



CERTIFICADO SUPLEMENTAR DE TIPO

(Supplemental Type Certificate)

NÚMERO
(Number)

2013S02-09

Este certificado, emitido com base na Lei nº 7565 "Código Brasileiro de Aeronáutica", de 19 de dezembro de 1986,
(This certificate, issued in the basis of the Law No. 7565 "Código Brasileiro de Aeronáutica", dated 19 December 1986,

é conferido ao (à): Sensenich Propeller Manufactoreing Company, Inc
(is granted to:) 14 Citattion Lane
Lotitz, PA 17543
USA

por ter a modificação ao projeto de tipo do produto abaixo citado, observadas as limitações e condições
(for having the change to the type design of the product mentioned below, with the limitations and conditions therefor as)
especificadas, satisfeito aos requisitos de aeronavegabilidade aplicáveis.
(specified hereon, met the applicable airworthiness requirements.)

Produto Original - Número do Certificado de Tipo: 3A19 (FAA)
(Original Product - Type Certificate No:)

Fabricante: Cessna Aircraft Company
(Manufacturer:)

Modelo(s): 152 and A152
(Model(s):)

DESCRIÇÃO DA MODIFICAÇÃO AO PROJETO DE TIPO: (Description of Type Design Change:)

Installation of a Sensenich model 72CK56-0-56 -54 or -52 metal propeller and S72CK spinner assembly in accordance with Sensenich Propeller Manufacturing Drawing C-2326, Rev. J, dated 10 July 2003, or later approved revisions.

This CST validates in Brazil the STC # SA1219EA, issued by FAA (USA).

LIMITAÇÕES E CONDIÇÕES: (Limitations and Conditions:)

See continuation sheet for applicable data.

DATAS: (Dates of:)

Do Requerimento: 13 Apr. 2012
(Application:)

Da emissão: 22 Feb. 2013
(Issuance:)

Da reemissão:
(Reissuance:)

Da emenda:
(Amendment:)


HELIO TARQUINIO JÚNIOR

Gerente-Geral, Certificação de Produto Aeronáutico
(General Manager, Aeronautical Product Certification)


DINO ISHIKURA

Superintendente de Aeronavegabilidade
(Airworthiness Superintendent)

NOTA:

(Note:)

- a) Este Certificado e os dados técnicos com base no quais ele foi emitido são válidos até que sejam cancelados, (This Certificate and the supporting technical data used for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Agência Nacional de Aviação Civil.)
- b) No caso de transferência de propriedade deste Certificado, o transferente deve preencher o quadro "Endosso de Transferência", e o adquirente deve enviar este Certificado à Gerência Geral de Certificação de Produto Aeronáutico para que seja reemitido em seu nome. (In case of transfer of the property of this Certificate, the grantor should fill the blanks of "Transfer Endorsement", and the transferee must remit this Certificate to the Gerência Geral de Certificação de Produto Aeronáutico to permit reissuance of the Certificate in his name.)

ENDOSSO DE TRANSFERÊNCIA

(Transfer Endorsement)

Transfiro a propriedade deste Certificado Suplementar de Tipo para:

(I transfer the property of this Supplemental Type Certificate to:)

ADQUIRENTE

(Transferee)

Nome:
(Name:)

Rua:
(Street:)

CEP: **Cidade:** **Estado:** **País:**
(Zip:) (City:) (State:) (Country:)

TRANSFERENTE

(Grantor)

Nome:
(Name:)

Rua:
(Street:)

CEP: **Cidade:** **Estado:** **País:**
(Zip:) (City:) (State:) (Country:)

Data de Transferência:
(Date of Transfer:)

Assinatura do Transferente:
(Signature of the Grantor:)

Nome:
(Name:)

Cargo:
(Function:)



Folha de Continuação ao
(Continuation Sheet to)

CERTIFICADO SUPLEMENTAR DE TIPO
(Supplemental Type Certificate)

NÚMERO 2013S02-09
(Number)

LIMITAÇÕES E CONDIÇÕES:
(Limitations and Conditions:)

- I. The approval of this type design change 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.
- II. 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.
- III. For the aircraft Serial Number 152-82032 and above, operation must be performed in accordance with FAA approved Aircraft Flight Manual Supplement - AFMS, document No. 1, no revision, dated 09 Apr. 2004, or later approved revision.
- IV. For aircraft Serial Number 152-82031 and up, the following propeller limits must be displayed in the cockpit:
 - a) Propeller Diameter not over 72 inches; not under 70 inches
 - b) Static RPM limits at maximum permissible throttle setting: not over 2275, not under 2100
 - c) Maximum RPM except takeoff and climb (FAR 36 cruise maximum continuous power limit) 2440 RPM.
- V. A copy of this Certificate and the Supplement referred on item III above (if applicable) shall be maintained as part of the permanent records of the modified aircraft.

-----END-----

SENSENICH PROPELLER MANUFACTURING COMPANY, INC.

AREA CODE 717
PHONE - 569-0435
FAX - 560-3725



14 CITATION LANE
LITITZ, PA
17543

SUPPLEMENT NO.1
To Cessna 152 FAA
Approved Flight Manual
FOR

Sensenich 72CK56-0-52 through 56 Metal Propeller and S72CK
Spinner Assembly

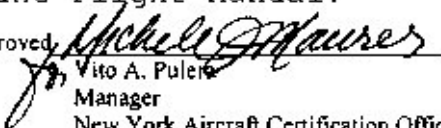
Reg. No. _____

Serial No. _____

This supplement is applicable to Cessna Model 152 aircraft with serial numbers 152-82032 and above. It must be attached to the FAA Approved Airplane Flight Manual dated July 1, 1978 when the Sensenich 72CK56-0-52 through 56 metal propeller and 72CK spinner (assembly) is installed in accordance with STC SA1219EA dated January 20, 1981.

This supplement contains the limitations and operating procedures, both normal and emergency, for the Sensenich S72CK56-0-52 through 56 metal propeller and S72CK spinner assembly installation when operating in accordance with this supplement. These limitations and procedures are in addition to, or in place of those contained in the basic FAA Approved Airplane Flight Manual.

FAA Approved


Vito A. Pulera
Manager
New York Aircraft Certification Office
Federal Aviation Administration

Date APR -9 2004

Visit Our Web Site at <http://www.sensenich.com>

SUPPLEMENT NO.1
To Cessna 152 FAA
Approved Flight Manual
FOR
Sensenich 72CK56-0-52 through 56 Metal Propeller and S72CK
Spinner Assembly

I Limitations:

Propeller: Sensenich Model 72CK56-0-52 through 56
Diameter: Not over 72 in.; not under 70 in.
Static RPM limits at maximum permissible throttle setting-
not over 2275; not under 2100.
Engine Limits: Take off power 2550 RPM.
FAR 36 Noise Certification Maximum continuous power 2440 RPM

II Procedures - No change.

III Emergency Procedures - No change.

IV Performance - Performance is equivalent to an unmodified
Model 152

FAA Approved

Date APR -9 2004

SUPPLEMENT NO.1
To Cessna 152 FAA
Approved Flight Manual
FOR
Sensenich 72CK56-0-52 through 56 Metal Propeller and S72CK
Spinner Assembly

LOG OF REVISIONS

• Revised Pages

| <u>Rev</u> <u>No.</u> | <u>Pages</u> <u>No.</u> | <u>Date</u> | <u>Description</u> | <u>Approved</u> |
|--------------------------|----------------------------|-------------|------------------------------------|-----------------|
| A | 1,2,3 | 1/12/04 | Updated format, Added 52" Pitch | |

FAA Approved

Date APR - 9 2004

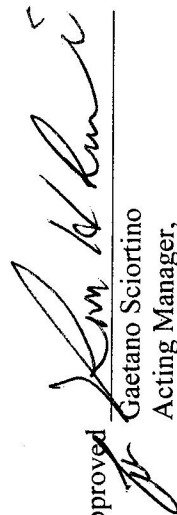
Visit Our Web Site at <http://www.sensenich.com>

FAA APPROVED MODEL LIST (AML) NO. SA1219EA
Sensenich Propeller Manufacturing Company, Inc.
 INSTALLATION OF Model 72CK56-0-56, -54 and -52 Metal Propellers

Original Issue Date
 April 09, 2004
 Revision 1, Dec. 1, 2004

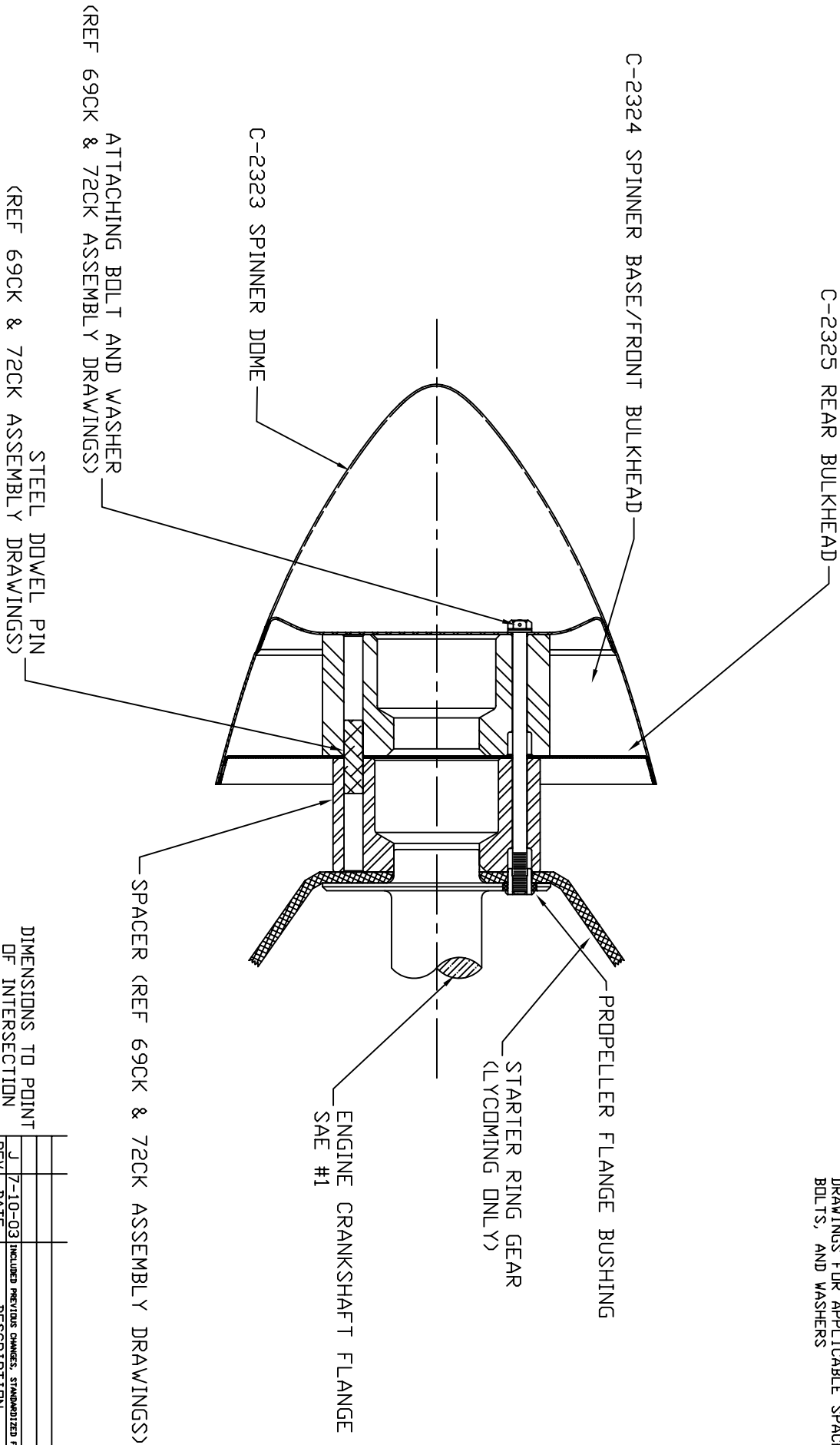
| Item | Aircraft Make | Aircraft Model | Certification Basis | Installation Instructions | AFM Supplement Number/Date | AML Amendment Date |
|------|----------------|----------------|---------------------|--|--|--------------------|
| 1 | Cessna | 152 | T.C. 3A19 / CAR 3 | Sensenich Propeller Manufacturing Co. Installation Instructions for S72CK56 Propeller dated January 12, 2004 and Sensenich Propeller Manufacturing Co. Installation Drawing C-2326 Revision J dated July 10, 2003. | Supplement No. 1, dated April 09, 2004 | N/A |
| 2 | Cessna | A152 | T.C. 3A19 / CAR 3 | Sensenich Propeller Manufacturing Co. Installation Instructions for S72CK56 Propeller dated January 12, 2004 and Sensenich Propeller Manufacturing Co. Installation Drawing C-2326 Revision J dated July 10, 2003. | Supplement No. 1, dated April 09, 2004 | N/A |
| 3 | Reims Aviation | F152 | T.C. A13EU / CAR 3 | Sensenich Propeller Manufacturing Co. Installation Instructions for S72CK56 Propeller dated January 12, 2004 and Sensenich Propeller Manufacturing Co. Installation Drawing C-2326 Revision J dated July 10, 2003. | Supplement No. 1, dated April 09, 2004 | N/A |
| 4 | Reims Aviation | FA152 | T.C. A13EU / CAR 3 | Sensenich Propeller Manufacturing Co. Installation Instructions for S72CK56 Propeller dated January 12, 2004 and Sensenich Propeller Manufacturing Co. Installation Drawing C-2326 Revision J dated July 10, 2003. | Supplement No. 1, dated April 09, 2004 | N/A |

FAA Approved


 Gaetano Sciortino
 Acting Manager,

New York Aircraft Certification Office

SPINNER ASSEMBLY
CROSS-SECTION VIEW



- NOTES:
- (UNLESS OTHERWISE SPECIFIED)
1. DOME ATTACHES TO FRONT BULKHEAD USING 6 AN526C1032R8 (OR EQUIV.) PAN HEAD SCREWS AND 6 A1020 (OR EQUIV.) FIBER WASHERS
 2. FRONT BULKHEAD ATTACHES TO REAR BULKHEAD USING 10 AN526C1032R8 (OR EQUIV.) PAN HEAD SCREWS AND 10 A1020 (OR EQUIV.) FIBER WASHERS
 3. REFERENCE 69CK & 72CK ASSEMBLY DRAWINGS FOR APPLICABLE SPACERS, BOLTS, AND WASHERS

| DIMENSIONS TO POINT OF INTERSECTION | | | TOLERANCES UNLESS OTHERWISE NOTED | | |
|--|--------|--|-----------------------------------|--------|--|
| 1 DEC | ±0.020 | | 1 DEC | ±0.020 | |
| 2 DEC | ±0.015 | | 2 DEC | ±0.015 | |
| 3 DEC | ±0.010 | | 3 DEC | ±0.010 | |
| 4 DEC | ±0.005 | | 4 DEC | ±0.005 | |
| ANGLES ± 1 DEG. | | | | | |
| MATERIAL 6061 ALUM PER (COP-A-250/11) | | | | | |
| STOCK | | | | | |
| HEAT TR. 16 PER MIL-H-6088 | | | | | |
| FINISH ALUMINUM/PART PER SP-116, OR PULISH | | | | | |
| DESIGN | | | | | |
| DRAWN K.S. SCHULTZ | | | | | |
| SCALE | 1/2 | | APP'D | DI | |
| DWG. C-2326 | | | | | |
| NO. | | | | | |

| TITLE | | |
|-----------------------------------|--|--|
| SENSENICH PROPELLER MFG. CO. INC. | | |
| 69CK & 72CK | | |
| SPINNER ASSEMBLY | | |

| REV | DATE | DESCRIPTION | BY |
|-----|---------|--|-----|
| J | 7-10-03 | INCLUDED PREVIOUS CHANGES, STANDARDIZED FORMAT | KSS |

**PROPELLER INSTALLATION INSTRUCTIONS
FOR SENSENICH S72CK56 PROPELLER
ON CESSNA 152/REIMS AVIATION CESSNA 152 AIRCRAFT**

- I) Remove Cessna spinner assembly, Sensenich or McCauley Propeller and mounting bolts per instructions in 152 Maintenance Manuals.

Original attaching bolts and spinner can be used to install Sensenich Propeller, provided original propeller was a Sensenich 72CK56.

II) **INSTALLATION OF 72CK56 PROPELLER:**

- a) Install propeller, spacer assembly, rear spinner bulkhead, on engine flange as per included drawing #C-2326 Rev J.
- b) Position front spinner, and insert propeller attaching bolts(6 each AN6H-55AS bolts and AN960-616 washers (furnished).
- c) Tighten propeller attaching bolts (280 to 300 in-lb.). Install 0.040 inch diameter stainless steel safety wire (not furnished).
- d) Install spinner dome.

III) **WEIGHT AND BALANCE:**

- a) Revision of the aircraft weight and balance is not necessary if replacing a Sensenich Propeller. If replacing a McCauley fixed pitch propeller, the weight and balanced must be changed. The Sensenich 72CK weighs 28.4 lbs at an arm of -36.5 inches.

IV) **FLIGHT MANUAL SUPPLEMENT:**

For all aircraft models the following propeller limits must be displayed in the cockpit:

- 1) Propeller Diameter not over 72 inches; not under 70 inches

- 2) Static RPM limits at maximum permissible throttle settings; not over 2275, not under 2100
- 3) Maximum RPM except takeoff and climb (FAR 36 cruise maximum continuous power limit) 2440 RPM

For aircraft S/N's 152-82032 and above: FAA approved Sensenich Flight Manual Supplement must be installed in aircraft when the above alteration is made. Fill out a 377 form for the alteration and make all necessary changes to the aircraft records.

72CKS6 INSTALLATION
Cessna 152/Reims Aviation
Cessna 152
CJS 1/12/04