

101712

INVOICE NO. R

CUSTOMER NO.

PIEDMONT AVIATION, INC.

MONTGOMERY COUNTY AIRPARK, 7930 QUEEN AIR DR.
GAITHERSBURG, MARYLAND 20760
(301) 258-0650

1009

TERMS ☒ CASH SALE ☐ CHARGE SALE ☐ CREDIT MEMO ☐ CASH RECEIPT ☐ COMPANY REQUISITION

DATE: 9/1/80 CUSTOMER ORDER NUMBER WORK ORDER NO./AIRCRAFT NO. SHIP VIA: PL WAYBILL NUMBER SOLD BY: [Signature]

SOLD TO: _____ SHIP TO: _____

Location	QTY	QTY B/O	MFG. PART NUMBER	PI STOCK NUMBER	DESCRIPTION	QTY SHIPPED	UNIT PRICE	DISC.	NET AMOUNT
	4	0	313		Liners	4	42° 2.90		11.60
	1	0	600X6 4ply FET		Tire	1	64.31 38.60		38.60
			301-026-420		FET	1	,36		,36
									50.56

THIS IS YOUR INVOICE

PLEASE PAY FROM THIS INVOICE

Merchandise shipped according to order cannot be returned without our permission.
All claims for damages should be made direct to transportation company.

SALES TAX	2.53
SHIPPING CHARGES	
TOTAL	53.09

PHONE: (301) 662-5306



N^o 29281

Complete Welding & Machine Shop Services
Portable Welding Equipment

TRI-STATE
Welding and Machine Co., Inc.
7932 REICH'S FORD ROAD
FREDERICK, MARYLAND 21701

Heat Treating Facilities
Metal Spraying

S
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• DCD
Aero Service Co.

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663-0796

Customer Order No.		Date Shipped	Our Order No.	Shipped Via	Terms	Invoice Date	
			15634	customer	Cash	9-3-81	
QTY. ORD'D	QTY. SHIP'D	DESCRIPTION				UNIT PRICE	AMOUNT
		Repair stainless heater shroud for Air-plane				Labor:	15.00
<i>paid by ck# 1013</i>							
A Finance Charge of 1 1/2% per month will be charged on all accounts over 30 days.							

We hereby certify that these goods were produced in compliance with all applicable requirements of Sections 6, 7, and 12 of the Fair Labor Standards Act, as amended, and of regulations and orders of the United States Department of Labor issued under Section 14 thereof.

CAPITAL AVIATION INSTRUMENT CORP.

P. O. BOX 542
MANASSAS MUNICIPAL AIRPORT
MANASSAS, VIRGINIA 22110

703-369-0500 Metro 631-2126

INVOICE

INVOICE NO. **Nº 4519**

INVOICE DATE **9/3/81**

SHIPPED TO

SAME

TO
D C D AERO SERVICE CO
CESSNA BLDG
FREDERICK MUNICIPAL AIRPORT
FREDERICK, MD 21701

OUR ORDER NO. 1128-1	YOUR ORDER NO. DAVE DOBBS	SALESMAN TWK	TERMS COD	SHIPPED VIA UPS	PPH OR COLL X
QUANTITY	DESCRIPTION			PRICE	AMOUNT
1	AIRSPEED (TRUE) P/N 2030-2018-00-1210 S/H T0971-11			170.00-25%	127.50
	SHIPPING			1.47	
	COD FEE			1.40	2.87
	TOTAL DUE				\$130.37
	*CORE CHARGE				40.00
					170.37
* EXCHANGE CREDIT OF \$40.00 WILL BE ISSUED UPON RECEIPT OF YOUR EXCHANGE CORE					
THANK YOU					
PLEASE SEND US YOUR TAX EXEMPT NUMBER.					

GAIN

GREEN ANTON INCORPORATED

7040 Airport Drive - Gulfstream, MO 20758 (301) 948-5900

CUSTOMER'S ORDER NO.		PHONE		DATE 9/7/81	
NAME E Dave Dotts					
ADDRESS					
CASH	C.O.D.	CHARGE	ON ACCT	MISC RETL	PAID OUT
20	MS28775-110		1420	2.54	
20	Sd2007 Valve		650	13.66	
				TAX	83
SOLD BY		RECEIVED BY		TOTAL 17.83	

All claims and returned goods MUST be accompanied by this bill.

Thank You

INVOICE NO. **R**

CUSTOMER NO.

PIEDMONT AVIATION, INC.

MONTGOMERY COUNTY AIRPARK, 7930 QUEEN AIR DR.
GAITHERSBURG, MARYLAND 20760
(301) 258-0650

TERMS ☒ CASH SALE ☐ CHARGE SALE ☐ CREDIT MEMO ☐ CASH RECEIPT ☐ COMPANY REQUISITION

DATE 3/6/19	CUSTOMER ORDER NUMBER	WORK ORDER NO./AIRCRAFT NO.	SHIP VIA PL	WAYBILL NUMBER	SOLD BY [Signature]
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SOLD TO _____ SHIP TO _____

[illegible]

THIS IS YOUR INVOICE

PLEASE PAY FROM THIS INVOICE

Merchandise shipped according to order cannot be returned without our permission.
All claims for damages should be made direct to transportation company.

SALES TAX	8.99
SHIPPING CHARGES	
TOTAL	188.73

[illegible]

Thank You

D. O. D. AERO SERVICE Co.
CESSNA BUILDING
FREDRICK MUNICIPAL AIRPORT
FREDRICK, Md 21701

DATE	AIRCRAFT REGISTRATION	TYPE INSPECTION
	N3212T	Annual
1.	Clean and check plugs	NEW plugs
2.	Compression check engine	1) 74/80 2) 79/80 3) 75/80 4) 72/80
3.	Clean fuel screen	79 79 79 75
4.	Clean carb. air filter	NEW FILTER
5.	Check and clean engine oil screen	OK
6.	Check mag. points	OK
7.	Check generator and starter brushes	OK
8.	Check prop track	OK
9.	Lubricate aircraft	OK
10.	Check brake linings	OK
11.	Bleed and adjust brakes	OK
12.	Service reservoir	OK
13.	Repack wheel bearings	OK
14.	Check tire pressure	OK
15.	Check and service battery	OK
16.	Static check due	N/A
17.	Transponder check due	N/A
18.	ELT	C589511-0117 12/81
19.	AD's	OK
20.	Sign logs	Airframe Powerplant
21.	Update board	

INV. NO. _____

PAGE _____ OF _____ PAGES

TACH TIME _____

N _____ SERIAL # _____

D. C. D. AERO SERVICE Co.
CESSNA BUILDING
FREDRICK MUNICIPAL AIRPORT
FREDRICK, Mo 21701

OWNER _____

PHONE NO. _____

MAKE _____ MODEL _____

ITEM	AD 71-24-4 Flex hose inspection	MECH	HOURS
CORRECTIVE ACTION:	C/W REPLACED ALL LINES	DD	
ITEM	AD 72-3-3 flap jack screw lube	MECH	HOURS
CORRECTIVE ACTION:	C/W by cleaning, insp., & lube with moly bendorn	DD	
ITEM	AD 74-16-6 oil line gauge clamp	MECH	HOURS
CORRECTIVE ACTION:	checked & found to be secure	DD	
ITEM	AD 79-8-3 Electrical system failure	MECH	HOURS
CORRECTIVE ACTION:	C/W by installation of 1N line fuse	DD	
ITEM	AD 79-10-14 Fuel tank venting	MECH	HOURS
CORRECTIVE ACTION:	C/W by installation of new caps P/N C-156001-0106	DD	
ITEM		MECH	HOURS
CORRECTIVE ACTION:			

DATE _____ MECHANIC _____ APPROVED BY: _____

INV. NO. _____

PAGE 1 OF 1 PAGESTACH TIME 1150.7N 3212T SERIAL 17700512

D. C. D. AERO SERVICE Co.
CESSNA BUILDING
FREDRICK MUNICIPAL AIRPORT
FREDRICK, Md 21701

OWNER _____

PHONE NO. _____

MAKE CESSNA MODEL 177

ITEM <u>1</u>	<u>Airspeed inop</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Installed new true airspeed</u>		<u>DD</u>	
ITEM <u>2</u>	<u>No ELT</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Install P/M ELT s/n 9303</u> <u>ARM 184.5</u>		<u>DD</u>	
<u>Exp 12/61 P/N C589511-0117 3.25 lbs</u>			
ITEM <u>3</u>	<u>Left tire worn</u> <u>- 0118 KIT</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Replace with new tire</u>		<u>DD</u>	
<u>Goodyear 800 Special II 6.00.X6 4ply</u>			
ITEM <u>4</u>	<u>Left brake housing cracked</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Replaced with new housing</u>		<u>DD</u>	
ITEM <u>5</u>	<u>Both brake disc rough & lines rotted</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Replaced with new chrome disc</u>		<u>DD</u>	
<u>9 LINES 104-261</u>			
ITEM <u>6</u>	<u>Right Left Aileron rod - end worn tooth</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Installed new rod end</u>		<u>DD</u>	

DATE _____ MECHANIC _____ APPROVED BY: _____

INV. NO. _____

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N 3212T SERIAL # _____

D. C. D. AERO SERVICE Co.
CESSNA BUILDING
FREDRICK MUNICIPAL AIRPORT
FREDRICK, Mo 21701

OWNER _____

PHONE NO. _____

MAKE _____ MODEL _____

ITEM <u>2</u>	<u>Aileron cable tension low / Right aileron stop broken</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Repair stop, Rig aileron system as per specs</u>		<u>DD</u>	
ITEM <u>8</u>	<u>Left stabilator tip cracked</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Replaced tip w/ new hardware</u>		<u>DD</u>	
ITEM <u>9</u>	<u>SERVICE NOSE strut low</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Serviced with fluid + AIR</u>		<u>DD</u>	
ITEM <u>10</u>	<u>Both master cylinders leaking internally</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Replaced o-rings & seals</u>		<u>DD</u>	
ITEM <u>11</u>	<u>Left control wheel assembly loose - bracket broken</u>	MECH	HOURS
CORRECTIVE ACTION: <u>TEMPORARY REPAIR P/O</u>		<u>DD</u>	
ITEM <u>12</u>	<u>Cowling shock mounts torn</u>	MECH	HOURS
CORRECTIVE ACTION: <u>Replaced 4 shock mounts</u>		<u>DD</u>	

DATE _____

MECHANIC _____

APPROVED BY: _____

INV. NO. _____

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N 3212T SERIAL # _____

D. C. D. AERO SERVICE Co.
CESSNA BUILDING
FREDRICK MUNICIPAL AIRPORT
FREDRICK, Mo 21701

OWNER _____

PHONE NO. _____

MAKE _____ MODEL _____

ITEM 13	Turn coordinator shot	MECH	HOURS
CORRECTIVE ACTION: Installed servicable unit		DD	
ITEM 14	Left main gear strut strut fairing loose	MECH	HOURS
CORRECTIVE ACTION: Installed speed fairing cuffs		DD	
ITEM 15	ADF. wire antenna missing	MECH	HOURS
CORRECTIVE ACTION: Installed new antenna antenna assm		DD	
ITEM 16	Left rudder stop broken	MECH	HOURS
CORRECTIVE ACTION: OK for service Repair at later date		* DD	
ITEM 17	Carb heat shroud broken	MECH	HOURS
CORRECTIVE ACTION: Remove, welded, REinstall		DD	
ITEM 18	# 3 cylinder exhaust gasket about to blow	MECH	HOURS
CORRECTIVE ACTION: Replaced all gaskets		DD	

DATE _____

MECHANIC _____

APPROVED BY: _____

INV. NO. _____

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TACH TIME _____

 N. 3212T SERIAL 1

 D. C. D. AERO SERVICE Co.
 CESSNA BUILDING
 FREDRICK MUNICIPAL AIRPORT
 FREDRICK, Md 21701

OWNER _____

PHONE NO. _____

MAKE _____ MODEL _____

ITEM		MECH	HOURS
19	Repair carb accelerator pump check valve / Resatex carb bowl		
	CORRECTIVE ACTION: Disassem, adjust, clean, REINSTALL Resatex carb bowl screws	DD	
20	Obtain Wt & Bal, 337 forms, Recompute Wt & Bal.	MECH	HOURS
	CORRECTIVE ACTION:		
21	Electric clock inop	MECH	HOURS
	CORRECTIVE ACTION: Replaced with 8-day wind-up clock REMOVE FUSE AND TAPED WIRES	DD	
22	P-leads rubber boots shot	MECH	HOURS
	CORRECTIVE ACTION: Replace with new boots	DD	
23	Alternator belt loose	MECH	HOURS
	CORRECTIVE ACTION: Tighten as required & safety Replaced belt	DD	
24	Check tach accuracy	MECH	HOURS
	CORRECTIVE ACTION:		

DATE _____ MECHANIC _____ APPROVED BY: _____

INV. NO. _____

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N _____ SERIAL # _____

D. C. D. AERO SERVICE Co.
CESSNA BUILDING
FREDRICK MUNICIPAL AIRPORT
FREDRICK, Mo 21701

OWNER _____

PHONE NO. _____

MAKE _____ MODEL _____

ITEM 1	AD 68-7-9 - SE 68-13 Flap system	MECH	HOURS
CORRECTIVE ACTION: P/c/w		DD	
ITEM 2	AD 68-17-4 SM 15-41 Stall WARNING	MECH	HOURS
CORRECTIVE ACTION: P/c/w		DD	
ITEM 3	AD 68-18-2 oil pressure line COPPER line	MECH	HOURS
CORRECTIVE ACTION: P/c/w FLEX line		DD	
ITEM 4	AD 70-1-2 Fuel gauge SE 69-25 P/N's. 12341-667-1 & 2	MECH	HOURS
CORRECTIVE ACTION: P/c/w		DD	
ITEM 5	AD 70-24-4 Fuel shut-off valve	MECH	HOURS
CORRECTIVE ACTION: Checked & adjusted as required		DD	
ITEM AD 71-1-3	Stabilator attach stiffener brackets	MECH	HOURS
CORRECTIVE ACTION: P/c/w		DD	

DATE _____

MECHANIC _____

APPROVED BY: _____

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION — FEDERAL AVIATION ADMINISTRATION
SPECIAL AIRWORTHINESS CERTIFICATE

A	CATEGORY/DESIGNATION		SPECIAL FLIGHT PERMIT	
	PURPOSE		OUT OF ANNUAL INSPECTION	
B	MANUFACTURER	NAME		
		ADDRESS		
C	FLIGHT	FROM MONTGOMERY COUNTY, MARYLAND		
		TO FREDERICK, MARYLAND		
D	N- 3212T		SERIAL NO.	17700512
	BUILDER CESSNA		MODEL	177
E	DATE OF ISSUANCE 08-27-81		EXPIRY	09-06-81
	OPERATING LIMITATIONS DATED 08-27-81		ARE A PART OF THIS CERTIFICATE	
	SIGNATURE OF FAA REPRESENTATIVE <i>Hunter Legrow</i> HUNTER LEGROW		DESIGNATION OR OFFICE NO. 1321	

Any alteration, reproduction or misuse of this certificate may be punishable by a fine not exceeding \$1,000 or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

A	This airworthiness certificate is issued under the authority of the Federal Aviation Act of 1958 and the Federal Aviation Regulations (FAR).
B	This airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production flight tests, and only production flight tests, of aircraft registered in his name. No person may conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire; and/or (2) Carrying persons not essential to the purpose of the flight.
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in Block A.
D	This airworthiness certificate certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable FAR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable FAR and in accordance with conditions and limitations which may be prescribed by the Administrator as part of this certificate; (2) over any foreign country without the special permission of that country.
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in FAR Part 21, Section 21.181 or 21.217.

SPECIAL FLIGHT PERMIT

OPERATING LIMITATIONS

N. 3212T SERIAL NUMBER 17700512 DATE ISSUED 08-27-81
DATE EXPIRES 09-06-81

Aircraft shall be operated in compliance with its applicable Operations Limitations.

The flight shall be made in accordance with visual flight rules (VFR-Day) and shall be limited to single pilot (unless authorized by FAA approved Flight Manual) and necessary crew baggage. Flight over thickly populated or congested areas will be avoided whenever possible.

The owner/operator will insure that all applicable Airworthiness Directives that are due for compliance be completed by appropriate personnel before this flight and signed off in the maintenance records per FAR 91.173.

This authorization is valid only after an appropriate inspection of this aircraft and engine(s) is accomplished by an A & P Mechanic and a logbook entry is made attesting that this aircraft is safe for the intended flight.

These Operating Limitations and Special Airworthiness Certificate must be displayed in the aircraft in accordance with Federal Aviation Regulation 91.27.



HUNTER LEGROW
General Aviation Airworthiness Inspector
AEA-GADO 1321



**CHIEF
AIRCRAFT
INC.**

PAGE: 1

345 Whispering Pines
Grants Pass, Oregon 97527

INVOICE NUMBER: 0082651-IN
INVOICE DATE: 12/03/90
SALESPERSON: 0003
CUSTOMER NO: CHU2065

ORDERS 24-HR. FAX
1-800-447-3408 1-503-479-4431

OREGON & INFORMATION
1-503-476-6605

SOLD TO:
HAROLD CHURCH
102 ROSEWOOD TERRACE
LEXINGTON PARK MD 20653

SHIP TO:
HAROLD CHURCH
102 ROSEWOOD TERRACE
LEXINGTON PARK MD 20653

ATTN:

CARD NO.

CUSTOMER P.O.	SHIP VIA	F.O.B.	TERMS			
	UPS GRD		MASTERCARD			
ITEM NO.	UNIT	ORDERED	SHIPPED	BACK ORD	PRICE	AMOUNT
TKI 75906	EACH	4	4	0	6.50	26.00
GASKET SILICONE LYC 75906						
DD ADF BSK	EACH	1	1	0	21.50	21.50
STAINLESS ADF WIRE ANTENNA KIT						

POLICY

EXCHANGES & RETURNS may be made within 30 days from date of receipt and in original condition with carton, papers, unfilled blank warranty cards and a COPY OF THIS INVOICE. Return of special orders are subject to a 15% restocking fee. Shipping and handling are non-refundable. CORES must be returned complete with a COPY OF THIS INVOICE (missing or damaged parts may result in a reduced credit).

All ITEMS are new and carry manufacturer warranty. Defective units are repaired or replaced at manufacturer's discretion, NOT Chief Aircraft, Inc. Damaged shipments must be reported to delivery carrier immediately.

NET INVOICE:	47.50
DISCOUNT:	.00
COD/SHIPPING:	.00
INVOICE TOTAL:	47.50
LESS DEPOSIT:	47.50
INV. BALANCE:	.00

AIRPARK SALES & SERVICE, INC.

St. Mary's Airport
P.O. Box 40
Hollywood, MD 20636
(301) 373-2101

invoice

INVOICE NO.	PAGE NO.
7327	1

DATE	OPERATOR
8/ 1/91	ASB

Church, Hal
102 Rosewood Terrace
Lexington Park, MD 20653

SIGNATURE

DATE	DESCRIPTION	QUANTITY	AMOUNT	TOTAL
8/ 1/91	Receive on Account	1	480.00	480.00

PAY METHOD

CHECK

SUB TOTAL	ADJ. TOTAL	TAX
480.00	0.00	0.00

GRAND TOTAL

480.00

AIRPARK SALES & SERVICE, INC.

St. Mary's Airport
P.O. Box 40
Hollywood, MD 20636
(301) 373-2101

invoice

INVOICE NO.	PAGE NO.
7328	1

DATE	OPERATOR
8/ 1/91	ASB

Church, Hal
102 Rosewood Terrace
Lexington Park, MD 20653

SIGNATURE

DATE	DESCRIPTION	QUANTITY	AMOUNT	TOTAL
8/ 1/91	Receive on Account RENT DISCOUNT	1	120.00	120.00

PAY METHOD

APSS

SUB TOTAL	ADJ. TOTAL	TAX
120.00	0.00	0.00

GRAND TOTAL

120.00

Detach This Portion And Keep

OWNER'S WARRANTY RECORD

Owner's Name _____

Address _____

City, State, Zip

Dealer's Name American Avionics Inc

Address 765 Perimeter Road Sittly Wash 98108

City, State, Zip

Date Of Purchase 8/21/90

Serial No. 73078

If assistance is needed, contact your Il Morrow Dealer, a Service Center, or the factory Service Department. The Il Morrow factory may be contacted at:

Il Morrow Inc.

P.O. Box 13549
Salem, OR 97309
(503) 581-8101

II MORROW INC. Limited Warranty (Avionic Loran Products)

1. Scope of Limited Warranty

II Morrow warrants to the original consumer purchaser that II Morrow products will be free of defects in materials and workmanship, under normal use, for the periods described below. The warranty begins on the original retail delivery date, or on the date of first use, whichever occurs earlier. Avionics Loran receivers are covered for 30 months after delivery or first use, whichever is earlier. Antennas and antenna preamplifiers are covered for a period of 12 months after delivery or first use, whichever is earlier. This warranty shall be effective only if and when (i) II Morrow receives a completed warranty registration card with respect to the specific product unit found to be defective; (ii) the unit was installed by personnel certified by the FAA to install avionic equipment and copy of FAA Form 337 documenting the installation is provided to II Morrow (except for homebuilt); (iii) II Morrow receives notice of such defect during the period of the warranty; and (iv) the consumer purchases the unit in the United States or Canada. II Morrow's sole and exclusive liability for breach of warranty shall be (a) at II Morrow's option to repair or replace the defective II Morrow products or return the purchase price for any defective products that are returned during the warranty period. II Morrow products repaired or replaced under this warranty are subsequently warranted only to the remaining, unexpired portion of the warranty period applicable to the original product. If II Morrow elects to repair or replace the product, II Morrow shall have a reasonable time to do so.

2. Limitation of Implied Warranties

TO THE EXTENT ALLOWED BY LAW, ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO II MORROW PRODUCTS ARE LIMITED IN DURATION TO THE DURATION OF THESE WRITTEN WARRANTIES. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

3. Exclusion of Remedies and Liability

IN NO EVENT SHALL II MORROW, ANY DISTRIBUTOR, OR THE SELLING DEALER BE LIABLE FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING LOSS OF PROFITS, LOSS OF TIME, OR INCONVENIENCE) WHETHER BASED ON CONTRACT, TORT, STRICT LIABILITY OR ANY OTHER LEGAL THEORY EVEN IF II MORROW, SUCH DISTRIBUTOR, OR THE SELLING DEALER WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some states do not allow limitations of incidental or consequential damages, so the above limitation may not apply to you.

4. Limitation of Warranty

The foregoing warranty shall not apply to defects resulting from (a) improper or inadequate maintenance; (b) unauthorized modification of the products; (c) operation of the products outside of their environmental specifications; (d) improper installation; (e) neglect, misuse or abuse of the products; (f) integration with other products not covered by a II Morrow warranty; or (g) exposure to corrosive environments. This warranty shall not apply to any products not manufactured by II Morrow. No one is authorized to change or add to this warranty. II Morrow makes no warranty with respect to any installation of II Morrow products by II Morrow, any authorized dealer or any other person. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

5. Technical Assistance

The warranty set forth above shall not be enlarged, diminished or affected by, and no obligation or liability shall arise from II Morrow, any authorized dealer or any other person rendering of technical advice, assistance or service in connection with the selection, purchase or use of any II Morrow products.

6. Place of Repair or Replacement

In order to obtain the benefits of this warranty, the defective II Morrow products must be returned to II Morrow at its plant at 2245 Turner Road, S.E., Salem,

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

Number SA71GL

This certificate issued to Brackett Aircraft Company, Inc.

certifies that the change in the type design for the following product with the limitations and conditions

thereafter specified herein meets the airworthiness requirements of Part 25 specified under certification basis on the applicable Data Sheet or Aircraft Specifications.

Original Product - Type Certificate Number

Make As shown on Approved Model List(s)
Model

Description of Type Design Change

Replace existing engine air filter from assembly with Brackett Aircraft Specialties from assembly in accordance with Approved Model List.

NOTE: FAA Approved Model List(s) form a part of this certificate.

Limitations and Conditions This approval should not be extended to other aircraft of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the interrelationship between this change and any of those other previously approved modifications will introduce no adverse effect upon the airworthiness of that aircraft.

This certificate and the supporting data which is the basis for approval shall remain in effect until no longer superseded, amended, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application January 9, 1975

Date received March 3, 1983

Date of issuance February 21, 1975

Date received



By direction of the Administrator

James A. Hargrave

Supervisor, Aircraft Modification Section

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 reprinted in accordance with 14 CFR 21.47

FAA Form 8130-1 (2-75)

BRACKETT AIRCRAFT COMPANY INC.

STC SA71GL

APPROVED MODEL LIST NO. 1

PAGE NO. 1

BRACKETT FILTER MODEL RA-5110A		APPLICABILITY LIST	
AIRCRAFT MODEL	T.C. NO.	DESCRIPTION OF TYPE DESIGN CHANGE	APPROVED DATE
CESNA 172N, 172P	1A12	Install RA-5110A filter assembly in accordance with installation instructions No. RA-5111 dated December 5, 1979 or later FAA Approved Revision.	Jan. 29, 1980
BRACKETT FILTER MODEL RA-5710		APPLICABILITY LIST	
CESNA 177, 177A, 177B, CESNA 177BQ	A13CH A20CE	Install RA-5710 filter assembly in accordance with installation instructions No. 57104 dated September 23, 1977 or later FAA Approved Revision.	Dec. 29, 1977
Boeing Aviation S.A. CESNA 177BQ	A26KH		Jan. 23, 1977
BRACKETT FILTER MODEL RA-5810		APPLICABILITY LIST	
CESNA 172NG	1A17	Install RA-5810 filter assembly in accordance with installation instructions No. RA-5806 dated June 14, 1982 or later FAA Approved Revision.	July 20, 1982



BRACKETT AIR FILTERS

INSTRUCTIONS

ASSEMBLY PART NO. BA-5710

APPROVED ON AIRCRAFT MODELS: SEE FAA APPROVED APPLICABILITY LIST.

FAA APPROVAL DATA: STC-SA71GL List No. 1
FAA-PMA Supplement No. 1

Your new polyurethane air filter element has been designed to give maximum dust collecting efficiency, good air flow, lightweight, and economical replacement. The element has been treated with a special treatment called a wetted agent and is approximately 98% efficient. The special wetted agent is the secret to the efficiency of capturing dust and repelling water. The element has also been treated with a fire retardant. For the above reasons replace the element each 100 hours of use or every 12 months or when 50% covered with foreign material. Do NOT wash and reuse.

INSTALLATION INSTRUCTIONS

- Step 1. Remove air filter assembly Part No. C294510-0601.
- Step 2. Install Brackett air filter frame assembly as per original filter assembly. MAKE SURE FRAME FITS TIGHT ENOUGH TO COMPRESS GASKET.
- Step 3. Install element Part No. BA-5705. First, blot off excessive wetting agent and then push element into frame making sure the taper of the element fits the taper of the frame.
NOTE: If you desire extra precaution you can coat the inside of the frame lightly with some grease. This insures an extra good seal between the side of element and the frame.
- Step 4. Install grill with the four AN 832-6 screws (provided).
- Step 5. For all future element replacements remove the grill only and replace element P.N. BA-5705.

Servicing: Under normal conditions, replace filter element P/N BA-5705 after 100 hours use or 1 year intervals. Under severely dusty conditions, check daily and replace when element is 50% covered with foreign material.

Instruction Sheet
Part No. BA-5704
Date: 9-23-77

Mfg. by:
Brackett Aircraft Co., Inc.
KINGMAN, AZ

BRACKETT AIR FILTER APPLICATION DATA: CONTINUED

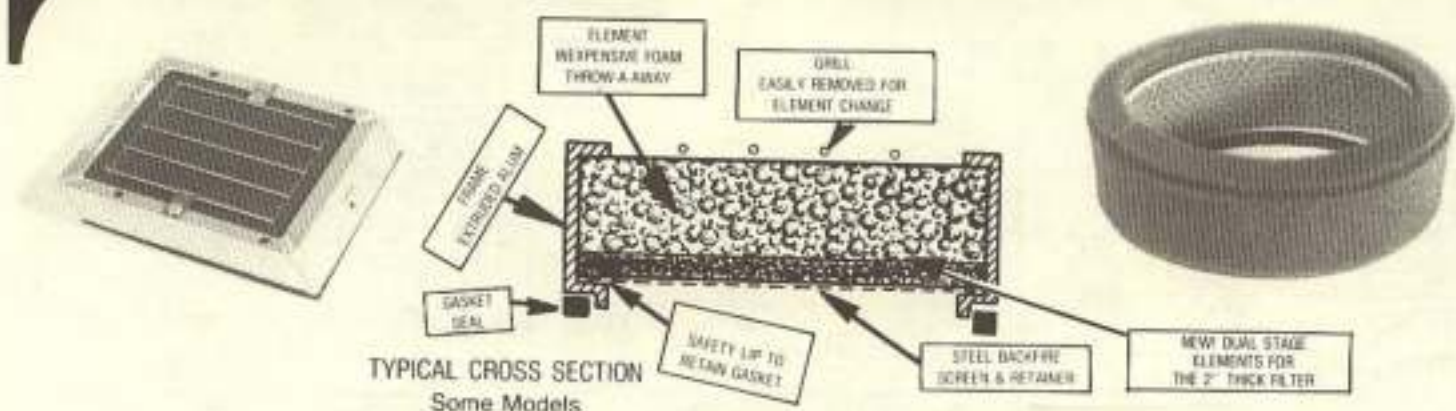
MANUFACTURER'S AIRCRAFT MODELS	BRACKETT FILTER ASSY. NO	BRACKETT ELEMENT NUMBER
CESSNA, continued		
170, 170A, B	BA-5110	BA-6108
172, 172A, B, C		
D, E, F, G		
H, J, K, L, M		
172N, P	BA-5110A	BA-6108
R172K	BA-111	BA-24
172 RG	BA-5810	BA-5805
175, 175A, B, C	BA-101	BA-8
177, 177A, B	BA-5710	BA-5705
RG, RG11		
F177RG		
180, (53"-55")	BA-8010	BA-8005
180A, B, C, D, E	BA-8110	BA-8103-1
F, G, H, J, K, L		
182, 182A, B	BA-8110	BA-8103-1
C, D, E, F, G, H		
J, K, L, M, N, P, Q, R		
R-182, FR-182		
TR-182, T-182		
185, 185A, B	BA-8110	BA-8103-1
C, D, E, F		
188, 188A	N/A	BA-14
195, A, B, 190	BA-8410	BA-8405
205, A	BA-2110	BA-2305
P206, A, B, C, D, E	BA-2210L	BA-2205L
U206, A, B, C, D, E, F, G		
TP206A, B, C, D, E	BA-2410	BA-2405
TU206A, B, C, D, E, F, G		
207, 207A	BA-2210L	BA-2205L
T-207, T-207A	BA-2410	BA-2405
210, 210A, B, C	BA-2110	BA-2305
210D, E, F, G, H, J	BA-2210L	BA-2205L
K, L, M, N to	BA-2210R	BA-2205R
SN 64135		
210N, SN64136 & up	BA-2410	BA-2405
P-210 AI	BA-8710	BA-8705
T-210F, G, H, J, K, L, M, N	BA-2410	BA-2405
T-303	BA-5210	BA-5205
310, A, B	BA-2110	BA-2305
310F, G, H, I, J, K, L	BA-2310	BA-2305
310N, P, Q, T, 310P	BA-107	BA-12
T310Q		
310R	BA-117	BA-17
T310R	BA-108	BA-13
337, A-K	BA-111	BA-24
340, 340A	BA-108	BA-22
401, 401B to SN3300	BA-107	BA-12
402B to SN 0800	BA-107	BA-12
402B to SN0801 up	BA-108	BA-13
402C	BA-109	BA-22
414, A	BA-109	BA-22
421, 421A, B, C	BA-108	BA-13
L-19	BA-101	BA-8
T-50, AT-17,	BA-2710	BA-2705
UC-78, JRC-1		

MANUFACTURER'S AIRCRAFT MODELS	BRACKETT FILTER ASSY. NO	BRACKETT ELEMENT NUMBER
DEHAVILLAND		
DHC-2(L-20)	BA-8210-1	BA-8205
GREAT LAKES		
2T1A-2	BA-101	BA-8
GRUMMAN		
AMERICAN		
AA-1, AA-1A	BA-4210	BA-4108
AA-1B, AA-1C, AA-5		
AA5A	NR	BA-19
AA5B TIGER, GA-7	BA-120	BA-20
AG-CAT		
G164, G164A	BA-8210	BA-8205
HILLER		
UH-12, UH-12A, B, C, D, E	BA-102	BA-2
HELIO		
H295	NR	BA-21
HUGHES		
269A, A-1B, C	BA-102	BA-2
LAKE		
LA4-200	BA-3110	BA-7305
LUSCOMBE		
8, BA thru 8F	BA-4106	BA-4108
MAULE		
M-4-210, M-4-210C	BA-111	BA-24
M-4-210S, M-4-210T		
M-5-210C		
M-4-220, M-4-220C,	BA-6110	BA-6108
M-4-220S, M-4-220T		
M-4-180C, M-4-180S,		
M-4-180T, M-5-220C,		
M-5-235C, M-5-180C,		
M-5-210TC, M-6-180,		
M-6-235, M-7-235		
MOONEY		
M-18C	BA-5110	BA-6108
M20, M20A, B	BA-6110	BA-6108
C, D, G		
M20E, F	BA-6310	BA-6305
M20J	BA-6210	BA-6205
NAVION		
G, H	BA-4310	BA-4305
A	BA-113	BA-25
B	BA-116	BA-25
NORTH AMERICAN		
AT6 (SNJ)	BA-8310	BA-8305
PIPER		
600, 601	BA-4	BA-4
J-3, J-4, J-5	BA-4106	BA-4108
PA-11, 11S, 12, 12S	BA-4106	BA-4108
PA-16, 17, 18, 19	BA-4106	BA-4108
PA-18A-150	BA-112	BA-13
S/N 18-6064 & AFT		
PA20, 120, 135	BA-4106	BA-4108

MANUFACTURER'S AIRCRAFT MODELS	BRACKETT FILTER ASSY. NO	BRACKETT ELEMENT NUMBER
PIPER, continued		
PA22-ALL	BA-4106	BA-4108
PA-23-150, 160	BA-3110A	BA-7305
PA-23-235	BA-104	BA-3
250A, 250B		
PA-23-250-C, D	BA-115	BA-15
E, S/N 27		
1505 & up		
TURBO LYC.		
PA-23-250,	BA-3510	BA-3505
E23-250		
PA-24-180 up to	BA-3110A	BA-7305
S/N 1477		
PA-24-250	BA-3210	BA-3205
TOSN1477		
PA-24-180	BA-104	BA-3
250, 260		
PA-25-150, 235	BA-104	BA-3
PA25-250, 260		
PA-26-140, 150	BA-104	BA-3
160, 180, 235		
PA-28-181, 201T	BA-104	BA-3
PA28R-201T	BA-104	BA-3
PA28RT-201T	BA-104	BA-3
PA28R-201	BA-105	BA-10
PA28RT-201		
PA-28R-180		
PA-28R-200		
PA-28-151, 161		BA-16
PA-30-160	BA-105	BA-10
PA31-PA31-300-350	BA-100	BA-7
PA32-260	BA-104	BA-3
PA-32-300 S/N,		
T64001 & AFT		
PA-32R-300,		
PA-32RT-300		
PA-32R-301		
PA32-300	BA-115	BA-15
w/IO-540-K1A5		
PA32-300T, 32RT-300T	BA-100	BA-7
PA32-301T, 32R-301T	BA-3010	BA-7
PA34-200T, 220T	BA-104	BA-3
PA34-200		
w/lyc IO-360	BA-105	BA-10
CIE6 or LIO-360-CIE6		
PA36-300 w/Cont	BA-104	BA-3
6-285-B, PA36-375		
PA-38	BA-4106	BA-4108
PA-39	BA-105	BA-10
PA-44	BA-105	BA-10
ROBINSON		
R-22	BA-110	BA-23
STEARMAN		
ALL SERIES 75	BA-118	BA-18
TAYLORCRAFT	BA-4106	BA-4108
VARGA		
2150A	BA-4106	BA-4108

MFG. BY BRACKETT AIRCRAFT CO. INC.

7045 Flightline Drive
Kingman, Arizona 86401
(602) 757-4005
FAX (602) 757-1948



REASONS TO CHOOSE A BRACKETT FILTER

- FAA-PMA APPROVED 70 DIFFERENT MODELS.
- OUR PATENTED TREATED FOAM HAS A 98% EFFICIENCY RATING.
- YOU REPLACE ONLY THE LOW COST THROW-A-WAY ELEMENT
- EASY, ACCURATE SERVICING BY REPLACEMENT AT SPECIFIED TIMES.
- READILY AVAILABLE TO ALL F.B.O.'S DISTRIBUTED BY MOST MAJOR AIRCRAFT SUPPLY HOUSES.
- DUAL STAGE FOAM ELEMENT INCREASES DUST HOLDING CAPACITY
- IT'S A PROVEN FILTER. BRACKETT AIR FILTERS (FORMERLY AC) HAVE BEEN IN SERVICE ON AIRCRAFT AND HELICOPTERS SINCE 1968. AT PRESENT BRACKETT FOAM FILTERS ARE INSTALLED AS FACTORY ORIGINAL EQUIPMENT ON ELEVEN CURRENT PRODUCTION AIRCRAFT AND ONE HELICOPTER.
- OUR FOAM FILTER IS UNAFFECTED BY WATER (APPROVED FOR SEA PLANES). IT HAS NO PLEATS TO STORE DIRT AND IS ABRASIVE RESISTANT.
- THE CUT-A-WAY SHOWS THE EXCLUSIVE BRACKETT FILTER FRAME SAFETY FEATURES.

DON'T NEGLECT YOUR AIR FILTER

A QUOTE FROM LYCOMING FLYER:

Quote: "Dust or some form of dirt is frequently the principal factor in premature piston ring and cylinder wear. If a worn or poorly fit air filter allows as much as a tablespoon of abrasive dirt material into the cylinders it will cause wear to the extent that an overhaul will be required."

APPLICATION DATA:

MANUFACTURER'S AIRCRAFT MODELS	BRACKETT FILTER ASSY. NO	BRACKETT ELEMENT NUMBER
AERO COMMANDER		
A-9, A9A, A9B	BA-104	BA-3
560, 560A, E	BA-2610	BA-2605
AIRCRAFT		
415C, CD, D, E, G	BA-8810	BA-8805
F-1, A-1, A2-A	BA-4106	BA-4108
BEECH		
23, A2, A23A		
A23-19, A23-19A	BA-104	BA-3
A23-24, B23		
C-23, C-24R, A24R	BA-7510	BA-7305
B24R, B19, C-23A		
33, A33, B33		
C33, E33, F33	BA-7110	BA-7112
G33		
E33A, E33C	BA-7210	BA-7112
F33A, F33C		
35, A35, B35		
thru S/N	BA-7310	BA-7305
D2605		
B35, C35, D35		
E35, F35, G35	BA-7110	BA-7112
H35, J35, K35		
M35, N35, P35		

MANUFACTURER'S AIRCRAFT MODELS	BRACKETT FILTER ASSY. NO	BRACKETT ELEMENT NUMBER
BEECH, continued		
S-35 thru	BA-7410	BA-7112
S/N D7671		
S35, V35, V35A	BA-7210	BA-7112
V35B, 36, A36, A36TC		
55, A55, B55	BA-7510	BA-7605
C-55, D-55, E-55	BA-6210-1	BA-6205
THRU S/N 1078		
58, THRU S/N		
TH 740		
E55, E55A, S/N	BA-7710	BA-7705
TE-1079 & up		
58, 58A, S/N	BA-7710	BA-7705
TH741 & up		
A65, 70	BA-100	BA-7
65-880, B68		
76	BA-7010	BA-7005
95, B95, B95A	BA-7810	BA-7805
D95A		
BELL		
47-G-2, G-2A, G-3B, -1 -2, -2A	BA-102	BA-2
G2A1, 47J, -2, -2A		
47G-3B, G3B1		
G3B2, J-2, J2A	BA-103	BA-9
G4, G4A, G5		

MANUFACTURER'S AIRCRAFT MODELS	BRACKETT FILTER ASSY. NO	BRACKETT ELEMENT NUMBER
BELLANCA		
300	BA-104	BA-3
14-19-3A	BA-8110	BA-8103-1
17-30, 17-30A		
7CA, 7HCAA		
7GCBC, 7KCAB	BA-106	BA-11
8KCAB		
7GC, 7GCA		
7GCBA, 7HC	BA-104	BA-3
7KC		
7GC-AA		
7GC-BC, 7-KCAB, 8-KCAB	BA-8110	BA-8103-1
7ECA, 8GCBC		
BRANTLY		
B-2, B-2B	BA-104	BA-3
BRITTEN NORMAN		
BN-2A-6	BA-104	BA-3
CESSNA		
120, 140, 140A		
150, 150A, B, C	BA-4106	BA-4108
D, E, F, G, H, J		
K, L, M, 152, A-152		

GAVMECH, INC.
315 Airport Road
Suite 500
California, Md 20619
I n v o i c e

3212T
Cessna 177
Harold G. Church
102 Rosewood Terrance
Lexington Park, MD 20653

Ship to/Remark
0492

Date 12/01/90 No. 123

Page 4 Due Date 12/31/90

Description				Extended
Screw	2.000	2.000	0.0800	0.16
Item # 507CBR8				
Cotter Key	1.000	1.000	0.0500	0.05
Item # 24665-151				
Ducting 2"	1.500	1.500	5.4200	8.13
Item # SCAT8				
Nut	1.000	1.000	0.4100	0.41
Item # AN363-1032				
Screw	1.000	1.000	0.3300	0.33
Item # 507CBR12				
Gloss White	1.000	1.000	5.2500	5.25
Item # 1109				
Screw	4.000	4.000	0.0700	0.28
Item # 4X1/2RTA				
Spring	3.000	3.000	0.7500	2.25
Item # SPRING				
Cotter Key	2.000	2.000	0.1700	0.34
Item # 24665-306				
Screw	1.000	1.000	0.1100	0.11
Item # 526C6R8				
St. Mary's Labor Rate	38.500 @	38.0000	/hour	1463.00
Item # 538L				
County Labor Use Tax	16.15			43.89
	22.00			

PAID CHK # 1056
8 DEC 90
[Signature]

Sub-Total : 2170.34
Tax : 33.17
Total : 2203.51

Net To Pay : 2203.51

GAVMECH, INC.
315 Airport Road
Suite 500
California, Md 20619
I n v o i c e

3212T
Cessna 177
Harold G. Church
102 Rosewood Terrance
Lexington Park, MD 20653

Ship to/Remark
0492

Date 12/01/90 No. 123

Page 3 Due Date 12/31/90

Description				Extended
Roller	8.000	8.000	5.5400	44.32
Item # S1704-1				
Bushing	7.000	7.000	6.2400	43.68
Item # 1414104-54				
Washer	8.000	8.000	0.3600	2.88
Item # 1714000-22				
Screw	4.000	4.000	0.1700	0.68
Item # 526C10R8				
Cherry Max Rivet	14.000	14.000	0.9100	12.74
Item # CR3243-4-2				
Screw	5.000	5.000	0.1300	0.65
Item # 526C6R6				
Washer	1.000	1.000	0.0200	0.02
Item # AN960-6				
Nut Self Lock	2.000	2.000	0.4600	0.92
Item # NAS679A4W				
Screw S/S	1.000	1.000	0.0800	0.08
Item # 6RX1/2THAS				
Bolt	5.000	5.000	0.1800	0.90
Item # AN3-5A				
Washer	5.000	5.000	0.0200	0.10
Item # AN960-10L				
Nut Self Lock	1.000	1.000	0.2500	0.25
Item # NAS679A3W				
Cotter Key	1.000	1.000	0.0500	0.05
Item # 24665-151				
Gasket	1.000	1.000	0.3400	0.34
Item # 71973				
Tywrap	1.000	1.000	0.1000	0.10
Item # TY23M				
Screw	2.000	2.000	0.1600	0.32
Item # 526CBR6				
Hose	1.000	1.000	2.9400	2.94
Item # 69603				

GAVMECH, INC.
315 Airport Road
Suite 500
California, Md 20619
I n v o i c e

3212T
Cessna 177
Harold G. Church
102 Rosewood Terrance
Lexington Park, MD 20653

Ship to/Remark
0492

Date 12/01/90 No. 123

Page 2 Due Date 12/31/90

Description				Extended
Screw	1.000	1.000	0.1100	0.11
Item # T8X8B				
Tinnerman	1.000	1.000	0.2200	0.22
Item # A1274-BZ1				
Screw	2.000	2.000	0.1200	0.24
Item # 526C8R8				
Bolt	4.000	4.000	0.2700	1.08
Item # AN4-7A				
Washer	6.000	6.000	0.0300	0.18
Item # AN960PD4				
Washer	1.000	1.000	0.0400	0.04
Item # AN960-416				
Screw S/S	1.000	1.000	0.0800	0.08
Item # 6RX1/2THAS				
Screw	3.000	3.000	0.1100	0.33
Item # T8X8B				
Tinnerman	2.000	2.000	0.1100	0.22
Item # A1778-BZ1				
Rivet	40.000	40.000	0.0100	0.40
Item # AN470				
Washer	40.000	40.000	0.0200	0.80
Item # AN960-6				
Aeroshell Multi-Grade Oil	8.000	8.000	3.7500	30.00
Item # 15W-50				
Bolt	1.000	1.000	2.5100	2.51
Item # AN4-44A				
Gasket	1.000	1.000	19.0300	19.03
Item # S158B-1				
Control	1.000	1.000	299.5200	299.52
Item # C299505-0401				
Nut	1.000	1.000	0.2200	0.22
Item # NAS679A4				
Placard	1.000	1.000	2.5700	2.57
Item # 0400210-1				

GAVMECH, INC.
315 Airport Road
Suite 500
California, Md 20619
I n v o i c e

3212T
Cessna 177
Harold G. Church
102 Rosewood Terrance
Lexington Park, MD 20653

Ship to/Remark
0492

Date 12/01/90 No. 123

Page 1 Due Date 12/31/90

Description				Extended
Screw	12.000	12.000	0.1400	1.68
Item # 526C8R4				
Cotter Key	2.000	2.000	0.0600	0.12
Item # 24665-153				
Cotter Key	2.000	2.000	0.3700	0.74
Item # 24665-379				
Seat Stop	3.000	3.000	10.0600	30.18
Item # 0511242-1				
Filter	1.000	1.000	2.5000	2.50
Item # B3-5-1				
Air Filter	1.000	1.000	22.8000	22.80
Item # D9-14-5				
Screw	5.000	5.000	0.3300	1.65
Item # 507C6R6				
Corrosion Block	1.000	1.000	12.9500	12.95
Item # ACF50-13				
Ducting 3"	5.000	5.000	7.5200	37.60
Item # SCAT12				
100LL Decal	1.000	1.000	5.7500	5.75
Item # FL65				
Screw	5.000	5.000	0.2600	1.30
Item # 507C10R6				
Screw	3.000	3.000	0.1400	0.42
Item # CBX8B				
Baffle	6.500	6.500	7.4200	48.23
Item # TB071				
Sandpaper	1.000	1.000	0.6200	0.62
Item # S220				
Lubricant	1.000	1.000	5.1300	5.13
Item # LPS-2				
Paint Black	1.000	1.000	5.5000	5.50
Item # B10				
Nylon Washers	15.000	15.000	0.0300	0.45
Item # WN-10				

[illegible]

DATE 29 Nov 90

PHONE

[illegible]

REPAIR LABOR @ _____					
F.S.		FREIGHT			
				TOTAL LABOR	
				TOTAL PARTS	
				OUTSIDE REPAIRS	
				TOTAL FREIGHT	
				TAX	
				TOTAL AMOUNT	

GAVMECH, INC.
315 Airport Road
Suite 500
California, Md 20619
I n v o i c e

CHUR1
Harold Church

Ship to/Remark

California, MD 20619

Date 10/29/90 No. 43

Page 1 Due Date 10/29/90

Description				Extended
St. Mary's Labor Rate	17.400 @ 38.0000	/hour		661.20
Item # S38L				
Sandpaper	1.000	1.000	0.6200	0.62
Item # S220				
Screw	9.000	9.000	0.3300	2.97
Item # 507CBR16				
Screw	4.000	4.000	0.1600	0.64
Item # S26CBR12				
Terminal Ring	1.000	1.000	0.3000	0.30
Item # FND2622-3				
Terminal	4.000	4.000	0.1500	0.60
Item # C1210-S106				
Nut	4.000	4.000	0.7800	3.12
Item # MS21055L08				
Rivet	27.000	27.000	0.0100	0.27
Item # 20425				
Hose Low Pressure	1.000	1.000	1.6700	1.67
Item # 306-4				
Cherry Max Rivet	2.000	2.000	0.9300	1.86
Item # CR3243-4-3				
Cherry Max Rivet	4.000	4.000	0.9100	3.64
Item # CR3243-4-2				
Screw	4.000	4.000	0.3300	1.32
Item # 507CBR12				
Fuel Cap Kit	1.000	1.000	104.0000	104.00
Item # SK177-39B				
Freight	216.000 @ 0.0100	/each		2.16
Item # FREIGHT				

Labor 661.20
Parts 17.01
Tax .85
Freight 2.16
681.22

*PAID in full
11/10/90
Barber*

Sub-Total :	784.37
Tax :	6.05
Total :	790.42
Net To Pay :	790.42

[illegible]

NAME Hal Church

ADDRESS

CITY	PHONE
------	-------

	MAKE & MODEL	YEAR	SERIAL NUMBER	REGISTRATION NO.	TAC/TIME
PLANE	C177			3212T	
ENGINE					
ENGINE					

[illegible]

I hereby authorize the above repair work to be done along with the necessary material, and hereby grant you and/or your employees permission to operate the aircraft herein described for the purpose of testing and/or inspection. An express mechanic's lien is hereby acknowledged on above aircraft to secure the amount of repairs thereto.

Signature _____

NOT RESPONSIBLE FOR LOSS OR DAMAGE TO
AIRCRAFT OR ARTICLES LEFT IN AIRCRAFT IN CASE
OF FIRE, THEFT OR ANY OTHER CAUSE BEYOND
OUR CONTROL.

NO. 0407
DATE 10/1/90

REPAIR LABOR @ _____			
F.S.	FREIGHT		
	2 16	TOTAL LABOR	
		TOTAL PARTS	120 93
		OUTSIDE REPAIRS	
		TOTAL FREIGHT	2 16
		TAX	6 04
		TOTAL AMOUNT	

MAC AIRE
P. O. BOX 1265
TAPPAHANNOCK AIRPORT
TAPPAHANNOCK, VA 22560
(804) 443-5885

NAME HAROLD G CHURCH				DATE 1-2-92	
ADDRESS 102 ROSEWOOD TERRACE MD 20653				UPPER NO.	DESCRIPTION
CITY LEXINGTON PARK					
MAKE & MODEL CESNA 177		YEAR 1985	SERIAL NO. 17700512	HOURS	MIN.
REGISTRATION NO. N 3212 T		PASSIDG 0320 E2D1-2423 27A	SERIAL NO. 1567.61		
RECEIVED		A.M.	LICENSE NO.		
		P.M.			
PROVIDED		A.M.	PHONE (AREA) SECT	WRITTEN BY	
		P.M.	YES ☐ # 301 862 4301	MCO	
DATE DELIVERED					
				CHANGE OIL	☒
				CHANGE OIL FILTER CART.	☒
				INSPECTIONS 25 HOUR	☐
				100 HOUR PERIODIC INSP.	☒ <i>Amul</i>
				TUNE ENGINE	☐
				ADJ. BRAKES	☐
				WASH	☐

INSPECT All wheel Bearings packed & Cleaned.
Turn Buckles Lubed All Surfaces Lubed TAW
CESSNA Service Manual. All Compressin OK
Repacked Inductor Air Filter. Airwing Topcabin 250.00

PAT GASH

Owner supplied oil & Filter.
Got Amsoil 15-50 - Champ. CH 48110.

REMARKS AND RECOMMENDATIONS FOR REPAIR		GALS GAS		OCTANE		WGT.		DETERGENT		NON-DETERGENT		TOTAL LARGE	
1													
2													250.00
3													895
4													
5													
ACCEPTANCE OF REPAIRED PLANE		TERMS		I hereby authorize the following repair work to be done along with the necessary material, and hereby grant you and/or your employees permission to operate and fly the aircraft herein described for the purpose of testing and/or inspection. An express mechanic's lien is hereby acknowledged on above aircraft to secure the amount of repairs thereto. You will not be held responsible for loss or damage to the aircraft or articles left in aircraft in case of fire, or any other cause beyond your control.		GAS FUEL		30.00		TAX		85	
At time of delivery of said aircraft, the undersigned has read and examined all notations in the "Remarks and Recommendations Section" and accepts the same as modifications of the repair and service work originally ordered as set forth herein above, hereby ratifying the original repair service except as modified.		☐ CASH ☐ CHARGE ☐ INTERNAL		☐ CASH ☐ CHARGE ☐ INTERNAL		☐ CASH ☐ CHARGE ☐ INTERNAL		☐ CASH ☐ CHARGE ☐ INTERNAL		☐ CASH ☐ CHARGE ☐ INTERNAL		☐ CASH ☐ CHARGE ☐ INTERNAL	
OWNER'S SIG.		DND BY		X		TOTAL		299.75		TOTAL		299.75	

QUAN.	PART NUMBER/DESCRIPTION	AMOUNT
	pd in full 11/11/92	
	CK 1378	
	SUBLET REPAIRS	

PROFESSIONAL FLIGHT SERVICE

MARYLAND AIRPORT

INDIAN HEAD, MD 20640 (301) 283-0131

FAA APPROVED REPAIR STATION PJIR402K

NAME	UNIT
HAL CHURCH	RT359A-9495
ADDRESS	MODEL
102 ROSEWOOD TERRACE	ITT NM0052
CITY	AIRRAFT VIN
LEXINGTON PARK, MD 20653	CARDINAL
IPRIBILET	SERIAL
IFR CERTIFICATION	N3212T
QUT OUT	DATE
1 / 1	1 / 1

ITEM	WORK TO BE DONE	AMOUNT
1	IFR Certified O.K. this date.	
2	Checking RT-328T ARC Radio	150 00
3	found bad senr. - Radio left	
4	for repair.	40 00
5		
6		

CERTIFY THAT THIS ACF
HAS BEEN REPAIRED AND INSPECTED IN ACCORDANCE WITH
CURRENT FAA REGULATIONS AND IS APPROVED FOR RETURN
FOR SERVICE

DETAILS OF THE REPAIRS ARE ON FILE UNDER WORK ORDER

111192-03R DATE 11-11-98

INSPECTED BY *H. A. [unclear]* FILE # *402K*

WHEREFORE, THE ABOVE NAMED ALBANY DEEDS THE NECESSARY MATERIAL TO THE COURT IN ORDER TO HAVE MADE ALL NECESSARY CHIEFS TO THE COURT OF APPOINTMENT OF THE COURT, IN ORDER TO HAVE THE LINE IS HEREBY ACKNOWLEDGED TO HAVE BEEN TO SECURE AMOUNT OF ALBANY THEREIN, IT IS BECOMING NECESSARY FOR YOU TO EMPLOY A COLLECTION AGENT AND OR AN ATTORNEY TO COLLECT THIS AMOUNT, I AM UNDERSTANDING, AGREE TO PAY ALL COURT COSTS PLUS A REASONABLE ATTORNEY'S FEE AND COLLECTION FEE.

PARTS	
LABOR	190 00
SUBSET OR OTHER	
TAX	
TOTAL	

PROFESSIONAL FLIGHT SERVICE, INC.

Maryland Airport

Indian Head, MD. 20640

283-0131

Customer's
Order No.

Date

11-11-52

Name

Address

SOLD BY

CASH

O.O.D.

CHARGE

ON
ACCT.

MOSE
RETD.

PAID
OUT

QUAN.

DESCRIPTION

PRICE

AMOUNT

1000 cc Fuel

1000 cc RT-328T

11-11-52 03H

TAX

TOTAL

All claims and returned goods MUST be accompanied by this bill

011484

Rec'd by

QUANTITY	PART NUMBER / DESCRIPTION	AMOUNT
1	ARCP/N 41405	320.00
	SN 15968	300.00
	Od 11/14/92 D	
	SUBLET REPAIRS	

PROFESSIONAL FLIGHT SERVICE

MARYLAND AIRPORT
INDIAN HEAD, MD 20640 (301) 283-0131
FAA APPROVED REPAIR STATION PJIR402K

NAME <i>Hal Church</i>	UNIT
ADDRESS	MODEL # <i>32PT</i> SERIAL # <i>10859</i>
CITY	AIRCRAFT TYPE
PROBLEM <i>Lack of NAV sensitivity Needs realignment</i>	SERIAL #
DUE OUT <i>11/1/92</i>	DATE <i>11/11/92</i>

WORK	WORK TO BE DONE	AMOUNT
2	<i>Checked all modes + functions Com O.K. - NAV inoperative - Isolated defective NAV LO synthesizer replaced with reconditioned unit. All O.K. on test.</i>	<i>100.00</i>

PARTS	<i>300.00</i>
LABOR	<i>100.00</i>
SUBLET OR OTHER	
TAX	<i>15.00</i>
TOTAL	<i>415.00</i>

I HEREBY AUTHORIZE THE ABOVE REPAIRS ALONG WITH THE NECESSARY MATERIAL. YOU OR YOUR EMPLOYEES MAY MAKE ALL NECESSARY CHECKS TO DETERMINE THE AIRWORTHINESS OF THIS UNIT. AN EXPRESS MECHANIC'S LIEN IS HEREBY ACKNOWLEDGED ON ABOVE UNIT TO SECURE AMOUNT OF REPAIRS THEREON. IF IT BECOMES NECESSARY FOR YOU TO EMPLOY A COLLECTION AGENCY AND/OR AN ATTORNEY TO COLLECT THIS AMOUNT, I THE UNDERSIGNED, AGREE TO PAY ALL COURT COSTS PLUS A REASONABLE ATTORNEY'S FEE AND/OR COLLECTION FEE.

CERTIFY THAT THIS RADIO HAS BEEN REPAIRED AND INSPECTED IN ACCORDANCE WITH CURRENT FAA REGULATIONS AND IS APPROVED FOR RETURN FOR SERVICE.

DETAILS OF THE REPAIRS ARE ON FILE UNDER WORK ORDER

11/1/92 04 DATE *11/11/92*

INSPECTED BY *H. H. Ingelin* FAA CERT. *PJIR402K*

4/5 00

PROFESSIONAL FLIGHT SERVICE, INC.

Maryland Airport

Indian Head, MD. 20640

283-0134

Customer's

Order No.

Date

11-14-92

Name

Address

SOLD BY

CASH

C.O.D.

CHARGE

ON ACCT

MOSE RETD

PAID OUT

QUAN

DESCRIPTION

PRICE

AMOUNT

11/19/92-044

415.00

Oct 11/983

TAX

TOTAL

All claims and returned goods MUST be accompanied by this bill.

011503

Rec'd by

PRECISION AVIONICS, INC.
DUTCHESS COUNTY AIRPORT
WAPPINGERS FALLS, NY 12590

* INVOICE 5363 *

SOLD TO:

DATE: 09/06/95
TERMS: COD

John McGlynn
64 Soundview Drive
Stanford, CT 06902

OUR TEL: 914-462-5118
YOUR TEL: 203-353-1560
ACCOUNT: JOMC

-----< DETAILS >-----

ADF INOP,

1. ADF inop. R-546E s/n 11830, IN-346A s/n 1001 test and found power supply shorted, troubleshot and found fuse F-1 open and Q-4 shorted, replaced both. Did complete bench alignment procedure, heat, freeze and vibrate. OPS test OK Yellow Tag. Remove, replace and ship test.

QTY	PART NUMBER	DESCRIPTION	EACH	EXTENDED
1	3 AMP	PICOFUSE	3.40	3.40
1	2N-5305	DARLINGTON TRANSISTOR	14.95	14.95

RETURN TO SERVICE - CRS # OQ1R383K
The component/work listed above was repaired and
or inspected in accordance with FAA regulations
and is approved for return to service.

TOTALS	
HOURS @ \$55.00:	4.00
LABOR:	220.00
PARTS:	18.35
OUTSIDE WORK:	0.00
SHIPPING & INS.:	0.00
N.Y. SALES TAX:	17.28

Signed _____

Thanks -
CK Glass

***** TOTAL: 255.63

PAI-700 VERTICAL CARD MAGNETIC COMPASS INSTALLATION AND COMPENSATION

INSTALLATION INFORMATION

For proper operation of the Vertical Card Magnetic Compass, it is important for the installer to understand the basic design differences of the "Wet Magnetic Compass" and the PAI-700 Vertical Card Magnetic Compass.

"WET MAGNETIC COMPASS"

The magnetic sensing element consists of bar magnets attached to a float or other device in such a manner as to create a pendulous assembly which sits on a pivot in a jeweled cup, free to tilt and rotate. The azimuth card is attached to said device in such a manner as to be viewed through the instrument lens.

The complete assembly is submerged in fluid, which acts as a damper, and is free to react to the earth's magnetic lines of force, horizontal and/or vertical, as well as other forces - gravity, kinetic, and centrifugal.

"PAI-700 VERTICAL CARD MAGNETIC COMPASS"

The magnetic sensing element consists of a somewhat more massive magnet with the additional torque required for rotating the vertical azimuth card. The sensing magnet is mounted on a shaft which rotates on jeweled bearings in a vertical housing affixed to the compass case assembly. Thus, the sensing magnet is maintained in a captive plane in relation to the aircraft. The rotation of the sensing magnet is transferred through miter gears and a shaft rotating on jeweled bearings in a horizontal housing to the vertical azimuth card. The design utilizes eddy-current damping (magnetic), and contains no fluid. Overswing is minimized or eliminated.

When level, the sensing magnet reacts to the earth's horizontal lines of force, and when not level, to some product of the earth's horizontal and vertical magnetic lines of force. The reaction of the sensing magnet to the forces present - gravity, kinetic, and centrifugal - is reduced due to the absence of pendulosity.

INSTALLATION

The afore-mentioned design details - shafts, jewels, gears, massive magnet, etc. - make it necessary to install the PAI-700 Vertical Card Magnetic Compass with adequate vibration damping. When installed too solidly, it is possible that a resonant vibration transmitted directly to the compass case may cause undue magnet and dial card movement. The best way to think of the mounting is to "gently" hold the compass in place - as in the palm of your hand.

Panel mounting is not recommended. The magnetic influences in this area may cause proper compensation to be difficult or impossible.

COMPENSATION INFORMATION

Each aircraft has its own inherent magnetic pattern and no two are alike, even of the same assembly line. The inherent magnetic pattern of an aircraft is a product of magnetic influences, physical presence in ferrous metal used in structure or components, induced, by electrical circuits of varying strength and location, and the earth's magnetic field.

From the above, one realizes that it is highly desirable to have the aircraft as close to flying configuration as possible, or flying, as the compensation procedure is followed. Known magnetic headings may be obtained for ground compensation by the use of a compass rose, master compass, or transit-perlorus. For taking each reading, the engine rpm should be at normal cruise and electrical and radio equipment should be in the flying norm. A directional gyro is a convenient azimuth reference with frequent rechecks of the original known magnetic heading to check possible drift. It is a good policy to confirm all ground compensations in flight.

On a smooth air day the compensation procedure may be followed in flight using the directional gyro azimuth with frequent rechecks of the original known magnetic heading to check possible drift. A known magnetic heading may be from a runway, section lines (with magnetic variation figured), or the "old iron compass" - a railroad.

(CONTINUED ON BACK)

IMPORTANT

The compensator is in neutral when the dots on the adjusting screws are aligned with the dots on the compensator face - NINE O'CLOCK. MAXIMUM compensator correction is attained when the adjusting screw is rotated - clockwise or counter - clockwise - 180°, or to THREE O'CLOCK. DAMAGE to the compensator mechanism will occur if the adjusting screws are forced beyond 180° in either direction.

COMPENSATION PROCEDURE

The poly-plane compensator used on the PAI-700 VC Magnetic Compass has a deviation correction range of approximately plus or minus twenty degrees on the cardinal headings. The readings in quadrants between cardinal headings are products of the adjacent cardinal headings corrective adjustments.

Use a non-magnetic screw driver for making adjustments.

1. Starting with the aircraft on a known magnetic heading of North, use the N-S adjusting screw to remove all deviation so the compass indicates North. The N-S adjusting screw is the LH screw on the compensator.
2. Rotate the aircraft to a known magnetic heading of East, use the E-W adjusting screw to remove all deviation so the compass indicates East. The E-W adjusting screw is the RH screw on the compensator.
3. Rotate the aircraft to a known magnetic heading of South. Note the degrees of deviation. Using the N-S adjusting screw, remove one half of the deviation.
4. Rotate the aircraft to a known magnetic heading of West. Note the degrees of deviation. Using the E-W adjusting screw, remove one half of the deviation.
5. Return the aircraft to the known magnetic heading of North to confirm its relation to South. The deviation should be the same. In some aircraft "fine tuning" adjustments and rechecks are necessary.
6. Return the aircraft to the known magnetic heading of East to confirm its relation to West. The deviation should be the same. In some aircraft "fine tuning" adjustments and rechecks are necessary.
7. On completion of the preceding procedure, the aircraft is rotated to each 30 degree known magnetic heading thru 360 degrees and the deviation is recorded on the compass correction card.
8. The compass correction card should be installed close to the compass and convenient for the pilot to read.

SHOULD the preceding procedure fail to produce satisfactory results, here are some suggestions:

Use a magnet to check hardware in the proximity of the compass. Steel screws and nuts can be replaced with brass or aluminum in some uses. Steel shake proof lockwashers will hold magnetism.

Some radio navigational instruments with meter movements have been the problem when they have no magnetic shield. This is a physical problem and not an electrical problem.

If the problem is electrical, manipulation of the switches should point out the site. On some rare occasions, it has been necessary to reroute some wiring.

Relocation of the compass is sometimes the answer. Sometimes only slight relocation can be the answer.

PAI MAGNETIC BALANCING BALLS - PART NO. PBB 475

The PAI Magnetic Balancing Balls are additional compensation aids. They are used in some aircraft to overcome compensation problems that resist all else. They are used successfully in many steel frame aircraft - Mooney, Ballanca, etc. Major deviation errors can be adjusted with the PAI Magnetic Balancing Balls and "fine tuning" is accomplished with the poly-plane compensator.

From The Desk
of
Clay T. Cullen

DATE: 28 June 2000
INV. No. 0628-1

To: RICK MOISAN
Re: 3212T - ANNUAL
TACH: 2061-8

N 3212T

① ANNUAL INSPECTION — 17.0 HRS — \$ 850.⁰⁰
PARTS: 1PA CHABLO FILTER \$ 16.⁰⁰
8PA ~~SOUPIL~~ SOUPIL MINERAL ~~2.00~~ (O/S - N/C) \$ 18.⁰⁰
1PA AN900-16 2.⁰⁰ →

② RESCUE ADF FREQ. KNOB — \$ 10.⁰⁰

③ REMOVED SHIPS BATTERY GROUND WIRE DUE TO CORROSION.
CLEANED, NEUTRALIZED & REINSTALLED — \$ 40.⁰⁰

④ REPLACED LEFT MAIN TIRE — 1.0 \$ 50.⁰⁰
PARTS: 1PA MCCORMY 600x6 GPLY AIRHAWK (O/S - N/C)

⑤ INSTALLED MISSILE UPPER COWL FASTENER - N/C
PARTS - 1PA SOUTHCO FASTENER - 140 w/ cup \$ 4.⁰⁰ →

TOTAL pg 1 \$ 972.⁰⁰

See 132. (cont) →

From The Desk
of
Clay T. Cullen

DATE: 26 JUNE 2000

INV. No. 0628-1
COUNT

To: N/A
Re: CLAY'S WEEKLY SUMMARY
Till: WEEK OF

AIRCRAFT

TIME NO.

TIME

\$ TOTAL

PRV
BAL. B-1 \$ 972

⑥ Replaced LEAKING FUEL TRIM GASKET AT R/H FUEL CELL - 1.5

\$ 75

PARTS: 10A S1588-1 GASKET \$16.⁰⁰
6A 6350 - WASHERS 6.⁰⁰

\$ 22.⁰⁰

⑦ DRAINED FUEL CELLS, REMOVED CORRODED GASULATOR ASS'Y & REPLACED WITH SERVICEABLE UNIT, REFUELED & LEAK CHECK SYSTEM & ASSEMBLY - OIL - 5.5

\$ 275.⁰⁰

PARTS: 10A GASULATOR Assembly Serviceable 07560005-2 (O/S - N/C) \$.

⑧ REMOVED CORROSION AT TAIL NAV. LIGHT ASS'LY - .2

\$ 10.⁰⁰

⑨ PERFORMED EIT INSP/OPS ✓ F/A/W FAR 91.207 - .3

15.⁰⁰

⑩ REPLINED AIR INTAKE FILTER - .3

15.⁰⁰

K-PARTS: 10A BA5705 (O/S - N/C)

TOTAL

\$ 1,384.⁰⁰

CENTURY AIR MANAGEMENT, INC.
P.O. BOX 140
TERRYVILLE, CT. 06786-0140

(203)269-7703

NORTH AMERICAN AVIATION
49 MARY BROOK RD
DANBURY, CT

06810

DATE : Jun 28, 20**
INVOICE # : 10775
TERMS : NET 30 DAYS
P.O. # : VBL
SHIP VIA : DELIVER

ORDERED	SHIPPED	BACK ORDER	PART NUMBER	DESCRIPTION	LIST	COST	UNIT	DISC.	TOTAL
2	0	2	0523619-1	FUEL ACCESS GASKET	12.60	12.60	EA	.0%	0.00
2	2	0	100 12-1QT	50 WT MINERAL OIL	25.50	25.50	CA	.0%	51.00
1	1	0	BA-5705	FILTER ELEMENT	8.18	4.90	EA	40.00%	4.90
1	1	0	600X4	McCOMBS AIRHAWK		65.00			

RICK - \$ 95.10

TO CENTURY AIR MGT.

CT. SALES TAX 0.00
SHIP/DELIVER 0.00
DROP SHIP FEE 0.00
HAZMAT FEE 0.00
TOTAL \$5.90

U.S. AIR SALVAGE INC.

639 WOODLYN ROAD, PO 5832
JOHNSON CITY, TN 37603

423-929-1330 FAX: 423-929-2747

Invoice

DATE	INVOICE #
06/22/00	5677

BILL TO
Clay Cullen 49 Miry Brook Rd Dunbury CT 06810 203-797-0649

SHIP TO

P.O. NUMBER	TERMS	REP	SHIP	VIA	F.O.B.	PROJECT
	Credit Card		06/22/00	Federal Express		
QUANTITY	ITEM CODE	DESCRIPTION			PRICE EACH	AMOUNT
1	PARTS SHIPPING	1968 CARDINAL GASCOLATER FEDEX STANDARD OVERNIGHT Out-of-state sale, exempt from sales tax			150.00 13.40 0.00%	150.00T 13.40 0.00
PARTS GUARANTEED 10 DAYS FROM DATE RECEIVED. CUSTOMER IS LIABLE FOR SHIPPING CHARGES ON ALL RETURNS.						
					Total	\$163.40

Aircraft Speed Mods, Ltd.

DESIGNS BY SOBCHUK



G. Kurt Thompson, President

6310 Old Cove Drive

Emerald Isle, North Carolina 28594

~~(919) 354-6630~~



HAL CHURCH
102 ROSEWOOD TERRACE
LEXINGTON PARK, MD 20653

New Ph #
Maple Leaf 21 AUG 90
204 728 7618
Canada

Thank you for your inquiry. I believe this information will prove to be of assistance to you. Please call or write for additional information. I can provide photo copies of pictures of the individual mods if necessary. All of my Cardinal's mods have been approved with FAA 337's except the Fancy Pants™ and the late model wheel pants which have STC's. Be sure that you contact the FAA GADO of FSDO before starting any installation of these mods: Conversation now will save much frustration later!

These photos illustrate (TOP LEFT) The newest available air inlets for reduced cooling air turbulence and cold weather flying, (TOP RIGHT) the nose gear cylinder & scissors assy fairing (also called "FANCY PANTS"™), (CENTER LEFT) the late model main landing gear fairing with the newly designed brake fairing and the customer fabricated leg fairing, (CENTER) the exhaust pipe fairing, (CENTER RIGHT) an aft shot of the new model main landing gear fairing & newly designed brake fairing, (BOTTOM LEFT) the tailcone fairing with stabilator gap seals molded in, (BOTTOM CENTER) the fuselage fairing cuff (now superseded by a much better fitting design) and another glimpse of the custom made main landing gear leg fairing with its normal airfoil at top and reversed airfoil at the bottom, (BOTTOM RIGHT) the opposite side air inlet. This aircraft which previously cruised at 130 MPH, now cruises at 155 MPH at 5500 feet at 23.5" X 2400 RPM. Several additional mods are on the aircraft now and I have seen 165 MPH straight and level at full power at sealevel and 173 MPH straight and level at 3500 feet. We are still modifying the aircraft and expect to make further gains in the near future.

My takeoff roll is quite noticeably reduced and rate of climb is at least 200 fpm greater than book. I have now applied full gap seals (FAA 337 approved) to my Cardinal and my old service ceiling of 14,600' is now estimated in excess of 20,000'. During a climb test, I had an engine failure due to a broken valve at 19,000' and was then still climbing at better than 200 fpm. I believe that this aircraft could easily break 20,000' before the rate of climb dropped below 100 fpm! That old engine now has Cermichromed cylinders by ECI of San Antonio, TX, has been remanufactured by Firewall Forward of Loveland, CO, is blueprinted, balanced, ports polished, cylinders flow balanced, is powerful and runs smooth as silk and has no oil leaks. At 120 hours since the overhaul, my oil consumption is at 10 hours per quart and compressions are 77.5 to 79.0 over 80 on all cylinders.

Aircraft Speed Mods, Ltd., in cooperation with ISO Aero Services, Inc. located at Kinston Regional Jetport, in Kinston, NC, is proud to be able to offer full "turnkey" installation of your aircraft modifications. We have now secured FAA certification of our "mod" installations for all of the Cardinal models C-177, C-177A, C-177B and the RG-177. We will be adding C-172s and C-182s to the list of aircraft that we install the speed mods on in the near future. Now, for the first time since the Sobchuk mods have been available, the customer is able to select the speed mods he or she wants installed and simply deliver their Cessna to a reputable FBO for complete installation. We can now give an estimate for your job that is totally complete including all mods, fiberglassing, fasteners, painting and the required FAA 337's with weight and balance updates when necessary.

When the aircraft is picked up, it will be ready to fly with no delays caused by your FSDO's or GADO's being reluctant to approve the modifications because it is the first time they have seen them or problems with A&P's and AI's either unfamiliar with the current FAA regulations or the paperwork necessary to secure approval of these modifications. You will not be delayed weeks or even months trying to "do it yourself" nor will you have to pay hard-earned money to finance the learning curve of an A&P mechanic unfamiliar with the installation of these mods and any time-saving methods we have developed due to the number of mods we have installed.

ISO Aero Services, Inc. has an excellent reputation for aircraft maintenance and has been a Cessna dealer for many years. They regularly maintain their own large fleet of Cessna aircraft and their ongoing experience insures that your Cessna will be worked on by someone that knows both how it is built and how to maintain it properly. They maintain a large stock of Cessna spare parts and usually have what you need to keep your aircraft going strong. Their shop is clean, well equipped, has an excellent reputation, and is staffed by highly experienced personnel. Exclusive of sanding, painting and preparing the FAA Form 337, we estimate that we can install mods within the following time frames:

- (1) Exhaust Fairing-1.5 manhours (RG-177-2.5 manhours)
- (2) ADF Loop Cover-1.0 manhour
- (3) Tailcone Fairing-4.0 manhours for lower/7.0 upper and lower
- (4) Wheel Pants-MLG-1.5 manhours ea.
- (5) Wheel Pants-Nose-1.0 manhour
- (6) Gap Seals-7.5 manhours (not yet available)
- (7) Fancy Pants™ 12.0 manhours (C-182 7-8 manhours)
- (8) Air Inlets-3.0 manhours
- (9) MLG Kit-8.0 manhours
- (10) Fuel Drain Fairings-1.5 manhours for set of three
- (11) Cowl Cheek Fairings-1.5 manhours
- (12) Cabin Roof Fairing-8.0 manhours (not yet available)
- (13) Stabilator Tips-1.5 manhours for set of two
- (14) Front Filler for Fancy Pants™-0.5 manhour
- (15) Fixed Cowl Flap-3.5 manhours
- (16) Wheel Bolt Fairings-1.5 manhours set of four
- (17) Inertia Reel Shoulder Harnesses-7.0 manhours for front & rear seats

J. MHS.

SPEED FAIRINGS**Fancy Pants™ (w/hardware)****ADF Loop (w/hardware)****Nose Pants (5.00x5)
MLG Pants (6:00x6)****Exhaust Fairing (Lyc Eng)
Exhaust Fairing (Lyc Eng)
Exhaust Fairing (Cont Eng*)****Tailcone (Incl Tiedown)****Fixed Cowl Flap****Cowl Cheek Fillets****Front Filler (Fancy Pants lead in)****Fuel Drain Fairings****Wheel Stud Covers****Stabilator Tips****Main Ldg Gear Kit
(Incl Brake & Fuselage Fgs & Plans)****Brake Fairings (Tube Type Gear*)****Air Inlet Fairings****Inertia Reel S/Harness
(Incl Lap Belt, Buckle & Fgs)****Inertia Reel S/Harness
(Replaces old style fixed shoulder harness)****AIRCRAFT****C-177s
C-182
C-172 (Being STC'd-Not Yet Available)****Cessna 172,177,182,206****Cessna 172,177,182,206****Cessna 172,177,182,206****C-172,177****172RG,177RG****C-182 w/right side exh*****All Cardinals****C-177s****C-177s****C-177s****Cessna 172,177,182,206****Cessna 172,177,182,206****All Cardinals****C-177s****C-177,182****C-177s****All****All****YEAR****All
61 & newer
Available)****All****All****All****All****All****All****69-78****68-69****All****70-78****All****All****All****All****All*****All****All****All****PRICE****\$517.00 w/STC
\$517.00 w/STC****Lg \$45.00
Sm \$35.00****\$225.00 w/STC
\$225.00 w/STC****\$225.00
\$250.00
\$225.00****\$325.00****\$310.00****\$79.00 set of 2****\$32.00****\$12.00 each****\$71.00 for 4****\$260.00 set of 2****\$560.00 for kit ✓
(alum. \$29. extra)****\$300.00 set of 2****\$175.00 set of 2****\$200.00 (Black)
TSO C-22f****\$125.00 (Beige)******Strap colors can be easily changed**

Canadian shipment into the states & UPS shipment to the customer not included in prices shown. Please allow up to 4 - 6 weeks lead time when placing your order due to the fact that the Canadian manufacturer of many of these parts only fabricates the parts when an order is received. Customs processing and shipping add a minimum of two weeks. If requested items are in our current stock, we will ship within 24 hours. Prices are subject to change without notification. Check for current prices when placing your order for merchandise.

From the Desk Of John McGlynn
64 Soundview Drive
Stamford, CT. 06902
(203) 353-1560 (Home)
(718) 248-8035 (Office)

8/26/94

Aviation Insurance Group
Attn: Misty
Re: Renewal of N3212T

Dear Misty,

Here we are again at the annual renewal and let's see if we can figure out how many hours we all have. The chart below summarizes our total hours.

Pilot	Total Hours	Total C177 Hours
John McGlynn	350	161
Rick Moisan	305	105
Phillip Woellhof	SEL 165 Glider 76.4 Total 241.4	28.7

These totals do not coorespond with the estimates given last year. I believe that totals for Rick and Phillip were switched because if I add Phillips total for 94/95 to Rick's total hours it starts to look more accurate. In any case, please use the hours listed above since I can defend them. The total hours in the C177 Cardinal I obtained from our monthly flight summary sheets that we keep on the airplane to split expenses. Please call me on 212-657-2183 if you ahave any more questions.

Thanks
John

Sincerely,


John McGlynn
64 Soundview Drive
Stamford, CT. 06902

Post-It Fax Note	7671	Date 3/16	# of pages 2
To: Misty	From: John McGlynn		
Co. Dept. Aviation Ins	Co. City/State		
Phone #	Phone #		
Fax #	Fax #		