



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

Aviation Safety
Aircraft Certification Service
Compliance & Airworthiness Division

Seattle ACO Branch
2200 S 216th Street
Des Moines, WA 98198-6547

OCT 22 2018

In Reply
Refer To: 784-18-11545

Mr. Scott Philiben
President
CiES, Inc.
1375 SE Wilson Ave., Suite 150
Bend, OR 97702

Dear Mr. Philiben:

We have completed our evaluation of the request for amendment of Approved Model List (AML) Supplemental Type Certificate (STC) SA02511SE, to install replacement fuel quantity indicator sending unit(s) on aircraft models listed in AML SA02511SE. We find that you have satisfactorily demonstrated compliance with the applicable certification regulations. Accordingly, we have enclosed AML STC SA02511SE, amended on October 22, 2018, for the installation in accordance with the CiES Inc., Master Drawing List and the CiES Inc., Installation Requirements & Instructions for Continued Airworthiness (ICA) documents as listed on that AML, or later FAA approved revisions.

This STC is official Federal Aviation Administration (FAA) approval for your installation and may be used to authorize identical installations on other aircraft of the same model. It may be transferred or otherwise made available to another party by means of a licensee arrangement in accordance with Title 14 Code of Federal Regulations (CFR) section (§) 21.47. You are required to advise this office prior to the transfer, when you transfer or grant licensee rights to the STC, in order that we may take the necessary recording or reissuance action.

If you agree to permit another person to use this STC to alter the product, it is your responsibility to give the other person written evidence of that permission in the form of a "permission statement." This permission statement should contain the agreement specifying the product to be altered, the STC number, and the person who is being given the consent to use the STC.

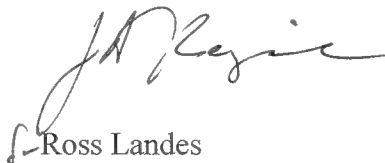
As recipient of this approval, except as provided in § 21.3(d), you are required to report any failure, malfunction, or defect in any product or article manufactured by you that you have determined has resulted or could result in any of the occurrences listed in § 21.3(c). The report should be communicated initially by telephone to the Manager, Propulsion Section, AIR-784, telephone number (206) 231-3550, within 24 hours after it has been determined that the failure has occurred. In addition, written notification to the Manager, Seattle ACO Branch, AIR-780, at the above address is required. FAA Form 8010-4 (Malfunction or

Defect Report) or any other appropriate format is acceptable in transmitting the required details.

If you plan to manufacture replacement or modification articles for sale in conformance with approved data listed on the certificate, a parts manufacturer approval (PMA) may be applied for under the provisions of § 21.303 and issued after establishing compliance with § 21.307 and § 21.308. The identification requirements for articles produced under a PMA are in § 45.15. Your application may be in letter form, with reference to the STC number, and should be addressed to the Federal Aviation Administration, Northwest Mountain Region, Attention: Manager, Seattle MIDO Section, 2200 S. 216th Street, Des Moines, WA 98198-6547.

Since I am very much interested in the service we provide to the aviation community and the public, it would be helpful if you would provide your thoughts and comments regarding how the approval process went. To gather this information, we have provided this letter and its enclosures electronically and attached a short survey that I hope you will fill out and return via e-mail as indicated on the survey. Please make the subject line of the return e-mail read "Survey" to ensure proper receipt. You may rest assured that your comments will receive my full attention and that I will hold your comments in strict confidence, should you request I do so. Please note that this stakeholder survey is common to all Aircraft Certification offices within the FAA's Aircraft Certification Service and is aimed at enabling the Aircraft Certification Service to deliver the best services to each of our stakeholders.

Sincerely,



Ross Landes
Aviation Safety
Manager, Seattle ACO Branch
Compliance & Airworthiness Division
Aircraft Certification Service

2 Enclosures

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SA02511SE

This certificate, issued to

**CiES Inc.
1375 SE Wilson Ave., Suite 150
Bend, OR 97702**

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

Original Product—Type Certificate Number: * See attached Federal Aviation Administration (FAA)
Make: Approved Model List (AML) SA02511SE for approved
Model: aircraft models and applicable airworthiness regulations

Description of the Type Design Change: Installation of replacement fuel quantity indicator sending unit(s) on aircraft models listed in AML SA02511SE, original issue date March 14, 2017, or later FAA-approved revision, in accordance with the CiES Inc., Master Drawing List and the CiES Inc., Installation Requirements & Instructions for Continued Airworthiness (ICA) documents as listed on that AML, or later FAA approved revisions.

Limitations and Conditions: Approval of this change in type design applies only to the aircraft listed on AML SA02511SE. Aircraft on which this type design change is installed must be maintained in accordance with the CiES Inc., Installation Requirements & ICA document as listed on AML SA02511SE, or later FAA-approved revision. There is no change to the operating instructions for the aircraft associated with installation of this STC. This approval should not be installed on aircraft of the approved models on which other previously approved modifications are incorporated unless it is determined by the installer that the relationship between this change and other previously approved modifications will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this certificate, AML SA02511SE, and the ICA 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: June 16, 2016

Date reissued:

Date of issuance: March 14, 2017

Date amended: October 22, 2018



By direction of the Administrator

[Handwritten Signature]

(Signature)

Manager, Seattle ACO Branch

(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.

**FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA025115E
FOR**

CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TC NUMBER	CERTIFICATION BASIS FOR ALTERATION	INSTALLATION REQUIREMENTS & INSTRUCTIONS FOR CONTINUED AIRWORTHINESS		STC MASTER DRAWING LIST		CIES SENDER PART NUMBERS APPROVED FOR INSTALLATION	APPROVED SENDER AND INSTRUMENT COMBINATIONS	AML REV DATE
					Number	Revision*	Number	Revision**			
1.	Textron Aviation Inc. (formerly Cessna)	172, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 172I, 172K, 172L, 172M, 172N, 172P, 172Q, 172R, 172S	3A12	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC284022 0603-XXXX CC284022 0605-XXXX CC284022 0609-XXXX CC284022 0616-XXXX CC284022 0617-XXXX CC284022 0624-XXXX (Tip)	1-25	10/22/18
2.	Textron Aviation Inc. (formerly Cessna)	182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182I, 182K, 182L, 182M, 182N, 182P, 182Q, 182R, 182S, 182T, R182, T182, T182T, TR182	3A13	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC284022 0602-XXXX CC284022 0606-XXXX CC284022 0607-XXXX CC284022 0608-XXXX (Tip) CC284022 0624-XXXX (Tip)	1-25	10/22/18
3.	Textron Aviation Inc. (formerly Cessna)	175, 175A, 175B, 175C, P172D, R172E, R172F, R172G, R172H, R172J, R172K, 172RG	3A17	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC284022 0603-XXXX CC284022 0616-XXXX CC284022 0617-XXXX CC284022 0620-XXXX CC284022 0624-XXXX CC284022 0608-XXXX (Tip)	1-19,21-25	10/22/18
4.	Textron Aviation Inc. (formerly Cessna)	210, 210A, 210B, 210C, 210D, 210E, 210F, 210G, 210H, 210I, 210K, 210L, 210M, 210N, 210R, T210F, T210G, T210H, T210I, T210K, T210L, T210M, T210N, T210R, 210-5 (205), 210-5A (205A), P210N, P210R	3A21	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC284022 0601-XXXX CC284022 0602-XXXX (Strut) CC284022 0608-XXXX (Tip) CC284022 0624-XXXX (Tip) CC284022 0608-XXXX (Tip)	1-19,21-25	10/22/18

**FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA02511SE
FOR**

CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

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					Number	Revision*	Number	Revision**			
5.	Textron Aviation Inc. (formerly Cessna)	185, 185A, 185B, 185C, 185D, 185E, A185E, A185F	3A24	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0602-XXXX CC284022 0608-XXXX (Tip) CC284022 0624-XXXX (Tip)	1-19,21-25	10/22/18
6.	Textron Aviation Inc. (formerly Cessna)	180, 180A, 180B, 180C, 180D, 180E, 180F, 180G, 180H, 180I, 180K	5A6	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0602-XXXX CC284022 0608-XXXX (Tip) CC284022 0624-XXXX (Tip)	1-19,21-25	10/22/18
7.	Textron Aviation Inc. (formerly Cessna)	177, 177A, 177B	A13CE	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0601-XXXX	1-19,21-25	10/22/18
8.	Textron Aviation Inc. (formerly Cessna)	207, 207A, T207, T207A	A16CE	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0602-XXXX CC284022 0608-XXXX (Tip)	1-19,21-25	10/22/18
9.	Textron Aviation Inc. (formerly Cessna)	177RG	A20CE	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0601-XXXX	1-19,21-25	10/22/18
10.	Cessna Aircraft Company	Cessna F177RG	A26EU	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0601-XXXX	1-19,21-25	10/22/18
11.	Cessna Aircraft Company	Cessna F182P, Cessna F182Q, Cessna FR 182	A42EU	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0602-XXXX CC284022 0608-XXXX (Tip) CC284022 0624-XXXX (Tip)	1-19,21-25	10/22/18

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ISSUE DATE: March 14, 2017

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					Number	Revision*	Number	Revision**			
12.	Textron Aviation Inc. (formerly Cessna)	206, P206, P206A, P206B, P206C, P206D, P206E, U206, U206A, U206B, U206C, U206E, U206D, U206F, U206G, TP206A, TP206B, TP206C, TP206D, TP206E, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, TU206G, 206H, T206H	A4CE	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0602-XXXX CC284022 0604-XXXX CC284022 0606-XXXX CC284022 0607-XXXX CC284022 0608-XXXX (Tip) CC284022 0611-XXXX CC284022 0612-XXXX	1-25	10/22/18
13.	Cessna Aircraft Company	Cessna F172D, Cessna F172E, Cessna F172F, Cessna F172G, Cessna F172H, Cessna F172K, Cessna F172L, Cessna F172M	A4EU	CAR 3, CAR 10, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0603-XXXX CC284022 0616-XXXX CC284022 0617-XXXX CC284022 0624-XXXX (Tip)	1-25	10/22/18
14.	Textron Aviation Inc. (formerly Cessna)	170, 170A, 170B	A-799	CAR 3	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0603-XXXX CC284022 0616-XXXX CC284022 0617-XXXX CC284022 0624-XXXX (Tip)	1-19,21-25	10/22/18
15.	Textron Aviation Inc. (formerly Cessna)	150, 150A, 150B, 150C, 150D, 150E, 150F, 150G, 150H, 150J, 150K, 150L, 150M, A150 A150K, A150L, A150M, 152, A152	3A19	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 0616-XXXX CC284022 0617-XXXX CC284022 0624-XXXX (Tip)	1-19,21-25	10/22/18

FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA025115E
FOR

CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TC NUMBER	CERTIFICATION BASIS FOR ALTERATION	INSTALLATION REQUIREMENTS & INSTRUCTIONS FOR CONTINUED AIRWORTHINESS		STC MASTER DRAWING LIST		CIES SENDER PART NUMBERS APPROVED FOR INSTALLATION	APPROVED SENDER AND INSTRUMENT COMBINATIONS	AML REV DATE
					Number	Revision*	Number	Revision**			
16.	Cirrus Design Corp.	SR20, SR22, SR22T	A00009CH	14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC284022 0001-XXXX CC284022 0002-XXXX CC284022 0004-XXXX CC284022 0005-XXXX CC284022 0006-XXXX CC284022 0007-XXXX CC284022 0008-XXXX CC284099 0001 (Installation) CC284099 0002 (Installation) CC284099 0003 (Installation) CC284099 0004 (Installation)	1-25	10/22/18
17.	Cirrus Design Corp.	SR22, SR22T (w/TKS Sender)	A00009CH	14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC284022 0003-XXXX	1-25	10/22/18
18.	Textron Aviation Inc. (formerly Beechcraft)	35-33, 35-A33, 35-B33, 35-C33, 35-C33A, E33, E33A, E33C, F33, F33A, F33C, G33, H35, G36, I35, K35, M35, N35, P35, S35, V35, V35A, V35B, 36, A36, A36TC, B36TC	3A15	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC284022 2201-XXXX CC284022 2202-XXXX CC284022 2203-XXXX CC284022 2215-XXXX CC284022 2216-XXXX CC284022 2217-XXXX CC284022 2218-XXXX CC284022 2219-XXXX (Tip)	1-19, 21-25	10/22/18

**FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA02511SE
FOR**

CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

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19.	Textron Aviation Inc. (formerly Beechcraft)	B95A, D95A, E95, 95-55, 95-A55, 95-B55, 95-B55A, 95-B55B (T-42), 95-C55, 95-C55A, G58, D55, D55A, E55, E55A, 56TC, A56TC, 58, 58A, 95, B95	3A16	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 2204-XXXX CC284022 2205-XXXX CC284022 2206-XXXX CC284022 2207-XXXX CC284022 2208-XXXX CC284022 2203-XXXX CC284022 2209-XXXX CC284022 2210-XXXX CC284022 2211-XXXX CC284022 2212-XXXX CC284022 2213-XXXX CC284022 2214-XXXX CC284022 2219-XXXX (Tip) CC284022 2225-XXXX CC284022 2226-XXXX CC284022 2227-XXXX	1-19,21-25	10/22/18
20.	Textron Aviation Inc. (formerly Beechcraft)	58P, 58PA, 58TC, 58TCA	A23CE	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 2204-XXXX CC284022 2205-XXXX CC284022 2206-XXXX CC284022 2207-XXXX CC284022 2208-XXXX	1-19,21-25	10/22/18

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21.	Maule Aerospace Technology, Inc.	Bee Dee M-4, M-4, M-4C, M-4S, M-4T, M-4-180C, M-4-180S, M-4-180T, M-4-210, M-4-210C, M-4-210S, M-4-210T, M-4-220, M-4-220C, M-4-220S, M-4-220T, M-5-180C, M-5-200, M-5-210C, M-5-210TC, M-5-220C, M-5-235C, M-6-180, M-6-235, M-7-235, MX-7-235, MX-7-180, MX-7-180, MT-7-235, M-8-235, MX-7-160, MX-7-160, MX-7-180A, MX-7-180A, MX-7-180B, M-7-235B, M-7-235A, M-7-235C, MX-7-180C, M-7-260, MT-7-260, M-7-260C, MX-7-160C, MX-7-180AC, M-9-235	3A23	CAR 3, 14 CFR 23	CC-TR-2840-031	N/C	CC2840 00 03	A	CC284022 2401-XXXX	1-19,21-25	10/22/18
22.	Mooney Intl. Corp.	M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20L, M20M, M20R, M20S, M20TN	2A3	CAR 3, 14 CFR 23	CC-TR-2840-031	N/C	CC2840 00 03	A	CC284022 0701-XXXX CC284022 0702-XXXX CC284022 0705-XXXX CC284022 0706-XXXX CC284022 0707-XXXX CC284022 0708-XXXX CC284022 0709-XXXX	1-19,21-25	10/22/18
23.	Pilatus Aircraft Ltd.	PC-6	7A15	CAR 10, CAR 3	CC-TR-2840-031	N/C	CC2840 00 03	A	CC284022 2301-XXXX	1-19,21-25	10/22/18

**FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA025115E
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CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

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24.	Piper Aircraft, Inc.	PA-23, PA-23-160, PA-23-235, PA-23-250, PA-23-250 (Navy UO-1), PA-E23-250	1A10	CAR 3	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0808-XXXX CC284022 0809-XXXX	1-19,21-25	10/22/18
25.	Piper Aircraft, Inc.	PA-22, PA-22-108, PA-22-135, PA-22S-135, PA-22-150, PA-22S-150, PA-22-160, PA-22S-160,	1A6	CAR 3	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0816-XXXX	1-19,21-25	10/22/18
26.	Piper Aircraft, Inc.	PA-24, PA-24-250, PA-24-260, PA-24-400	1A15	CAR 3	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0812-XXXX CC284022 0813-XXXX CC284022 0820-XXXX CC284022 2219-XXXX (Tip)	1-19,21-25	10/22/18
27.	Lavia Argentina S.A. (Piper)	PA-25	2A10	CAR 8	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0817-XXXX	1-19,21-25	10/22/18
28.	Piper Aircraft, Inc.	PA-28-140, PA-28-150, PA-28-160, PA-28-180, PA-28-235, PA-28S-160, PA-28S-180, PA-28R-180, PA-28R-200, PA-28-151, PA-28-161, PA-28-181, PA-28R-201, PA-28R-201T, PA-28-236, PA-28RT-201, PA-28RT-201T, PA-28-201T	2A13	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0810-XXXX CC284022 0811-XXXX	1-19,21-25	10/22/18

FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA02511SE
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29.	Piper Aircraft, Inc.	PA-30, PA-39, PA-40	A1EA	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0812-XXXX CC284022 0813-XXXX CC284022 2219-XXXX (Tip)	1-19,21-25	10/22/18
30.	Piper Aircraft, Inc.	PA-31, PA-31-300, PA-31-325, PA-31-350,	A20SO	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0804-XXXX CC284022 0805-XXXX CC284022 0806-XXXX CC284022 0807-XXXX	1-19,21-25	10/22/18
31.	Piper Aircraft, Inc.	PA-32-301XTC, PA-32-301FT, PA-32S-300, PA-32-260, PA-32-300, PA-32R-300, PA-32RT-300, PA-32RT-300T, PA-32R-301(SP), PA-32R-301(HP), PA-32R-301T, PA-32-301, PA-32-301T	A3SO	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0810-XXXX CC284022 0811-XXXX	1-19,21-25	10/22/18
32.	Piper Aircraft, Inc.	PA-34-200, PA-34-200T, PA-34-220T	A7SO	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0810-XXXX CC284022 0811-XXXX	1-19,21-25	10/22/18
33.	Piper Aircraft, Inc.	PA-44-180, PA-44-180T P.68, P.68 "Observer 2", P.68B, P.68C, P.68 "Observer", P.68TC "Observer", P.68C-TC	A19SO	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0814-XXXX CC284022 0815-XXXX	1-19,21-25	10/22/18
34.	Vulcanair S.p.A	24 C8C, 24 C8CS	A31EU	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0401-XXXX	1-19,21-25	10/22/18
35.	Fairchild Personal Planes	GA8, GA8-TC320	A-535	Aero Bulletin 7-A	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 2101-XXXX	1-19,21-25	10/22/18
36.	GA 8 Airvan (Pty) Ltd (formerly Gippstand)	GA8, GA8-TC320	A00011LA	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 0301-XXXX CC284022 0302-XXXX	1-19,21-25	10/22/18

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CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TC NUMBER	CERTIFICATION BASIS FOR ALTERATION	INSTALLATION REQUIREMENTS & INSTRUCTIONS FOR CONTINUED AIRWORTHINESS		STC MASTER DRAWING LIST		CIES SENDER PART NUMBERS APPROVED FOR INSTALLATION	APPROVED SENDER AND INSTRUMENT COMBINATIONS	AML REV DATE
					Number	Revision*	Number	Revision**			
37.	B-N Group Ltd.	BN2A MK III, BN2A MK III-2, BN2A MK III-3	A29EU	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 2001-XXXX CC284022 2002-XXXX CC284022 2003-XXXX CC284022 2004-XXXX	1-19,21-25	10/22/18
38.	American Champion Aircraft Corp.	8KCAB, 8GCBC	A21CE	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 2501-XXXX	1-19,21-25	10/22/18
39.	American Champion Aircraft Corp.	7ECA, 7GCAA, 7KCAB, 7GCBC	A-759	CAR 4a, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 2501-XXXX	1-19,21-25	10/22/18
40.	Textron Aviation Inc. (formerly Beechcraft)	45 (T-34), A45 (T-34A, B-45), D45 (T-34B)	5A3	CAR 3	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 2203-XXXX CC284022 2219-XXXX (Tip)	1-19,21-25	10/22/18
41.	Textron Aviation Inc. (formerly Beechcraft)	35, A35, B35, C35, D35, E35, F35, G35, 35R	A-777	CAR 3	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 2201-XXXX CC284022 2202-XXXX CC284022 2203-XXXX CC284022 2215-XXXX CC284022 2216-XXXX CC284022 2217-XXXX CC284022 2218-XXXX CC284022 2219-XXXX (Tip) CC284022 2230-XXXX (Tip)	1-19,21-25	10/22/18
42.	B-N Group Ltd.	BN-2, BN-2A, BN-2A-6, BN-2A-8, BN-2A-2, BN-2A-9, BN-2A-3, BN-2A-20 BN-2T-4R, BN-2A-21, BN-2A-26, BN-2A-27, BN-2B-20, BN-2B-21, BN-2B-26, BN-2B-27, BN-2T	A17EU	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	N/C	CC284022 2001-XXXX CC284022 2002-XXXX CC284022 2003-XXXX CC284022 2004-XXXX	1-19,21-25	10/22/18
43.	True Flight Holdings LLC	AA-5, AA-5A, AA-5B, AG-5B	A16EA	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC284022 3708-XXXX CC284022 3708-XXXX	1-19,21-25	10/22/18

**FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA02511ISE
FOR**

CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TC NUMBER	CERTIFICATION BASIS FOR ALTERATION	INSTALLATION REQUIREMENTS & INSTRUCTIONS FOR CONTINUED AIRWORTHINESS		STC MASTER DRAWING LIST		CIES SENDER PART NUMBERS APPROVED FOR INSTALLATION	APPROVED SENDER AND INSTRUMENT COMBINATIONS	AML REV DATE
					Number	Revision*	Number	Revision**			
44.	Piper Aircraft Inc.	PA-46-310P, PA-46-350P, PA-46R-350T	A25SO	14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC28400818-XXX CC2840990801 (INSTALLATION) CC2840990802 (INSTALLATION)	1-19,21-25	10/22/18
45.	Textron Aviation Inc. (Formerly Cessna)	LC40-550FG, LC41-550FG, LC42-550FG, T240	A00003SE	14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC2840220618-XXX CC2840220619-XXX CC2840570618 (FEED THRU INSTALL.)	1-19, 21-25	10/22/18
46.	Textron Aviation Inc. (Formerly Cessna)	337, 337E, 337A (USAF 02B), T337E, T337B, 337F, M337B (USAF 02A), T337F, T337B, 337G, 337C, T337G, T337C, 337D, T337D, 337H, P337H, T337H, T337H-SP	A6CE	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC2840220621-XXX CC2840450601-103 (BRACKET)	1-19,21-25	10/22/18
47.	Textron Aviation Inc. (Formerly Cessna)	190 (LC-126A,B,C) 195 195A 195B	A-790	CAR 3	CC-TR-2840-031	C	CC28400003	A	CC2840220622-XXX CC2840450601-101 (BRACKET)	1-19,21-25	10/22/18
48.	SOCATA	TB 9, TB 10, TB 20, TB 21, TB 200	A51EU	14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC2840223801-XXX	1-19,21-25	10/22/18
49.	Commander Aircraft Corp.	112, 112TC, 112B 112TCA, 114, 114A 114B, 114TC	A12SO	14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC2840222501-XXX	1-19,21-25	10/22/18
50.	Textron Aviation Inc. (formerly Cessna)	208, 208B	A37CE	14 CFR 23	CC-TR-2840-031	C	CC28400003	A	CC2840220625-XXX CC2840220626-XXX CC2840220627-XXX	1-19,21-25	10/22/18

FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA025115E
FOR

CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TC NUMBER	CERTIFICATION BASIS FOR ALTERATION	INSTALLATION REQUIREMENTS & INSTRUCTIONS FOR CONTINUED AIRWORTHINESS		STC MASTER DRAWING LIST		CIES SENDER PART NUMBERS APPROVED FOR INSTALLATION	APPROVED SENDER AND INSTRUMENT COMBINATIONS	AML REV DATE
					Number	Revision*	Number	Revision**			
51.	Textron Aviation Inc. (formerly Cessna)	310 310A(USAF U-3A) 310B 310C, 310D 310E (USAF U-3B) 310F 310G 310H E310H 310I 310J 310J-1 E310J 310K 310L 310N 310P T310P 310Q E310H T310Q 310I 310R T310R	3A10	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC2840220640-XXXX CC2840220641-XXXX CC2840220642-XXXX CC2840220643-XXXX CC2840220644-XXXX	1-19,21-25	10/22/18
52.	Textron Aviation Inc. (formerly Cessna)	320 320-1 335 320A 320B 320C 320D 320F 320E 340 340A	3A25	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC2840220640-XXXX CC2840220641-XXXX CC2840220642-XXXX CC2840220643-XXXX CC2840220644-XXXX CC2840220622-XXXX	1-19,21-25	10/22/18
53.	Textron Aviation Inc. (formerly Cessna)	401 401A 401B 402 402A 402B 402C 411 411A 414 414A 421 421A 421B 421C	A7CE	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC2840220641-XXXX CC2840220642-XXXX CC2840220643-XXXX CC2840220644-XXXX CC2840220622-XXXX	1-19,21-25	10/22/18
54.	Textron Aviation Inc. (formerly Cessna)	T303	A34CE	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC2840220630-XXXX CC2840220631-XXXX	1-19,21-25	10/22/18
55.	Textron Aviation Inc. (formerly Beechcraft)	50 (L-23A) B50 (L-23B) C50 D50 (L-23E) D50A D50B D50C D50E D50E-5990 E50 (L-23D, RL-23D) F50 G50 H50 J50	5A4	CAR 3	CC-TR-2840-031	C	CC2840 00 03	A	CC2840222231-XXXX CC2840222332-XXXX	1-19,21-25	10/22/18
56.	AERMACCHI S.p.A	F.260 F.260B F.260C F.260D F.260E F.260F	A10EU	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC2840224504-XXXX CC2840224503-XXXX CC2840224502-XXXX CC2840224501-XXXX	1-19,21-25	10/22/18

FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA025115E
FOR

CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TC NUMBER	CERTIFICATION BASIS FOR ALTERATION	INSTALLATION REQUIREMENTS & INSTRUCTIONS FOR CONTINUED AIRWORTHINESS		STC MASTER DRAWING LIST		CIES SENDER PART NUMBERS APPROVED FOR INSTALLATION	APPROVED SENDER AND INSTRUMENT COMBINATIONS	AML REV DATE
					Number	Revision*	Number	Revision**			
57.	AERMACCHI S.p.A	S.205-8/F, S.205-18/R, S.205-20/F, S.205-20/R, S.205-22/R, S.208 S.208A	A9EU	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC2840224510-XXXX	1-19,21-25	10/22/18
58.	Univair (Stinson)	108 108-1 108-2 108-3 108-5	A-767	CAR 3	CC-TR-2840-031	C	CC2840 00 03	A	CC2840224705-XXXX	1-19,21-25	10/22/18
59.	Sierra Hotel Aero (formerly Navion)	Navion (L-17A) Navion A (L-17B) (L-17C) Navion B Navion D Navion E Navion F Navion G Navion H	A-782	CAR 3	CC-TR-2840-031	C	CC2840 00 03	A	CC2840222803-XXXX CC2840222802-XXXX	1-19,21-25	10/22/18
60.	Consolidated Vultee Aircraft Corp. - Stinson Division	V-77	A-774	CAR 3	CC-TR-2840-031	C	CC2840 00 03	A	CC2840224701-XXXX	1-19,21-25	10/22/18
61.	Reims Aviation SA	F406	A54EU	14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC2840220640-XXXX CC2840220642-XXXX CC2840220622-XXXX	1-19,21-25	10/22/18
62.	Twin Commander Aircraft LLC	560-F 685 680 690 680E 690A 680F 690B 680F(P) 690C 680FL 690D 680FL(P) 695 680T 695A 680V 695B 680W 720 681	2A4	CAR 3, 14 CFR 23	CC-TR-2840-031	C	CC2840 00 03	A	CC2840222510-XXXX	1-19,21-25	10/22/18
63.	Helio Aircraft LLC	H-250 (USAF U-10D) H-295 HT-295 (USAFYL-24) H-391 H-391B (USAF L-28A or U-10B) H-395 H-395A H-700 H-800	1A8	CAR 3	CC-TR-2840-031	C	CC2840 00 03	A	CC2840224801-XXXX	1-19,21-25	10/22/18
64.	Viking Air Limited (formerly de Havilland)	DHC-2 Mk. I DHC-2 Mk. II DHC-2 Mk. III	A-806	CAR 3	CC-TR-2840-031	C	CC2840 00 03	A	CC2840224601-XXXX	1-19,21-25	10/22/18

FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA02511ISE
FOR

CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

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					Number	Revision*	Number	Revision**			
65.	Piper Aircraft, Inc.	PA-18, PA-18S PA-18 "105" (Special) PA-18S "105" (Special) PA-18A PA-18 "125" (Army L-21A) 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-19 (Army L-18C) PA-19S	1A2	CAR 3					CC284022 0816-XXXX	1-19,21-25	10/22/18
66.	Textron Aviation Inc. (formerly Beechcraft)	76	A29CE	FAR 23		CC-TR-2840-031		CC2840 00 03	CC284022 2233-XXXX CC284022 2234-XXXX	1-19,21-25	10/22/18

* Or later FAA Accepted ICA and FAA Approved Airworthiness Limitations Revision

** Or later FAA Approved Revision

Note: CiES part numbering system for STC AML is CC284022 - (ZZ ZZ) - (Y XX), where (ZZ ZZ) designates the Aircraft manufacturer, Aircraft Model, and Physical Location, (XX) designates Minor change designation, and (Y) typically designates sender Output Signal Type.

FAA Approved:



Manager, Seattle ACO Branch

AMENDED: 10/22/18

REISSUED:

**FEDERAL AVIATION ADMINISTRATION (FAA) APPROVED MODEL LIST (AML) SA025115E
FOR**

CIES INC. CC284022 SERIES TSO C55a FUEL QUANTITY SENDERS

ISSUE DATE: March 14, 2017

Item	Cockpit Display Manufacturer	Cockpit Display Model	Data Converter (LRU ¹)	Fuel Sender Output Capability	Instrument Input Capability
1	JP Instruments	EDM 900	N/A	Voltage 0-5 VDC	0-4.7 VDC
2	JP Instruments	EDM 930	N/A	Voltage 0-5 VDC	0-4.7 VDC
3	JP Instruments	EDM 900	N/A	Digital Frequency 64Hz-10kHz	0-100 kHz
4	JP Instruments	EDM 930	N/A	Digital Frequency 64Hz-10kHz	0-100 kHz
5	Electronics International	MVP-50	EDC-33P	Voltage 0-5 VDC	0-18 VDC
6	Electronics International	CGR-30P	EDC-33P	Voltage 0-5 VDC	0-18 VDC
7	Electronics International	MVP-50	EDC-33P	Digital Frequency 64Hz-10kHz	0-6 kHz
8	Electronics International	CGR-30P	EDC-33P	Digital Frequency 64Hz-10kHz	0-6 kHz
9	Ultra FEI	Aurae CRM2120	N/A	Voltage 0-5 VDC	0-5 VDC
10	Aerospace Logic	FL25X	N/A	Voltage 0-5 VDC	0-5 VDC
11	Aerospace Logic	FL20XD	N/A	Digital Frequency 64Hz-10kHz	10-300 Hz
12	Aerospace Logic	FL21X	N/A	Voltage 0-1 VDC	0-1 VDC
13	Aerospace Logic	FL20X	N/A	Voltage 0-1 VDC	0-1 VDC
14	Garmin	G1000	GEA 71	Voltage 0-5 VDC	0-5 VDC
15	Garmin	G950	GEA 71	Voltage 0-5 VDC	0-5 VDC
16	Garmin	G1000	GEA 71	Voltage 0-1 VDC	0-1 VDC
17	Garmin	G950	GEA 71	Voltage 0-1 VDC	0-1 VDC
18	Garmin	G1000	GEA 71	Digital Frequency 64Hz-10kHz	0-100 kHz
19	Garmin	G950	GEA 71	Digital Frequency 64Hz-10kHz	0-100 kHz
20	Rochester Gauges	FQ-40XX Series	N/A	Voltage 0-1 VDC	0-1 VDC
21	JP Instruments	EDM 960	EDM 950	Voltage 0-5 VDC	0-4.7 VDC
22	JP Instruments	EDM 960	EDM 950	Digital Frequency 64Hz-10kHz	0-100 kHz
23	Garmin	G500/G600 Txi	GEA 110	Voltage 0-5 VDC	0-5 VDC
24	Garmin	G500/G600 Txi	GEA 110	Digital Frequency 64Hz-10kHz	0-30,000 Hz
25	Garmin	G2000	GEA 71	Voltage 0-1 VDC	0-1 VDC

¹LRU – line replaceable unit receives or converts the fuel sender output signal to provide the input signal to the cockpit display instrument.