeronautic s							
30.	Maule Air-craft Corp.	M Series	3A23	CAR Part 3	11	u	и	11	31
31.	McDonnell Douglas	DC3 Series DC4 Series	A-807 A-618	CAR 4 CAR 4	11	1 1	11	11	1/10/91
32.	Mooney	M20 Series (Mooney) M22	2A3 A6SW	CAR 3	11	11	Iŧ	*1	10/13/89 5/11/92

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 			Original	Contification	FAA Sealed Drawings		Installation		1
	Aircraft	Aircraft	Type Certificate	Certification Basis for	rak seated brawings		Instructions		AML Amend.
Item	Make	Model	Number	Alteration	Number	Rev. No.	Number	Date	Date
					TD031381	C 10/6/89	11012881 11072091	1/28/88 7/20/89	
33.	Navion	See Camiar Ryan and Thompson							
34.	North American Aviation	AT-6	A-2-575	CAR 4a	п	11	i i	11	10/13/89
35.	Partenavia Cost- truzioni Aero- nautiche	P 68 Series	A31EU	FAR 21.29 (FAR 23)	11	BE	n	ei	11
36.	Piaggio (See Industrie)	P.136-L Series	A 813	CAR 10					03/05/93
37.	Pilatus Britten- Norman	BN Series	A17EU	FAR 21,29, FAR 23	п	u	16	u	10/13/89
38.	Piper Aircraft Corp.	J4 Series J5 Series PA12Series PA15Series PA15Series PA15Series PA15Series PA16Series PA18Series PA22Series PA22Series PA22Series PA25Series PA25Series PA28Series PA28Series PA28Series PA 30,39, 40 Series	ATC595 ATC660 A-691 A-691 A-692 A-698 695 A-703 708, A-740,721 A-725 A-780 A-797 A-800 1A1 A-805 1A2 AR-7 1A4 1A61EU 1A10 1A15 2A8, 2A10 2A13	ATC595 ATC660 CAR 4a CAR4a CAR4a CAR 4a 695 CAR4a CAR4a CAR4a CAR3 CAR3 CAR3 CAR3 CAR3 CAR3 CAR3 CAR3	п	II	11	IJ	5/11/92 10/13/89
		PA31Series PA32Series PA34Series PA36Series PA38Series PA44Series PA46Series PA-60-600 PA-60-601 PA-60-601P PA-60-602P PA-60-700P	A8EA A3SO A7SO A9SO A10SO A18SO1 A19SO A25SO A17WE A17WE A17WE A17WE A17WE	CAR 3 (FAR 23) CAR 3 FAR 23 FAR 21 FAR 23 FAR 23 FAR 23 FAR 23 FAR 23 FAR 23 FAR 23 FAR 23 FAR 23 FAR 23		u 11	n n 0	11 11 11	" 10/13/89 8/21/90 10/13/89

Installation Of Electronics International Digital Automatic Engine Analyzers

				T			Issue Date: Apri		1 1700
	Aircraft	Aircraft	Original Type Certificate	Certification Basis for	FAA Sealed Drawings		Installation Instructions		AML Amend.
Item	Make	Model	Number	Alteration	Number	Rev. No.	Number	Date	Date Date
					TD031381	C 10/6/89	11012881 11072091	1/28/88 7/20/89	
39.	Pitts	See Child							
40.	Prop-Jets Inc. (Aero Commander)	200 Series	3A18	CAR 3 CAR 3 CAR 3	11	"	t f	11	10/13/89
41.	Reims Aviation (Cessna)	172Series 150Series 182Series 337Series	A4EU A18EU A13EU A42EU A23EU	CAR 10 FAR 21.29 (CAR 3) FAR 21.29 CAR PART 3 FAR 21.29 (FAR 23) FAR PART 23	п	11	II	n	. п
42.	Robinson Helicopter	R 22	H10WE	FAR 27	u	п	16	31	16
43.	Rockwell Inter- national (Also see Ayres)	111Series 112Series 114Series 500,520 560,680, 681,690, 695,720	A12SO A7SO 6A1	FAR 23 (FAR 36) FAR 23 CAR 3	11	31	11	11	1/10/91
44.	Rust, Robert F. (Chipmunk)	21,22 Series	A44EU	FAR 21.29	11	11	п	п	10/13/89
45.	Ryan Aero- nautical Co.	SCW-145 ST Series	658 ATC 571 ATC 681 A-749	CAR 4a CAR 4a	41	N N	И	II	5/11/92
46.	Ryan Aircraft Corp.	B Series	ATC 25	CAR 4a	11	II	It	ıı .	5/11/92
47.	Sikorsky Aircraft	H19 Series S-39Series S-41-B S-43Series VS-44-A S-51Series S-52Series S-55Series S-61Series S-61Series S-62A Series S-64Series S-76Series	HR1SO ATC-375 2-286 A-593 752 H-2 H-3 1H4 1 H11 1 H15	FAR 21.25 FAR 21.25 FAR 21.25 Aero Bul-7A CAR 4A CAR 6 CAR 6 CAR 6 CAR 7 CAR 7 CAR 7 CAR 8 FAR 29	11	11	=	11	5/11/92 "
48.	Socata Group Aero- spatiale	TB9,10, 20,21	A51EU		n	18	И	11	1/10/91

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					TD031381	C 10/6/89	11012881 11072091	1/28/88 7/20/89	
49.	Stearman Aircraft	C3 Series 4 Series	ATC55, 2-159 2-445 ATC251 2-155 ATC-305 ATC-292	ATC55 2-159 2-445 ATC251 2-155 ATC-305 ATC-292	ıı	n	н	II	10/13/89
	<u> </u>	6 Series	ATC459	ATC459					
50.	Stinson	SM Series SR Series SR Series	ATC16 ATC136 ATC48 ATC45 ATC61 ATC94 ATC98 ATC519 ATC530 ATC580 ATC580 ATC594 ATC608 ATC609 ATC621	ATC16 ATC136 ATC48 ATC45 ATC61 ATC94 ATC98 ATC519 ATC530 ATC580 ATC580 ATC608 ATC609 ATC609	li .	II.	āī	11	\$1
		OK GC. 100	ATC625 ATC640	ATC625 ATC640	11	u		н	10/13/89
51.	Stol Amphibian Corp.	UC-1 (Twin-Bee) Republic	A6EA A-769	CAR 3	и	н	al .	11	6/06/90
		RC-3		<u> </u>	11	11	и	a1	6/06/90
52.	Swift Museum Foundation	GC Series	A-766	CAR 4a		16	61	0	5/11/92
53.	Taylor- craft Aviation	BC & BCS Series 19 & F21 DC Series BF Series BL Series	A-696 1A9 A746 A-699 A-700	CAR Part 04 CAR Part 3 CAR 4a CAR 4a CAR 4a	ıı	и	II	11	10/13/89
54.	Thompson, Jimmie, Enterprise (Navion)	A through Z Series	A-782	CAR 3	11	EL	11	п	ti
55.	Trytek, E.J.	Aeronca CF,KC K, KS	ATC 655 A-634	Aero Bul. 7a Aero Bul. 7a	H	u	и	"	5/11/92

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					TD031381	c 10/6/89	11012881 11072091	1/28/88 7/20/89	
56.	Univar Aircraft Corp. (Forney)	108 Series	A-767 A2EA	CAR 3	11	ii	11	II.	10/13/89
	(Erco) (Stinson)	F-1A E (Mooney)	A-787 A-787 A-787	CAR 3 CAR 3 CAR 3 CAR 3					
,	(Alon)	415-D A-2	A-787 A-787	CAR 3					
	(Mooney) (Erco)	A2-A M10 415-C 415-CD	A-787 A-787 A-718 A-718	CAR 3 CAR 3 CAR 4a CAR 4a					" 5/11/92 10/13/89
57.	Varga Air- craft Corp.	2150Series	4A19	CAR 3	0)	и	H	H	"
58.	Waco Air- craft	A Series B&C Series	ATC26, 644 677 598 714 ATC41 ATC123 ATC168	ATC26 644 677 598 CAR 4a ATC 41 ATC 123 ATC168rt, 04	44	п	и	11	10/13/89
		D Series	ATC538 ATC639 ATC597 ATC42	ATC538 ATC639 ATC597 ATC42	11	11	п	и	5/11/92 "
		E Series G Series	665 2-430 ATC 13	665 2-430 ATC 13					
		I, J, K	2-363	2-363					
		Series	2-361 ATC 313	2-361 ATC 313					
		O, P, Q Series	ATC468 ATC464 ATC491 ATC453 ATC502	ATC468 ATC464 ATC491 ATC453 ATC502					
		R&S Series	ATC466 ATC311 ATC543	ATC466 ATC311 ATC543					
		U, Y, Z Series	ATC542 ATC586 ATC627	ATC542 ATC586 ATC627					10/13/8
59.	Weatherly Aviation	201Series 620Series	A10WE A26WE	FAR 21.25 (a) (CAM8) FAR 21.25 (a)	11	15	н	II	in