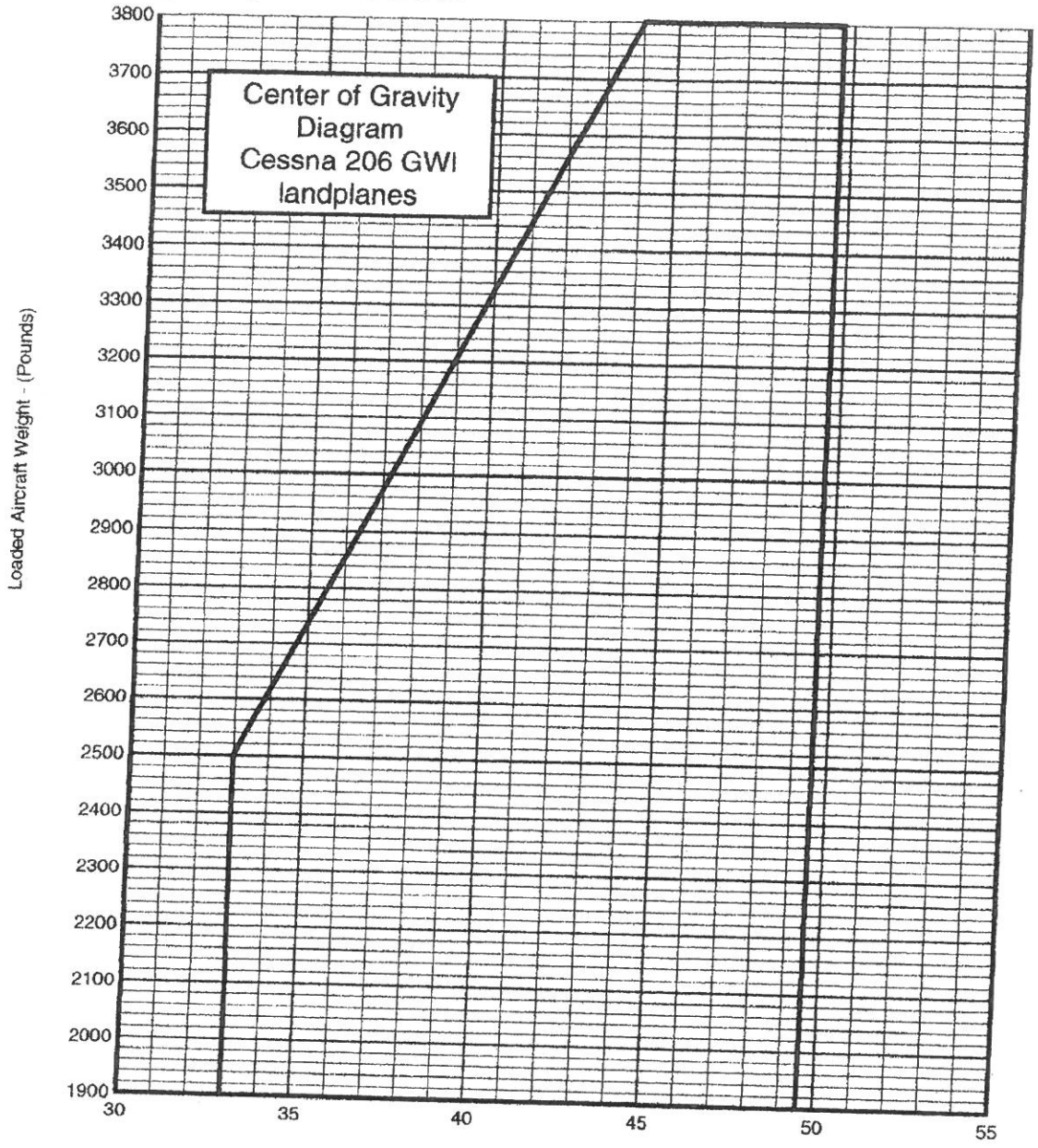
gross weight increased to 3800 lbs.



3/30/99
Flint Aero Inc.

List of effective Pages

sheet number	title	version	date
1	cover	rev K	9/4/07
2	installation instructions	version 5	9/7/06
3	installation instructions	5	9/7/06
4a	notes	4	6/11/04
4b	notes	3	8/4/05
5	bill of materials	5	2/3/07
6	bill of materials	4	2/3/07
7	bill of materials	4	10/19/04
8	bill of materials	3	9/4/07
9a	overall fuel line placement, rc	5	8/4/05
9b	overall fuel line placement, int	4	8/4/05
10	access covers	4	10/19/04
11	**deleted**		
12	**deleted**		
13	spar web	4	6/14/04
14	air duct modification	1	3/18/04
15a	fuel pump installation, 14v int	4	6/15/04
15b	fuel pump installation, 28v rc	4	6/15/04
15c	fuel pump installation, 28v int	4	6/15/04
15d	fuel pump installation, 14v rc	4	6/15/04
16	wing corner/access Cover	4	10/19/04
17	access cover, detail	4	10/19/04
18	**deleted**		
19	fuel line support	4	6/15/04
20a	electrical, 14v	6	9/4/07
20b	electrical, 28v	6	9/4/07
21a	nav light wires	5	6/17/04
21b	alternate lights	4	6/10/04
22	vent line bracket	3	6/8/04
23	venting system	3	6/15/04
24a	plumbing junction, rc	3	6/15/04
24b	plumbing junction, int	3	6/15/04
25	fuel outlet/rib modification	3	6/8/04
26	tank mounting screws	3	6/10/04
27	tank alignment	2	12/13/06
28	stall warning adjustment	2	3/18/04
29	maintenance	3	6/15/04
30	placards	4	10/19/04
31	index	2	3/18/04

Applicable models: U206F, TU206F, U206G, TU206G, 206H, T206H

Note: "INT" refers to non rubber cell equipped aircraft.

This kit is configured for-
tank serial number:

aircraft serial number:

as follows:

Main tanks
- ☐ bladder
- ☐ "hard" tanks

Turbo
- ☐ yes
- ☐ no

Voltage
- ☐ 14
- ☐ 28

Gauge style
- ☐ 2 gauges
- ☐ 1 dual gauge

Octane
- ☐ 80/86
- ☐ 100LL
- ☐ 100/130

Installation is compatible with landplanes, amphibians, floatplanes, skiplanes, cargo pods, autopilot systems and STOL conversions.

Read all instructions before beginning installation.

Continued Airworthiness Instructions may be found on sheet 29

Note to installer:
Any deviations or changes by installer during installation shall be in accordance with FAA manual AC 43.13 - 1B/2A or by FAA FSDO approval.

These drawings should physically be kept in the aircraft.
FAA Part 91-417 requires that the STC also remain with the aircraft.

Use only the type of wheels, tires and brakes that the aircraft was originally equipped with from the Cessna factory.

It is suggested that the Flint tanks be kept full when the airplane is on the ground. This will reduce condensation and prolong the life of the sending units.

FLINT AERO INC.
1942 Joe Crosson Drive
El Cajon, CA 92020

Cessna Auxiliary Fuel System Installation Instructions, Cover Page

date: 9/4/07
Revision: K

drawn: CLG
approved: DLH

FA3330
Sheet 1 of 36

All dimensions are in inches

10.Install the aux wing tip tank according to diagrams and instructions outlined on sheet 26 and 27. Make sure there is adequate clearance between the aileron and the aux wing tip fuel tank of .15 to .35 inches. Torque all aux wing tank mounting screws to 10 to 12 inch pounds.

11. If strobe transformer is mounted on outboard side of close out rib move transformer to clear tip tank. Fabricate a plate from .032 or .040 aluminum and rivet plate to inboard side of close out rib using 8 number 4 rivets. Remount transformer using nut plates or riv nuts. Line transformer up with oval access cover to facilitate removal.

12. Use aux fuel pump to transfer fuel from aux tanks to main tanks for 10 minutes each. Remove the fuel pump screen from the bottom of the fuel pump and check for any contamination. Repeat until clean.

13.Weight and balance data: Plus 35 pounds at plus 53 inches. Factory CG envelope must be strictly adheared to.
Fuel pump amp load is 2 to 3 amps.
Residual fuel is .2 U.S. gallons total.

14.Complete FAA form 337 and make the appropriate changes on the equipment list. Note the installation in the aircraft log book and **sign and date**.

15. After 5 hours of engine operation and transfer of fuel from aux to main tanks, check all fuel system sediment traps including the transfer pump screen and the engine screen. Sign and date aircraft and engine log books.

16. It is strongly recommended that if the airplane is to be flown above 3600 lbs, 8 ply tires be fitted.

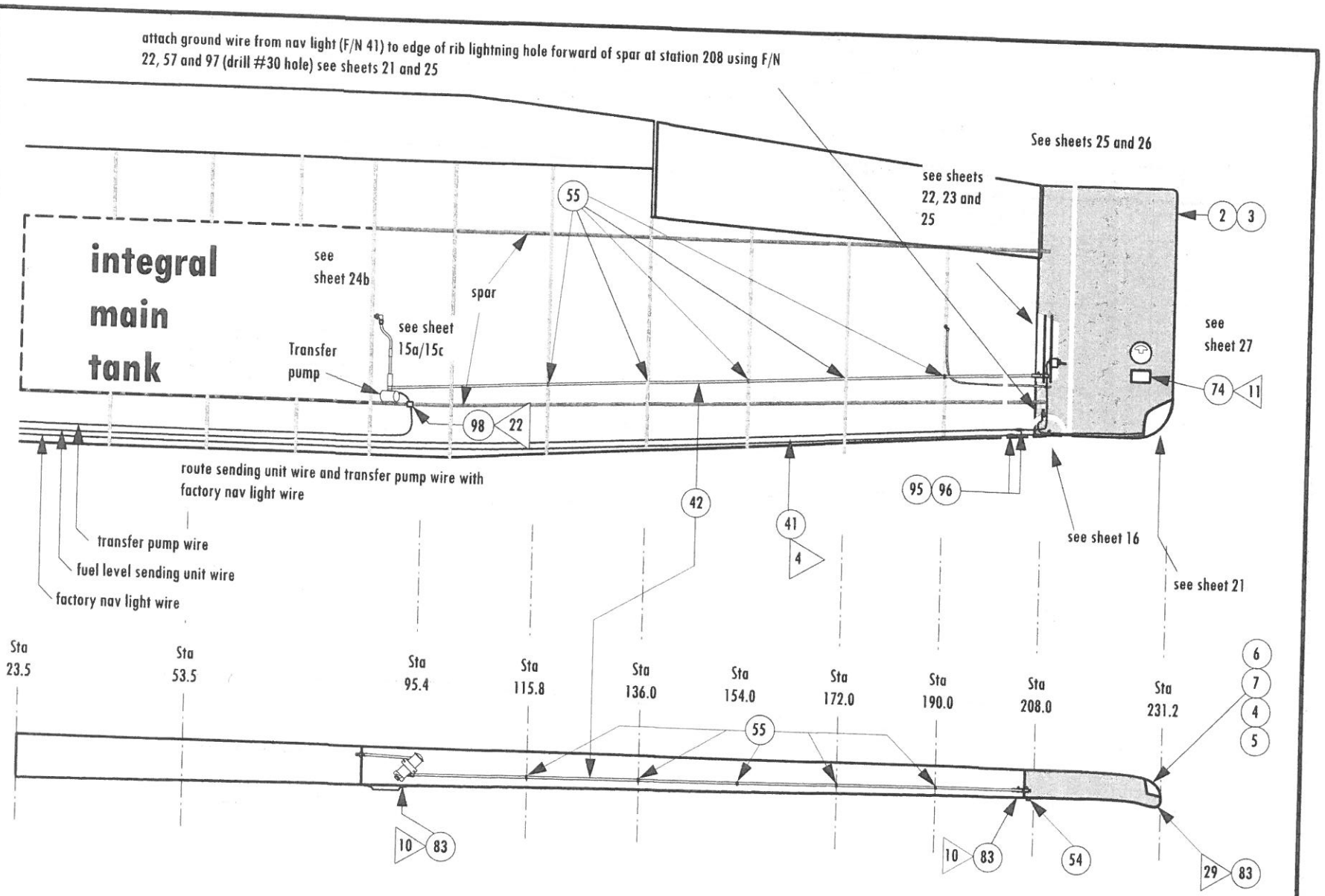
		Sheet
21	Route fuel line through existing hole in spar (RC only). Make clearance between all pullys and cables.	9a
22	Locate F/N 98 equal distance from top and bottom of wing	9b
23	Clean with alcohol only	21a, 23
24	Parts 10 through 14 may be used to supress electrical noise	15a-15d
25	De-burr and lightly lube end of tube before inserting into fitting	23
26	Whelen wire extension kit (HS5 or HT10) and connectors (A441 and A442) may be installed or an equivalent may be fabricated	21a
27	Clamp to hold vent line in place	23
28	Trim doubler as necessary to maintain original wing contour	13
29	Install third F/N 83 (per wing) on tank kits 96L-698 and earlier	9a, 9b

F/N	Qty	Part #	Description	INT	RC	14	28	Sheet
49	2	FA9246D-NU	Nut, bulkhead fitting, int tank junction	•		•	•	24b
50	2	FA8166D-NI	Nipple, pump inlet	•		•	•	15
50	6	FA8166D-NI	Nipple, pump inlet / windshield post		•	•	•	24a, 15
51	8	FA112-CL	Clamp, fuel outlet / vent line	•	•	•	•	23, 25
52	2	FA8246D-TE	Tee, fuel line	•	•	•	•	15
53	1	FA186-LK	Light kit, dual gauge, optional	•	•	•	•	20a, 20b
54	2	FA180-QD	Valve, quick drain	•	•	•	•	9
55	8	FA2827-GR	Grommet		•	•	•	9a, 18
55	10	FA2827-GR	Grommet	•		•	•	9b, 18
56	2	FA213-1	Bracket, mounting, fuel line		•	•	•	9a, 19
57	2	FA1778-TN	Nut, Tinnerman, vent line clamp	•		•	•	23
57	4	FA1778-TN	Nut, Tinnerman, vent line clamp / fuel line bracket		•	•	•	9a, 19, 23
58	2	FA1274-TE	Tee, brass, pump inlet, alt to F/N 43 and 44	•		•		15a
59	4	FA21919DG6-CL	Clamp, fuel line bracket, duct clamp		•	•	•	9, 14, 19
60	2	FAFL212-SW	Switch, 12 volt, Carling, lighted	•	•	•		20a
61	2	FAFA124-SW	Switch, 24 volt, Carling, lighted	•	•		•	20b
62	3	FA5AMP-FH	Fuse holder, 5 amp, in-line	•	•	•	•	20
63	3	FA79807-FU	Fuse, 5 amp, Buss AGC5	•	•	•	•	20
64	2	FA457SW-GA	Gauge, fuel quantity, SW	•	•	•	•	20
64a	2	FA457SW-LS	Light socket for SW gauge	•	•	•	•	20
65	2	FA58820J150-RE	Resistor, 10 watt, 150 ohm, ceramic, SW gauge	•	•		•	20b
66	2	FA21919WCJ5-CL	Clamp, #6, heat resistant, resistor mounting, SW gauge	•	•		•	20b
67	2	FA1274-TE	Tee, brass, pump inlet, alt to F/N 43 and 44		•	•		15d
68	2	FA208226D-EL	Elbow, 90 degree, junction at door post		•	•	•	24a
69	6'	FA505214-TU	Tubing, AL 1/4" x .035, 5052-0 or 6061-0, vent line	•	•	•	•	23
70	2	FA220-2	Tubing, rubber 1/4" ID, vent line, 4"	•	•	•	•	23
71	2	FA12342-NI	Adaptor, 1/4 x 1/8, brass, alternate to F/N 33 and 43	•	•		•	15b, 15c
72	2	FA8R58A-SC	Screw, 8 x 5/8 truss head, type A, vent line clamp	•	•	•	•	23
73	2	FA21919DG10-CL	Clamp, vent line	•	•	•	•	23
74	2	FA3330-03	Placard, fuel tank quantity, at filler cap, 100 octane	•	•	•	•	9, 30
75	1	FA185-13	Placard, fuse, left	•	•	•	•	30

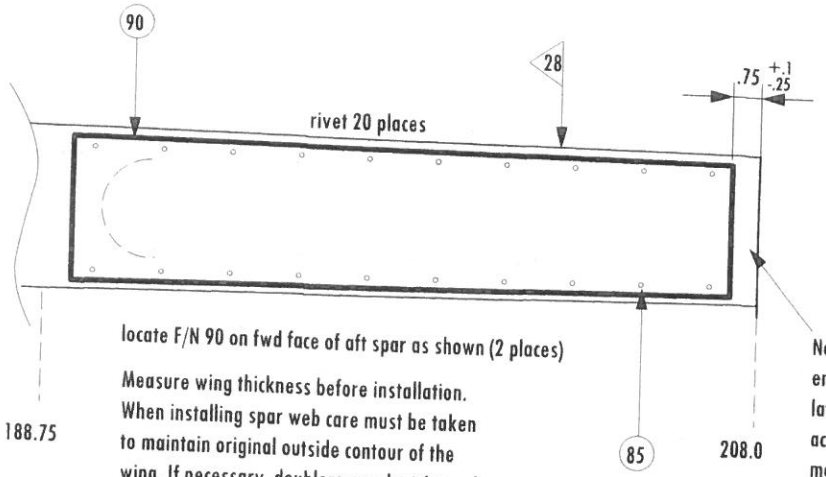
FLINT AERO INC.	FA33BOM
Cessna Auxiliary Fuel System Bill of Materials	
Sheet 3 of 4	date: 8/17/05 revision IR

F/N	Qty	Part #	Description	INT	RC	14	28	Sheet
76	2	FA221-00	Placard, fuel SW gauge	•	•	•	•	20, 30
77	2	FA526832R14-SC	Screw, fuel line bracket		•	•	•	9a, 19
78	1	FA185-12	Placard, fuse, right	•	•	•	•	30
79	1	FA185-15	Placard, switch, left	•	•	•	•	30
80	1	FA185-14	Placard, switch, right	•	•	•	•	30
81	2	FA3330-04	Placard, fuel tank quantity, at filler cap, 130 octane optional	•	•	•	•	30
82	2	FA9142-EL	Elbow, pump outlet		•	•		15d
83	6	FA200-00	Placard, fuel drip, under pump/under fuel outlet	•	•	•	•	9, 30, 25
84	2	FA21044N08-NU	Nut, fuel line bracket		•	•	•	9a, 19
85	40	FA321342-RI	Rivet, spar web, aft, cherry	•	•	•	•	13
86	38	FA20470AD445-RI	Rivet, spar web, fwd, conventional	•	•	•	•	13
87	1	FA350-RE	Resistor, dual gauge, 28 volt only	•	•		•	20b
88	1 rl	FAINSUL-TA	Tape, industrial insulating, 3/4"		•	•	•	9a
89	2	FA210-2	Web, fwd spar	•	•	•	•	13
90	2	FA211-2	Web, aft spar	•	•	•	•	13
91	2	FA182024-BL	Bulb, fuel gauge, 24v, SW gauge	•	•		•	20b
92	2	FA189312-BL	Bulb, fuel gauge, 12v, SW gauge	•	•	•		20a
93	40	FA20470AD33-RI	Rivet, vent line bracket, inspection cover ring	•	•	•	•	10, 17, 22, 23, 25
94	2	FA5AMP-BR	Breaker, circuit, 5 amp - MPI Mfg. (alternate to F/N 62 and F/N 63)	•	•	•	•	20
95	4	FA90F3723-CO	Connector, quick disconnect, male, nav light wire	•	•	•	•	9, 21a
96	4	FA90F3733-CO	Connector, quick disconnect, female, nav light wire	•	•	•	•	9, 21a
97	6	FA551105-TR	Terminal, electrical, #10 stud, 18-22, nav light ground wire	•	•	•	•	9, 21a
98	2	FA354894-GR	Grommet, transfer pump wire	•	•	•	•	9b
99	1	FA21919WCJ3-CL	Clamp, resistor for WB gauge, optional	•	•		•	20b
100	2	FA354896-GR	Grommet, vent line	•	•	•	•	22, 23, 25
101	1	FA224-1	Placard, reduce Vne (turbo only)	•	•	•	•	30
102	2	FA212-2	Bracket, vent line, 2.5"	•	•	•	•	23, 25
103	5"	FA405014-TU	Vent line, plastic, cut from quantity supplied	•	•	•	•	23
104	1	FA333-16	Placard, fuel management, cockpit	•	•	•	•	30
105	28	FA2042633-RI	Rivet, oval inspection cover backing plate	•	•	•	•	10, 16, 17
106	2	FA108001VX-SW	Toggle switch, miniature (Alt to F/N 60,61)	•	•	•	•	20a, 20b

FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System Bill of Materials (4 of 4)	
Sheet 8 of 36	date: 9/4/07

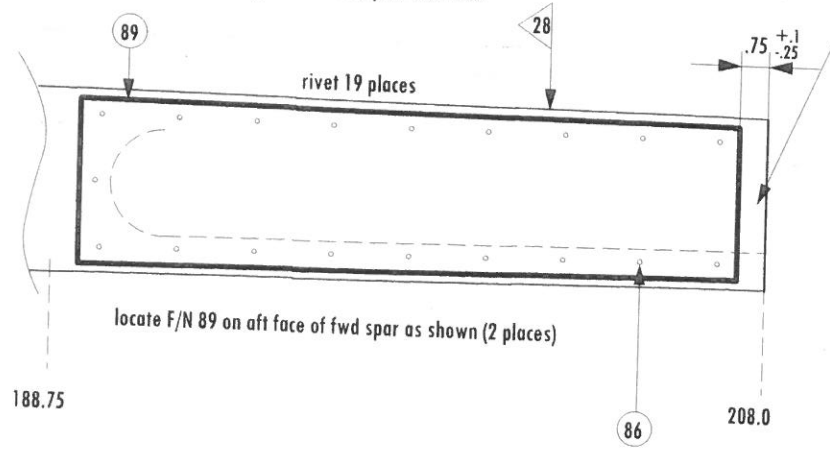


FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System Overall view of integral main tank installation	Scale 1:25
Sheet 9b of 36	date: 8/4/05 Version 4



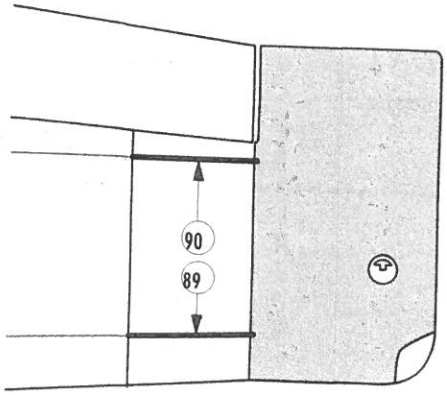
locate F/N 90 on fwd face of aft spar as shown (2 places)

Measure wing thickness before installation. When installing spar web care must be taken to maintain original outside contour of the wing. If necessary, doublers may be trimmed.



locate F/N 89 on aft face of fwd spar as shown (2 places)

Note: gap at outboard end of spar doubler is later used for wrench access to hold aft mounting bolt.



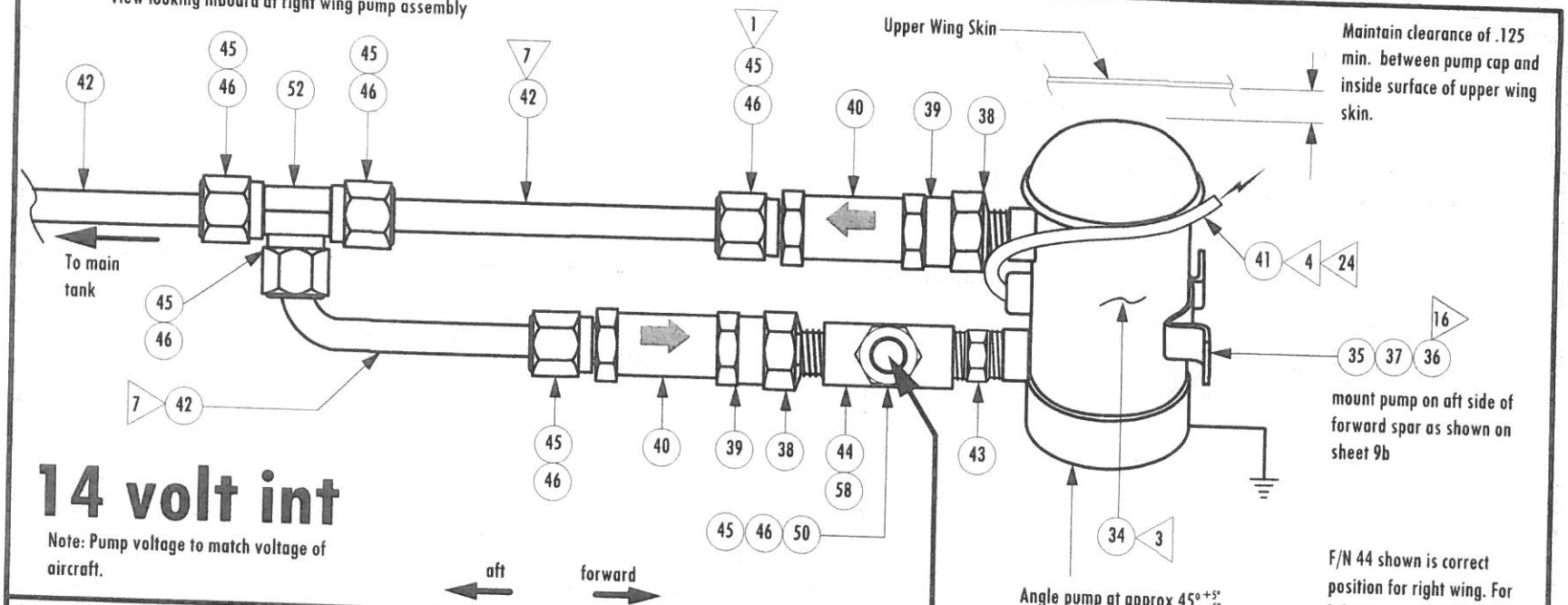
scale 1:25

station 188.75

station 208

FLINT AERO INC.	FA3330
scale 1:5	
Cessna Auxiliary Fuel System spar web	
Sheet 13 of 36	rev date: 6/14/04 v4

View looking inboard at right wing pump assembly



14 volt int

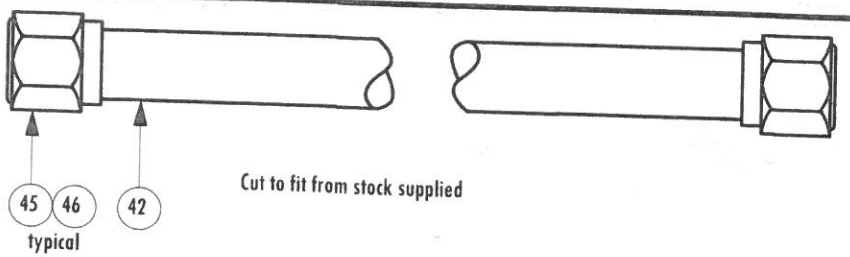
Note: Pump voltage to match voltage of aircraft.

aft ← → forward

From aux tank

Angle pump at approx 45° +5° -5° to allow filter removal

F/N 44 shown is correct position for right wing. For left wing, rotate F/N 44 180° about its fore/aft axis.

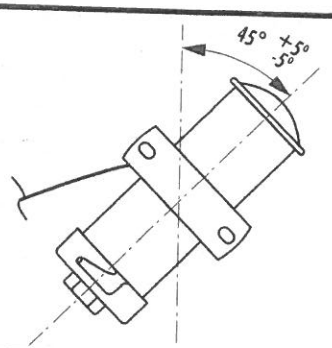


Cut to fit from stock supplied

Material: .375 OD x .035 $^{-.006}_{+.010}$ wall
5052-0 or 6061-0 AL tubing

Flare tube ends per MS33584

view of pump looking aft



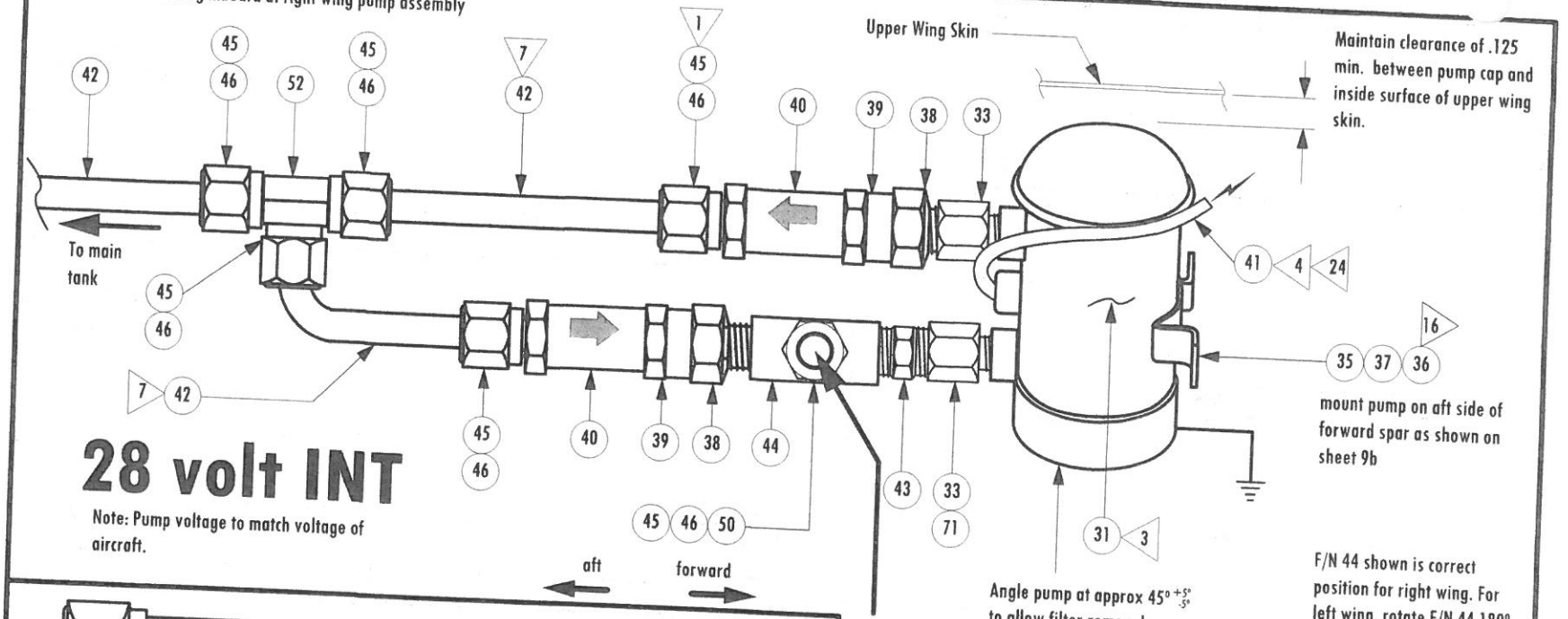
Existing inspection cover under fuel pump.

Drill #10 drain hole under pump through inspection plate cover and install F/N 83

10

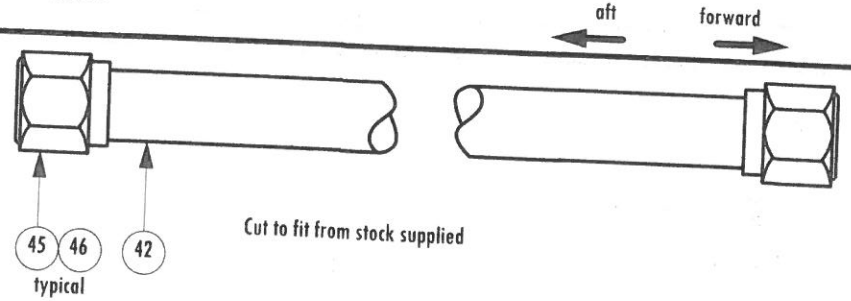
FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System 14 volt Fuel Pump Installation	
Sheet 15a of 36	date: 6/15/04 Version 4

View looking inboard at right wing pump assembly



28 volt INT

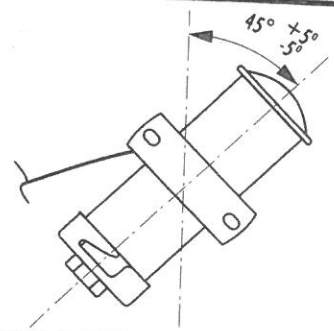
Note: Pump voltage to match voltage of aircraft.



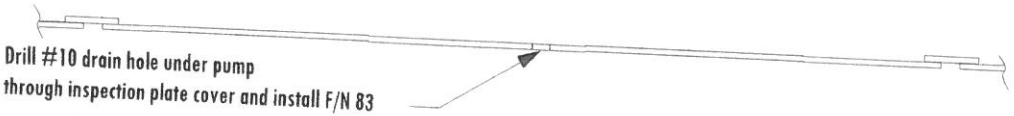
Material: .375 OD x .035 $^{+.010}_{-.006}$ wall
5052-0 or 6061-0 AL tubing

Flare tube ends per MS33584

view of pump looking aft



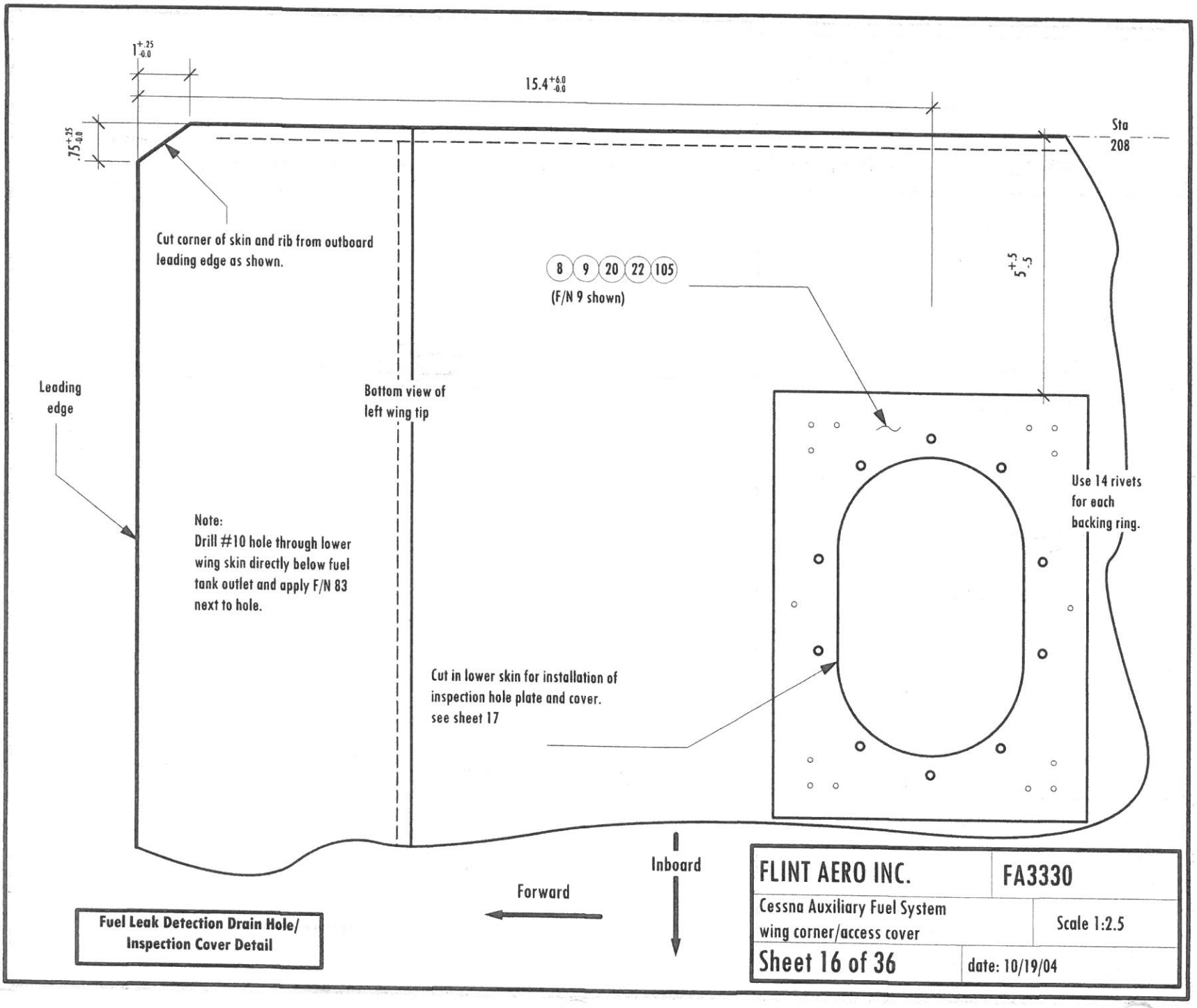
Existing inspection cover under fuel pump.



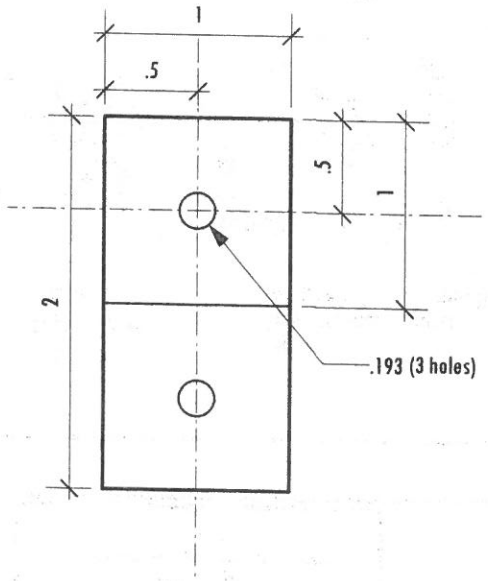
Drill #10 drain hole under pump through inspection plate cover and install F/N 83

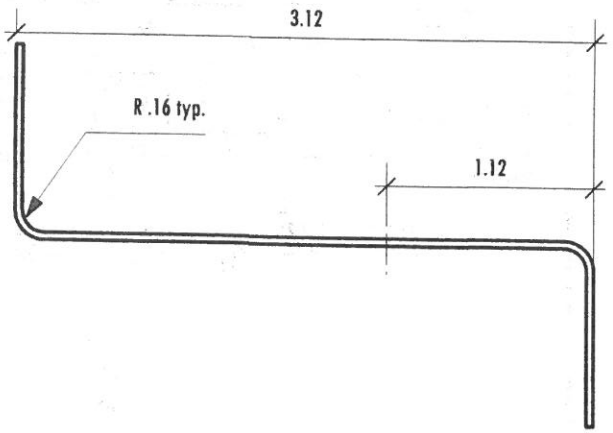
10

FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System 28 volt Fuel Pump Installation	
Sheet 15c of 36	date: 6/15/04 Version 4


1 +.25 -0.0
15.4 +6.0 -0.0
.75 +.25 -0.0
Sta 208
Cut corner of skin and rib from outboard leading edge as shown.
8 9 20 22 105
(F/N 9 shown)
5 +.5 -.5
Leading edge
Bottom view of left wing tip
Use 14 rivets for each backing ring.
Note:
Drill #10 hole through lower wing skin directly below fuel tank outlet and apply F/N 83 next to hole.
Cut in lower skin for installation of inspection hole plate and cover.
see sheet 17
Inboard
Forward
Fuel Leak Detection Drain Hole/ Inspection Cover Detail
FLINT AERO INC.
FA3330
Cessna Auxiliary Fuel System wing corner/access cover
Scale 1:2.5
Sheet 16 of 36
date: 10/19/04

FA213-1
Fuel Line Support Bracket

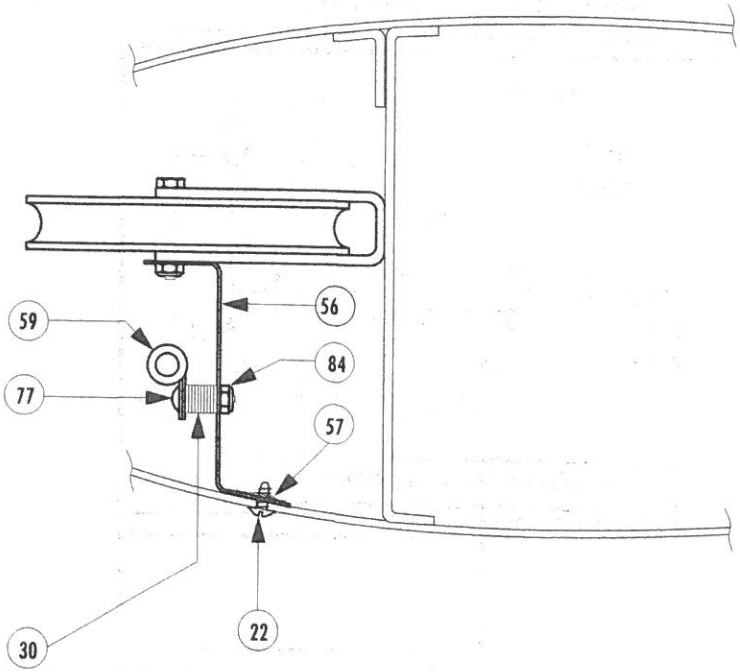




Material: AL 2024 T3,
2024 T6, 6061 T4,
6061 T6
.040 $^{+.025}_{-.010}$ (56)

Scale 1:1

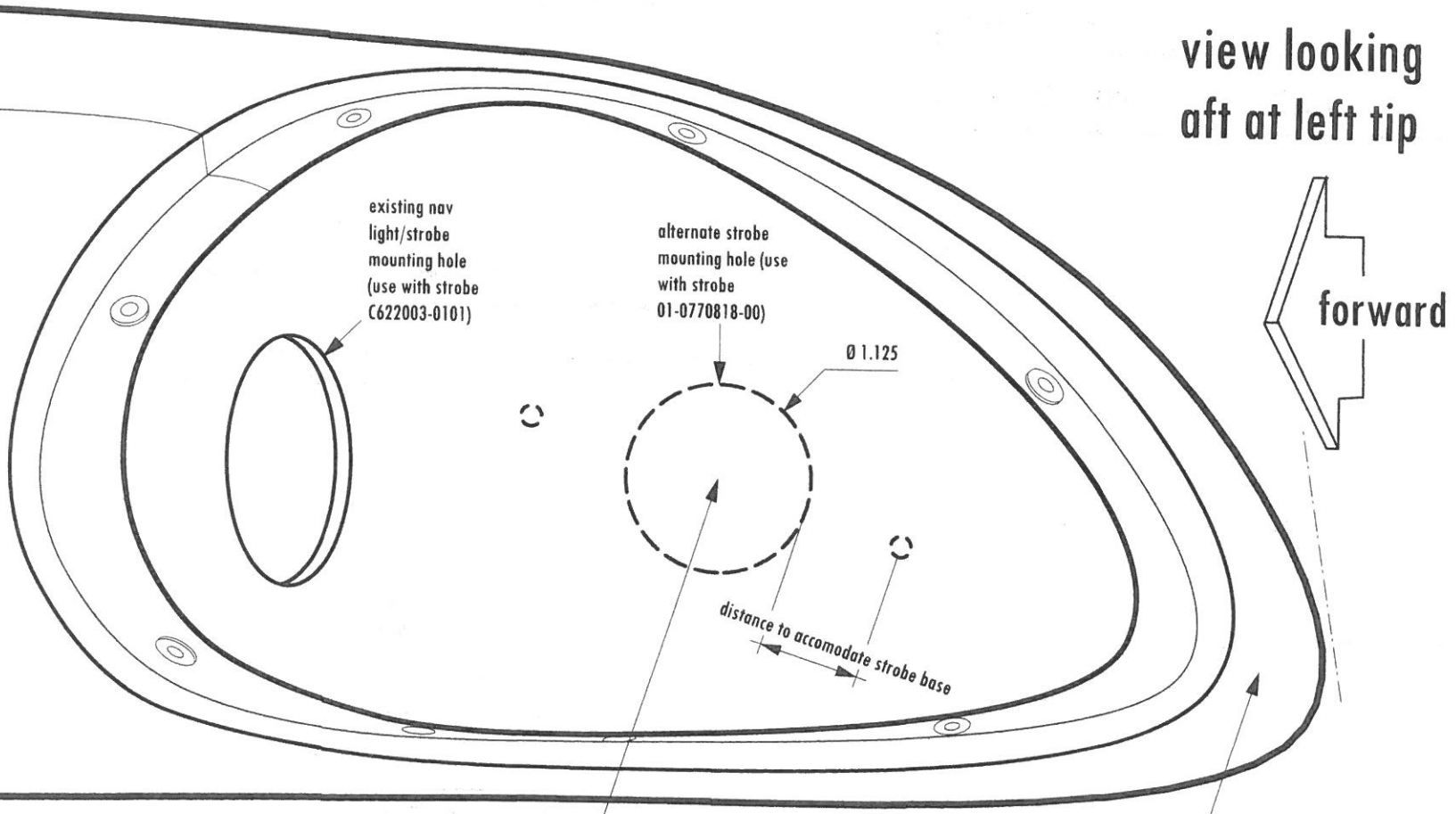
Fuel Line Support at
Wing Station 115.75
RC only



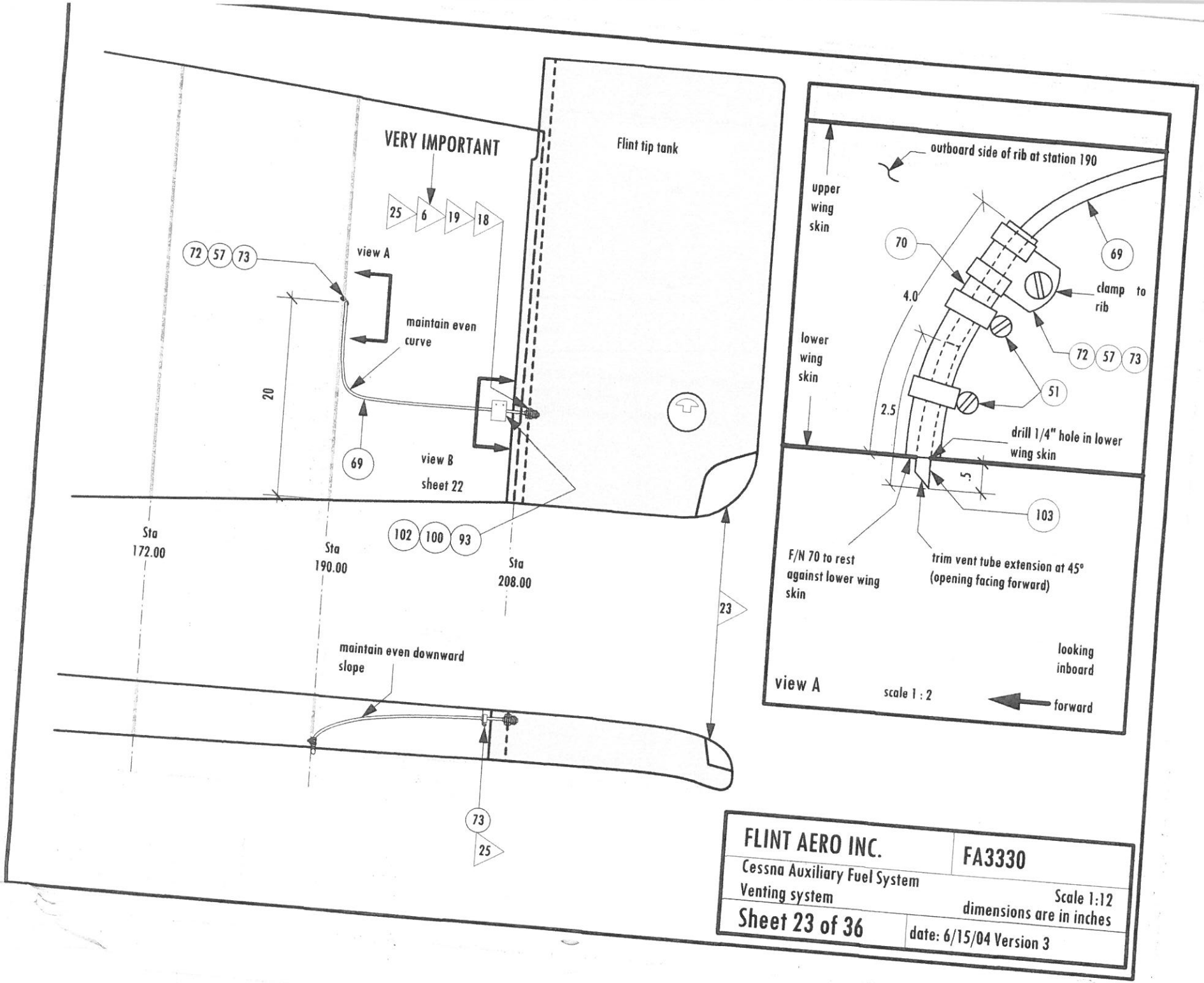
install number required to
provide clearance between
fuel line and wing structure

Scale 1:2.5

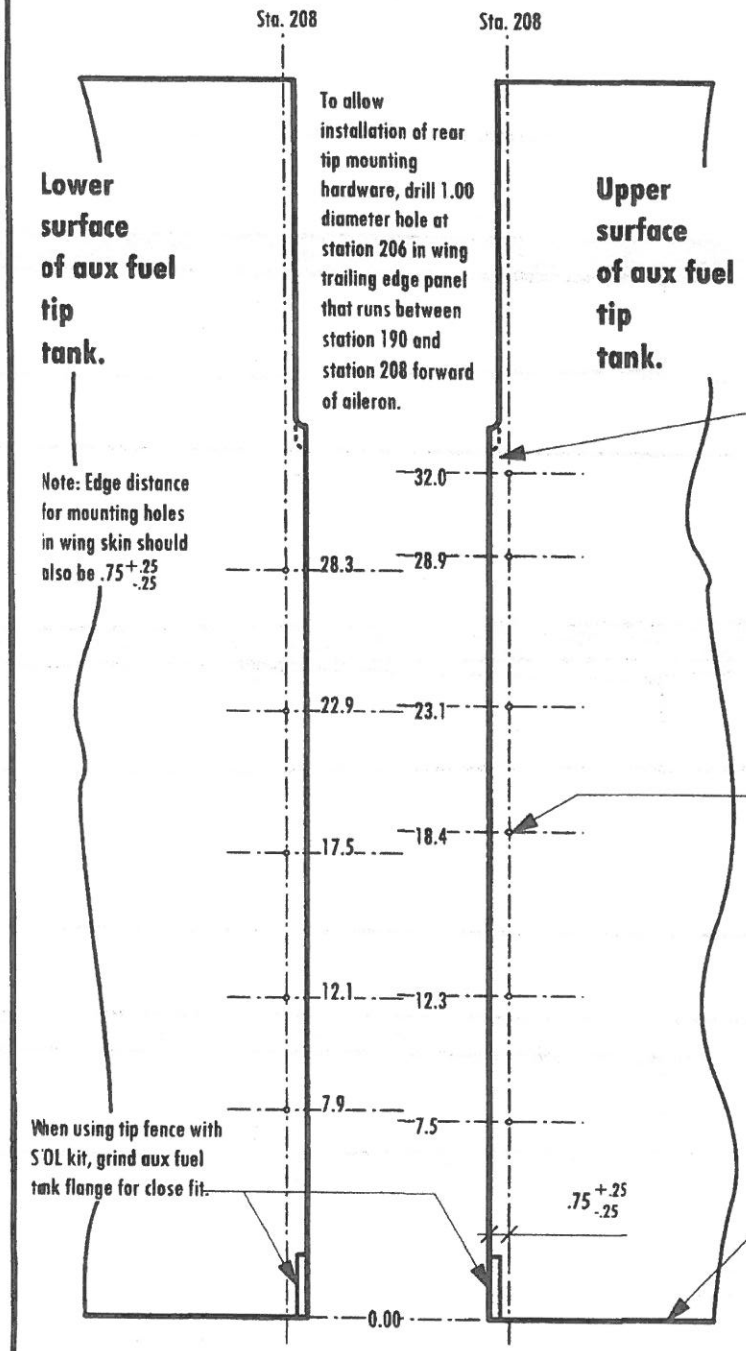
FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System Fuel Line Support FA213-1	
Sheet 19 of 36	date: 6/15/04 Version 4



FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System Alternate nav light strobe mounting	
Sheet 21b of 36	date: 6/10/04 Version 4



FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System Venting system	Scale 1:12 dimensions are in inches
Sheet 23 of 36	date: 6/15/04 Version 3



IMPORTANT:
Carfeully observe all edge distance instructions

When necessary grind tank cutouts for aileron clearance. Maintain aft tank edge distance of (28) at 0.50 minimum.

.189 dia hole (11) places
Note- No holes to match the existing holes in the wing structure. No mismatched or oversized holes allowed. Pick up stringer ends and spar cap ends when installing where possible

(28) (29) ▽8 (30) ▽15

Torque mounting bolts to 10-12 inch lbs.
The following nutplates may be used instead of nut #29:
MS21077-3, MS21078-3 or MS21080-3

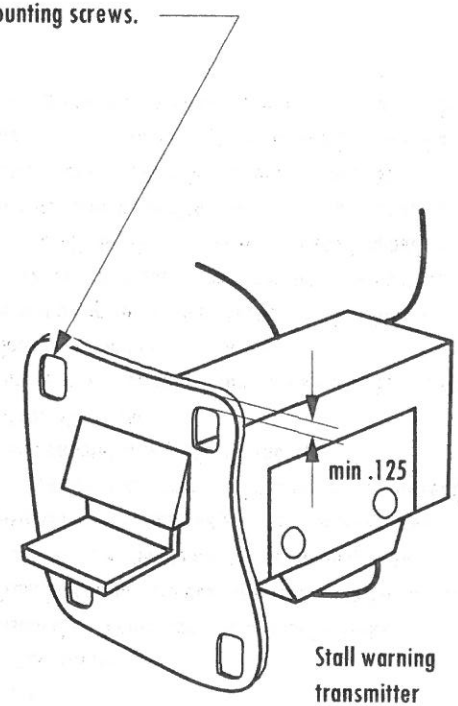
FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System Wing Mounting Screw Locations	scale 1:7
Sheet 26 of 36	date: 12/13/06

Modify stall warning transmitter in left wing leading edge as follows:

•Mark present location of stagnation point sensing vane on wing leading edge.

•Remove transmitter and elongate the top of the four mounting slots .125 inches. Observe min. dimension in drawing below. On aircraft equipped with heated stall warning switch, grind tinnerman nuts to clear heating element.

•Re-install transmitter with vane .25 inches below mark. Conduct flight test as described in this drawing. Re-position the transmitter as determined by flight tests. Re tighten mounting screws.



Stall warning transmitter

After completion of aux fuel tank installation and stall warning transmitter modification, perform a flight test to determine proper stall warning speeds in accordance with the following procedures:

•Load the airplane to a gross weight of 3800 lbs, plus or minus 100 lbs.

•Load to a forward center of gravity, 43.5 inches, plus 1.0, minus 0.0, aft of datum.

•Perform the following flight tests at flap settings of 0 degrees, 20 degrees and 40 degrees.

•Set power idle, trim to 85 mph (74 knots) and reduce speed with elevator control at a rate not to exceed one mile per hour per second (one knot per second) until the stall warning horn sounds.

•Note this speed. Continue deceleration to full stall. Note lowest speed reached in stall.

•If the unit actuates the horn at a speed in excess of 10 miles per hour (10 knots) above the stall speed, loosen the mounting screws and move the unit down.

•If the unit actuates the horn at a speed less than 5 miles per hour (5 knots) above the stall speed, move the unit up.

•Refly the stall check until the horn actuates between 5 and 10 miles per hour (5 and 10 knots) above the stall for all three flap settings.

•After successful flight test completion, enter a written statement of satisfactory flight test in the log book to be signed by appropriately certificated pilot.

FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System Stall warning modification	
Sheet 28 of 36	date: 3/18/04 Version 2

FA 185-15

79 .625

Left Wing Tip Fuel 15.0 Gallons (14.9 Gal usable) ON OFF

1.5

FA 185-14

Right Wing Tip Fuel 15.0 Gallons (14.9 Gal usable) ON OFF

80

Aux fuel pump on-off switch placards

15 U.S. Gallons. aviation fuel
(14.9 Gal. useable)
100/100LL minimum grade
Auxiliary pump switch must be off
before filling.

1.5

3.38

Aux tank octane and quantity placard
FA3330-03

11 74

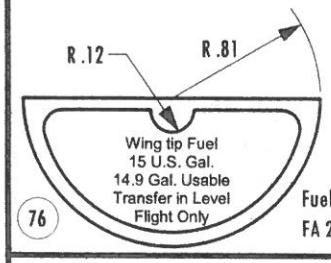
15 U.S. Gallons. aviation fuel
(14.9 Gal. useable)
100/130 minimum grade
Auxiliary pump switch must be off
before filling.

1.5

3.38

Aux tank octane and quantity placard
FA3330-04 (optional)

11 81



76 Fuel gauge placard
FA 221-00

Reduce Vne 5 mph per
1,000 ft. above 18,000 ft.

2.188

101 turbo models only

MAXIMUM GROSS WEIGHT: 3800 lbs
Total wing tip fuel 30 U.S. gallons (29.8 gallons usable).
Transfer fuel during level flight.
Transfer fuel when each main tank is 15 to 20 gallons below full into main tank that is not supplying engine.
Wing tip fuel switch must be off during takeoff, landing, filling, and when empty.
Monitor main fuel tank gauge while transferring wing tip fuel to prevent over filling.

1.85

3.125

Mount placard on instrument panel
in clear view of pilot.

Fuel management placard
FA 333-16

9 104

Fuel drip placard
FA200-00

Any fuel drip from
drain requires
immediate repair.

.5

1.5

10 83

Install adjacent to each fuel leak detection drain hole.

.5

Tip tank
Left pump

FA 185-13

75

1

Tip tank
Right pump

FA 185-12

78

Installed adjacent to appropriate wing tip tank pump circuit breaker or fuse

FLINT AERO INC.	FA3330
Cessna Auxiliary Fuel System Placards	scale: 1:1
Sheet 30 of 36	date: 10/19/04

June 21, 2013

Photo Science Inc.
523 Wellington Way
Suite # 375
Lexington, KY 40503

RE: STC Permission Statement

Dear Sir:

This letter serves as a one time authorization per our installation center agreement to install a ***Vacuum Pump Cooling Shroud*** *Installation Kit on your Cessna* ***TU206*** *Aircraft, S/N* ***TU20606282,*** *Registration No.* ***N6461Z****.*

Installation is to be done in accordance with ***RAM AIRCRAFT LIMITED PARTNERSHIP STC SA7367SW-D.***

Sincerely,

Larry Garcia

Larry Garcia
Inspection Dept.

RAM Aircraft, Limited Partnership • 7505 Karl May Drive • Waco Regional Airport • P.O. Box 5219 • Waco, Texas 76708
Phone: (254) 752-8381 • Fax: (254) 752-3307 • e-mail: information@ramaircraft.com • www.ramaircraft.com

United States Of America

Department of Transportation - Federal Aviation Administration

Supplemental Type Certificate

Number SA7367SW-D

This Certificate issued to RAM Aircraft, Limited Partnership
7505 Karl May Drive
Waco, TX 76708

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 3 *of the* Civil Air *Regulations.*

Original Product Type Certificate Number: A4CE

Make: Cessna

Model: 206 Series

Description of Type Design Change:
Installation of vacuum pump cooling shroud in accordance with RAM Drawing No. 1221, "Vacuum Pump Cooling Shroud Installation," Rev. B, dated 2/11/87, and RAM Drawing No. 1199, "Vacuum Pump Cooling Shroud Details," Rev. B, dated 2/17/87 or later FAA approved revisions.

Limitations and Conditions:
Compatibility of this modification with previously installed equipment must be determined by installer. If the holder agrees to permit another person to use this certification to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: July 31, 1986

Date reissued: October 08, 2001, February 28, 2008

Date of issuance: February 05, 1988

Date amended:

By direction of the Administrator

(Signature)

S. Frances Cox, Manager
Special Certification Office,
Southwest Region

(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

U.S 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 1958)

1. Aircraft	Make: Cessna	Model: TU206G
	Serial No.: U20606282	Nationality and Registration Mark: N6461Z
2. Owner	Name *(As shown on registration certificate)*: Brown, Reno A.	Address *(As shown on registration certificate)*: PO Box 4958 Jackson, WY. 83001-4958

3. For FAA Use Only

The technical data identified herein has been found to comply with applicable airworthiness requirements and is hereby approved for use only on the above described aircraft, subject to conformity inspection by a person in § 43.7.

Inspector, NM-FSDO-07 — Date: 13 OCT 2004

4. Unit Identification				**5. Type**	
Unit	Make	Model	Serial No.	Repair	Alteration
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	C. Certificate No.
Intermountain Aerospace 1940 International Way Idaho Falls, Idaho 83402	☐ U.S. Certified Mechanic ☐ Foreign Certified Mechanic ☒ Certified Repair Station ☐ Manufacturer	QI5R146N Radio 1, 2, 3, Accy. 3 Limited Instruments

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
2/27/2004	E. L. Andrews

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						Other *(Specify)*
☐	FAA Flt Standards Inspector	☐	Manufacturer	☐	Inspection Authorization	
☐	FAA Designee	☒	Repair Station	☐	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
10/26/04	QI5R146N	

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.)

1. N6461Z, SN U20606282: The Garmin GNS530 System, (software 4.00), previously installed and approved for VFR navigation only on 337 dated 2-18-2004 has been re-evaluated by this CRS and is approved for VFR/IFR enroute, terminal and non precision approaches. Evaluated the system as follows:

2. The Garmin GNS530 system complies with TSO C129 Class A1. The Garmin GNS530 was hardwired to the Pilot's Bendix/King KI 525A HSI and to the previously installed Co-Pilot's Garmin GI106A course deviation indicators.

3. Conducted evaluation of the cockpit layout of the installed equipment, mounting provisions, electrical load and antenna installation and the installation conforms with AC20-138, paragraph 8c2 and Appendix 1 dated May 25, 1994 and the Garmin GNS 530 installation manual P/N 190-00181-02 revision G, dated May, 2003 and the KCS 55/55A installation manual PN 006-00111-0010 rev 10, dated Feb. 2002.

4. Checked the VHF comm interference per AC20-138 and the Garmin GNS530 installation manual P/N 190-00181-02 Rev G dated May 2003.

5. Conducted a functional flight evaluation to evaluate proper system operation and accuracy I.A.W. AC20-138 paragraph 8c2 and conforms to AC20-138.

6. Verified that the maximum expected ground speed of the aircraft is less than the systems maximum operating speed.

7. Removed the "GPS LIMITED TO VFR USE ONLY" placard.

8. The Garmin GNS530 system is approved for VFR/ IFR enroute, terminal and non-precision approaches, (except LOC, LOC-BC, LDA, SDF operations) when operated IAW the FAA approved Flight Manual Supplement dated 10/12/04, and the Garmin GNS 530 Pilot's Guide, P/N 190-00181-00 Rev C dated April 2003. The Garmin GNS530 flight manual supplement and the Garmin GNS530 Pilot's Guide, P/N 190-00181-00 Rev C dated April 2003 or later must be available to the flight crew.

9. Use of this equipment during IFR operations requires operator compliance with AC90-45a append. E (periodic maintenance and inspection of airborne area navigation systems).

10. The FAA approved Flight Manual Supplement dated 10/12/04 approved by the Salt Lake City FSDO, 116 North 2400 West, Salt Lake City, UT. 84116, has been inserted in the Airplane Flight Manual.

11. **Instructions for Continued Airworthiness**

Section 1. Introduction: See above.
Section 2. Description: Garmin GNS 530 IFR field approval per this FAA form 337.
Section 3. Control, operation information: Contained in the Pilot's guide and FAA approved Airplane Flight Manual Supplement referenced above.
Section 4. Service information: To be serviced by manufacture or properly certificated repair station or mechanic.
Section 5. Maintenance instructions: Continued airworthiness for the above mentioned equipment is contingent upon compliance with practices detailed in AC 43.13-1B Chapter 12 and the accomplishment of the post installation for the above mentioned equipment as contained in the Installation Manual at each annual/100 hr inspection or upon removal and replacement of any system component. This includes system functional check and security of system components, and inspection of wiring harnesses for chafing, burning, defective insulation, heat deterioration, and security.
Section 6. Troubleshooting information: Refer to the installation manual listed above.
Section 7. Removal and Replacement information: Refer to installation manual listed above.
Section 8. Diagrams: Refer to installation manual listed above.
Section 9. Special inspection requirements: N/A.
Section 10. Application of protective treatments: N/A.
Section 11. Data: See above.
Section 12. List of special tools: Listed in manual referenced above.
Section 13. For commuter category aircraft only: N/A.
Section 14. Recommended overhaul periods: N/A.
Section 15. Airworthiness limitations: No additional airworthiness limitations.
Section 16. Revision: If it becomes necessary to revise this Form 337 ICA, a letter will need to be submitted to your local FSDO with a copy of the revised FAA form 337 and revised ICA.

----------END----------

☐ Additional Sheets Are Attached

U.S.GPO:1989-0-663-171

Installation Center: Intermountain Aerospace
Repair Station #: Q15R146N
Address: 1940 International Way
Idaho Falls, ID. 83402

FAA APPROVED FLIGHT MANUAL SUPPLEMENT
GARMIN GNS 530 VHF COMMUNICATIONS TRANSCEIVER / VOR/ILS RECEIVER / GPS RECEIVER

AIRCRAFT MAKE: Cessna

AIRCRAFT MODEL: TU206G

AIRCRAFT SERIAL NO.: U20606282

REGISTRATION NO: N6461Z

SOFTWARE VERSION: 4.00

This Supplement must be attached to the FAA approved Flight Manual for the Cessna, model TU206G, part number D1025-13-rand-200, dated Sep., 1975, or later approved version when the Garmin GNS 530 system is installed in accordance with FAA form 337 dated _____, and Garmin GNS 530 installation manual part number 190-00140-02 Rev. G dated April, 2003.

The Information contained herein supplements or supersedes the basic Airplane Flight Manual for the Cessna, model TU206G, manual number D1025-13-rand-200 dated Sep. 1975 only in those areas listed herein. For limitations, procedures, and performance information not contained in this document, consult the basic Airplane Flight Manual.

FAA APPROVED: _____.

Richard L. Jeffs
Aviation Safety Inspector
1020 North Flyer Way
City: Salt Lake City State: UT 84116

DATE: 13 OCT 2004

Aircraft Make: Cessna
Aircraft Model: TU206G
Aircraft Registration #: N6461Z
Aircraft Serial Number: U20606282

GARMIN GNS 530 VHF Communications
Transceiver / VOR/ILS Receiver / GPS Receiver

Table of Contents

Aircraft Make: Cessna
Aircraft Model: TU206G
Aircraft Registration #: N6461Z
Aircraft Serial Number: U20606282

GARMIN GNS 530 VHF Communications
Transceiver / VOR/ILS Receiver / GPS Receiver

SECTION I
GENERAL

1. The GNS 530 System is a fully integrated, panel mounted instrument, which contains a VHF Communications Transceiver, a VOR/ILS receiver, and a Global Positioning System (GPS) Navigation computer. The system consists of a GPS antenna, GPS Receiver, VHF VOR/LOC/GS antenna, VOR/ILS receiver, VHF COMM antenna and a VHF Communications Transceiver. The primary function of the VHF Communication portion of the equipment is to facilitate communication with Air Traffic Control. The primary function of the VOR/ILS Receiver portion of the equipment is to receive and demodulate VOR, Localizer, and Glide Slope signals. The primary function of the GPS portion of the system is to acquire signals from the GPS system satellites, recover orbital data, make range and Doppler measurements, and process this information in real-time to obtain the user's position, velocity, and time.

2. Provided the GARMIN GNS 530's GPS receiver is receiving adequate usable signals, it has been demonstrated capable of and has been shown to meet the accuracy specifications for:

   - VFR/IFR enroute, terminal, and non-precision instrument approach (GPS, Loran-C, VOR, VOR-DME, TACAN, NDB, NDB-DME, RNAV) operation within the U.S. National Airspace System in accordance with AC 20-138.

   - One of the approved sensors, for a single or dual GNS 530 installation, for North Atlantic Minimum Navigation Performance Specification (MNPS) Airspace in accordance with AC 91-49 and AC 120-33.

   - The system meets RNP5 airspace (BRNAV) requirements of AC 90-96 and in accordance with AC 20-138, and JAA AMJ 20X2 Leaflet 2 Revision 1, provided it is receiving usable navigation information from the GPS receiver.

   - The equipment as installed has been found to comply with the requirements for GPS primary means of navigation in oceanic and remote airspace, when used in conjunction with the 500 Series Trainer Program incorporating the FDE Prediction Program. This does not constitute an operational approval.

   Navigation is accomplished using the WGS-84 (NAD-83) coordinate reference datum. Navigation data is based upon use of only the Global Positioning System (GPS) operated by the United States of America.

SECTION II
LIMITATIONS

1. The GARMIN GNS 530 Pilot's Guide, P/N 190-00181-00, Rev. C, dated April 2003 or later appropriate revision must be immediately available to the flight crew whenever navigation is predicated on the use of the system. In addition to the Pilot's Guide, the appropriate Pilot's Guide Addendum also must be immediately available to the flight crew if primary means oceanic/remote navigation is conducted.

2. The GNS 530 must utilize the following or later FAA approved software versions:

Function	Sub-System Version				
	Main	GPS	COM	VOR/LOC	G/S
Initial Approval	2.00	2.00	1.22	1.25	2.00
Traffic / Weather Interface	2.00	2.00	1.22	1.25	2.00
Primary Oceanic/Remote	3.00	3.00	1.22	1.25	2.00
TIS Interface	4.00	2.00	1.22	1.25	2.00

   The Main software version is displayed on the GNS 530 self test page immediately after turn-on for 5 seconds. The remaining system software versions can be verified on the AUX group sub-page 2, "Software / Database Versions".

3. IFR enroute and terminal navigation predicated upon the GNS 530's GPS Receiver is prohibited unless the pilot verifies the currency of the database or verifies each selected waypoint for accuracy by reference to current approved data.

4. Instrument approach navigation predicated upon the GNS 530's GPS Receiver must be accomplished in accordance with approved instrument approach procedures that are retrieved from the GPS equipment database. The GPS equipment database must incorporate the current update cycle.

   (a) Instrument approaches utilizing the GPS receiver must be conducted in the approach mode and Receiver Autonomous Integrity Monitoring (RAIM) must be available at the Final Approach Fix.

   (b) Accomplishment of ILS, LOC, LOC-BC, LDA, SDF, MLS or any other type of approach not approved for GPS overlay with the GNS 530's GPS receiver is not authorized.

SECTION II
LIMITATIONS (CONT.)

(c) Use of the GNS 530 VOR/ILS receiver to fly approaches not approved for GPS requires VOR/ILS navigation data to be present on the Pilot's HSI.

(d) When an alternate airport is required by the applicable operating rules, it must be served by an approach based on other than GPS or Loran-C navigation, the aircraft must have the operational equipment capable of using that navigation aid, and the required navigation aid must be operational.

(e) VNAV information may be utilized for advisory information only. Use of VNAV information for Instrument Approach Procedures does not guarantee Step-Down Fix altitude protection, or arrival at approach minimums in normal position to land.

5. If not previously defined, the following default settings must be made in the "SETUP" menu of the GNS 530 prior to operation (refer to Pilot's Guide for procedure if necessary):

(a) **dis, spd** ..... $^{n}_{m}$ $^{k}_{t}$ (sets navigation units to "nautical miles" and "knots")
(b) **alt, vs** ..... $^{f}_{t}$ fpm (sets altitude units to "feet" and "feet per minute")
© **map datum** .. WGS 84 (sets map datum to WGS-84, see note below)
(d) **posn** ..... deg-min (sets navigation grid units to decimal minutes)

NOTE: In some areas outside the United States, datums other than WGS-84 or NAD-83 may be used. If the GNS 530 is authorized for use by the appropriate Airworthiness authority, the required geodetic datum must be set in the GNS 530 prior to its use for navigation.

SECTION III
EMERGENCY PROCEDURES

ABNORMAL PROCEDURES

1. If GARMIN GNS 530 navigation information is not available or invalid, utilize remaining operational navigation equipment as required.

2. If "RAIM POSITION WARNING" message is displayed the system will flag and no longer provide GPS based navigational guidance. The crew should revert to the GNS 530 VOR/ILS receiver or an alternate means of navigation other than the GNS 530's GPS Receiver.

SECTION III
EMERGENCY PROCEDURES (CONT.)

3. If "RAIM IS NOT AVAILABLE" message is displayed in the enroute, terminal, or initial approach phase of flight, continue to navigate using the GPS equipment or revert to an alternate means of navigation other than the GNS 530's GPS receiver appropriate to the route and phase of flight. When continuing to use GPS navigation, position must be verified every 15 minutes using the GNS 530's VOR/ILS receiver or another IFR-approved navigation system.

4. If "RAIM IS NOT AVAILABLE" message is displayed while on the final approach segment, GPS based navigation will continue for up to 5 minutes with approach CDI sensitivity (0.3 nautical mile). After 5 minutes the system will flag and no longer provide course guidance with approach sensitivity. Missed approach course guidance may still be available with 1 nautical mile CDI sensitivity by executing the missed approach.

5. In an in-flight emergency, depressing and holding the Comm transfer button for 2 seconds will select the emergency frequency of 121.500 Mhz into the "Active" frequency window.

SECTION IV
NORMAL PROCEDURES

1. DETAILED OPERATING PROCEDURES

   Normal operating procedures are described in the GARMIN GNS 530 Pilot's Guide, P/N 190-00181-00, Rev. C, dated April 2003 or later appropriate revision.

2. PILOT'S DISPLAY

   The GNS 530 System data will appear on the Pilot's HSI. The source of data is either GPS or VLOC as annunciated on the display above the CDI key.

   NOTE: It is the pilot's responsibility to assure that published or assigned procedures are correctly complied with. Course guidance is not provided for all possible ARINC 424 leg types. See the GNS 530 Pilot's Guide for detailed operating procedures regarding navigation capabilities for specific ARINC 424 leg types.

SECTION IV
NORMAL PROCEDURES (CONT.)

3. AUTOPILOT OPERATION

Coupling of the GNS 530 System steering information to the autopilot can be accomplished by engaging the autopilot in the NAV mode.

When the autopilot system is using course information supplied by the GNS 530 System and the course pointer is not automatically driven to the desired track, the course pointer on the HSI must be manually set to the desired track (DTK) indicated by the GNS 530. For detailed autopilot operational instructions, refer to the FAA Approved Flight Manual Supplement for the autopilot.

4. CROSSFILL OPERATIONS

For dual GNC 500 Product Series or GNC 500/GNC 400 Product Series installations, crossfill capabilities exist between the number one and number two Systems. Refer to the GARMIN GNS 530 Pilot's Guide for detailed crossfill operating instructions.

5. AUTOMATIC LOCALIZER COURSE CAPTURE

By default, the GNS 530 automatic localizer course capture feature is enabled. This feature provides a method for system navigation data present on the Pilot's HSI and the Co-Pilot's course deviation indicator (CDI) to be switched automatically from GPS guidance to localizer / glide slope guidance as the aircraft approaches the localizer course inbound to the final approach fix. If an offset from the final approach course is being flown, it is possible that the automatic switch from GPS course guidance to localizer / glide slope course guidance will not occur. It is the pilot's responsibility to ensure correct system navigation data is present on the Pilot's HSI and the Co-Pilot's CDI before continuing a localizer based approach beyond the final approach fix. Refer to the GNS 530 Pilot's Guide for detailed operating instructions.

6. DISPLAY OF LIGHTNING STRIKE DATA

For installations that interface the BFGoodrich WX-500 Stormscope and the GNS 530, lightning strike data detected by the WX-500 will appear on the GNS 530. For detailed operating instructions regarding the interface of the GNS 530 with the WX-500, refer to the WX-500 Pilot's Guide and the GNS 530 Pilot's Guide for the WX-500 Stormscope interface.

SECTION IV
NORMAL PROCEDURES (CONT.)

7. DISPLAY OF TRAFFIC ADVISORY DATA

For installations that interface a Traffic Advisory System (TAS) and the GNS 530, traffic data detected by the TAS will appear on the GNS 530. For detailed operating instructions regarding the interface of the GNS 530 with the TAS, refer to the FAA Approved Flight Manual Supplement for the TAS, the Pilot's Guide for the TAS and the GNS 530 Pilot's Guide.

8. DISPLAY OF TRAFFIC INFORMATION SERVICE DATA

If interfaced, TIS surveillance data uplink by Air Traffic Control (ATC) radar through the GTX 330 Mode S Transponder will appear on the moving map and traffic display pages of the GNS 530. For detailed operating instructions regarding the interface of the GNS 530 with the GTX 330, refer to the GNS 530 Pilot's Guide Addendum for the TIS System interface.

SECTION V
PERFORMANCE

No change.

SECTION VI
WEIGHT AND BALANCE

See current weight and balance data.

SECTION VII
AIRPLANE & SYSTEM DESCRIPTIONS

See GNS 530 Pilot's Guide for a complete description of the GNS 530 system.

U.S 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 1958)

1. Aircraft	Make: Cessna	Model: TU206G
	Serial No.: U20606282	Nationality and Registration Mark: N6461Z
2. Owner	Name *(As shown on registration certificate)*: Brown Reno A.	Address *(As shown on registration certificate)*: PO Box 4958 Jackson, WY. 83001-4958

3. For FAA Use Only

The technical data identified herein has been found to comply with applicable airworthiness requirements and is hereby approved for use only on the above described aircraft, subject to conformity inspection by a person in § 43.7.

~~Inspector, NM FSDO-07~~ 18 FEB 2004 ~~Date~~

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	5. Repair	5. Alteration
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	C. Certificate No.
Intermountain Aerospace 1940 International Way Idaho Falls, Idaho 83402	☐ U.S. Certified Mechanic ☐ Foreign Certified Mechanic ☒ Certified Repair Station ☐ Manufacturer	QI5R146N Radio 1, 2, 3, Accy. 3 Limited Instruments

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
11/13/03	E. L. Andrews

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	☐	Inspection Authorization	Other *(Specify)*
☐	FAA Designee	☒	Repair Station	☐	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
2/20/04	QI5R146N	

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.)

1. N-6461Z, SN U20606282: Removed KMA24 MB/Audio Panel, a Trimble 2000 Approach Plus GPS, a Bendix/King KX155 Com/Nav from the center radio stack at station 14. Also removed an Eventide Argus 5000 Moving Map from the pilot's instrument panel station 14. Removed a PMA 3000 ICS from the co-pilot's instrument panel located at station 14 and removed a GPS antenna at station 36.

2. Installed a Garmin model GNS530 COMM/NAV/ILS/GPS, **software level 4.00**, a Garmin GMA 340 ICS/MB/Audio Panel into the radio stack at station 14. Installed the Bendix/King KI 227 ADF indicator into the pilot's instrument panel, station 14.

3. The ICS/MB/Audio Panel GMA 340 is located as the top unit in the radio stack, followed by the GNS 530 com/nav/ils/gps. The KI 227 was installed into the hole vacated by the Argus 5000 in the pilot's instrument panel station 14. The Garmin GA 56 GPS antenna was installed using the same footprint and doubler as a previously removed GPS antenna. Used existing MB and Com antenna and coaxial cable.

4. A. All materials and methods of installation are in accordance with AC 43.13-1B chapter 7, 10, 11; AC 43.13-2A chapters 1, 2 and 3, paragraph 36, 38b(3), and 39b, also the GNS 530 installation manual part number 190-00181-02, revision G, dated May 2003, GMA 340 installation manual part number 190-00149-01 revision L, dated July 2003, and the KR 87 installation manual number 006-00184-0005 revision 5 dated Dec. 1996.

1) The Radios get their power from the avionics master buss.

B. Circuit protection was installed using circuit breaker, Potter/Brumfield P/N W58XC4C12A-5 for the GNS 530 comm, -5 for the GNS530 gps, and -3 for GMA 340 ics/mb/audio panel, and were installed into the circuit breaker panel located at sta 14 and connected to the avionics buss and placarded "Nav/Com #1", "GPS", and "Audio/ICS/MB".

C. All wiring supplied in this installation is MIL-22759/16 type ET with extruded TFE Teflon insulation. Used existing RF transmission lines. The KI 227 ADF indicator was interfaced to the existing KR 87 ADF.

D. The GNS 530 GPS was previously approved under **Supplemental Type Certificate SA00864WI**.

E. The Garmin GPS GNS 530 is limited to **VFR USE ONLY**. The GNS 530 was installed and interfaced into the Bendix/King KI 525A HSI. The aircraft was ground and flight evaluated in accordance with, and conforms to AC20-138 section 7.c. (2). A placard was installed onto the instrument panel, which states **"GPS LIMITED TO VFR USE ONLY"**.

5. Verified altitude reporting integrity was not jeopardized by connecting to the grey code output of the blind encoder to the GNS530.

6. Electrical load limit check in accordance with AC 43.13-2A chapter 2, section 27d, and is within the limits.

7. The weight and balance section of the aircraft manual was revised, and the equipment list updated.

8. This installation conforms to 14 CFR 23 subpart F. These systems operate per their manufacturers operating limitations with no adverse effects on the aircraft, its systems, or other installed equipment.

9. Placed the Garmin GNS 530 Pilot's Guide P/N 190-00181-00 rev. C dated April 2003 in the aircraft.

10. **Instructions for Continued Airworthiness**

Section 1. Introduction: see above

Section 2. Description: COM, ICS and Audio panel for communications, NAV, MB, ADF and GPS for navigation

Section 3.Control, operation information: Refer to the installation manuals and pilot's guide listed above.

Section 4. Service information: To be serviced by manufacture or properly certificated repair station or mechanic.

Section 5. Maintenance instructions: Continued airworthiness for the above mentioned equipment is contingent upon compliance with practices detailed in AC 43.13-1B Chapter 12 and the accomplishment of the post installation requirements for the above mentioned equipment as contained in the installation manuals (referenced above) at each annual/100 hr inspection, not to exceed 24 months, or upon removal and replacement of any system component. This includes system functional check and security of system components, security, chafing, burning, defective insulation, loose or broken terminals, heat deterioration and corroded terminals.

☒ Additional Sheets Are Attached

U.S.GPO:1989-0-663-171

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.)

N6461Z, S/N U20606282:

9. **Instructions for Continued Airworthiness (cont.)**

Section 6. Trouble shooting information: Listed in installation manuals referenced above.

Section 7. Removal and replacement information: Com/GPS and GMA 340 requires a 3/32 allen wrench, KI 227 requires a #2 phillips sqrew driver.

Section 8. Diagrams: Listed in installation manuals referenced above.

Section 9. Special inspection requirments: N/A

Section 10. Application of protective treatments: N/A.

Section 11. Data: See above.

Section 12. List of special tools: N/A.

Section 13. For commuter category aircraft: N/A.

Section 14. Recommended overhaul periods: N/A.

Section 15. Airworthiness limitations: N/A.

Section 16. Revision: If it becomes necessary to revise the Form 337 ICA, a letter will need to be submitted to your local FSDO with a copy of the revised FAA form 337 and revised ICA.

----------END----------

☐ Additional Sheets Are Attached

U.S.GPO:1989-0-663-171

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 violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make: CESSNA	Model: TU206G
	Serial No.: U20606282	Nationality and Registration Mark: N9861Z
2. Owner	Name *(As shown on registration certificate)*: Mission Aviation Fellowship	Address *(As shown on registration certificate)*: P O Box 3202, Redlands, CA 92373-0998

3. For FAA Use Only

4. Unit Identification / **5. Type**

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
Moody Aviation P.O.Box 429 Elizabethton, TN 37644-0429		U.S. Certificated Mechanic	DVPR374D Limited Airframe
		Foreign Certificated Mechanic	
	X	Certified 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
January 16, 2003	James M. Childers

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		Inspection Authorization	Other *(Specify)*
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
January 16, 2003	DVPR374D Limited Airframe	James M. Childers

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA3694NM

This certificate, issued to Rosen Product Development Inc.

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 3 *of the* Civil Air Regulations.

Original Product — Type Certificate Number: A4CE

Make: Cessna

Model: 206

Description of Type Design Change: Cockpit Sun Visor installation in accordance with FAA-approved Rosen Drawing List Number RCS-00DL, dated December 17, 1986, or later FAA-approved revisions.

Limitations and Conditions: The approval of this change in type design applies basically to the above aircraft model only. This approval should not be extended to other aircraft of this model on which previously approved modifications are incorporated, unless it is determined that the interrelationship between this change and any other previously approved modifications will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate and FAA-approved Drawing List Number RCS-00DL shall be maintained as part of the permanent records of the modified aircraft.

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: January 23, 1987

Date of issuance: February 12, 1987

Date reissued:

Date amended:

By direction of the Administrator

D. L. Riggs
(Signature)

Assistant Manager, Seattle Aircraft Certification Office, ANM-100S
(Title)

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

FAA Form 8110-2 (10-68)

This certificate may be transferred in accordance with FAR 21.47.

ROSEN PRODUCT
DEVELOPMENT INC.

Eugene, OR 97402/USA/Phone 541 342 2032

Rosen NSA Sunvisor System
For Single Engine Cessnas*

DRAWING LIST

RCS-00 DL

Drawing #	Description	Sheet #	Rev Level	DCN #'s
RCS-100	Mounting Brackets	1	---	---
RCS-100 PL	Lens & Brackets	2	---	---
	Parts List	1		
RNSA-100	Slides & Swivels	1	---	---
RNSA-100 PL	Parts List	1	---	---
RCS-300	Assembly Drawing			
	(-1 System)	1	---	---
	(-2 System)	2	---	---
	(-3 System)	3	---	---
	(-4 System)	4	---	---
RCS-300 PL	Parts List			

December 17, 1986

* Except 177

AC

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 violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make: Cessna	Model: TU206G
	Serial No.: U206-06282	Nationality and Registration Mark: USA N6461Z
2. Owner	Name *(As shown on registration certificate)*: Columbia Aviation, INC	Address *(As shown on registration certificate)*: 5401 Kingston Pike, Suite 190, Knoxville TN 37919

3. For FAA Use Only

"The data identified herein complies with 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."

JUN 3 0 1998
DATE

SIGNATURE OF FAA INSPECTOR

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
MOODY AVIATION P.O. BOX 429 ELIZABETHTON, TN 37643		U.S. Certificated Mechanic	DVPR374D
		Foreign Certificated Mechanic	LIMITED AIRFRAME
	X	Certified Repair Station	LIMITED RADIO
		Manufacturer	LIMITED INST - PANEL FABRICATION

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: 11-6-98

Signature of Authorized Individual: C Bedford
Cecil Bedford

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

	FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	Other *(Specify)*
	FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
11-6-98	DVPR374D	C Bedford Cecil Bedford

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.)

Reg: N6461Z
S/N: U206 - 06282
Date: 11-06-98
IPRGPS.337

GPS IFR CERTIFICATION ENROUTE, TERMINAL & APPROACH

I. Installation completed previously and field approved on 2-22-98. This is for follow on IFR approval only. Reference STC# SA09005SC for initial approvals.

II. GPS Installation Compliance with AC20.138, Section 8,- '... used under Instrument Flight Rules (IFR) ' (b). - Airworthiness Considerations.

a. **System Integrity and Software**
- The flight check of the installation indicates normal accuracy for this installation as per the attached flight check sheet.
  i. Hardware compliance has been accomplished by the manufacturer.
  ii. Software compliance has been accomplished by the manufacturer.

b. **Location of Display**
- The 2000 APPROACH panel unit is mounted in the primary radio rack, and is in a position that the pilot can easily manipulate system controls. The nav 1 indicator, (shared indicator) is in the pilot's instrument panel, and in full view of the pilot.
- Annunciator lights /Switches are integral in the MD41 annunciation control unit which is mounted below the HSI.

c. **Failure Protection**
- Failure of the 2000 APPROACH system will not cause failure of any other aircraft system. In addition, operation of the 2000 APPROACH system does not adversely affect the operation of any other aircraft system.

d. **Environmental Conditions**
- The 2000 APPROACH receiver, mounted in the radio stack, is being operated within its environmental specification. The antenna, mounted outside of the cabin, also operates within its environmental specification.

☒ Additional Sheets are Attached

e. **Electromagnetic Interference**
- The 2000 APPROACH receiver does not cause objectional electromagnetic or other types of interference with existing aircraft or avionics systems, nor is it adversely affected by other aircraft systems. There is no SATCOM equipment in the aircraft. Filters, Ted P/N 4-70-54, installed in VHF Comm antenna leads to reduce harmonic interference to the GPS.

f. **Anti-Ice Protection**
- The aircraft is not approved for flight into known icing, no additional precautions have been taken for the antenna installation.

g. **System Controls, Displays and Annunciators**
- All displays and controls are visible in normal lighting conditions in the Aircraft. Annunciator dimming is photo cell controlled. The 2000 APPROACH display is also controlled by a photo cell. Additionally, components are mounted such that the crew cannot inadvertently turn the system off.

h. **Navigation Data Base**
- The 2000 APPROACH incorporates a pilot updatable data base containing the appropriate information. User modification of the fixed database is not possible but user defined way points are possible.

i. **Pressure / Barometric Altitude Inputs**
- The GPS is interfaced with an ADC200 air data computer system. IFR Navigation is approved for enroute, terminal and approach. (TSO C129 A1)

j. **Manufacturers Instructions**
- All equipment was installed with reference to the appropriate manufacturers installation manuals.

III. Installation Compliance with AC20.138, Section 8,- (2)... 'Follow on IFR Airworthiness Installation Approvals'

a. **Navigation Continuity**
- Normal data is available through out 30° banked turns to the left and right. See attached data sheet.
- Enroute accuracy and ground position accuracy are within acceptable limits. See attached sheet for details.

b. **Approach considerations**
- Three approaches were flown as indicated on the attached data sheet. Operation was normal during the approach phases of the GPS operation.

III. **GENERAL**

a. Flight data check sheet attached.

b. FMS for 2000 APPROACH previously approved and installed.

c. Placard states

'TRIMBLE 2000 APPROACH approved for enroute, terminal and approach operations'

d. Initial IFR certification granted on STC# SA09005SC

d. All work performed on Moody Aviation RS# DVPR374D Work order # 84033

---------- END ----------

FLIGHT CHECK DATA FOR GPS IFR CERTIFICATION:

Mfg. TRIMBLE Model. 2000 APPROACH
Software Version -0240B
IFR/STC # SA9005SC
A/C Reg # N6461Z S/N # U206 - 06282

Route Selection

Elizabethton Airport	.....	(0A9)
Holston Mt VOR	.....	(HMV)
Approach to Abingdon (VOR/DME overlay)		
Abingdon Airport	.....	(VJI)
Glade Springs VOR	.....	(GZG)
Rogersville Airport	.....	(RVN)
Approach to Tri City (NDB 5 overlay)		
Tri City Airport) Airport	.....	(TRI)
Approach to Tri City (NDB 23 overlay)		
Holston Mt VOR	.....	(HMV)
Elizabethton Airport	.....	(0A9)

Flight Check Date
10/26/1998

Flight Test Data
Pilot - Gleason - 264906727 (CFI) (with certificate number & type)
Observer - Tierney - 215629359 (CFI) (with certificate number & type)

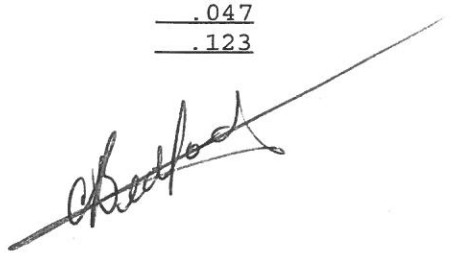
Start Time - 10:0 Local Lock on time GPS 10:41:03 Time dif 63 sec

Test Facility	GPS Reading	Actual Facility	Difference
HMV	N 36°26'205	36°26'2	.005
	W 082°07'735	082°07'8	.065
TK 033°			
Approach VJI VOR/DME	System performance (Location on A/P)		℄ at Center of runway
VJI (Survey Point)	N 36°41'275	36°41'2	.075
	W 082°01'903	082°02'0	.097
TK 021°			
GZG	N 36°49'515	36°49'5	.015
	W 082°04'684	082°04'8	.116
TK 349°			

30° Bank 360° turns left System performance Normal
30° Bank 360° turns right System performance Normal
Next Leg (GZG D> RVN) Flown Auto Pilot Good

RVN	N 36°27'435	36°27'5	.065
	W 082°53'245	082°53'1	.145
TK 243°			
Approach TRI NDB 5	System performance (Location on A/P)		℄ over threshold 5
TRI (Survey Point)	N 36°28'455	36°28'5	.045
	W 082°24'542	082°24'5	.042
Approach TRI NDB 23	System performance (Location on A/P)		℄ over threshold
HMV	N 36°26'227	36°26'2	.027
	W 082°07'782	082°07'8	.018
TK 097°			
0A9	N 36°22'253	36°22'3	.047
	W 082°10'523	082°10'4	.123

End Time - 12:15 Local



A/C

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: Cessna	Model: TU206G
	Serial No.: U20606181	Nationality and Registration Mark: N6461Z USA
2. Owner	Name *(As shown on registration certificate)*: Columbia Aviation, Inc.	Address *(As shown on registration certificate)*: 5401 Kingston Pike, Suite 190 Knoxville, TN 37919

3. For FAA Use Only

4. Unit Identification / **5. Type**

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
Moody Aviation P. O. Box 429 Elizabethton, TN 37644-0429		U.S. Certificated Mechanic	Limited Airframe DVPR374D
		Foreign Certificated Mechanic	
	X	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
October 15, 1998	Michael C. Dunkley *Michael C. Dunkley*

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							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
October 16, 1998	DVPR374D	Michael C. Dunkley *Michael C. Dunkley*

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.)

Cessna U206G
S/N 20606282
Reg No. N6461Z

REMOVAL OF GENERAL AVIATION MODIFICATIONS, INC. TURBO GAMIJECTORS

Removed:

General Aviation Modifications, Inc. turbo GAMIjectors Kit No. GT14C, S/N 4128, installed in accordance with STC SE09289SC, PMA No. PQ821SW, and turbo GAMIjector Installation Procedure No. IP-97-002 (Rev 002) dated February 6, 1997.

Installed:

New engine with original TCM fuel nozzles. No change to weight and balance. All work accomplished under Moody Aviation work order # 93018.

----------END----------

☐ Additional Sheets Are Attached

☆U.S. GOVERNMENT PRINTING OFFICE: 1992-769-012/60157

A/C

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 violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make: Cessna	Model: TU206G
	Serial No.: U206-06282	Nationality and Registration Mark: USA N6461Z
2. Owner	Name *(As shown on registration certificate)*: Columbia Aviation, INC	Address *(As shown on registration certificate)*: 5401 Kingston Pike, Suite 190, Knoxville TN 37919

3. For FAA Use Only

"The data identified herein complies with 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."

9-2-98
DATE

SIGNATURE OF FAA INSPECTOR

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~~~~~~ (As described in Item 1 above) ~~~~~~~~~~				XXX
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
MOODY AVIATION P.O. BOX 429 ELIZABETHTON, TN 37643		U.S. Certificated Mechanic	DVPR374D
		Foreign Certificated Mechanic	LIMITED AIRFRAME
	X	Certified Repair Station	LIMITED RADIO
		Manufacturer	LIMITED INST - PANEL FABRICATION

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
9-4-98	Cecil Bedford

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		Inspection Authorization	Other *(Specify)*
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
9-4-98	DVPR374D	Cecil Bedford

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.)

Reg: N6461Z
S/N: U206-06282
Date: 9-4-98

Whelen Flasher Installation

1. Removed Original Cessna flashing beacon complete with power supply and load resistor.
2. Installed Whelen model 70509 Flasher, TSO C96A, as per installation guide form # 13215B.
   a. Connected power leads from new flasher unit to the existing power leads from the original flasher unit.
   b. Installed light assembly in the standard position on top ot the vertical fin.
   c. Verified that there is no interference with existing avionics equipment. Operational checks normal.
3. General
   a. All work done as per installation guide form # 13215B.
   b. No change to weight and balance.
   c. Equipment list updated.
   d. Work performed on Moody Aviation RS# DVPR374D work order number 84033

---------- END ----------

☐ Additional Sheets are Attached

A/C

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 violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make: Cessna	Model: TU206G
	Serial No.: U206-06282	Nationality and Registration Mark: USA N6461Z
2. Owner	Name *(As shown on registration certificate)*: Columbia Aviation, INC	Address *(As shown on registration certificate)*: 5401 Kingston Pike, Suite 190, Knoxville TN 37919

3. For FAA Use Only

"The data identified herein complies with 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."

8-26-98
DATE

SIGNATURE OF FAA INSPECTOR

4. Unit Identification / **5. Type**

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
MOODY AVIATION P.O. BOX 429 ELIZABETHTON, TN 37643		U.S. Certificated Mechanic	DVPR374D
		Foreign Certificated Mechanic	LIMITED AIRFRAME
	X	Certified Repair Station	LIMITED RADIO
		Manufacturer	LIMITED INST - PANEL FABRICATION

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
8-26-98	Cecil Bedford

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

	FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	Other *(Specify)*	
	FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group		

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
8-26-98	DVPR374D	Cecil Bedford

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.)

Reg: N6461Z
S/N: U206-06282
Date: 8-26-98 CB

ARGUS 5000CE Moving Map System Installation

1. Installed Argus 5000 CE moving map in left instrument panel, right side, second position down below the electric attitude indicator.
   a. Installed using Argus reference manual Part #141000, dated Nov. 1996.
   b. Unit mounted in right side of left instrument panel, above the KI209 nav indicator. Used the Argus supplied mounting clamp and standard AN hardware.
   c. Interfaced with Trimble 2000 Approach + GPS receiver/processor, KI525A HSI, KR87 ADF, MD26-28 400Hz AC inverter, BF Goodrich WX500 Storm Scope processor and panel mounted "select" & "info" switches. Appropriate installation manuals referenced for each interconnect.
   d. Reference made to STC# SA00545NY for certification and approvals.
   e. Flight Manual Supplement compiled from Eventide supplied document and submitted for approval.

2. General
   a. All wire meets Mil-w-22759 or equivalent and is installed with reference to AC43.13-1A, Ch. 11, Section 2, Par 424, Par 424(a), and Par 426(e). Section 3 Figure 11.5, Par 446, Par 448, Section 5, Par 478. and Section 7, Par 514 - 519.
   b. Instrument mounting done with reference to AC43.13-2A, Ch. 11, Sect. 213 Paragraphs (a-b). and supplied installation instructions.
   c. Weight and balance updated.
   d. Equipment list updated.
   e. Work performed on Moody Aviation RS# DVPR374D work order number 84033

---------- END ----------

☐ Additional Sheets are Attached

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA00545NY

This certificate issued to Eventide Inc.
One Alsan Way
Little Ferry, NJ 07643

certifies that the change in the type design for the following product with the limitations and conditions thereto as specified hereon meets the airworthiness requirements of Part 3/23 of the Civil Air/ Federal Aviation Regulations.

Original Product — Type Certificate Number 3A12
Make Cessna Aircraft Company
Model 172N

Description of Type Design Change:

Installation of an Argus 5000/CE Moving Map Display in accordance with Eventide Avionics Div., Dwg. No.140001, Rev. 1, dated October 7, 1996.

Limitations and Conditions:

1. The Eventide Avionics, Airplane Flight Manual Supplement, Doc. No. 143000, Rev. N/A, for the Cessna Model C-172N, FAA approved January 14, 1997 is required with this modification.

(See STC Continuation Sheet Page 2)

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: September 5, 1996
Date of issuance: January 14, 1997

Date revised:
Date amended:

By direction of the Administrator

Michele J. Maurer
(Signature)

Michele J. Maurer
Manager, Systems & Flight Test Branch
New York Aircraft Certification Office
(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

A/C

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 violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make: Cessna	Model: TU206G
	Serial No.: U206-06282	Nationality and Registration Mark: USA N6461Z
2. Owner	Name *(As shown on registration certificate)*: Columbia Aviation, INC	Address *(As shown on registration certificate)*: 5401 Kingston Pike, Suite 190, Knoxville TN 37919

3. For FAA Use Only

"The data identified herein complies with 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."

JUL 1 1998
DATE

SIGNATURE OF FAA INSPECTOR

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~~~~~~ *(As described in Item 1 above)* ~~~~~~~~~~				XXX
PLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
MOODY AVIATION P.O. BOX 429 ELIZABETHTON, TN 37643		U.S. Certificated Mechanic	DVPR374D
		Foreign Certificated Mechanic	LIMITED AIRFRAME
	X	Certified Repair Station	LIMITED RADIO
		Manufacturer	LIMITED INST - PANEL FABRICATION

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
8-23-98	Cecil Bedford

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		Inspection Authorization	Other *(Specify)*
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
8-23-98	DVPR374D	Cecil Bedford

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.)

Reg: N6461Z
S/N: U206-06282
Date: 8-23-98 CB

Installation

1. Removed:
   a. EL panels from switch and flap control areas, 400Hz inverter for panel supply voltage.
   b. DME and Transponder antennas from rearward belly of aircraft.
   c. Battery operated clock
   d. Shadin MiniFlow fuel flow system with associated wiring and transducer.
      i. Panel mounted indicator from right instrument panel
      ii. Fuel flow transducer from the engine backbone.
   e. DVOR from the right instrument panel
   f. Sigtronics SPA400 ICS system, intercom box from right panel, jacks and harness from aircraft.
   g. WX10 Storm scope system
      i. Panel mounted indicator from the left instrument panel.
      ii. Processor from rear radio rack.
      iii. Antenna sensor from rear belly.
   h. All avionics wiring and circuit breakers
   i. Glare shield lighting.
   j. CI 105 Glide slope antenna from top of A/C at station # 38. Patched holes using flush patches.
   k. CI 505 nav antenna splitter
   l. KI227 ADF indicator from right instrument panel.
   m. Avionics shelf from tail cone.

2. Fabricated
   a. New wiring harness for complete radio stack, including the existing equipment - KMA24 Audio panel, Ryan ATS8000 TCAD, Dual KX155 Nav/Comms, KN72 Nav converter, KI209 secondary nav indicator, KR87 ADF, KT79 Transponder, KN62 DME, KCS55A compass system and SSD120-30 blind encoder. Reference made to the appropriate manufactures installation manuals for interconnects. All wire meets Mil-w-22759 or equivalent
   b. Emergency Buss switching block to allow isolation of critical avionics equipment. Fabricated using Cessna split buss relay P/N1917-2, in conjunction with 1N1188A 30 Amp, heat sync mounted.

☒ Additional Sheets are Attached

c. New radio rack side rail on the left side from .050 Alclad. Original rail used as fabrication template.

3. Re-racked the following original equipment,
   a. In center radio rack
      i. KMA24 Audio Panel top of stack
      ii. ATS8000 Ryan TCAD in third stack position.
         (1) Interfaced with previously installed couplers and antennas as well as existing KT79 transponder and SSD120-30 encoder.
      iii. #1 KX155 Nav/Comm in the fourth position.
         (1) Interfaced with existing KN72 Nav converter, KN62 DME, KCS55A compass system and newly installed MD41-624 switch/annunciator panel (TSO C129)
      iv. #2 KX155 Nav/Comm in the fifth position.
         (1) Interfaced with existing KI209 nav indicator and KN62 DME.
      v. KR87 ADF in the sixth position
         (1) Interfaced with original KA44B antenna and newly installed Argus 5000CE moving Map.
      vi. KT79 Transponder in the seventh position.
         (1) Interfaced with original SSD120-30 Transcal blind encoder, Ryan ATS8000 TCAD and newly installed STec Altitude preselect. KA60 antenna remounted on belly, right side at station #43
   b. In the right side Instrument panel
      i. KN62 DME
         (1) Interfaced with existing KX155 Nav/Comms and antenna.
         (2) KA60 antenna remounted on belly, left side at station # 76
4. Installed the following:
   a. In the right Instrument panel
      i. PM3000 PS Engineering interphone system.
         (1) PM3000 ICS was installed in the right instrument panel, below the SigmaTek instrument cluster as per PS Engineering installation manual # 79032501MS1, Revision A, Dated 25-Mar-97 . Interfaced with KMA 24 audio panel, pilot's and co-pilot's jacks, existing PTT's on both yokes, and four passenger jacks.
         (2) Failure or removal of the ICS system will not adversely affect the operation of the basic audio distribution system.
         (3) TSO Compliance for PM3000 interphone system, pending.
      ii. Vacuum driven standby Instruments for Co Pilot use.
         (a) Attitude Indicator plumbed into existing vacuum system using Airborne fittings and low pressure hose.
         (b) Directional Gyro plumbed into existing vacuum system using Airborne fittings and low pressure hose.
         (c) Reference made to AC43 13 2A Chapter 11 - "Adding or Relocating Instruments" sections 212 , 213 and 214 (b).

b. Behind the Side panels between stations 18 and 30
   i. Jbox fabricated from aluminum component box and mounted.
      (1) Wired for Encoder code distribution.
      (2) Interfaced with KT79 Transponder, SSD120-30 Encoder and STec Altitude preselect unit.
   ii. Terminal strips on left and right side for the future installation of ANC headset interfaces.
      (1) Mounted using standard AN hardware.
      (2) Wired to PM3000 interphone system for Pilot and CoPilot positions.

c. Behind the Instrument panel between station 0 and 18
   i. CI1125 Antenna Quadraplexer mounted on the right hand side.
      (1) Interfaced with Dual KX155 nav and glide slope functions.
   ii. Aero Enhancements "ultra vision" glare shield lighting system control unit.
      (1) Mounted with standard AN hardware
      (2) Interfaces with Aero enhancements glare shield mounted light bars, and back up 9V battery.
      (3) Installed and interfaced as per Aero Enhancement installation prints.
   iii. Split buss relay to separate Avionics equipment from primary Buss. Reference Cessna wiring print 0570101. Mounted Relay, Cessna P/N S1917-2, on hand brake support bracket.
   iv. Ground blocks, AMP P/N 200838-2, mounted to stringer, left side, used as common ground point for all avionics harness and A/C system wiring.
   v. Junction strip for panel light connections mounted to the hand brake support bracket.
   vi. Remounted SSD120-30 blind encoder in it's original location on the bottom of the glove box.

d. On the rearward Avionics rack, behind the baggage compartment behind station 145
   i. WX500 Storm Scope processor
      (1) Mounted and interfaced as per BFGoodrich installation manual, P/N 009-11500-001 (Rev A) 18 July 1997.
         (a) Interfaced with Argus 5000CE moving map unit, KCS55A compass system, MD26-28 400Hz AC inverter, and NY-163 Storm Scope antenna. Interface cables meet the requirements set forth by BFGoodrich.
         (b) Antenna mounted as per installation instructions at station 89, using the factory supplied doubler plate and mounting hardware.
   ii. ADC200 Air Data Computer
      (1) Installed and interfaced as per Shadin Installation manual P/Ns 962810, 962820, Revision A September 12, 1995.
      (2) Plumbed to A/C pitot and Static systems.
         (a) Performed Static system leak check as per FAR 91.411
      (3) Installed temperature probe at station # 140.
      (4) Interfaced with Electronics International Flowscan 201B-M fuel flow transducer as a repeater device. (Primary fuel flow device is by

Electronics International)

(5) Additional interfaces with KCS55A compass system, Trimble 2000 Approach + GPS, and MD26-28 400Hz AC inverter.

iii. Re mounted existing KG102A remote gyro and KN72 nav converter on radio shelf.

iv. Moved ELT from side of A/C skin to radio shelf and installed wiring for remote test operation.

e. In the nose well rack area at station -16 and -30

i. Fabricated rack for equipment mounting from .063 alclad .

(1) Riveted piano hinge P/N MS20257-2 to .063 alclad sheet and existing angle cross member. Secured other end of .063 Alcald sheet to the second existing angle cross member using # 8 screws into fiber lock nutplates.

(2) Mounted equipment in nose well area.

(a) Relocated Transistor block for panel light dimming from behind the right panel, to the rack in the nose well area.

(b) Astron 2412 24 -14 volt converter to supply 14 volts to the cigarette lighters for the operation of portable equipment. Mounted a .050 Alclad plate attached to the top of the nose well "roof" using with #10 screws. Attached power supply to this plate using #10 screws into MS nutplates.

(c) MD26-28 400Hz AC "peanut" inverter mounted to the .063 sheet using standard AN hardware.

(d) Relocated PROP anti ice control module from behind the hand brake to the rack in the nose well area.

f. Belly mounted CI122 antenna for portable comm.

i. Fabricated doubler from .050 Alclad, 4"x8" and riveted on left side of belly at station 112.

ii. Mounted CI122 bent whip antenna to installed doubler and sealed.

g. Installed sub panel lighting assemblies to replace the removed EL panels.

i. Panels fabricated by Paramount Panels in Ontario California, and meet all appropriate safety and fire standards.

ii. Panels masked for appropriate switches, circuit breakers and functions.

5. General

a. All wire meets Mil-w-22759 or equivalent and is installed with reference to AC43.13-1A, Ch. 11, Section 2, Par 424, Par 424(a), and Par 426(e). Section 3 Figure 11.5, Par 446, Par 448, Section 5, Par 478. and Section 7, Par 514 - 519.

b. Instrument mounting done with reference to AC43.13-2A, Ch. 11, Sect. 213 Paragraphs (a-b).

c. Performed Transponder biennial and encoder correspondence checks as required by FAR 91.413.

d. Performed static system checks as required by FAR 91.411

e. Weight and balance updated.

f. Equipment list updated.

g. Work performed on Moody Aviation RS# DVPR374D work order number 84033

---------- END ----------

MAJOR REPAIR AND ALTERATION

(Airframe, Powerplant, Propeller, or Appliance)

U.S. Department of Transportation
Federal Aviation Administration

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification SO-FSDO-03

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 violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make: CESSNA	Model: TU206G
	Serial No.: U20606282	Nationality and Registration Mark: USA N6461Z
2. Owner	Name *(As shown on registration certificate)*: COLUMBIA AVIATION, INC.	Address *(As shown on registration certificate)*: 5401 KINGSTON PIKE STE 190 KNOXVILLE, TN 37919

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					XX
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
MOODY AVIATION P. O. BOX 429 ELIZABETHTON, TN 37644		U.S. Certificated Mechanic	DVPR374D LIMITED AIRFRAME
		Foreign Certificated Mechanic	
	X	Certified 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
AUGUST 21,1998	JAMES M. CHILDERS James M. Childers

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		Inspection Authorization	Other *(Specify)*
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
AUGUST 21, 1998	DVPR374D	JAMES M. CHILDERS James M. Childers

RECEIVED FA
AUG 24 1998
TN FSDO NASHVIL

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.)

N6461Z
CESSNA U206G
S/N U20606282

INSTALLATION OF GENERAL AVIATION MODIFICATIONS, INC.TURBO GAMIJECTORS

Removed:

Six TCM fuel nozzles p/n 632748-14C.

Installed:

General Aviation Modifications, Inc. turboGAMIjectors Kit No. GT14C s/n 4128 in accordance with STC SE09289SC, PMA No. PQ821SW and turbo GAMIjector Installation Procedure No. IP-97-002 (rev 002) dated February 6,1997. No change to weight and balance. All work accomplished under Moody Aviation work order number 83062.

END

☐ Additional Sheets are Attached

A/C

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 violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make: Cessna	Model: TU206G
	Serial No.: U206-06282	Nationality and Registration Mark: USA N6461Z
2. Owner	Name *(As shown on registration certificate)*: Columbia Aviation, INC	Address *(As shown on registration certificate)*: 5401 Kingston Pike, Suite 190, Knoxville TN 37919

3. For FAA Use Only

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
MOODY AVIATION P.O. BOX 429 ELIZABETHTON, TN 37643		U.S. Certificated Mechanic	DVPR374D
		Foreign Certificated Mechanic	LIMITED AIRFRAME
	X	Certified Repair Station	LIMITED RADIO
		Manufacturer	LIMITED INST - PANEL FABRICATION

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
8-23-98	Cecil Bedford

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

	FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	Other *(Specify)*
	FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
8-23-98	DVPR374D	Cecil Bedford

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.)

Reg: N6461Z
S/N: U206-06282
Date: 8-23-98 CB

Installation of STec System 55 Autopilot

1. Removed:
   a. System 60 autopilot components
      i. Panel Mounted controller
      ii. Remote mounted roll guidance computer.
      iii. Remote mounted pitch guidance computer.
2. Recertified the existing servos which remain part of the updated autopilot.
   a. Removed servos, cleaned clutches and set clutches as per Autopilot installation Document for ST-037
3. Installed System 55 autopilot model ST-556 components IAW STC# SA8886SW-D
   a. Panel mounted programer/computer in bottom of radio rack
   b. Altitude Vertical Speed selector/Altitude Alerter model ST-360 mounted in left instrument panel below the HSI. Mounting and interconnect done IAW with STec supplied diagrams.
   c. Wiring harness supplied by STec for the ST-556 system interconnect.
   d. Interfaced with previously installed KCS55A compass system as per STec interconnect diagrams.
      i. This interconnect allows nav information to be supplied from either the #1 VOR system or the Trimble 2000 Approach + GPS system.

4. General
   a. All wire is supplied as part of the STC, or meets Mil-w-22759 or equivalent and is installed with reference to AC43.13-1A, Ch. 11, Section 2, Par 424, Par 424(a), and Par 426(e). Section 3 Figure 11.5, Par 446, Par 448, Section 5, Par 478. and Section 7, Par 514 - 519.
   b. All work done IAW STC# SA8886SW-D, with reference made to appropriate manufacturers installation and interface information.
   c. Weight and balance updated.
   d. Equipment list updated.
   e. Work performed on Moody Aviation RS# DVPR374D work order number 84033

---------- END ----------

☒ Additional Sheets are Attached

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA8886SW-D

This certificate, issued to S-TEC Corporation
946 Pegram
Mineral Wells, TX 76067

certifies that the change in the type design for the following product with the limitations and conditions thereto as specified hereon meets the airworthiness requirements of Part 3 *of the* Civil Air Regulations.

Original Product—Type Certificate Number: A4CE

Make: Cessna

Model: U206G and TU206G

Description of Type Design Change:

Installation of S-TEC System 55 Two Axis Automatic Flight Guidance System, Model ST-556, with Optional Automatic Electric Trim System, according to Bulletin No. 656, dated 9-19-94 and Master Drawing List No. 92722, dated 9-19-94 with Optional Flight Director/Steering Horizon or later FAA Approved revisions of the above data (28 Volt System).

Limitations and Conditions:

1. Also eligible on Models U206G and TU206G (Landplane, Floatplane or Amphibian Configuration) And These Models When Modified Per STC SA3634SW (Extended Range Fuel Tanks) or STC SA2353NM (Soloy Engine Conversion).

2. Also eligible on Models U206G and TU206G (Landplane Configuration) When Modified Per STC SA1513WE (Robertson STOL).

(See Continuation Sheet, Page 2, a part of this STC.)

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: 9-20-94

Date reissued:

Date of issuance: 9-26-94

Date amended:

By direction of the Administrator

(Signature)

William J. Thomas
DAS Staff Coordinator, DAS 5 SW

(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

a/c

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 violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make: Cessna	Model: TU206G
	Serial No.: U206-06282	Nationality and Registration Mark: USA N6461Z
2. Owner	Name *(As shown on registration certificate)*: Columbia Aviation, INC	Address *(As shown on registration certificate)*: 5401 Kingston Pike, Suite 190, Knoxville TN 37919

3. For FAA Use Only

"The data identified herein complies with 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."

JUN 2 9 1998
DATE

SIGNATURE OF FAA INSPECTOR

4. Unit Identification

Unit	Make	Model	Serial No.	5. Type: Repair	5. Type: Alteration
AIRFRAME	~~~~~~~~~~ *(As described in Item 1 above)* ~~~~~~~~~~				XXX
I[illegible]PLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
MOODY AVIATION P.O. BOX 429 ELIZABETHTON, TN 37643		U.S. Certificated Mechanic	DVPR374D LIMITED AIRFRAME LIMITED RADIO LIMITED INST - PANEL FABRICATION
		Foreign Certificated Mechanic	
	X	Certified 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: 8-22-98

Signature of Authorized Individual: Cecil Bedford

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		Inspection Authorization	Other *(Specify)*
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
8-22-98	DVPR374D	Cecil Bedford

FAA Form 337 (12-88)

(d) Navigation Source Annunciator - The system uses a shared KI525A HSI with nav source annunciation displayed on the MD41-624 mounted immediately below it.

(e) Computer Software - Revision level is current as of June 1998, and is approved for IFR flight.

(f) Failure Protection - Failure of the Trimble 2000 Approach unit will not adversely degrade any other system.

(g) System controls, Displays, and annunciators - Other than the MD41-624 which includes annunciation lamps and switches, there are no additional external switches or controls. Dimming is performed automatically by use of a photo cell. The Trimble 2000 Approach display is in the radio rack and also uses photo cell dimming.

(h) Navigation/Integrity Annunciation -

(i) Nav flag displays under the following conditions:

1) Power loss

2) GPS equipment malfunction affecting navigation.

(i) Autopilot interface - Interface is with the HSI such that the nav source selected to the HSI also drives the nav function of the Stec system 55 Autopilot. Autopilot operation remains unchanged.

(j) Manufacturer's Instructions - The installation of the Trimble 2000 Approach system, the MD41-624 annunciator control unit and the ADC200 air data computer were done with reference to the manufacturers installation instructions with composite interconnect drawings attached.

3. **GENERAL**

a. All wire meets Mil-w-22759 or equivalent and is installed with reference to AC43.13-1A, Ch. 11, Section 2, Par 424, Par 424(a), and Par 426(e). Section 3 Figure 11.5, Par 446, Par 448, Section 5, Par 478. and Section 7, Par 514 - 519.

b. Instrument mounting done with reference to AC43.13-2A, Ch. 11, Sect. 213 Paragraphs (a-b).

c. FMS for 2000 APPROACH approved and installed.

d. Panel mounted placard states

GPS APPROVED FOR VFR ONLY

e. Initial certification for the Trimble 2000 Approach system was granted on STC# SA09005SC.

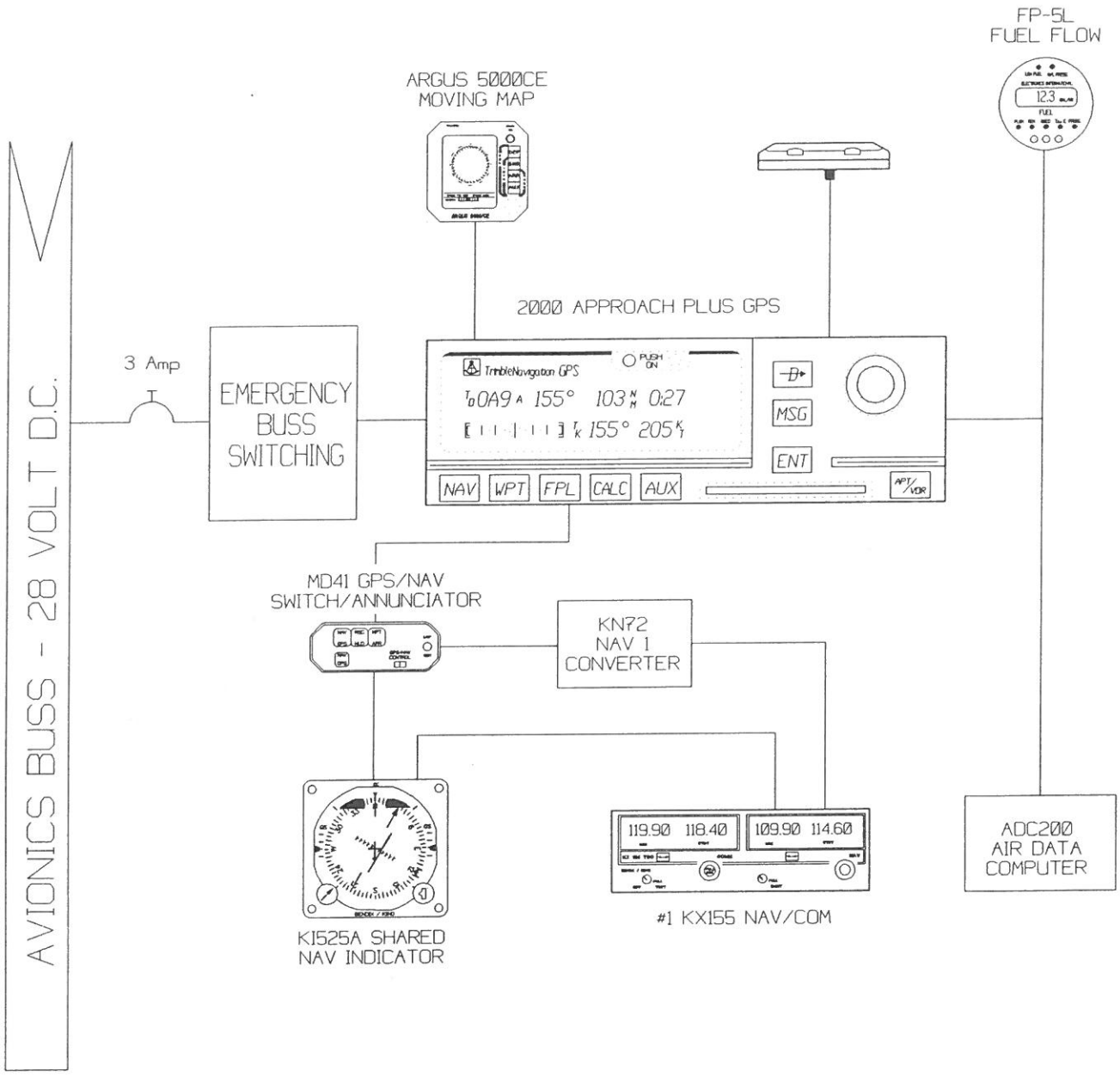
f. Weight and balance updated.

g. Equipment list updated.

h. All work performed on Moody Aviation RS# DVPR374D Work order # 84033

---------- END ----------

Reg: N6461Z
S/N: U206 - 06282
Date: 8-22-98 CB



	2000 APPROACH BLOCK
AIRCRAFT:	CESSNA U206G N6461Z
VOLTAGE:	28 v DC
drawing # 1 of 4	
DRAWN BY:	Cecil Bedford
DRAWING NAME:	2000AP_B
SCALE:	NONE
DATE:	06/17/98
REVISED BY:	JON CHRISTIANSEN