

United States Of America  
Department of Transportation - Federal Aviation Administration  
**Supplemental Type Certificate**

*Number* SA09666AC

*This Certificate issued to* Century Flight Systems, Inc.  
P.O. Box 610  
Municipal Airport  
Mineral Wells, TX 76068

ST2021AC-A  
PRM -150

*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 23 Amendments 23-1 through 23-53 of the Federal Aviation Regulations.*

*Original Product Type Certificate Number :* SEE ATTACHED APPROVED MODEL LIST (AML)  
*Make :* SEE ATTACHED APPROVED MODEL LIST (AML)  
*Model :* SEE ATTACHED APPROVED MODEL LIST (AML)

*Description of Type Design Change:* Installation of a Global Positioning Steering System (GPSS) consisting of a GPSS Adapter Controller 1C975-0 and a GPSS Annunciator/Switch 1C977-0 or 1C977-1 in accordance with Century Flight Systems, Inc. Master Document List referenced on the attached AML, or later FAA approved revisions. Airplane Flight Manual Supplement referenced on the attached AML, or later FAA approved revisions is required for this installation.

*Limitations and Conditions:* Compatibility of this design change with previously approved modifications must be determined by the installer. If the holder agrees to permit another person to use this certificate to alter the product, the holder must 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 :* November 15, 2004

*Date reissued :*

*Date of issuance :* March 21, 2006

*Date amended :*



*By direction of the Administrator*

(Signature)

Michele M. Owsley  
Manager, Airplane Certification Office,  
Southwest Region

(Title)

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**FAA APPROVED MODEL LIST (AML) NO. 69A2096**

FAA Approved: AFMS 68S1150, Initial Release (IR), Dated 03/21/2006

FAA Approved: AML 69A2096, Amendment B, Dated 03/21/2006

FAA Approved: MDL 87A1310, Revision B, Dated 01/05/2006

FAA Accepted: Instructions for Continued Airworthiness (ICA) Bulletin No. 2146, Dated 01/02/2005

Original Issue Date: March 21, 2006

| Item | Aircraft Make    | Aircraft Model             | Original Type Certificate Number | Certification Basis for Alteration | Installation Type | MDL Revision Date | AFMS Approval Date | AML Amendment and FAA Approval Date |
|------|------------------|----------------------------|----------------------------------|------------------------------------|-------------------|-------------------|--------------------|-------------------------------------|
| 1    | Piper Warrior    | PA28-151                   | 2A13                             | CFR Part 23                        |                   | 01/05/2006        | 03/21/2006         | B and 03/21/2006                    |
| 2    | Piper Warrior II | PA28-161                   | 2A13                             | CFR Part 23                        |                   | 01/05/2006        | 03/21/2006         | B and 03/21/2006                    |
| 3    | Piper Cherokee   | PA28-180                   | 2A13                             | CFR Part 23                        |                   | 01/05/2006        | 03/21/2006         | B and 03/21/2006                    |
| 4    | Piper Archer II  | PA28R-200,<br>PA28R-201T   | 2A13                             | CFR Part 23                        |                   | 01/05/2006        | 03/21/2006         | B and 03/21/2006                    |
| 5    | Piper Arrow III  | PA28R-201                  | 2A13                             | CFR Part 23                        |                   | 01/05/2006        | 03/21/2006         | B and 03/21/2006                    |
| 6    | Piper Arrow IV   | PA28RT-201,<br>PA28RT-201T | 2A13                             | CFR Part 23                        |                   | 01/05/2006        | 03/21/2006         | B and 03/21/2006                    |

FAA Approved: \_\_\_\_\_

Approval Date: March 21, 2006

**1. AML Revision Log**

| Revision No. | Pages | Description    | FAA Approval     | Date       |
|--------------|-------|----------------|------------------|------------|
| (-)          | ALL   | IR             | Not FAA Approved | 06/23/2005 |
| A            | ALL   | Added Models   | Not FAA Approved | 09/30/2005 |
| B            | ALL   | Removed Models |                  | 03/21/2006 |

**2. Introduction**

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

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This document is the FAA Approved Model List (AML) for STC09666AC-A for installing the GPSS Heading System into eligible airplanes. The GPSS Heading System consists of a GPSS Adapter/Controller 1C975-0 and GPSS Annunciators 1C977-0 (vertical panel) or 1C977-1 (horizontal panel).

Revisions to the AML must be coordinated between the STC holder and the responsible ACO, and require FAA approval. AML revisions will be treated as STC amendments, so FAA involvement is required as defined in the applicable FAA Orders.

This STC is only applicable to the 14 CFR Part 23 airplanes identified in this AML. Installations in other 14 CFR Part 23, Part 25, Part 27, and Part 29 aircraft are not authorized under this STC.

This STC assumes the following equipment is already installed on each airplane eligible for this proposed modification. The following equipment must be properly linked to meet the intended function for the system, as certified under this AML approval.

*List of required equipment that is not part of this approval.*

| Part Description | Part Type                                  |
|------------------|--|
| Autopilot        | C21, C31, C41, C2000, or Triden            |
| GPS/FMS          | Arinc 429 output with Label 121            |
| Heading System   | Direct Current or 400 Hertz (Hz) Roll Gyro |
|                  |  |

**3. Certification Basis (amendment 23-53)**

|         |         |         |         |         |         |         |         |         |         |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 23.143  | 23.301  | 23.303  | 23.305  | 23.307  | 23.561  | 23.572  | 23.603  | 23.605  | 23.607  |
| 23.609  | 23.611  | 23.613  | 23.619  | 23.625  | 23.627  | 23.671  | 23.771  | 23.777  | 23.1301 |
| 23.1309 | 23.1321 | 23.1322 | 23.1329 | 23.1331 | 23.1357 | 23.1365 | 23.1367 | 23.1381 | 23.1431 |
| 23.1501 | 23.1541 | 23.1555 | 23.1581 | 23.1583 | 23.1585 |         |         |         |         |

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