Cirrus SR20 Type Certificate and Airworthiness Directives

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A00009CH

Revision 19

Cirrus Design Corporation

SR20
SR22
SR22T

February 4, 2013

SEE (DATA PERTINENT TO ALL MODELS) AND (NOTES SECTION)

TYPE CERTIFICATE DATA SHEET NO. A00009CH

This data sheet, which is part of Type Certificate No. A00009CH, prescribes conditions and limitations under which the product for which type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder: Cirrus Design Corporation
4515 Taylor Circle
Duluth, MN 55811

SEE (DATA PERTINENT TO ALL MODELS) AND (NOTES SECTION)

I - Model SR20, (Normal Category), Approved October 23, 1998

Engine	Teledyne Continental IO-360-ES, Type Certificate Data Sheet (TCDS) E1CE	
Fuel	100/100LL minimum grade aviation gasoline	
Engine Limits	Maximum Take-off	2700 RPM (200 hp)
	Maximum Continuous Power	2700 RPM (200 hp)

Propeller and Propeller limits

1. Hartzell Propeller Inc. P/N BHC-J2YF-1BF/F7694
TCDS P37EA
Maximum Diameter: 76 inches
Minimum Diameter: 73 inches
Number of Blades: 2
Low Pitch: 14.6° +/- 0.5°
High Pitch: 35.0° +/- 1.0°
Not to be operated above 24 inches of manifold pressure between 1900 and 2200 RPM.
Spinner: Hartzell P/N A-2295(P) NOTE: Spinner may be painted or polished.

2. Hartzell Propeller Inc. P/N PHC-J3YF-1MF/F7392-1
TCDS P36EA
Maximum Diameter: 74 inches
Minimum Diameter: 72 inches
Number of Blades: 3
Low Pitch: 14.1° +/- 0.5°
High Pitch: 35.0° +/- 1.0°
No operating limitations to 2800 RPM
Spinner: Hartzell P/N A-2295-1P

3. Hartzell Propeller Inc. P/N PHC-J3YF-1RF/F7392-1
TCDS P36EA
Maximum Diameter: 74 inches
Minimum Diameter: 72 inches
Number of Blades: 3
Low Pitch: 13.9°+/-0.5°
High Pitch: 35.0° +/- 1.0°
No operating limitations to 2800 RPM
Spinner: Hartzell P/N A-2295-1(P) NOTE: Spinner may be painted or polished.

I - Model SR20, (Normal Category) (Cont.)

Airspeed Limits

S/N 1005 thru 1147:

Vne	Never Exceed Speed	200 KIAS
Vno	Maximum Structural Cruising Speed	165 KIAS
Vo	(2900 lbs) Operating Maneuvering Speed	135 KIAS
Vo	(2600 lbs) Operating Maneuvering Speed	126 KIAS
Vo	(2200 lbs) Operating Maneuvering Speed	116 KIAS
Vfe	Maximum Flap Extension Speed	100 KIAS
Vpd	Maximum Parachute Deployment Speed	135 KIAS

S/N 1148 thru 1877, 1879 thru 1885, and S/N 1005 thru 1147 if Cirrus Service Bulletin SB 20-01-00 is complied with:

Vne	Never Exceed Speed	200 KIAS
Vno	Maximum Structural Cruising Speed	165 KIAS
Vo	(3000 lbs) Operating Maneuvering Speed	131 KIAS
Vo	(2600 lbs) Operating Maneuvering Speed	122 KIAS
Vo	(2300 lbs) Operating Maneuvering Speed	114 KIAS
Vfe	Maximum Flap Extension Speed	100 KIAS
Vpd	Maximum Parachute Deployment Speed	135 KIAS

S/N 1878, 1886 and subsequent:

Vne	Never Exceed Speed	200 KIAS
Vno	Maximum Structural Cruising Speed	163 KIAS
Vo	(3050 lbs) Operating Maneuvering Speed	130 KIAS
Vfe	Maximum Flap Extension Speed	104 KIAS
Vpd	Maximum Parachute Deployment Speed	133 KIAS

C.G. Range

S/N 1005 thru 1147:
Forward Limits: 138.7 inches at 2110 lbs with a straight line taper to 141.0 inches at 2694 lbs, and 143.0 inches at 2900 lbs.

Aft Limits: 144.6 inches at 2110 lbs, with straight line taper to 147.4 inches at 2570 lbs, and to 147.9 inches at 2745 lbs, and 148.2 inches at 2900 lbs.

S/N 1148 thru 1877, 1879 thru 1885, and S/N 1005 thru 1147 if Cirrus Service Bulletin SB 20-01- 00 is complied with:
Forward Limits: 138.7 inches at 2110 lbs with a straight line taper to 141.0 inches at 2694 lbs, and 144.1 inches at 3000 lbs.

Aft Limits: 144.6 inches at 2110 lbs, with straight line taper to 147.4 inches at 2570 lbs, and to 148.1 inches at 2900 lbs, and 148.0 inches at 3000 lbs.

S/N 1878, 1886 and subsequent:
Forward Limits: 137.8 inches at 2100 lbs with a straight line taper to 139.1 inches at 2700 lbs, and to 140.7 inches at 3050 lbs
Aft Limits: 148.1 inches at 2100 lbs, with straight line to 148.1 inches at 3050 lbs.

Empty Weight C.G. Range

None

I - Model SR20, (Normal Category) (Cont.)

Maximum Weight

S/N 1005 thru 1147:
Takeoff and Landing: 2900 lbs.

S/N 1148 thru 1877, 1879 thru 1885, and S/N 1005 thru 1147 if Cirrus Service Bulletin SB 20-01-00 is complied with:

Takeoff:	3000 lbs.
Landing:	2900 lbs.
Zero Fuel:	2900 lbs.

S/N 1878, 1886 and subsequent:
Takeoff and Landing: 3050 lbs.

Minimum Crew

One (1) Pilot

Number of Seats

S/N 1005 thru 2126:
4 (2 at 143.5 inches aft of datum, 2 at 180 inches aft of datum)

S/N 2127 and subsequent:
4+1 (2 at 143.5 inches aft of datum, 2+1 at 180 inches aft of datum)

Maximum Baggage

130 Lbs. at 208 inches

Fuel Capacity Total

S/N 1005 thru 1877, 1879 thru 1885:
60.5 gal at 153.75 inches
Usable: 56 gal (See Note 1)

S/N 1878, 1886 and subsequent:
58.5 gal at 154.9 inches
Usable: 56 gal (See Note 1)

Oil Capacity

8 quarts at 76.2 inches

Maximum Operating Altitude

The aircraft is limited to 17,500 ft MSL.

Control Surface Movements

Wing Flaps:	Up 0°± 0.5°	Down 50% 16°± 0.5°	Down 100% 32°± 0.5°
Aileron:	Up 12.5° ± 1.0°	Down 12.5° ±1.0°	
Elevator:	Up 25.0° +0°/-1.0°	Down 15° ± 1.0°	
Elevator Trim:	Up 17.0° Minimum	Down 10.5° ± 1.0°	
Rudder:	Right 20.0° ± 1.0°	Left 20.0° ± 1.0°	

Additional Limitations

Airframe life limit: 12,000 flight hours

Design Data

The airplane shall be manufactured in accordance with the latest FAA approved revision of "Master Drawing List", Document No. 13750, or other FAA approved data. NOTE: Document No. 12609 is the predecessor document to Document No. 13750.

Serial Nos. Eligible

1005 and on

Data Pertinent to All Models

Reference Datum

100 inches in front of the forward face of firewall bulkhead

Leveling Means

Door sill and leveling points as defined in AFM

Certification Basis

Model SR20: 14 CFR Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-47, except as follows:

14 CFR 23.573, 23.575, 23.611, 23.657, 23.673 through Amendment 23-48;

14 CFR 23.783, 23.785, 23.867, 23.1303, 23.1307, 23.1309, 23.1311, 23.1321, 23.1323, 23.1329, 23,1361, 23.1383, 23.1401, 23.1431, 23.1435 through Amendment 23-49;

14 CFR 23.3, 23.25, 23.143, 23.145, 23.155, 23.1325, 23.1521, 23.1543, 23.1555, 23.1559, 23.1567, 23.1583, 23.1585, 23.1589 through Amendment 23-50;

14 CFR 23.777, 23.779, 23.901, 23.907, 23.955, 23.959, 23.963, 23.965, 23.973, 23.975, 23.1041, 23.1091, 23.1093, 23.1107, 23.1121, 23.1141, 23.1143, 23.1181, 23.1191, 23.1337 through Amendment 23-51;

14 CFR 23.1305 through Amendment 23-52

Noise: 14 CFR Part 36 dated December 1, 1969 as amended by 36-1 through 36-21.

In addition to the certification basis stated above, for SR20 S/N 1423 through 1877 and SR20 serials 1879 and subsequent the certification basis is amended to include the following regulations at the amendment levels stated for the SR20 Fuselage Redesign (G2 marketing designation):

14 CFR 23.561, 23.607, 23.629 through Amendment 23-48.

14 CFR 23.853 through Amendment 23-49.

14 CFR 23.161, 23.177, 23.181, 23.201, 23.203, 23.233, 23.1581 through Amendment 23-50.

14 CFR 23.925, 23.1043, 23.1047, 23.1183 through Amendment 23-51.

14 CFR 23.901 through Amendment 23-53.

In addition to the certification basis stated in the paragraphs above, for SR20 S/N 1878, 1886 and subsequent the certification basis is amended to include the following regulations at the amendment levels stated for SR20 Wing Redesign (G3 marketing designation):

14 CFR 23.473, 23.499,23.725,23.865 through Amendment 23-48.

14 CFR 23.677, 23.723, 23.735, 23.1351, 23.1353,23.1359, 23.1365 through 23-49.

14 CFR 23.45, 23.49, 23.51, 23.53, 23.63, 23.71, 23.75, 23.77, 23.147,23.157,23.175, 23.1511, 23.1553, 23.1557 through Amendment 23-50.

For aircraft equipped with optional Garmin G1000 avionics or Garmin G1000 avionics with Garmin GFC-700 autopilot system, the certification basis, for installtion specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 2016 and subsequent),

14 CFR 23.1308 through Amendment 23-57.

Certification Basis (cont'd)

Model SR22: 14 CFR Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-53, except as follows:

14 CFR 23.301 through Amendment 42

14 CFR 23.855, 23.1326, 23.1359, not applicable

Noise: 14 CFR Part 36 dated December 1, 1969, as amended by 36-1 through 36-22

For aircraft equipped with optional Garmin G1000 avionics or Garmin G1000 avionics with Garmin GFC-700 autopilot system, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 2979, 2992, 3002 and subsequent),

14 CFR 23.1308 through Amendment 23-57.

For aircraft equipped for optional Flight Into Known Icing operation, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 3003, 3310, 3326, 3403 and subsequent),

14 CFR 23.1326, 23.1359 through Amendment 23-49.

14 CFR 23.1308 through Amendment 23-57.

For aircraft with 3600 lb max takeoff and landing weight limitation, the certification basis, for installation specific items only, is amended to include the following regulation at the amendment level stated: (Effective S/N 3915 and subsequent)

14 CFR 23.1308 through Amendment 23-57.

14 CFR Part 36 through Amendment 36-28.

Model SR22T: 14 CFR Part 23 of the Federal Aviation Regulations effective February 1, 1965, as amended by 23-1 through 23-59, except as follows:

14 CFR 23.301 through Amendment 42

Noise: 14 CFR Part 36 dated December 1, 1969, as amended by 36-1 through 36-28

Data Pertinent to All Models (cont'd)

Equivalent Level of Safety (ELOS) Findings

ACE-96-5 for 14 CFR Part 23.221 (Spinning); Refer to FAA Memorandum dated June 10, 1998 for models SR20, SR22.

ACE-96-5A for 14 CFR Part 23.221 (Spinning); Refer to FAA Memorandum dated February 02, 2010 for model SR22T.

ACE-01-01 for 14 CFR Part 23.1143(g) (Engine Controls) and 23.1147(b) (Mixture Controls); Refer to FAA Memorandum dated February 14, 2001 for model SR20.

ACE-00-09 for 14 CFR Part 23.1143(g) (Engine Controls) and 23.1147(b) (Mixture Controls); Refer to FAA Memorandum dated September 11, 2000 for model SR22.

ACE-00-09A for 14 CFR Part 23.1143(g) (Engine Controls) and 23.1147(b) (Mixture Controls); Refer to FAA Memorandum dated February 02, 2010 for model SR22T.

ACE-08-05 for 14 CFR Part 23.777(d) (Cockpit Controls) and 23.781(b) (Cockpit control knob shape); Refer to FAA Memorandum dated April 11, 2008 for models SR20, SR22. (effective with optional Garmin G1000 avionics installation, see certification basis above).

ACE-08-05A for 14 CFR Part 23.777(d) (Cockpit Controls) and 23.781(b) (Cockpit control knob shape); Refer to FAA Memorandum dated February 02, 2010 for model SR22T (all serials).

ACE-09-06 for 14 CFR Section 23.1326(b)(1) (Pitot heat indication systems); for Flight Into Known Icing equipped airplanes only (Effective S/N 3003, 3310, 3326, 3403 and subsequent); Refer to FAA Memorandum dated April 20, 2009 for model SR22.

ACE-09-06A for 14 CFR Section 23.1326(b)(1) (Pitot heat indication systems); Refer to FAA Memorandum dated February 02, 2010 for model SR22T (all serials).

ACE-10-08 for 14 CFR Section 23.1091(b)(4) (Alternate air door override means); Refer to FAA Memorandum dated February 02, 2010 for model SR22T (all serials).

Special Conditions

23-ACE-88 for ballistic parachute, for models SR20, SR22, SR22T.

23-134-SC for protection of systems for High Intensity Radiated Fields (HIRF), for models SR20, SR22.

23-163-SC for inflatable restraint system. Addition to the certification basis model SR20 effective S/N 1541 and subsequent; model SR22 S/N 1500, 1520 and subsequent; model SR22T (all serials).

Data Pertinent to All Models (cont'd)

Exemptions

Exemption No. 9849 to regulation 23.1419(a) for Flight Into Known Icing operations only on model SR22 (Effective S/N 3003, 3310, 3326, 3403 and subsequent). Exemption allows for a higher stall speed than that required by 23.49(c) & (d) when operating in icing conditions.

Exemption No. 9993 to regulation 23.1419(a) for Flight Into Known Icing operations only on model SR22T (Effective S/N 0001 and on). Exemption allows for a higher stall speed than that required by 23.49(c) & (d) when operating in icing conditions.

Production Basis

Production Certificate 338CE issued June 12, 2000

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (See Certification Basis) must be installed in the airplane for airworthiness certification.

In addition to the above required equipment, the following equipment are also required:

- The latest FAA approved Revision of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL for the CIRRUS DESIGN SR20", Document No. 11934-001 for aircraft serials 1005 through 1147 with 2900 pound TOGW, Document No. 11934- 002 for aircraft serials 1005 through 1147 with 3000 pound TOGW and for aircraft serials 1148 through 1267, Document No. 11934-003 for aircraft serials 1268 and subsequent, or Document No. 11934-004 for aircraft serials 2016 and subsequent. (See Note 7)

- The latest FAA approved Revision of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL for the CIRRUS SR22", Document No. 13772-001 for aircraft serials 0002 thru 3914, Document No. 13772-002 for aircraft serials 2979, 2992, 3002 thru 3914, or Document No. 13772-004 for aircraft serials 3915 and subsequent. (See Note 7)

- The latest FAA approved Revision of the "PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL for the CIRRUS SR22T", Document No. 13772- 003 for aircraft serials 0001 thru 0441, or Document No. 13772-005 for aircraft serials 0442 and subsequent. (See Note 7)

NOTES

Note 1. A current weight and balance report including list of equipment included in the certificated empty weight, and loading instructions when necessary must be provided for each aircraft at the time of original certification. The certificated empty weight and loading corresponding center of gravity location must include unusable fuel of:

27 lb. at (+153.8 inches) for model SR20 S/N 1005 thru 1877, 1879 thru 1885.
18 lb at (+154.9 inches) for model SR22 S/N 0002 thru 2333, 2335 thru 2419, and 2421 thru 2437.
15 lb at (+154.9 inches) for models SR22 S/N 2334, 2420, 2438 and subsequent; SR20 S/N 1878, 1886 and subsequent; and SR22T for S/N 0001 and subsequent.

Note 2. All placards specified in the latest FAA approved revisions of the following documents must be displayed in the airplane in the appropriate locations:

"PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR20", document numbers 11934-001, 11934-002, 11934-003 or 11934-004
"PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR22" document numbers 13772-001, 13772-002, or 13772-004.
"PILOT'S OPERATING HANDBOOK AND FAA APPROVED AIRPLANE FLIGHT MANUAL FOR THE CIRRUS SR22T" document number 13772-003, or 13772-005.

Note 3. FAA approved Airworthiness Limitations are included in Section 4 of the Airplane Maintenance Manual (AMM) Document No. 12137-001 for model SR20, and 13773-001 for models SR22 and SR22T.

Note 4. Exterior colors are limited to those specified in the latest FAA accepted revision of the Airplane Maintenance Manual (AMM) Document No. 12137-001 for model SR20, and 13773-001 for models SR22 and SR22T.

Note 5. Major structural repairs must be accomplished in accordance with FAA approved Cirrus Design repair methods or other methods approved by the FAA.

Note 6. For Model SR22 S/N 0002 thru 2333, 2335 thru 2419, and 2421 thru 2437 a maximum landing weight exists along the line between 141.4 inches at 3210 lbs and 142.7 inches at 3400 lbs.

Note 7. The Pilot's Operating Handbook and FAA Approved Airplane Flight Manual (POH) may be installed in the airplane in hardcopy format or on a portable device in electronic format in accordance with the limitations in the POH. The electronic format has the same base and dash number as the hardcopy format and includes "ePOH" after the dash number.

..END..

FAA Airworthiness Directive Compliance Record

845 Severn Ave. Tampa, Florida 33606
941-360-6877
ext.136

Report Produced By: **Sarasota Avionics and Maintenance**

Content Revision: **11/2/2016** File ID: **N44YP-16** Aircraft Registration:

FAA AD Number Effective Date	Description	Complied Date Time	Amendment Number Method of Compliance/Applicability	Once or Recur	Next Due Date Time	1. Facility 3. Cert. Num. 2. Cert. Type 4. Author. By
Manufacturer Cirrus Design Corp.	**Category** Airframe	**Model** SR20				**Part #:** **Serial #:**
2008-11-18 **7/7/2008** ©ATP	To detect and correct leaks in the exhaust system, which could result in exhaust gases leaking into the cabin,contd. ©ATP	11/4/2016 2624.3 TTAF	C/W by inspection and pressure check, no defects found.	Recur ©ATP	2724.3 TTAF or 11/4/2017	1. Sarasota Avionics and Mai 2. A&P-IA 3. 3505535 4. Steven D. Reifeis Signature:
2001-25-03 **12/17/2001** ©ATP	To detect and replace understrength rivets in the elevator and rudder, which could result in failure,contd. ©ATP	11/4/2016 2624.3 TTAF	N/A by serial number	Once ©ATP		1. Sarasota Avionics and Mai 2. A&P-IA 3. 3505535 4. Steven D. Reifeis Signature:
2008-14-13 **8/14/2008** ©ATP	To prevent in-flight failure of the cabin door, which could result in door separation from the airplane ©ATP	11/4/2016 2624.3 TTAF	N/A by serial number	Once ©ATP		1. Sarasota Avionics and Mai 2. A&P-IA 3. 3505535 4. Steven D. Reifeis Signature:
2006-19-10 **10/24/2006** ©ATP	To prevent the crew seats from folding forward during emergency landing with dynamic loads with consequent,contd. ©ATP	3/19/2007 933.0 TTAF	PCW by replacement of crew seat pins	Once ©ATP		1. Sarasota Avionics and Mai 2. A&P-IA 3. 3505535 4. Steven D. Reifeis Signature:
2008-03-16 **3/11/2008** ©ATP	To prevent the possibility of jamming of the rudder-aileron interconnect system, which may result in loss of,contd. ©ATP	3/28/2008 1129.1 TTAF	PCW IAW SB 2X-27-14 R3	Once ©ATP		1. Sarasota Avionics and Mai 2. A&P-IA 3. 3505535 4. Steven D. Reifeis Signature:

Airworthiness Directive Compliance Record

AIRCRAFT RECORDS - DO NOT DESTROY — airframe

Company	Coyote Aerospace
Manufacturer	CIRRUS DESIGN CORPORATION
Model	SR20
Tail #	N44YP
Serial #	1169
Current Time	2445
Total Time	2445
A/C Cert. Date	2002

01-25-03 12/17/01 ELEVATOR TORQUE TUBE AND RUDDER HINGE/

Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature **Cert. #** A&P3420653IA

02-05-05 03/19/02 SUPERSEDED BY AD 2002-24-08/

Method of Compliance Superceded by AD 2002-24-08
SB # **Date** **Next Due** N/A
Notes
Signature **Cert. #** A&P3420653IA

02-21-02 11/08/02 ROLL AND YAW TRIM CARTRIDGE RETAINING NUT/

Method of Compliance Previously Complied With (P/C/W)
SB # 20-27-06 **Date** 11/2002 **Next Due** N/A
Notes
Signature **Cert. #** on file

02-24-08 01/24/03 PARACHUTE ACTIVATION SYSTEM MODIFICATION/

Method of Compliance Previously Complied With (P/C/W)
SB # **Date** 08/2002 **Next Due** N/A
Notes Hobbs 114.4
Signature **Cert. #** on file

05-17-19 10/13/05 SUPERSEDED BY AD 2006-19-10/

Method of Compliance See Note:
SB # **Date** **Next Due** N/A
Notes superceded by 2006-19-10
Signature **Cert. #** A&P3420653IA

06-07-06 05/11/06 FUEL LINE AND WIRING HARNESS IN CONSOLE/

Method of Compliance Previously Complied With (P/C/W)
SB # **Date** 02/2006 **Next Due** N/A
Notes Hobbs: 890.6
Signature **Cert. #** on file

06-19-10 10/24/06 CREW SEAT BREAK-OVER BOLT AND RECLINE LOCKS/

Method of Compliance Previously Complied With (P/C/W)
SB # 2X-25-17R1 **Date** 03/2007 **Next Due** N/A
Notes hobbs 933.0
Signature **Cert. #** on file

Prepared by E. Cipcic, A+P/IA Date 10-20-15

Airworthiness Directive Compliance Record

06-21-03 **11/17/06** **POH, BRAKE CALIPER OVERHEATING DAMAGE/**

Method of Compliance Previously Complied With (P/C/W)
SB # 2x-32-13 & 2x-32-14 **Date** 03/2007 **Next Due** N/A
Notes hobbs 933.0
Signature [signature] **Cert. #** on file

07-14-03 **08/16/07** **PARACHUTE SYSTEM PICK-UP COLLAR SUPPORT AND SCREWS/**

Method of Compliance Previously Complied With (P/C/W)
SB # A2x-95-10R3 **Date** 05/2007 **Next Due** N/A
Notes hobbs 1020.1
Signature [signature] **Cert. #** on file

08-03-16 **03/11/08** **RUDDER-AILERON INTERCONNECT RIGGING/**

Method of Compliance Previously Complied With (P/C/W)
SB # 2x-27-14R3 **Date** 03/2008 **Next Due** N/A
Notes hobbs 1129.1
Signature [signature] **Cert. #** on file

***08-11-18** **07/07/08** **ENGINE EXHAUST/HEAT EXCHANGER/**

Method of Compliance pressure check & visual inspection
SB # **Date** 08/2014 **Next Due** 10/2016 or 100 hrs
Notes Recurrent * LAST REPLACED 3-19-07
Signature [signature] **Cert. #** A&P3420653IA

08-14-13 **08/14/08** **CABIN DOOR ROD ENDS AND HINGE PIN/**

Method of Compliance N/A by s/n
SB # **Date** **Next Due** N/A
Notes Applies to SR20 s/n 1423-1906
Signature [signature] **Cert. #** A&P3420653IA

Prepared by E.Cipcic, A+P/IA. Date 10-20-15

Airworthiness Directive Compliance Record

AIRCRAFT RECORDS - DO NOT DESTROY engine

Company	Coyote Aerospace
Manufacturer	TELEDYNE CONTINENTAL MOTORS
Model	IO-360 SERIES
Location	Front
Serial #	357367
TSMOH	1683.1
Total Time	2445

70-14-07 11/22/74 FUEL INJECTION PUMP/

Method of Compliance N/A by s/n
SB # **Date** **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

74-18-07 08/28/74 CYLINDER FAILURE/

Method of Compliance N/A by s/n
SB # **Date** **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

81-13-10 R1 11/20/81 OIL PUMP DRIVE GEAR/

Method of Compliance N/A by s/n
SB # **Date** 08/2014 **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

88-03-06 04/15/88 TCM PRO-TECH ENGINE OIL FILTER/

Method of Compliance N/A by s/n
SB # **Date** 08/2014 **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

91-19-03 09/29/91 CHAMPION ENGINE OIL FILTER/

Method of Compliance N/A by s/n
SB # **Date** 08/2014 **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

92-04-09 06/22/93 ROCKER ARM SHAFT HOLD DOWN STUDS/

Method of Compliance N/A by s/n
SB # **Date** 08/2014 **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

93-10-02 08/12/93 CYLINDER VALVE RETAINER KEY/

Method of Compliance N/A by s/n
SB # **Date** **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

Prepared by E. Cipcic, A+P/IA. Date 10-20-15

Airworthiness Directive Compliance Record

94-14-12 06/23/94 SUPERSEDED BY AD 95-21-15/
Method of Compliance Superceded; see note.
SB # **Date** **Next Due** N/A
Notes superceded by AD 95-21-15
Signature **Cert. #** A&P3420653IA

95-21-15 11/28/95 ENGINE TEARDOWN AND INSPECTION/
Method of Compliance N/A by s/n
SB # **Date** 08/2014 **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

***96-12-22 07/31/96 OIL FILTER ADAPTER ASSEMBLY NUT/**
Method of Compliance N/A by s/n
SB # **Date** 08/2014 **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

***97-26-17 01/23/98 AIRMELT CRANKSHAFT/**
Method of Compliance N/A by manf.date
SB # **Date** 10/2015 **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

98-17-11 10/19/98 CRANKSHAFT CRACKS/
Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

98-19-02 11/09/98 SUPERIOR AIR PARTS PISTON PINS/
Method of Compliance N/A by installation
SB # **Date** 10/2015 **Next Due** N/A
Notes Not installed
Signature **Cert. #** A&P3420653IA

00-08-51 04/28/00 SUPERSEDED BY AD 2000-23-21/
Method of Compliance Superceded; see note.
SB # **Date** 10/2015 **Next Due** N/A
Notes Superceded by AD 2000-23-21...n/a: Aircraft not built until 2002
Signature **Cert. #** A&P3420653IA

00-11-51 06/07/00 SUPERSEDED BY AD 2002-13-04/
Method of Compliance Superceded; see note.
SB # **Date** 10/2015 **Next Due** N/A
Notes Superceded by AD 2002-13-04
Signature **Cert. #** A&P3420653IA

00-23-21 12/12/00 CRANKSHAFT CONNECTING ROD JOURNAL/
Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes N/A by engine and crankshaft s/n
Signature **Cert. #** A&P3420653IA

Prepared by E. Cipcic, A+P/IA. Date 10-20-15

* Indicates possible recurring inspections **Tdata, Inc** IO-360 SERIES Front **Page 2 of 3**

Airworthiness Directive Compliance Record

02-13-04 **07/12/02** **SUPERSEDED BY AD 2011-26-07/**

Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes n/a by magneto s/n
Signature [signature] **Cert. #** A&P3420653IA

09-24-51 **11/16/09** **SUPERSEDED BY AD 2009-24-52/**

Method of Compliance superceded by AD 09-24-52
SB # **Date** 10/2015 **Next Due** N/A
Notes superceded by AD 09-24-52
Signature [signature] **Cert. #** A&P3420653IA

09-24-52 **11/18/09** **SUPERSEDED BY AD 2010-11-04/**

Method of Compliance Superceded by AD 10-11-04
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

10-11-04 **06/16/10** **HYDRAULIC VALVE LIFTERS/**

Method of Compliance N/A by manf.date
SB # **Date** 10/2015 **Next Due** N/A
Notes N/A by engine manufacture date; manf. before June 19, 2009
Signature [signature] **Cert. #** A&P3420653IA

11-26-07 **01/24/12** **MAGNETO IMPULSE COUPLING STOP PIN/**

Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

12-03-06 **02/24/12** **AFS FUEL SERVO DIAPHRAGM/**

Method of Compliance N/A by manf.date
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

Prepared by E. Cipcic, A+P/IA. Date 10-20-15

Airworthiness Directive Compliance Record

AIRCRAFT RECORDS - DO NOT DESTROY [redacted]

Company	Coyote Aerospace
Manufacturer	HARTZELL
Model	BHC-J2Y SERIES
Location	Front
Tail #	N44YP
Serial #	EF268B
Blade	J67624 & J67626
TSMOH	<100 hours
Total Time	2445

77-12-06 12/21/77 77-12-06 R2 IS SUPERSEDED BY AD 2002-09-08/

Method of Compliance Superceded; see note.
SB # **Date** 10/2015 **Next Due** N/A
Notes Superceded by AD 2002-09-08
Signature [signature] **Cert. #** A&P3420653IA

01-07-03 06/04/01 PROPELLERS RETURNED TO SERVICE BY BASCO/

Method of Compliance N/A by installation
SB # **Date** 10/2015 **Next Due** N/A
Notes no work by this vendor
Signature [signature] **Cert. #** A&P3420653IA

*01-23-08 12/24/01 PROPELLER HUB/

Method of Compliance N/A by engine model
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

02-09-08 06/13/02 SUPERSEDED BY AD 2007-26-09/

Method of Compliance Superceded; see note.
SB # **Date** 10/2015 **Next Due** N/A
Notes superceded by AD 07-26-09
Signature [signature] **Cert. #**

03-01-03 01/23/03 ALUMINUM HUB REPLACEMENT/

Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

05-14-11 08/17/05 MAINTENANCE AND REPAIR BY SOUTHERN CALIFORNIA PROPELLER SERVICE/

Method of Compliance N/A: prop not serviced by Southern California Propellers
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

Prepared by E. Cipcic, A+P/IA. Date 10-20-15

Airworthiness Directive Compliance Record

***06-18-15 09/25/06 SUPERSEDED BY AD 2009-22-03/**

Method of Compliance Superceded; see note.
SB # **Date** 10/2015 **Next Due** N/A
Notes Superceded by 09-22-03
Signature E. Cipcic **Cert. #** A&P3420653IA

07-26-09 01/30/08 PLACARD, PROPELLER BLADE SHANK REWORK/

Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature E. Cipcic **Cert. #** A&P3420653IA

***08-13-28 07/17/08 PROPELLER HUB LUBRICATION HOLES/**

Method of Compliance N/A by engine model
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature E. Cipcic **Cert. #** A&P3420653IA

***09-22-03 11/12/09 PROPELLER HUB FRONT CYLINDER HALF/**

Method of Compliance N/A by engine model
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature E. Cipcic **Cert. #** A&P3420653IA

Prepared by E. Cipcic, A+P/IA. Date 10-20-15

Airworthiness Directive Compliance Record

AIRCRAFT RECORDS - DO NOT DESTROY **appliances**

Company Coyote Aerospace
Tail # N44YP

***74-18-05** **08/28/74** **SLICK ELECTRO, INC.**
MAGNETOS

MAGNETO IMPULSE COUPLING/
Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

77-12-05 **05/12/78** **CHAMPION SPARK PLUG CO.**
OIL FILTERS CH48108, CH48109

[R1] OIL FILTER/
Method of Compliance N/A by application
SB # **Date** 10/2015 **Next Due** N/A
Notes Tempest filters installed
Signature [signature] **Cert. #** A&P3420653IA

80-06-05 **03/28/80** **SLICK ELECTRO, INC.**
MAGNETOS

MAGNETOS/
Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

81-16-05 **08/06/81** **SLICK ELECTRO, INC.**
MAGNETOS

MAGNETO COIL/
Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

***99-04-04** **02/25/99** **SLICK ELECTRO, INC.**
MAGNETOS

MAGNETO IMPULSE COUPLING/
Method of Compliance N/A by engine model
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

01-23-17 **12/28/01** **GARMIN INTERNATIONAL**
GNS 430 UNIT

INACCURATE COURSE DEVIATION DISPLAYS/
Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

Prepared by E. Cipcic, A+P/IA. Date 10-20-15

* Indicates possible recurring inspections **Tdata, Inc (Tdata.com)** N44YP **Page 1 of 2**

Airworthiness Directive Compliance Record

02-26-03 **02/18/03** **BRACKETT AIRCRAFT SPECIALTIES, INC. BA-2410**

SINGLE SCREEN AIR FILTERS/
Method of Compliance N/A by application
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

11-26-07 **01/24/12** **SLICK ELECTRO, INC. MAGNETOS**

MAGNETO IMPULSE COUPLING STOP PIN/
Method of Compliance N/A by s/n
SB # **Date** 10/2015 **Next Due** N/A
Notes
Signature [signature] **Cert. #** A&P3420653IA

* AIRBORNE SL39A (5-31-02) • RECURRENT •
* MANDATORY INSPECTION of AIRBORNE Check Valves
(DUE EVERY 12 MONTHS, REPLACE EVERY 10 YEARS.)

Prepared by E. Cipcic, A+P/IA. Date 10-20-15

N44YP
AIRCRAFT REGISTRATION NO.

1169
AIRCRAFT SERIAL NO.

SR·20
TYPE AIRCRAFT

adNote™

84-26-2 R

Induction Air Filters

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear

DATE	TOTAL TIME AT COMPL.	TACH OR RECORDING METER TIME AT COMPL.	METHOD OF COMPLIANCE	NEXT COMPL DUE AT TOTAL TIME	NEXT COMPL DUE AT DATE, TACH, OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER
*	NOTE:	This	A.D. is NOT Applicable / NO PAPER induction filter			
		INSTALLED;	ENG. USES BRACKETT BA-24 FILTER.			4-30-10

Amendment 39-4966. Applies to all paper induction air filters used in small airplanes.

Compliance: Required as indicated, unless already accomplished.

To prevent possible engine power loss or stoppage caused by engine ingestion of fragments of a deteriorated induction air filter, accomplish the following:

Within the next one hundred hours time-in-service after the effective date of this AD or prior to the accumulation of 500 hours time-in-service on the filter, whichever occurs later, and thereafter at intervals not exceeding 500 hours time-in-service on the filter:

(a) Replace the air filter with a new filter that is FAA approved for the airplane installation.

(b) Within 100 hours time-in-service replace any filter on which the time-in-service cannot be determined utilizing the airplane maintenance records for this determination.

NOTE: This AD does not alter current maintenance procedures which require inspection of paper induction air filters at 100 hours time-in-service and annual inspections and replacement as necessary based on filter condition.

This amendment becomes effective January 29, 1985.

SR·20
TYPE AIRCRAFT

Ignition Switch

DATE	TOTAL TIME AT COMPL.	TACH OR RECORDING METER TIME AT COMPL.	METHOD OF COMPLIANCE	NEXT COMPL DUE AT TOTAL TIME	NEXT COMPL DUE AT DATE, TACH, OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER
N/A: This SWITCH NOT INSTALLED ON ACFT.						A+P 3420653 IA. 4-30-10

Amendment 39-8511. Docket 92-NM-165-AD.

Applicability: ACS and Gerdes ignition switches; as installed in, but not limited to, Piper Model PA-38-112 series airplanes, Schweizer Model G-164 series (including Model G-164A, G-164B, and G-164C) airplanes, Schweizer Model 2-37 and 2-37A series airplanes, and the following Cessna airplanes; certificated in any category:

Cessna Model	Serial Numbers		
150	15074428	through	15079405
A150	A1500389	through	A1500734
F150	F15001024	through	F15001428
FRA150	FRA1500212	through	FRA1500336
152	15279406	through	15286033
A152	A1520735	through	A1521049
F152	F15201429	through	F15201980
FA152	FA1520337	through	FA1520425
172	17261486	through	17276673
R172	R1722000	through	R1723454
172RG	172RG0001	through	172RG1191
F172	F17201045	through	F17202254
FR172	FR17200441	through	FR17200675
177	17701890	through	17702752
177RG	177RG0342	through	177RG1366
F177RG	F177RG0093	through	F177RG0177
180	18052317	through	18053203
182	18261786	through	18268615
R182	R18200001	through	R18202041
A182	A182-0137	through	A182-0148
F182	F18200001	through	F18200169
FR182	FR18200001	through	FR18200070
185	18502154	through	18504448
U206	U20601980	through	U20607020
207	20700222	through	20700788
210	21059893	through	21065009
P210	P21000001	through	P21000874

Compliance: Required as indicated, unless accomplished previously.

To prevent failure of ignition switches, accomplish the following:

(a) Within 100 flight hours after the effective date of this AD, or at the next annual inspection, whichever occurs first, perform an inspection of the ignition switch to detect wear and corrosion, and lubricate the switch, in accordance with ACS Service Bulletin SB92-01, dated August 15, 1992; or Cessna Service Bulletin SEB91-5, Revision 1, June 14, 1991. If wear or corrosion is detected, prior to further flight, replace the switch in accordance with the service bulletin. Repeat this inspection and lubricate the ignition switch in accordance with the service bulletin, thereafter, at intervals not to exceed 2,000 flight hours.

NOTE: ACS ignition switches that do not have a "start" position (models A-510-1 and A-510-5) or were manufactured on or after February 20, 1989, and have not accumulated 2,000 flight hours, need not be lubricated. The manufacture date is stamped on the switch body. These switches are identifiable by red paint in the screw heads on the back of the switch. However, manufacturer lubricated switches that have a "start" position, but do not have a starter solenoid diode, must be inspected and modified.

(b) Within 100 flight hours after the effective date of this AD, or at the next annual inspection, whichever occurs first, inspect the ignition switch installation to determine if a diode or other surge suppresser is installed on the starter solenoid. If one is not installed, prior to further flight, install a starter solenoid diode in accordance with ACS Service Bulletin SB92-01, dated August 15, 1992; or Cessna Service Bulletin SEB91-5, Revision 1, dated June 14, 1991.

NOTE: For operators using the Cessna service bulletin to install the diode in the starter solenoid: The procedures for installation are contained in Attachment to Service Bulletin SEB91-5R1, Revision 1, dated June 14, 1991.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Los Angeles Aircraft Certification Office (ACO), FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

NOTE: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Los Angeles ACO.

(d) Special flight permits may be issued in accordance with FAR 21.197 and 21.199 to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The inspection, lubrication, replacement, and modification shall be done in accordance with ACS Service Bulletin SB92-01, dated August 15, 1992; or Cessna Service Bulletin SEB91-5, Revision 1, dated June 14, 1991, which includes Attachment to Service Bulletin SEB91-5R1, Revision 1, dated June 14, 1991. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from ACS Products Company, P.O. Box 152, 1585 C Drive, Lake Havasu City, Arizona 86403-0008; or Cessna Aircraft Company, Customer Services, P.O. Box 7704, Wichita, KS 67277. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Los Angeles Aircraft Certification Office, 3229 East Spring Street, Long Beach, California; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on April 29, 1993

N44YP
AIRCRAFT REGISTRATION NO.

1169
AIRCRAFT SERIAL NO

SR-20
TYPE AIRCRAFT

adNote™

97-26-17 Corr. R
AD NUMBER

Continental/Rolls-Royce Engine

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear Engine Model/Serial No:

DATE	TOTAL TIME AT COMPL.	TACH OR RECORDING METER TIME AT COMPL.	METHOD OF COMPLIANCE	NEXT COMPL TOTAL TIME	DUE AT DATE, TACH, OR RECORDING METER TIME	AUTHORIZED SIGNATURE & NUMBER
N/A: by Eng. S/N + MANF. date (2002)						[signature] A+P3420653 IA 4-30-10

Amendment 39-10260. Docket 93-ANE-08. Supersedes AD 87-23-08, Amendment 39-5735.

Applicability: Teledyne Continental Motors (TCM) IO-360, LTSIO-360, TSIO-360, IO-520, LIO-520, LTSIO-520 and TSIO-520 series reciprocating engines built on or prior to December 31, 1980; rebuilt TCM IO-360, LTSIO-360, TSIO-360, IO-520, LIO-520, LTSIO-520 and TSIO-520 series reciprocating engines with serial numbers lower than those listed in TCM Critical Service Bulletin (SB) No. CSB96-8, dated June 25, 1996; TCM factory overhauled IO-360, LTSIO-360, TSIO-360, IO-520, LIO-520, LTSIO-520 and TSIO-520 series reciprocating engines with serial number of 901203H and lower; and Rolls-Royce, plc IO-360 and TSIO-360 series reciprocating engines with any serial number. These engines are installed on but not limited to the following aircraft: Raytheon (formerly Beech) models 95-C55, 95-C55A, D55, D55A, E55, E55A, 58, 58A, 58P, 58PA, 58TC, 58TCA, S35, V35, V35A, V35B, E33A, E33C, 35-C33A, 36, A36, F33A, F33C and A36TC; Bellanca model 17-30A; Cessna models 172XP, A185, A188, T188C, 206, T206, 207, T207, 210, T210, P210, 310R, T310P, T310Q, T310R, 320D, 320E, 320F, 336, 337, T337, P337, 340, 401, 402, 414 and T41B/C; Colemill conversion of Commander 500A; Goodyear Airship Blimp 22; Maule Model M-4-210, M-4-210C, M-4-210S, M-4-210T, and M-5-210C; Mooney model M20-K; Navion model H; Pierre Robin HR 100; The New Piper Aircraft, Inc. (formerly Piper Aircraft Company) models PA28-201T, PA28R-201T, PA28RT-201T, PA34-200T and PA34-220T; Prinair DeHavilland Heron; Reims models FR172, F337 and FT337; and Swift Museum Foundation, Inc. models GC-1A and GC-1B equipped with the IO-360 engine.

Note 1: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent crankshaft failure and subsequent engine failure, accomplish the following:

(a) At the next engine overhaul, or whenever the crankshaft is next removed from the engine, after the effective date of this AD, whichever occurs first, determine if the crankshaft was manufactured using the airmelt or vacuum arc remelt (VAR) process in accordance with the identification procedure described in TCM Critical SB No. CSB96-8, dated June 25, 1996. If the crankshaft was manufactured using the airmelt process or if the manufacturing process is unknown, remove the crankshaft from service and replace with a serviceable crankshaft manufactured using the VAR process.

(b) For all TCM IO-360, LTSIO-360, TSIO-360, IO-520, LIO-520, LTSIO-520 and TSIO-520 and Rolls-Royce, plc IO-360 and TSIO-360 engine models that have VAR crankshafts installed, regardless of serial number; at the next and every subsequent crankshaft removal from the engine case or installation of a replacement crankshaft, prior to crankshaft installation in the engine, conduct an ultrasonic inspection of the crankshaft in accordance with the procedures specified in TCM Mandatory SB No. MSB96-10, dated August 15, 1996, and, if necessary, replace with a serviceable part.

Note 2: Accomplishment of the ultrasonic inspection required by this AD does not fulfill any requirements for magnetic particle inspection or any other inspections specified in TCM or Rolls-Royce, plc overhaul manuals.

(c) The ultrasonic inspection of the crankshaft must be performed by a non-destructive test (NDT) ultrasonic (UT) Level II inspector who is qualified under the guidelines established by the American Society of Nondestructive Testing or MIL-STD-410 or FAA-approved equivalent, or must be trained by TCM personnel or their designated representative on how to accomplish and conduct this inspection procedure. The person approving the engine for return to service is required to verify that the UT inspection was accomplished in accordance with the requirements of this paragraph.

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Atlanta Aircraft Certification Office. Operators shall submit their requests through an appropriate FAA Maintenance Inspector, who may add comments and then send it to the Manager, Atlanta Aircraft Certification Office.

Note 3: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the Atlanta Aircraft Certification Office.

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements o this AD can be accomplished.

(f) The actions required by this AD shall be done in accordance wit the following TCM service documents:

Document No.	Pages	Date
CSB96-8	1-6	June 25, 1996
Total pages:	6.	
MSB96-10	1-3	August 15, 1996
Total pages:	3.	

This incorporation by reference was approved by the Director o Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR pa Copies may be obtained from Teledyne Continental Motors, P.O. Bo Mobile, AL 36601; telephone (888) 826-5874. Copies may be insp at the FAA, New England Region, Office of the Assistant Chief Co 12 New England Executive Park, Burlington, MA; or at the Office Federal Register, 800 North Capitol Street, NW., suite 700, Wash DC.

(g) This amendment becomes effective on January 23, 1998.

FOR FURTHER INFORMATION CONTACT: Jerry R Aerospace Engineer, Atlanta Aircraft Certification Office, FA Airplane Directorate, 1895 Phoenix Blvd., One Crown Center, S Atlanta, GA 30349, (770) 703-6096, fax (770) 703-6097.1

N444YP
AIRCRAFT REGISTRATION NO.

1169
AIRCRAFT SERIAL NO.

SR20
TYPE AIRCRAFT

adNote™

Garmin GNS 430

AD

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
Compliance verified by Lancaster Avionics, Lancaster. PA (KLNS)				

Amendment 39-12516; Docket No. 99-CE-87-AD.

(a) ***What airplanes are affected by this AD?*** This AD applies to the GNS 430 units that are specified in paragraph (a)(1) of this AD and are installed on aircraft. These GNS 430 units are installed in, but not limited to, aircraft that are certificated in any category and presented in paragraph (a)(2) of this AD:

(1) GNS 430 Units, part number 011-00280-00: serial numbers 9630001, 96300002, 96300017, 96300028, 96300034, 96300040, 96300068, 96300104, 96300108, 96300122, 96300125, 96300130, 96300142, 96300149, 96300161, 96300165, 96300218, 96300222, 96300232, 96300269, 96300272, 96300308, 96300333, 96300340, 96300348, 96300354, 96300369, 96300372, 96300382, 96300394, 96300411, 96300413, 96300429, 9630 96300451, 96300484, 96300485, 96300489, 9630 96300506, 96300513, 96300522, 96300549, 9630 96300585, 96300587, 96300618, 96300621, 9630 96300628, 96300641, 96300653, 96300664, 9630 96300734, 96300756, 96300766, 96300781, 9630 96300786, 96300808, 96300831, 96300837, 9630 96300846, 96300866, 96300870, 96300872, 9630 96300916, 96300923, 96300925, 96300929, 9630 96300961, 96300984, 96300987, 96301021, 9630 96301130, 96301280, and 96301296 through 96303200.

(2) Aircraft with the GNS 430 Unit Installation aircraft could have field approval installations):

TC holder	Airplane models
Cessna Aircraft Company.....	172, 182, 206, 208, 210, 401, 402, 404, 406, 411, 414, 414A, 421A, 421B, 421C, 425, 441, 500, 550, S550, 552, 560, 560XL, 501, 525, and 551.
Mooney Aircraft.....	M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20L, M20M, M20R, M20S, and M22.
Raytheon Aircraft Company....	Beech Models E33, F33, G33, E33A, F33A, E33C, F33C, 35, 35R, A35, B35, B35TC, C35, D35, E35, F35, G35, H35, J35, K35, M35, N35, P35, S35, V35, V35TC, V35A, V35A-TC, V35B, V35B-TC, 36, A36, A36TC, 50, B50, C50, D50, D50A, D50B, D50C, D50E, E50, F50, G50, H50, J50, 60, A60, B60, 65-90, 65-A90, B90, C90, C90A, C90B, E90, F90, 100, A100, B100, 95-55, 95-A55, 95-B55, 95-C55, D-55, E55, 58, 58P, and 58TC.
Socata.....	TBM 700.
The New Piper Aircraft, Inc..	J3C-40, J3C-50, J3C-50S (Army L-4, L-4B, L-4H, and L-4J), J3C-65 (Navy NE-1 and NE-2), J3C-65S, J3F-50, J3F-50S, J3F-60, J3F-60S, J3F-65 (Army L-4D), J3F-65S, J3L, J3L-S, J3L-65 (Army L-4C), J3L-65S, J4, J4A, J4A-S, J4E (Army L-4E), J5A (Army L-4F), J5A-80, J5B (Army L-4G), J5C, AE-1, HE-1, PA-11, PA-11S, PA-12, PA-12S, PA-14, PA-15, PA-16, PA-16S, PA-17, PA-18, PA-18A, PA-18A (Restricted), PA-18S, PA-18-"105" (Special), PA-18S-"105" (Special), PA-18-"125" (Army L-21A), PA-18AS-"125", PA-18S-"125", PA-18-"1 (Army L-21B), PA-18A-"135", PA-18A-"135" (Restricted), PA-18AS-"135", PA-18S-"135", PA-18-"150", PA-18A-"150", PA-18A-"150" (Restricted), PA-18AS-"150", PA-18S-"150", PA-1 (Army L-18C), PA-19S, PA- 20, P-20S, PA-20-"115", PA-20S-"115", PA-20-"135", PA-20S "135", PA-22, PA-22-108, PA-22-135, PA-22S-135, PA-22-150, PA-22S-150, PA-22-160, 22S-160, PA-24, PA-24-250, PA-24-260, PA-24-400, PA-25, PA-25-235, PA-25-260, PA- 140, PA-28-150, PA-28-151, PA-28-160, PA-28-161, PA-28-180, PA-28-235, PA-28S-16 PA-28R-180, PA-28S-180, PA-28-181, PA-28R-200, PA-28R-201, PA-28R-201T, PA-28 201, PA-28RT-201T, PA-28-201T, PA28- 236, PA-32R-301 (SP), PA-32R-301 (HP), PA 301T, PA-32-301, PA-32-301T, PA-36-285, PA-36-300, PA-36-375, PA-38-112, PA-46- and PA-46-350P.

(Ove

REGISTRATION NO.

AIRCRAFT SERIAL NO

TYPE AIRCRAFT

adNote

CAPS Activation Cable

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-12673; Docket No. 2002-CE-06-AD.

(a) ***What airplanes are affected by this AD?*** This AD applie following airplane models and serial numbers that are certificated category:

Model	Serial Numbers
(1) Group 1	
SR20	1148 through 1178, except 1151
SR22	0029 through 0160, except 0159
(2) Group 2	
SR20	1005 through 1147
SR22	0002 through 0028

(b) ***Who must comply with this AD?*** Anyone who wishes to operate any of the airplanes identified in paragraph (a) of this AD must comply with this AD.

(c) ***What problem does this AD address?*** The actions specified by this AD are intended to initially limit the chance of failure of the CAPS activation system in an emergency situation and eventually eliminate this potential failure. Failure of this system would result in occu and/or loss of life and loss of aircraft.

(d) ***What must I do to address this problem?*** To a problem, you must perform the following actions, unle accomplished:

Actions	Compliance	Procedures
(1) For Group 1 airplanes: in order reduce the need to use the CAPS system in a loss of aircraft control emergency situation, incorporate the following into the Limitation Section of the airplane flight manual (AFM): "(i) Do not operate the airplane in instrument flight rules (IFR) conditions, only operate the airplane in visual flight rules (VFR) conditions; and. (ii) Operate the airplane during daytime hours only, do not operate at night.	Prior to further flight after March 19, 2002 (the effective date of this AD) until the installation required by paragraph (d)(2) of this AD is accomplished.	The owner/operator holding at least a priva certificate as authorized by section 43.7 of Federal Aviation **Regulations** (14 CFR 43 incorporate into the AFM the information s in paragraphs (d)(1)(i) and (d)(1)(ii) of this Make an entry into the aircraft records sh compliance with this portion of the AD in accordance with section 43.9 of the Fede Aviation **Regulations** (14 CFR 43.9).
(2) For all affected airplanes: in order to prevent the cable housing from going into the rocket cone and in order to allow the rocket to fire correctly, install a cable clamp external to the cone adapter on the Cirrus Aircraft Parachute System (CAPS) activation cable.	For Group 1 airplanes: within the next 10 hours time-in-service (TIS) after March 19, 2002 (the effective date of this AD). The AFM Limitations requirement in paragraph (d)(1) of this AD is no longer required when this installation is accomplished. For Group 2 airplanes: within the next 25 hours TIS after March 19, 2002 (the effective date of this AD).	In accordance with Ballistic Recovery S Inc. Service Bulletin SB 95-01, Issued: 25, 2002, as specified in Cirrus Alert S Bulletin SBA 20-95-01, Issued: Februa 2002, and Alert Service Bulletin A22-9 Issued: February 25, 2002.

N44YP
AIRCRAFT REGISTRATION NO.

1169
AIRCRAFT SERIAL NO.

SR-20
TYPE AIRCRAFT

adNote™

2002-13-4 Corr. NM
AD NUMBER

TCM Engine/Slick Magneto

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear

Engine Model/Serial TCM IO-360-ES6

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
N/A	by S/N	(and)	MAGNETOS HAVE BEEN REPLACED.	Slick pic A+P3420653

Amendment 39-12792. Docket No. 2000-NE-19-AD. Supersedes AD 2000-11-51.

Applicability

This airworthiness directive (AD) is applicable to Teledyne Continental Motors (TCM) C-125, C145, O-300, IO-360, TSIO-360, and LTSIO-520-AE series reciprocating engines with Unison Industries (Slick) Magnetos, models 6314, 6324, and 6364, with magneto serial numbers of 99110001 through 9912999 inclusive. These engines are used on, but not limited to Cessna 170, 170A, 170B, 172, 172A through 172H, 172XP, 336, 337, and T303, Beagle B242-C, Cirrus SR20 and SR22, Globe Swift GC-1A and GC-1B, Maule M4, Piper PA-28R-201T and PA-34, and Reims (Cessna) FA172, F337, and FR172.

Note 1: The magneto serial number (SN) can be found in logbooks or other maintenance records. If the magneto was installed, or if the engine was assembled new, rebuilt, or overhauled before October 31, 1999, it is likely that a suspect magneto is not installed on the engine.

Note 2: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance

Compliance with this AD is required within 10 flight hours after the effective date of this AD, unless already done.

To prevent engine failure and loss of control of the airplane due to migration of the magneto impulse coupling stop pin out of the magneto frame and into the gear train of the engine, do the following:

Replacement of Magneto

(a) Replace any magneto that has a SN of 99110001 through 99129999, inclusive, with a magneto that does not have a serial number in that range.

Inspections

(b) Inspect each removed magneto to verify that the impulse coupling stop pin is present. If the pin is missing, do the following:

(1) For C-125, C145, O-300, IO-360, and TSIO-360 series engines, do the following:

(i) Remove magnetos, alternator or generator, and starter adapter from the accessory case.

(ii) Remove the accessory case from the crankcase and oil sump.

(iii) Visually inspect the entire engine gear train for damaged or broken gears and gear teeth.

(iv) Inspect visible portions of the engine crankcase and access case for damage due to the stop pin becoming lodged between the en gear train and the crankcase or accessory case.

(v) If the accessory case is damaged, repair or replace accessory case.

(vi) If the engine crankcase is damaged, disassemble the en and repair or replace the crankcase.

(vii) Inspect the oil pump drive gear teeth and inner cam gear for damage. Replace any engine drive train component that has damaged.

(viii) Replace any damaged gear, and magnaflux the mating using the applicable engine overhaul manual.

(2) For LTSIO-520-AE series engines, do the following:

(i)Remove the starter adapter, fuel pump, vacuum accessory drive pads, and both magnetos.

(ii) Visually inspect the entire engine gear train for dam broken gears and gear teeth.

(iii) If any damage has occurred, remove the engine f airplane, disassemble the engine, and inspect it for damage damage is found, repair as necessary.

(iv) Replace any damaged gear, and magnaflux the mat using the applicable engine overhaul manual.

(v) Inspect the interior portions of the engine crankcase fo due to the stop pin becoming lodged between the gear trai crankcase. If the crankcase is damaged, repair or replace the c

(c) After the effective date of this AD, do not install a Industries magnetos, model 6314, 6324, or 6364 that hav 99110001 through 99129999 inclusive, on any engine.

Note 3: A cross-reference for part numbers (P/N's) magneto model 6314 (TCM P/N 653271), model 6324 653292), and model 6364 (TCM P/N 649696) can be fo Mandatory Service Bulletin 00-6A, dated June 8, 2000.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjust compliance time that provides an acceptable level of safety approved by the Manager, Chicago Aircraft Certifi (CHIACO). Operators must submit their requests through FAA Principal Maintenance Inspector, who may add comm send it to the Manager, CHIACO.

Note 4: Information concerning the existence of appr methods of compliance with this airworthiness directive obtained from the CHIACO.

Special Flight Permits

(e) Special flight permits may be issued in accord 21.197 and 21.199 of the Federal Aviation Regulations and 21.199) to operate the aircraft to a location where th this AD can be done.

Effective Date

(f) This amendment becomes effective July 12, 20

REGISTRATION NO.

1169

AIRCRAFT SERIAL NO.

SR-20

TYPE AIRCRAFT

adNote

TCM Engine/Slick Magneto

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear

Engine Model/Serial TCM IO-360-ES6.

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
N/A by	S/N (AND)	MAGNETOS	have been replaced.	A+P 3420653IA. 4

Amendment 39-12792. Docket No. 2000-NE-19-AD. Supersedes AD 2000-11-51.

Applicability

This airworthiness directive (AD) is applicable to Teledyne Continental Motors (TCM) C-125, C145, O-300, IO-360, TSIO-360, and LTSIO-520-AE series reciprocating engines with Unison Industries (Slick) Magnetos, models 6314, 6324, and 6364, with magneto serial numbers of 99110001 through 9912999 inclusive. These engines are used on, but not limited to Cessna 170, 170A, 170B, 172, 172A through 172H, 172XP, 336, 337, and T303, Beagle B242-C, Cirrus SR20 and SR22, Globe Swift GC-1A and GC-1B, Maule M4, Piper PA-28R-201T and PA-34, and Reims (Cessna) FA172, F337, and FR172.

Note 1: The magneto serial number (SN) can be found in logbooks or other maintenance records. If the magneto was installed, or if the engine was assembled new, rebuilt, or overhauled before October 31, 1999, it is likely that a suspect magneto is not installed on the engine.

Note 2: This airworthiness directive (AD) applies to each engine identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For engines that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (d) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance

Compliance with this AD is required within 10 flight hours after the effective date of this AD, unless already done.

To prevent engine failure and loss of control of the airplane due to migration of the magneto impulse coupling stop pin out of the magneto frame and into the gear train of the engine, do the following:

Replacement of Magneto

(a) Replace any magneto that has a SN of 99110001 through 99129999, inclusive, with a magneto that does not have a serial number in that range.

Inspections

(b) Inspect each removed magneto to verify that the impulse coupling stop pin is present. If the pin is missing, do the following:

(1) For C-125, C145, O-300, IO-360, and TSIO-360 series engines, do the following:

(i) Remove magnetos, alternator or generator, and starter adapter from the accessory case.

(ii) Remove the accessory case from the crankcase and oil sump.

(iii) Visually inspect the entire engine gear train for damaged or broken gears and gear teeth.

(iv) Inspect visible portions of the engine crankcase and accessory case for damage due to the stop pin becoming lodged between the engine gear train and the crankcase or accessory case.

(v) If the accessory case is damaged, repair or replace the accessory case.

(vi) If the engine crankcase is damaged, disassemble the engine and repair or replace the crankcase.

(vii) Inspect the oil pump drive gear teeth and inner cam gear teeth for damage. Replace any engine drive train component that has been damaged.

(viii) Replace any damaged gear, and magnaflux the mating gear using the applicable engine overhaul manual.

(2) For LTSIO-520-AE series engines, do the following:

(i) Remove the starter adapter, fuel pump, vacuum pump, accessory drive pads, and both magnetos.

(ii) Visually inspect the entire engine gear train for damaged or broken gears and gear teeth.

(iii) If any damage has occurred, remove the engine from the airplane, disassemble the engine, and inspect it for damage. If damage is found, repair as necessary.

(iv) Replace any damaged gear, and magnaflux the mating gear using the applicable engine overhaul manual.

(v) Inspect the interior portions of the engine crankcase for damage due to the stop pin becoming lodged between the gear train and the crankcase. If the crankcase is damaged, repair or replace the crankcase.

(c) After the effective date of this AD, do not install any Unison Industries magnetos, model 6314, 6324, or 6364 that have a SN of 99110001 through 99129999 inclusive, on any engine.

Note 3: A cross-reference for part numbers (P/N's) for magneto model 6314 (TCM P/N 653271), model 6324 (TCM P/N 653292), and model 6364 (TCM P/N 649696) can be found in Mandatory Service Bulletin 00-6A, dated June 8, 2000.

Alternative Methods of Compliance

(d) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be approved by the Manager, Chicago Aircraft Certification Office (CHIACO). Operators must submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, CHIACO.

Note 4: Information concerning the existence of approved alternative methods of compliance with this airworthiness directive, if any, may be obtained from the CHIACO.

Special Flight Permits

(e) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be done.

Effective Date

(f) This amendment becomes effective July 12, 2002.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

Retaining Nut/Trim Cartridges

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-12908; Docket No. 2002-CE-41-AD.

(a) ***What airplanes are affected by this AD?*** This AD ap following airplane models and serial numbers that are certific category:

Model	Serial numbers
SR20	1005 through 1241, except 1235, 1237, and 1238.
SR22	0002 through 0333, except 0309, 0322, 0323, and 0328.

(b) ***Who must comply with this AD?*** Anyone who wishes to operate any of the airplanes identified in paragraph (a) of this AD must comply with this AD.

(c) ***What problem does this AD address?*** The actions specified by this AD are intended to prevent loss of the self-locking retaining nut on the roll and yaw trim cartridges during flight, which could result the corresponding flight control system. Such jamming cou of control of the airplane.

(d) ***What must I do to address this problem?*** To problem, you must accomplish the following actions:

Actions	Compliance	Procedures
(1) Replace the self-locking retaining nut on the yaw trim cartridge and the roll trim cartridge with a new self-locking retaining nut, part number MS21044N3.	Within the next 10 hours time-in-service after November 8, 2002 (the effective date of this AD), unless already accomplished.	In accordance with Cirrus Alert Service B A20–27–06, Issued: September 20, 200 Alert Service Bulletin SB A22–27–03, Iss September 20, 2002, as applicable.
(2) Do not install any self-locking retaining nut on the yaw trim cartridge or the roll trim cartridge that is not part number MS21044N3.	As of November 8, 2002 (the effective date of this AD).	Not applicable.

(e) ***Can I comply with this AD in any other way?*** You may use an alternative method of compliance or adjust the compliance time if:

(1) Your alternative method of compliance provides an equivalent level of safety; and

(2) The Manager, Chicago Aircraft Certification Office (ACO), approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Chicago ACO.

Note: This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/ operator must request approval for an alternative method of compliance in accordance with paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

(f) ***Where can I get information about any already-approved alternative methods of compliance?*** Contact Gregory J. Michalik, Aerospace Engineer, FAA, Chicago ACO, 2300 East Devon Avenue, Des Plaines, IL 60018; telephone: (847) 294-7135; facsimile: (847) 294- 7834.

(g) ***What if I need to fly the airplane to anot comply with this AD?*** The FAA can issue a special fl sections 21.197 and 21.199 of the Federal Aviation Reg 21.197 and 21.199) to operate your airplane to a locati accomplish the requirements of this AD.

(h) ***Are any service bulletins incorporated reference?*** Actions required by this AD must be done in Cirrus Alert Service Bulletin SB A20-27-06, Issue 2002, and Cirrus Alert Service Bulletin SB A22-27-03, 20, 2002. The Director of the Federal Register approve by reference under 5 U.S.C. 552(a) and 1 CFR pa copies from Cirrus Design Corporation, 4515 Taylor 55811; telephone: (218) 727-2737; or electronica address: http://www.cirrusdesign.com/sb. You may at FAA, Central Region, Office of the Regional C Room 506, Kansas City, Missouri, or at the Office of 800 North Capitol Street, NW., suite 700, Washingt

(i) ***When does this amendment beco*** amendment becomes effective on November 8, 20C

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote™

CAPS Modification

2002-24-7

AD NUMBER

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-12973; Docket No. 2002-CE-31-AD.

(a) ***What airplanes are affected by this AD?*** This AD affects the following airplane models and serial numbers that are certificated in any category:

Model	Serial numbers
SR20	1005 through 1195
SR22	0002 through 0209

(b) ***Who must comply with this AD?*** Anyone who wishes to operate any of the airplanes identified in paragraph (a) of this AD must comply with this AD.

(c) ***What problem does this AD address?*** The actions specified by this AD are intended to prevent failure of the Cirrus Airplane Parachute System (CAPS) activation system in an emergency situation. Failure of this system could result in occupant injury and/or loss of life and loss of aircraft.

(d) ***What actions must I accomplish to address this problem?*** T address this problem, you must accomplish the following:

Actions	Compliance	Procedures
Modify the Cirrus Airplane Parachute System (CAPS) by replacing the CAPS handle access cover, the CAPS activation handle bracket, and the CAPS activation cable with parts of improved design.	Within the next 90 days after January 24, 2003 (the effective date of this AD), unless already accomplished.	In accordance with the service information specified in paragraph (e) of this AD.

(e) ***What service information should I use to accomplish the actions required in paragraph (d) of this AD:*** Use the service bulletins specified below, as applicable:

(1) Cirrus Service Bulletin SB 20-95-03, Issued: June 10, 2002;

(2) Cirrus Service Bulletin SB 20-95-04, Issued: July 10, 2002;

(3) Cirrus Service Bulletin SB 20-95-05, Issued: July 10, 2002; or Cirrus Service Bulletin SB 20-95-05, Rev 1: dated August 14, 2002;

(4) Cirrus Service Bulletin SB 22-95-03, Issued: June 10, 2002;

(5) Cirrus Service Bulletin SB 22-95-04, Issued: July 10, 2002; and

(6) Cirrus Service Bulletin SB 22-95-05, Issued: July 10, 2002; or Cirrus Service Bulletin SB 22-95-05, Rev 1: dated August 14, 2002.

Note 1: Cirrus Service Bulletin SB 20-95-03, Issued: June 10, 2002, on page 2 of 2, includes an incorrect reference to SB 22-95-03 in step 4. The correct reference should be to SB 20-95-03.

Note 2: Cirrus Service Bulletin SB 20-95-05, Issued: July 10, 2002, on page 9 of 16, includes an incorrect reference to SB 22-95- 05 in step 15. The correct reference should be to SB 20-95-05.

(f) ***Can I comply with this AD in any other way?***

(1) You may use an alternative method of compliance or adjust the compliance time if:

(i) Your alternative method of compliance provides an equivalent level of safety; and

(ii) The Manager, Chicago Aircraft Certification Office (ACO), approves your alternative. Submit your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Chicago ACO.

(2) Alternative methods of compliance approved in accordance with AD 2002-05-05, which is superseded by this AD, are not approved as alternative methods of compliance with this AD.

Note 3: This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this A affected, the owner/ operator must request approval for an alternative meth compliance in accordance with paragraph (f) of this AD. The request s include an assessment of the effect of the modification, alteration, or repair unsafe condition addressed by this AD; and, if you have not eliminated the condition, specific actions you propose to address it.

(g) ***Where can I get information about any already-approved alte methods of compliance?*** Contact Gregory J. Michalik, Aerospace En FAA, Chicago ACO, 2300 East Devon Avenue, Des Plaines, IL 60018; tel (847) 294-7135; facsimile: (847) 294- 7834.

(h) ***What if I need to fly the airplane to another location to comply with*** The FAA can issue a special flight permit under sections 21.197 and 2 the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to ope airplane to a location where you can accomplish the requirements of this

(i) ***Are any service bulletins incorporated into this AD by re*** Actions required by this AD must be done in accordance with Cirru Bulletin SB 20-95-03, Issued: June 10, 2002; Cirrus Service Bulletin SB Issued: July 10, 2002; Cirrus Service Bulletin SB 20-95-05, Issued: Jul Cirrus Service Bulletin SB 20-95-05, Rev 1: dated August 14, 2002; Cir Bulletin SB 22-95-03, Issued: June 10, 2002; Cirrus Service Bulletin S Issued: July 10, 2002; Cirrus Service Bulletin SB 22- 95-05, Issued: Ju and Cirrus Service Bulletin SB 22-95- 05, Rev 1: dated August 14 Director of the Federal Register approved this incorporation by refere U.S.C. 552(a) and 1 CFR part 51. You may get copies from Ci Corporation, 4515 Taylor Circle, Duluth, MN 55811; telephone: (21 You may view copies at the FAA, Central Region, Office of the Regi 901 Locust, Room 506, Kansas City, Missouri, or at the Office o Register, 800 North Capitol Street, NW., Suite 700, Washington, DC

(j) ***Does this AD action affect any existing AD actions?*** Thi supersedes AD 2002-05-05, Amendment 39-12673.

(k) ***When does this amendment become effective?*** Th becomes effective on January 24, 2003.

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote™

2005-1-19 N/M

Garmin Transponder

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-13944; Docket No. FAA-2004-18743; Directorate Identifier 2004-CE-23-AD.

When Does This AD Become Effective?

(a) This AD becomes effective on February 23, 2005.

What Other ADs Are Affected by This Action?

(b) This AD supersedes AD 2004-10-15, Amendment 39-13645.

What Airplanes Are Affected by This AD?

(c) This AD affects GARMIN International Inc. GTX 33, GTX 33D, GTX 330, and GTX 330D Mode S transponders that include software versions 3.00, 3.01, 3.02, 3.04, or 3.05 that are installed on, but not limited to, the following airplanes, certificated in any category:

Aerotech Note: The table of aircraft affected by this airworthiness directive that was in this position of the original FAA version has been moved to the reverse side of this **adNote™** to facilitate compilation.

What Is the Unsafe Condition Presented in This AD?

(d) This AD is the result of observations that the GTX 33/33D 330/330D may detect, from other airplanes, the S1 (suppressio interrogating pulse below the minimum trigger level (MTL) and, some circumstances, not reply. The GTX 33/33D/330/330D should s reply even if it detects S1 interrogating pulses below the MTL. Th actions specified in this AD are intended to prevent interrogati aircraft from possibly receiving inaccurate replies, due to suppressio from aircraft equipped with the GTX 33/33D/330/330D Mode transponders when the pulses are below the minimum trigger lev (MTL). Software Upgrade Versions 3.03 and 3.06 correct a TA TCAD, and TCAS I system "whisper-shout" problem that cou potentially lead to the aircraft not being visible at certain ranges. TCA II systems are not affected. The inaccurate replies could result reduced vertical separation.

What Must I Do To Address This Problem?

(e) To address this problem, you must do the following:

Actions	Compliance	Procedures
Install GTX 33/33D/330/330D Software Upgrade for transponders with software version 3.00, 3.01, 3.02, 3.04, 3.05 to at least version 3.06. If version 3.03 is already installed, no further action is required. This version is no longer available from Garmin. This AD does not apply to software versions past 3.05.	Install the software upgrade within 180 days after February 23, 2005 (the effective date of this AD), unless already accomplished.	Follow GARMIN Mandatory Software Service Bulletin N 0304, Rev B, dated June 12, 2003 accomplished. (Software Upgrade 3.03) or GARMIN Mandatory Softwa Service Bulletin No.: 0409, dated July 19, 2004 (Softwa Upgrade 3.06).

May I Request an Alternative Method of Compliance?

(f) You may request a different method of compliance or a different compliance time for this AD by following the procedures in 14 CFR 39.19. Unless FAA authorizes otherwise, send your request to your principal inspector. The principal inspector may add comments and will send your request to the Manager, Wichita Aircraft Certification Office (ACO), FAA. For information on any already approved alternative methods of compliance, contact Roger A. Souter, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: 316-946-4134; facsimile: 316-946-4107; email address: roger.souter@faa.gov.

Does This AD Incorporate Any Material by Reference?

(g) You must do the actions required by this AD following the instructions in GARMIN Mandatory Software Service Bulletin No.: 0304, Rev B, dated June 12, 2003 (Software Upgrade 3.03) or GARMIN Mandatory Software Service Bulletin No.: 0409, dated July 19, 2004 (Software Upgrade 3.06). The Director of the Federal Register approved the incorporation by reference of this serv bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To a copy of this service information, contact GARMIN International I 1200 East 151st Street, Olathe, KS 66062; telephone: 913-397-82 To review copies of this service information, go to the Natio Archives and Records Administration (NARA). For information on availability of this material at NARA, go to: http://www.archives.gov/federal_register/code_of_federal_regulation br_locations.html or call (202) 741-6030.

To view the AD docket, go to the Docket Management Facil U.S. Department of Transportation, 400 Seventh Street, SW., Na Building, Room PL-401, Washington, DC 20590-001 or on the Inter at http://dms.dot.gov. The docket number is FAA-2004-18743.

Issued in Kansas City, Missouri, on January 7, 2005.

James E. Jackson, Acting Manager, Small Airplane Director Aircraft Certification Service.

N44YD
AIRCRAFT REGISTRATION NO.

1169
AIRCRAFT SERIAL NO.

SR-20
TYPE AIRCRAFT

adNote

Aero Advantage Vac. Pump

2006-06-10
AD NUM

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear Mfg./ Part No.:

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
N/A:	NOT INSTALLED on ACft.			A&P 3420653IA 4-30-10

Amendment 39-14472; Docket No. FAA-2005- 20440; Directorate Identifier 2005-CE-05-AD.

When Does This AD Become Effective?

(a) This AD becomes effective on March 10, 2006.

What Other ADs Are Affected by This Action?

(b) None.

What Airplanes Are Affected by This AD?

(c) This AD affects ADV200 series (part numbers (P/Ns) ADV211CC and ADV212CW) vacuum pumps installed on, but not to, the following aircraft that are certificated in any category. These pumps can be installed under supplemental type certificate SA10126SC, through field approval, or other methods:

Make	Model
Alexandria Aircraft, LLC	14–19, 14–19–2, 14–19–3, 17–30, 17–31, 17–31TC, 17–30A, 17–31A, and 17–31A
Alliance Aircraft Group, LLC	H–295 (USAF U10D).
American Champion Aircraft Corp	7AC, 7ECA, 7GC, 7GCA, 7GCAA, 7GCB, 7GCBC, 7HC, 7KC, 7KCAB, 8GCBC 8KCAB.
Cessna Aircraft Company, The	172, 172A, 172B, 172C, 172D, 172E, 172F, 172G, 172H, 172I, 172K, 172L, 172N 172P, 172Q, 182, 182A, 182B, 182C, 182D, 182E, 182F, 182G, 182H, 182J, 182I 182M, 182N, 182P, 182Q, 182R, R182, T182, TR182, 172RG, R172E, R172F, R172H, A152, 210, 210–5 (205), 210–5A (205A), 210A, 210B, 210C, 210D, 210E, 210F, 210H, 210J, 210K, 210L, 210M, 210N, P210N, T210G, T210H, T210M, T210N, 185, 185A, 185B, 185C, 185D, 185E, 180, 180A, 180B, 180C, 180D, 180E, 180 180H, 180J, 120, 140, 170, 170A, 170B, 177, 177A, 177B, 207, 207A, T207, T2 206, P206, P206A, P206B, P206C, P206D, P206E, TP206A, TP206B, TP206C, TP206E, TU206A, TU206B, TU206C, TU206D, TU206E, TU206F, TU206G, U U206B, U206C, U206D, U206E, U206F, U206G, 188, 188A, 188B, A188, A18 A188B.
Commander Aircraft Company	112, 112B, 112TC, 114, and 114A.
Dynac Aerospace Corporation	Aero Commander 100.
Global Amphibians, LLC	Lake LA–4–200, Lake Model 250.
Maule Aerospace Technology, Inc.	M–4–210, M–4–220, M–5–180C, M–5–200, M–5–235C, M–6–180, and M–6
Mooney Aircraft Corporation	M20, M20A, M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M2
Navion Aircraft Company, Ltd.	Navion G and Navion H.
Piper Aircraft, Inc., The New	PA–23, PA–23–160, PA–23–235, PA–23–250 (Navy UO–1), PA–E23–250, P 250, PA–24–260, PA–18, PA–18–105 (Special), PA–18–135, PA–18–150, P 20–135, PA–22–108, PA–22–135, PA–22–150, PA–22–160, PA–25, PA–25–235, PA 28–140, PA–28–150, PA–28–151, PA–28–160, PA–28–161, PA–28–180, P 28– 201T, PA–28–235, PA–28–236, PA–28R–180, PA–28R–200, PA–28R–201 PA–28RT–201, PA–28RT–201T, PA–25, PA–25–235, PA–25–260, J5A–8 4F), J5B (Army L–4G), J5C, PA–12, PA–36–285, PA–36–300, PA–36–375, PA PA–39, PA–40, PA–31, PA–31–300, PA–31–325, PA–31–350, PA–32–26 PA–32–301, PA–32–301T, PA–32R–300, PA–32R–301 (HP), PA–32R–3 300T, PA–31P, and PA–36–300.
Raytheon Aircraft Company	35–33, 35–A33, 35–B33, 35–C33, 35–C33A, 36, A36, A36TC, B36TC, F33, F33A, F33C, G33, H35, J35, V35, V35A, V35B, D45 (Military T–3 B35, C35, D35, E35, F35, G35, 19A, 23, A23, A23A, A24, A24R, B19, C24R.
Rogers, Burl A.	15AC and S15AC.
SOCATA—Groupe Aerospatiale	MS 885, MS 892A–150, MS 892E–150, MS 893A, MS 893E, Rallye 1 5 TB 10, TB 20, and TB 9
Tiger Aircraft LLC	AA–1, AA–1A, AA–1B, AA–1C, AA–5, AA–5A, and AA–5B.

What Is the Unsafe Condition Presented in This AD?

(d) This AD is the result of several reports of pump chamber failure. The actions specified in this AD are intended to prevent the vacuum pump failure or malfunction during instrument flight rules (IFR) flight that could lead to loss of flight instruments critical for flight. The loss of flight instruments could cause pilot disorientatio the aircraft.

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote™

2006-7-6

AD

Fuel Line/Wiring Chafing

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-14533; Docket No. FAA-2005-23023; Directorate Identifier 2005-CE-49-AD.

Effective Date

(a) This AD becomes effective on May 11, 2006.

Affected Ads

(b) None.

Applicability

(c) This AD affects the following airplane models and serial numbers that are certificated in any category

Model	Serial Nos.
SR20	1005 through 1581.
SR22	0002 through 1643 and 1645 through 1662

Unsafe Condition

(d) This AD is the result of reports of fuel line leaks re wire chafing on the fuel lines. The actions specified in intended to detect, correct, and prevent damage to the f wire bundles, which could result in fuel leaks. This failure unsafe fuel vapor within the cockpit and possible fire.

Compliance

(e) To address this problem, you must do the following:

Actions	Compliance	Procedures
(1) Inspect the fuel line and wire harness for any chafing damage.	Within the next 50 hours time-in-service (TIS) after May 11, 2006 (the effective date of this AD).	Follow Cirrus Design Corporation S SB 2X–28–04 R1, Issued: Novem Revised: November 14, 2005.
(2) If any chafing damage is found as a result of the inspection required by paragraph (e)(1) of this AD: (i) Replace any damaged fuel line; and (ii) Repair any damaged wires or sheathing of the wire harness	Before further flight after the inspection required by paragraph (e)(1) of this AD.	Follow Cirrus Design Corporation SB 2X–28–04 R1, Issued: Noven Revised: November 14, 2005.
(3) Install the following: (i) Forward loop clamp; (ii) Fuel line shield; (iii) Aft loop clamp; and (iv) Anti-chafe tubing	Within the next 50 hours time-in-service (TIS) after May 11, 2006 (the effective date of this AD).	Follow Cirrus Design Corporatio SB 2X–28–04 R1, Issued: Nove Revised: November 14, 2005.

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Chicago Aircraft Certification Office (ACO), FAA, ATTN: Wess Rouse, Aerospace Engineer, ACE-117C, Chicago Aircraft Certification Office, 2300 East Devon Avenue, Room 107, Des Plaines, Illinois 60018; telephone: (847) 294-8113; fax: (847) 294-7834, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Material Incorporated by Reference

(g) You must do the actions required by this AD following the instructions in Cirrus Design Corporation Service Bulletin SB 2X-28- 04 R1, Issued: November 1, 2005, Revised: November 14, 2005. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get a copy of this service information, contact Cirrus Design Corporation, 4515 Taylor Circle, Duluth, Minnesota 55811; telephone: (218) 727-2737 or on http://www.cirrusdesign.com. To review copies information, go to the National Archives and Rec (NARA). For information on the availability of this m to:

http://www.archives.gov/federal_register/code ns/ibr_locations.html or call (202) 741-6030. To go to the Docket Management Facility; U Transportation, 400 Seventh Street, SW., Nassif 401, Washington, DC 20590-001 or on http://dms.dot.gov. The docket number i Directorate Identifier 2005-CE-49-AD.

Issued in Kansas City, Missouri, on March 2

Kim Smith, Manager, Small Airplane Certification Service.

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote

Crew Seats

AD NUM

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-14767; Docket No. FAA-2006-24254; Directorate Identifier 2006-CE-24-AD.

Effective Date

(a) This AD becomes effective on October 24, 2006.

Affected Ads

(b) This AD supersedes AD **2005-17-19**, Amendment 39-14240.

Applicability

(c) This AD affects the following airplane models and serial numbers that are certificated in any category:

Model	Serial Numbers
(1) SR20	1005 through 1600
(2) SR22	0002 through 1727

Unsafe Condition

(d) This AD results from discovering that the crew seats, under emerge landing dynamic loads, may fold forward at less than the 26 g required by regulations, 14 Code of Federal Regulations (CFR) Section 23.562 (b)(2). We issuing this AD to prevent the crew seats from folding forward during emerge landing with dynamic loads with consequent occupant injury.

Compliance

(e) To address this problem, you must do the following:

Actions	Compliance	Procedures
(1) For Model SR20, serial numbers (S/Ns) 1005 through 1600, and Model SR22, S/Ns 0002 through 1727, do the following actions: (i) At the lower back of the crew seat, release the reclosable fasteners to expose the lower seat frame. (ii) Replace the crew seat break-over bolt with the new crew seat break-over pin, part number 17063-002. (iii) Recover the seat frame, refastening the reclosable fasteners. (iv) Inspect the crew seat. (v) Repeat the above actions for the opposite crew seat.	Within 50 hours time-in-service (TIS) or within 180 days, whichever occurs first, after October 24, 2006 (the effective date of this AD), unless already done.	Follow Cirrus Design Corporation Service Bulletin SB 2X-25 R1, Issued: December 15, 2005, Revised: January 20, 2006
(2) For Models SR20, S/Ns 1005 through 1455, and SR22, S/Ns 0002 through 1044, do the following actions: (i) Identify whether the recline lock is secured with two bolts or three bolts. (ii) If the recline locks are secured with two bolts, remove the existing recline locks and replace with the new recline locks kit, Kit Number 70084-001. (iii) If the recline locks are secured with three bolts, remove existing recline locks and replace with the new recline locks kit, Kit Number 70084-002. (iv) Check break-over pin alignment and adjust as necessary. (v) Check that the locks engage with the break-over bolts with the seat in the full recline position. If full seat recline is not possible or difficult to engage, grinding of the lower aft seat frame is necessary. (vi) Repeat the above actions for the opposite crew seat.	Within 50 hours TIS or within 180 days, whichever occurs first after October 13, 2005 (the effective date of AD 2005-17-19), unless already done.	Follow Cirrus Design Corporation Service Bulletin SB 2X R4, Issued: August 13, 2004, Revised: May 5, 2005.

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Chicago Aircraft Certification Office, FAA, ATTN: Wess Rouse, Small Airplane Project Manager, ACE-117C, Chicago Aircraft Certification Office, 2300 East Devon Avenue, Room 107, Des Plaines, Illinois 60018; telephone: (847) 294-8113; facsimile: (847) 294-7834; e-mail: wess.rouse@faa.gov; or Angie Kostopoulos, Composite Technical Specialist, ACE-116C, Chicago Aircraft Certification Office, 2300 East Devon Avenue, Room 107, Des Plaines, Illinois 60018; telephone: (847) 294-7426; facsimile: (847) 294-7834; e-mail: evangelia.kostopoulos@faa.gov, have the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(g) None.

Material Incorporated by Reference

(h) You must do the actions required by this AD following the instructions in Cirrus Design Corporation Service Bulletins SB 2X- 25-17 R1, Issued: December 15, 2005, Revised: January 20, 2006; and SB 2X-25-06 R4, Issued: August 13, 2004; Revised: May 5, 2005.

(1) As of October 24, 2006, the Director of the Federal Register approved the incorporation by reference of Cirrus Design Corporation Service Bulletin SB 2X-25-17 R1, Issued: December 15, 2005, Revised: January 20, 200 U.S.C. 552(a) and 1 CFR part 51.

(2) On October 13, 2005 (70 FR 51999, September 1, 2005), the the Federal Register previously approved the incorporation by referen Design Corporation Service Bulletin SB 2X-25-06 R4, Issued: Augus Revised: May 5, 2005.

(3) To get a copy of this service information, contact Ci Corporation, 4515 Taylor Circle, Duluth, Minnesota 55811; telephone 2737; Internet address: http://www.cirrusdesign.com.

To review copies of this service information, go to the National Records Administration (NARA). For information on the availability o at NARA, go to: http://www.archives.gov/federal_register/code_of_federal_regulations s.html or call (202) 741-6030. To view the AD docket, go t Management Facility; U.S. Department of Transportation, 400 S SW., Nassif Building, Room PL- 401, Washington, DC 20590-0 Internet at http://dms.dot.gov. The docket number is FAA-2006-242 Identifier 2006-CE-24-AD.

Issued in Kansas City, Missouri, on September 8, 2006

David R. Showers, Acting Manager, Small Airplane Dire Certification Service.

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote™

AD NU

Brake Overheat

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-14787; Docket No. Docket No. FAA-2006-24010; Directorate Identifier 2006-CE-14-AD.

Effective Date

(a) This AD becomes effective on November 17, 2006.

Affected Ads

(b) None.

Applicability

(c) This AD applies to the following airplane models and serial numbers (S/N) that are certificated in any category:

(1) Group 1: Model SR20 Airplanes, S/N 1005 through 1600.

(2) Group 2: Model SR22 Airplanes, S/N 0002 through 1739.

(3) Group 3: Model SR20 Airplanes, S/N 1005 through 1592.

(4) Group 4: Model SR22 Airplanes, S/N 0002 through 172

Unsafe Condition

(d) This AD results from several reports of airplane experienced brake fires and two airplanes that lost directional The actions specified in this AD are intended to detect, corre prevent overheating damage to the brake caliper piston O-rin which could result in leakage of brake hydraulic fluid. Conse this could lead to the loss of braking with loss of airplane di control or brake fire.

Compliance

(e) To address this problem, you must do the following:

Table 1.--Actions/Compliance/Procedures

Actions	Compliance	Procedures
(1) *For Group 1 and Group 2 airplanes:* Check the maintenance records to determine whether the brake caliper piston O-ring seals were replaced at the last annual or 100-hour inspection.	Within 50 hours time-in-service (TIS) after November 17, 2006 (the effective date of this AD), unless already done.	No special procedures necessary to check th maintenance records. The owner/operator ho least a private pilot certificate as authorized b 43.7 of the Federal Aviation Regulations (14 may make this check. You must make an en airplane records that shows compliance with of the AD in accordance with section 43.9 of Aviation Regulations (14 CFR 43.9).
(2) *For Group 1 and Group 2 airplanes:* If you find as a result of the check required by paragraph (e)(1) of this AD that there is no record of the replacement of brake caliper piston O-ring seals at the last annual or 100-hour inspection, then do the following: (i) Replace the O-ring seals with new O-ring seals or (ii) Replace old brake calipers with new brake calipers.	Before further flight after the check required by paragraph (e)(1) of this AD.	For the replacement, follow the brake maint procedures in Section 32–42 of the SR20 o Aircraft Maintenance Manual. For the replac new brake calipers, follow Cirrus Design Co Service Bulletin SB 2X–32–13 R1, Issued: 2005, Revised May 16, 2006.
(3) *For Group 3 and Group 4 airplanes:* (i) Modify the main landing gear (MLG) wheel fairings to add temperature indicator sticker inspection holes and trim the wheel fairings to prevent them from holding fluids; and (ii) Install a temperature indicator sticker on the brake calipers.	Do the modification within 50 hours TIS after November 17, 2006 (the effective date of this AD), unless already done. Do the temperature indicator sticker installation within 50 hours TIS after November 17, 2006 (the effective date of this AD), unless already done, and thereafter before further flight anytime you have the O-ring seals replaced due to overheating of the brake assembly (temperature indicator sticker turned black).	Follow Cirrus Design Corporation Service 2X–32–14 R1, Issued: January 18, 2006, February 17, 2006.
(4) For all airplanes: Insert the appropriate Revision A6 part number (P/N) into the Pilot's Operating Handbook (POH), as presented in TABLE 2.—REVISION A6 TO THE PILOT'S OPERATING HANDBOOK, in paragraph (f) of this AD.	Within 50 hours TIS after November 17, 2006 (the effective date of this AD), unless already done.	The owner/operator holding at least a pri certificate as authorized by section 43.7 Aviation Regulations (14 CFR 43.7) may information into the POH as specified in of this AD. Make an entry into the airpla records showing compliance with this pa accordance with section 43.9 of the Fe Regulations (14 CFR 43.9).
(5) *For Group 3 and Group 4 airplanes:* (i) Do not install any MLG fairings without also doing the modifications required by paragraph (e)(3)(i) of this AD; and (ii) Do not replace any brake calipers without also installing the temperature indicator sticker required by paragraph (e)(3)(ii) of this AD.	As of November 17, 2006 (the effective date of this AD).	Follow Cirrus Design Corporation Serv 2X–32–14 R1, Issued: January 18, 20 February 17, 2006.

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote™

2007-14-3 N

AD NUMBE

CAPS Failure

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-15125; Docket No. FAA-2007-27976; Directorate Identifier 2007-CE-042-AD.

Effective Date

(a) This AD becomes effective on August 16, 2007.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Model SR20 airplanes, serial numbers (SN) 1005 through 1798, and Model SR22 airplanes, SN 0002 through 2437, that:

(1) Are certificated in any category; and

(2) have not incorporated the actions in their entirety of Cirrus Alert Service Bulletin No. SB A2X-95-10 R1, Issued April 2, 2007, Revised: April 10, 2007.

Unsafe Condition

(d) This AD results from a Cirrus Design Corporation (CDC) repor of an in-flight Cirrus Airplane Parachute System (CAPS) activatio where the parachute failed to successfully deploy. We are issuing thi AD to correct pick-up collar support fasteners of the CAPS, whic could result in the premature separation of the collar. This condition, not corrected, could result in the parachute failing to successful deploy (CAPS failure).

Compliance

(e) To address this problem, you must do the following, unless already done:

Actions	Compliance	Procedures
Replace the pick-up collar support of the CAPS with the new design pick-up collar support and the two nylon collar support screws with new custom aluminum tension screws. One of the following must do the replacement: (1) A CDC trained and authorized parachute system technician who also holds an Airframe and Powerplant (A&P) mechanic certificate; or (2) A CDC trained and authorized parachute system technician who is supervised by an A&P mechanic.	Within the next 25 hours time-in-service (TIS) after August 16, 2007 (the effective date of this AD) or within 60 days after August 16, 2007 (the effective date of this AD), whichever occurs first.	Follow Cirrus Alert Service Bulletin No. SB A2X-95-10 R2, Issued April 2, 2007, Revise April 24, 2007.

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Chicago Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Wess Rouse, Aerospace Engineer, FAA, 2300 East Devon Avenue, Room 107, Des Plaines, Illinois 60018; telephone: (847) 294-8113; fax: (847) 297-7834. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Material Incorporated by Reference

(g) You must use Cirrus Alert Service Bulletin No. SB A2X-95-10 R2, Issued April 2, 2007, Revised: April 24, 2007, or Cirrus Alert Service Bulletin No. SB A2X-95-10 R1, Issued April 2, 2007, Revised: April 10, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approve incorporation by reference of this service information under 5 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Design Corporation, 4515 Taylor Circle, Duluth, Minnesota telephone: (218) 727-2737; Internet address: http://www.cirrusdesign.com.

(3) You may review copies at the FAA, Central Region, the Regional Counsel, 901 Locust, Kansas City, Missouri 641 the National Archives and Records Administration (NAR information on the availability of this material at NARA, call 2 6030, or go to: http://www.archives.gov/federal_register/code_of_federal_reg br_locations.html .

Issued in Kansas City, Missouri, on June 29, 2007.

Kim Smith, Manager, Small Airplane Directorate Certification Service.

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote™

2007-2019 10m

AD NUMBE

Hartzell Propeller

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear Propeller Model:_____ Serial No.:_____

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-15311. Docket No. FAA-2007-28876; Directorate Identifier 2000-NE-08-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective January 30, 2008.

Affected ADs

(b) This AD supersedes AD 2002-09-08, Amendment 39-12741.

Applicability

(c) This AD applies to all Hartzell Propeller Inc. models ( )HC- ( )( )Y( )-( )( )( ) compact series constant speed or feathering propellers with Hartzell manufactured "Y" shank aluminum blades. These propellers are used on, but not limited to, the following airplanes:

Manufacturer	Airplane Model
Aermacchi S.pA. (formerly Siai-Marchetti)	S-208
Aero Commander	200B and 200D
Aerostar	600
Beech	24, 35, 36, 45, 55, 56TC, 58, 60, and 95
Bellanca	14 and 17 series
Cessna	182 and 188
Embraer	EMB-200A
Maule	M5
Mooney	M20 and M22
Pilatus Britten Norman, or Britten Norman	BN-2, BN-2A, and BN-2A-6
Piper	PA-23, PA-24, PA-28, PA-30, PA-31, PA-32, PA-34, PA-36, and PA-39
Pitts	S-1T and S-2A
Rockwell	112, 114, 200, 500, and 685 series

(d) The parentheses appearing in the propeller model number indicates the presence or absence of an additional letter(s) that varies the basic propeller model. This AD applies regardless of whether these letters are present or absent in the propeller model designation.

Unsafe Condition

(e) This AD results from operators requesting clarification of certain portions of AD 2002-09-08. We are issuing this AD to prevent failure of the propeller blade from fatigue cracks in the aluminum blade shank radius, which can result in damage to the airplane and loss of airplane control.

Compliance

(f) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

(g) If the propeller maintenance records show compliance with AD 77-12-06R2, then compliance was previously done and no further action is required.

(h) Propellers are considered in compliance with the one-time inspection and rework requirements only, of this AD if:

(1) All blades are serial number D47534 and above, or

(2) All blades are identified with the letters "PR" or "
which are ink-stamped on the camber side, or the letters "R
which are metal-stamped on the blade butt.

Models ( )HC-( )( )Y( ) Compact Series "Y" Shank Propelle

(i) If propeller models ( )HC-( )( )Y( ) have not b
inspected and reworked in accordance with AD 77-12-06
then before further flight, do a one-time action to rem
inspect, rework, or replace blades if necessary using Har
Service Bulletin (SB) No. 118A, dated February 15, 1977.

Propeller Blade Shank Cold Rolling

(j) One requirement in Hartzell SB No. 118A is the rolling of the propeller blade shank.

(1) Cold rolling is a critical requirement in the preve
of cracks in the blade. Propeller repair shops must obtai
maintain proper certification to perform the cold r
procedure.

(Over)➔

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote

2008-3-16 N/M

AD NUMBER

Control Rigging

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER

Amendment 39-15367; Docket No. FAA-2007-28246; Directorate Identifier 2007-CE-048-AD.

Effective Date

(a) This AD becomes effective on March 11, 2008.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Model SR20 airplanes, serial numbers (SN) 1005 through 1861, and Model SR22 airplanes, SN 0002 through 2333, SN 2335 through 2419, and SN 2421 through 2437, that are certificated in any category.

Unsafe Condition

(d) This AD results from an incident of jamming of the aileron and rudder controls on a Model SR20 airplane and the possibility of the occurrence on other airplanes. In addition, other Models SR20 and SR22 airplanes have been found with misrigging of the flight controls that could lead to jamming. We are issuing this AD to prevent the possibility of jamming of the rudder-aileron interconnect system, which may result in loss of rudder and aileron flight controls.

Compliance

(e) To address this problem, you must do the following, unless already done:

Actions	Compliance	Procedures
(1) Inspect the rudder, aileron, and rudder-aileron interconnect rigging; correct any out-of-rig condition; and replace the attaching hardware for the rudder-aileron interconnect arm.	At whichever occurs first: (i) Within the next 25 hours time-in-service (TIS) after March 11, 2008 (the effective date of this AD); or (ii) Within the next 3 months after March 11, 2008 (the effective date of this AD).	Follow Cirrus Service Bulletin No. SB 2X-27-14 R3, Revised: October 10, 2007.
(2) Only if you find an out-of-rig condition: Report to the FAA any out-of-rig conditions discovered as a result of the inspection required by paragraph (e)(1) of this AD on the form in Figure 1 of this AD. The Office of Management and Budget (OMB) approved the information contained in this regulation under the provisions of the Paperwork Reduction Act and assigned OMB Control Number 2120-0056.	At whichever occurs later: (i) Within 10 days after the inspection required in paragraph (e)(1) of this AD; or (ii) Within 10 days after March 11, 2008 (the effective date of this AD).	Send the form (Figure 1 of this AD) to FAA, Manufacturing Inspection District Office, 6020 28th Avenue South, Room 103, Minneapolis, Minnesota, 55450-2700; telephone (612) 713-4366; facsimile (612) 713-4365.

Note: Temporary revisions to the airplane maintenance manuals (AMM), SR20 AMM Temporary Revision No. 27-1 and SR22 AMM Temporary Revision No. 27-1, both dated October 10, 2007, contain information pertaining to this subject.

**** Aerotech Note:** The inspection report that was at this location of the FAA version of this Airworthiness Directive (AD) has been moved to the reverse side to facilitate compilation of this **adNote™**.

Alternative Methods of Compliance (AMOCs)

(f) The Manager, Chicago Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Wess Rouse, Aerospace Engineer, 2300 East Devon Avenue, Room 107, Des Plaines, Illinois 60018; telephone: (847) 294-8113; fax: (847) 294-7834. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

Material Incorporated by Reference

(g) You must use Cirrus Service Bulletin No. SB 2X-27-14 R3, Revised: October 10, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of this service information under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, contact Cirrus Design Corporation, 4515 Taylor Circle, Duluth, Minnesota 55811; telephone: (218) 727-2737; internet address: http://www.cirrusdesign.com.

(3) You may review copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202- 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html .

Issued in Kansas City, Missouri, on January 29, 2008.

John Colomy, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

(Over)➔

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote

AD NUMBER

Teledyne Continental Engine

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear Engine Model/Serial No:_____

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
			N/A by SN #	

Directorate Identifier 2009-NE-38-AD.

Effective Date

(a) Emergency AD 2009-24-52, issued on November 18, 2009, is effective upon receipt.

Affected ADs

(b) This AD **supersedes** Emergency AD **2009-24-51**, issued November 16, 2009.

Applicability

(c) This AD supersedure applies to all Teledyne Continental Motors (TCM) 240, 360, 470, 520, and 550 series reciprocating engines with hydraulic valve lifters, part numbers (P/Ns) 657913, 657915, or 657916, installed. These engines are installed on, but not limited to, general aviation airplanes.

Unsafe Condition

(d) This AD supersedure results from TCM reporting three occurrences of rapid wear on the face of lifters, P/Ns 657913, 657915, and 657916, at 5, 6, and 38 hours time-in-service, and from the need to add the 550 series engines to the applicability. We are issuing this AD to prevent excessive hydraulic lifter wear, which can result in loss of engine power and loss of control of the airplane.

Compliance

(e) You are responsible for having the actions required by this AD performed before further flight after the effective date of this AD, unless the actions have already been done.

Excluded Engines

(f) If your engine was manufactured or rebuilt before June 19, 2009, and you have not had any hydraulic lifters replaced after June 19, 2009, no action is required.

Determining P/N of Lifters

(g) If your engine was manufactured or rebuilt on or after June 19, 2009, or if any of your hydraulic lifters were replaced on or after June 19, 2009, and you can't determine the P/N of your hydraulic lifters from the engine records:

(1) Use the list of engine serial numbers in Section A o TCM Mandatory Service Bulletin (MSB) No. MSB09-8, date November 3, 2009.

(2) Inspect the hydraulic lifters in each cylinder for P/N 657913, 657915, and 657916. Use TCM MSB No. MSB09- dated November 3, 2009, Section 1. Action Require paragraphs 1. through 3. to determine the P/N of the lifters.

Replacing the Lifters

(h) If your engine has any affected hydraulic lifters, repla the hydraulic lifters using TCM MSB No. MSB09-8, da November 3, 2009, Step 2, paragraphs 2. through 4.

Installation Prohibition

(i) After the effective date of this AD, do not install hydraulic lifters, P/Ns 657913, 657915, or 657916, into TCM 240, 360, 470, 520, or 550 series reciprocating engin

Alternative Methods of Compliance

(j) The Manager, Atlanta Certification Office, has authority to approve alternative methods of compliance fo AD if requested using the procedures found in 14 CFR 39.

Contact Information

(k) For further information, contact: Anthony H Aerospace Engineer, Atlanta Certification Office, FAA, Airplane Directorate, 1701 Columbia Avenue, College GA 30337; e-mail: anthony.holton@faa.gov; telephone (404) 474-5567; fax 474-5606.

Issued in Burlington, Massachusetts, on Novem 2009.

Peter A. White, Assistant Manager, Engine and P Directorate, Aircraft Certification Service.

AIRCRAFT REGISTRATION NO.

AIRCRAFT SERIAL NO.

TYPE AIRCRAFT

adNote

Southern California Propeller Service

If multi-engine: ☐ Left ☐ Right ☐ Front ☐ Rear Propeller Model:_____ Serial No.:_____

COMPLIANCE DATE	TOTAL TIME AT COMPLIANCE	TACH OR RECORDING METER TIME AT COMPLIANCE	METHOD OF COMPLIANCE	AUTHORIZED SIGNATURE & NUMBER
			N/A	

Hartzell Propeller, Inc., McCauley Propeller Systems, and Sensenich Propeller Manufacturing Company, Inc. Propellers: Amendment 39-14188. Docket No. 2003-NE-53-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective August 17, 2005.

Affected ADs

(b) None.

Applicability

(c) This AD applies to the Hartzell Propeller, Inc., McCauley Propeller Systems, and Sensenich Propeller Manufacturing Company, Inc. propeller models last returned to service by Southern California Propeller Service of Inglewood, CA., listed in the following Table 1:

Table 1.--Applicable Propeller Models

Hartzell Propeller, Inc.
()HC–()(2,3,4)Y()–().
()HC–()(2,3,4)(X,V,MV,W,Z,P,R) (F,G,L,K,R,20,30,31)–().
()HA–()–().
HC–B(3,4)(M,P,R,T)(A,N,P)–().
HC–(D,E)(4,5)(A,B,N,P)–().
McCauley Propeller Systems
()2()()3()C()()()–(): All constant speed two-bladed propeller models.
()3()()3()C()()()–(): All constant speed three-bladed propeller models.
1()()()()/(): All metal propeller models.
Sensenich Propeller Manufacturing Company, Inc.
All metal propeller models.

(d) These actions are against propeller models returned to service by Southern California Propeller Service. Southern California Propeller Service is not to be confused with propeller repair stations known as California Propeller or as Propeller Service of California. Southern California Propeller Service was issued Air Agency Certificate number of VXSR617L in 1992, which was revoked in June of 1998.

(e) For Hartzell and McCauley propeller models listed in Table 1 of this AD, any letter or number (or lack of a letter or number) could appear where open parentheses are shown in the model number. Model numbers could show any combination of letters or numbers where the model number shows parentheses with a series of numbers or letters.

(f) For propeller models listed in Table 1 of this AD, that have been overhauled since being returned to service by Southern California Propeller Service by an authorized repair station other than Southern California Propeller Service, no further action is required.

Unsafe Condition

(g) This AD results from the investigation of a failed propeller blade and subsequent inspections of various propeller models returned to service by Southern California Propeller Service, of Inglewood, CA. We are issuing this AD to prevent blade failure that could result i of a propeller blade and loss of control of the airplane.

Compliance

(h) You are responsible for having the actions required performed within 10 hours time-in-service after the effective AD.

Required Actions

(i) Perform the actions specified in paragraph (j) of propeller models listed in Table 1 of this AD. You can fin on performing the actions in the applicable propeller m service documentation.

(j) Perform the following actions:

(1) Disassemble,

(2) Clean,

(3) Inspect for the following:

(i) Cracks,

(ii) Corrosion or pits,

(iii) Nicks,

(iv) Scratches,

(v) Blade minimum dimensions,

(vi) Unapproved localized heating of blade,

(vii) Unapproved use of helicoil inserts in actuating pi

(viii) Improperly drilled actuating pin holes,

(ix) Chemical conversion coat or paint or both applied

(x) Lack of chemical conversion coating,

(xi) Lack of paint on internal surfaces,

(xii) Bolts incorrectly torqued,

(xiii) Incorrect parts,

(xiv) Incorrect installation of parts,

(xv) Reinstallation of parts intended for one-time use,

(xvi) Lack of proper shot peening.

(4) Repair and replace with serviceable parts, as ne

(5) Reassemble and test.

Alternative Methods of Compliance

(k) The Manager, Chicago Aircraft Certification authority to approve alternative methods of compliance AD if requested using the procedures found in 14 CFR

Special Flight Permits

(l) Under 14 CFR 39.23, we are limiting the specia this AD by not allowing any flights with apparent crack

Related Information

(m) Special Airworthiness Information Bulletin N March 20, 2001, pertains to the subject of this AD.

Issued in Burlington, Massachusetts, on July 5, 20

Francis A. Favara, Acting Manager, Engi Directorate, Aircraft Certification Service.

US Department of Transportation
Federal Aviation Administration

MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: CIRRUS	Model: SR20
	Serial No.: 1169	Nationality and Registration Mark: N44YP
2. Owner	Name *(As shown on registration certificate)*: Michael Bush	Address *(As shown on registration certificate)*: 1500 Ashwood CT Williamsport, PA 17701

3. For FAA Use Only

4. Unit Identification				**5. Type**	
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~ *(As described in Item 1 above)* ~~~~~				✓
POWERPLANT					X
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Advanced Aircraft Services Rich A. Brimhall II 500 Airport Rd. Suite D Lititz, PA 17543	X U.S. Certificated Mechanic	IA 3124994
	Foreign Certificated Mechanic	
	Certificated Repair Station	
	Manufacturer	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
3/28/08	

7. Approval for Return To Service

Pursuant to the authority given persons specified below, the unit identified in item 4 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☐ APPROVED ☐ REJECTED

BY						
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group

Other *(Specify)*

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
3/28/2008	IA 3124994	

FAA Form 337 (12-88)

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

8. Description of Work Accomplished

(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Removed six (6) TCM fuel nozzles P/N 627335D and installed General Aviation Modifications, Inc GAMIjectors Kit No. TIG360-10K S/N 17732 STC No. SE09963SC PMA No. PQ821SW pe GAMIjector Installation Procedure No. IP-2001-01 (Revision None) dated May 25, 2001. No change i weight or balance.

END

FORMS (FAA FORM 337)

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SE09963SC

This Certificate issued to General Aviation Modifications, Inc.
2800 Airport Rd., Hangar A
Ada Municipal Airport
Ada, OK 74820

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

Original Product Type Certificate Number: * See FAA approved Model List (AML)

Make: *

Model: *

Description of Type Design Change: Installation of modified fuel injector nozzles in accordance with General Aviation Modifications, Inc. "Data List", Revision NC, dated September 12, 2001, and "GAMIjector installation procedure for Continental engines with "Tuned" induction", IP-2001-01, dated May 25, 2001, or "turboGAMIjector installation procedure for Turbocharged Continental Engines with "Tuned" Induction", IP-2001-02, no revision, dated May 25, 2001, or later FAA approved revisions.

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 shall give the other person written evidence of that permission. This STC only applies to Teledyne Continental Motors (TCM) engine models listed on the FAA approved model list on the attached continuation sheet.

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: July 13, 2001

Date of issuance: November 6, 2001

Date reissued:

Date amended:

FEDERAL AVIATION ADMINISTRATION

By direction of the Administrator

(Signature)

S. Frances Cox
Manager, Special Certification Office
Southwest Region

(Title)

United States Of America
Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

FAA APPROVED MODEL LIST (AML)

STC No. SE09963SC
Project No. ST6777SC-E

General Aviation Modification, Inc.
2800 Airport Road, Hangar A
Ada Municipal Airport
Ada, OK 74820

Item	Aircraft Make	Aircraft Model	Original Type Certificate Number	Regulation / Part
1	Teledyne Continental Motors	IO-240A IO-240B	E7SO	FAR 33
2	Teledyne Continental Motors	IO-360-ES	E1CE	FAR 33
3	Teledyne Continental Motors	TSIO-360-MB TSIO-360-RB TSIO-360-SB LTSIO-360-RB	E9CE	FAR 33
4	Teledyne Continental Motors	TSIO-520-BE	E8CE	CAR 13
5	Teledyne Continental Motors	IO-550-G IO-550-N IO-550-R	E3SO	FAR 33
6	Teledyne Continental Motors	TSIO-550-B TSIO-550-C TSIO-550-E	E5SO	FAR 33
7	Teledyne Continental Motors	GTSIO-520-D GTSIO-520-H GTSIO-520-L GTSIO-520-N	E7CE	CAR 13

FAA Approved: _____
S. Frances Cox
Manager, Special Certification Office
Southwest Region

Date: NOV 3 0 2001

Pursuant to Title 49 United States Code § 44704(b)(3) (effective October 19, 1996) the signature below constitutes the agreement and permission of General Aviation Modifications, Inc. allowing the registered owner of N 44YP, to alter that certain Teledyne Continental engine(s): Model IO-360 ES, S/N 357623, and NA and, for the purpose of installing the GAMIjectors® fuel injectors which are the subject to that STC.

Corporate Seal

3-26-08
Date

General Aviation Modifications, Inc.
_____
Timothy Roehl, President

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

THE adlog AIRCRAFT MAINTENANCE RECORDKEEPING SYSTEM

337 Status

Aircraft Registration No. N3176 Aircraft S/N 1169

Date of 337	Further Continuous Airworthiness Requirements	Approved By	Description
3/28/08	Yes ☒ No ☐	[signature]	installation of Gami jectors
	Yes ☐ No ☐		
	Yes ☐ No ☐		
	Yes ☐ No ☐		
	Yes ☐ No ☐		
	Yes ☐ No ☐		
	Yes ☐ No ☐		
	Yes ☐ No ☐		
	Yes ☐ No ☐		
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	Yes ☐ No ☐		
	Yes ☐ No ☐		

U.S. Department of Transportation
Federal Aviation Administration

MAJOR REPAIR AND ALTERATION
(Airframe, Powerplant, Propeller, or Appliance)

Form Approved OMB No. 2120-0020 11/30/2007 | Electronic Tracking Number

For FAA Use Only

AEA-FSDO-13

INSTRUCTIONS: Print or type all entries. See Tilte 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U. S. C. §46301(a))

1. Aircraft

Nationality and Registration Mark	Serial No.	
N44YP	1169	
Make	**Model**	**Series**
CIRRUS DESIGN CORP.	SR20	

2. Owner

Name *(As shown on registration certificate)*	Address *(As shown on registration certificate)*
BUSH MICHAEL	1500 ASHWOOD CT WILLIAMSPORT, PENNSYLVANIA 17701-8926 UNITED STATES

3. For FAA Use Only

The data/~~alteration~~ identified herein complies with the applicable airworthiness requirements and is approved for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7.

APPROVING INSPECTOR Frank Smith AGI/I

DATE 6-22-2007, AEA-FSDO-13

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☒	**AIRFRAME**	▬▬▬▬	*(As described in Item 1 above)*	▬▬▬▬
☐	☐	**POWERPLANT**			
☐	☐	**PROPELLER**			
☐	☐	**APPLIANCE**	Type Manufacturer		

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency			
LANCASTER AVIONICS, INC. 500-U AIRPORT ROAD LITITZ, PA 17543		U. S. Certified Mechanic	Manufacturer	
		Foreign Certified Mechanic	C. Certificate No.	
	X	Certified Repair Station	LN7R261N	
		Certified Maintenance Organization		

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U. S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B ☐	Signature/Date of Authorized Individual	Mark J. Forth 22-June-2007

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

		FAA Flt. Standards Inspector		Manufacturer		Maintenance Organization		Persons Approved by Canadian Department of Transport
BY		FAA Designee	X	Repair Station		Inspection Authorization		Other (Specify)

Certificate or Designation No.	Signature/Date of Authorized Individual	Todd M. Adam 22-June-200
LN7R261N		