FEDERAL AVIATION AGENCY

Form approved.
Budget Bureau No. 04-R060.

MAJOR REPAIR AND ALTERATION FORM (AIRFRAME, POWERPLANT, PROPELLER OR APPLIANCE)

1. AIRCRAFT MAKE	MODEL	SERIAL NO.	NATIONALITY AND REGISTRATION MARK
Piper	PA-17	17-114	N4816H

2. OWNER NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
J E Lebo	610 Center St Millersburg, Pa.

3. COMPLETE ONLY FOR UNIT REPAIRED AND/OR ALTERED. DESCRIBE WORK ACCOMPLISHED ON REVERSE IN ACCORDANCE WITH CIVIL AERONAUTICS MANUAL 18.

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check) MAJOR REPAIR	MAJOR ALTERATION
a. AIRFRAME	(As described in item 1 above)				X
b. POWERPLANT					
c. PROPELLER					
d. APPLIANCE	TYPE AND MANUFACTURER				

The [illegible] identified herein complies with applicable airworthiness requirements and is approved only for the above-described aircraft subject to continuity inspection by a person authorized in CAR 1.111(b).

APPROVING INSPECTOR [signature]

DATE 7-11-63

4. AIRCRAFT WEIGHT AND BALANCE DATA *AFTER the repairs and/or alterations described below were made.

This item must be completed by repair or alteration agency. However, in the case of a spare component, it will not be completed until such component is installed in an aircraft. At this time, it will be completed by the installing agency, if applicable.

CATEGORY	EMPTY WEIGHT (Pounds)*	EMPTY CENTER OF GRAVITY (Inches from datum)*	USEFUL LOAD (Pounds)*
Nor	738.5	12.8" aft Wing LE	411.5

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Ner C Coulter, Jr. Box 170A New Cumberland, Pa.	☒ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	A&P 422947

d. I certify that the repair and/or alteration made to the unit(s) identified under item 3 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 18 of the U. S. Civil Air Regulations and that the information furnished herein is true and correct to the best of my knowledge.

26 Apr 63
(Date repair and/or alteration completed)

Ner C Coulter, Jr. A&P 422947
(Signature of authorized individual)

6. APPROVAL FOR RETURN TO SERVICE (Check and complete appropriate items)

Pursuant to the authority specified below the unit identified in item 3 was inspected in the manner prescribed by the Administrator of the Federal Aviation Agency and is

☒ APPROVED ☐ REJECTED BY ☐ FAA Designee ☐ FAA Flight Standards Inspector ☐ Manufacturer ☐ Repair Station ☐ Canadian Department of Transport Inspector of Aircraft ☒ Other (Specify) Auth Insp

26 Apr 63
(Date of approval or rejection)

Ner C Coulter, Jr. A&P 422947
(Signature of authorized individual; title or identification number)

7. TO BE COMPLETED ONLY BY FAA PERSONNEL

a. ☐ Forwarded for engineering comment ☐ See attached memorandum

b. ☐ Accepted _____ (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

_____
(FAA designation number)

_____
(Signature Flight Standards Inspector)

Form FAA-337 (4-62)

INSTRUCTIONS

This form must be completed in duplicate each time a major repair and/or alteration is made of an aircraft, airframe, powerplant, propeller or appliance. After the repair and/or alteration has been inspected and item 6 completed, the original copy of this form will be made available to the aircraft owner for retention as part of the aircraft records. The duplicate copy is retained by the FAA for administrative purposes.

See CAM 18 for detailed instructions concerning the information to be furnished with this form and instructions concerning its preparation.

---

8. DESCRIPTION OF WORK ACCOMPLISHED.*

1. Remove Nova-Tech radio.
2. Install Narco VHF-3 radio. Radio box mounted under left side of Instrument Panel to fuselage cross tubes as shown in the attached drawing. Antenna and leads, speaker and fuseing system of origional installation retained for this radio.
3. Structural support check meets requirements of CAM3. Material and work are in accordance with Cam 18.
4. Circut fused as shown on attached drawing.
5. Max running load of 7.2 amps does not exceed 80% Of 10 generator capacity, Champion P/N W-1510-9.
6. Install 9 gal wing tank in right wing in accordance with instructions provided by the kit manufacturer.(Stoddard Aero Co. 2550 E Fifth Ave, Anchorage, Alaska) This Installation was accomplished identical to like installation on Piper Pa-17 Ser No 17-7, N4582H. Copy of that 337 is attached. Also attached are installation instructions.
7. Placcard on Panel:
   Pilot only - No baggage when all tanks are full
   Pilot and Pass - No baggage and no fuel in wing tanks
8. Weight and balance:

Aircraft empty	727.2	63.04	45832.6
Vht-3 Narco	7.3	49.0	357.7
Wing tank	8.0	70.00	560.0
Nova-tech radio (Rem)	- 4.5	52.00	- 234.0
	738.5		46516.3

$\frac{46516.3}{738.5}$ = 62.8" aft datum = 68.2-50.0 = 12.8" aft wing LE

EWCG limits are 12.5 to 17.5" aft wing LE

New EWCG	12.8" aft Wing LE
New Empty wt	738.5 Lbs
New Useful load	411.5 Lbs

---

*If additional space is needed attach additional sheets bearing aircraft nationality and registration mark and date work completed.

Check block if additional sheets are attached. ☒

U.S. GOVERNMENT PRINTING OFFICE 1961—870263

STODDARD AERO SERVICE

INSTRUCTIONS FOR INSTALLING WING TANK IN PIPER VAGABOND (PA-15 & 17)

1. Remove fairing strips from root of wing (both top and bottom strips).

2. Cut away area from top of wing where tank will be located (between first and second ribs of right wing). Use care to avoid cutting any of the rib stitching of the second rib. Area removed should be the entire width—between the ribs—and extending in length from about two inches ahead of the front spar to about two inches aft of the rear spar.

3. Remove and discard all channel braces within the tank area Disconnect the drag wires crossing the tank area and withdraw them through the inspection holes only far enough to permit the tank to lower into place. (It may be necessary to apply inspection rings at the outer ends of the drag wires in order to provide an opening through which to work and a place through which to withdraw the wires.) Tie lengths of safety wire to each of the drag wires to use as pull-wires to draw them back through the tank. Lay the wires back over the second rib. Cut web across braces and tie to second rib instead of first.

4. Locate point of lower wing fabric directly below tank clamp locations and apply two inspection rings, cut away fabric from center of ring. Wrap the spars with two or three layers of friction tape at the places where the tank brackets will be located. Apply two inspection rings near the root of wing at the drag-wire connections through which to reconnect them. (Applied to lower wing fabric.) Locate position of tank outlet and clip or remove any interfering web from rib member (first rib) (a rotary file is ideal for this). Cut away a small area of the aluminum leading edge material both at the top and bottom of the spar where the front tank bracket locates. This will have to be done even before the spar can be wrapped with friction tape. Provide only enough room to install and tighten the bracket through-bolt.

5. Place tank on wing in place to be entered, insert safety wires through their respective holes and lower into place. Bend lower end of clamp up under spars and install 3/16 through-bolts. Re-install drag wires and adjust. Locate spot on lower wing fabric and cut small hole for tank drain. Apply small grommet f[redacted].

6. Cut a 30-inch length of copper tube and connect to the tank outlet using the STRAIGHT connector. Form a gradual bend and bring through the fabric to the inside of the cabin through an appropriate hole cut for it. Attach cut-off valve at this position. Bring additional tubing forward and down right side of through space just ahead of instrument panel (if space is inadequate, enlarge with punch). Avoid any sharp bends in line and slope gently downward from point where line enters cabin.

7. Insert "T" in regular fuel line between regular shut-off valve and strainer. Connect auxiliary fuel line to this "T".

8. Cut piece of fabric at least four inches wider and longer than opening in wing cut for tank. Avoid doping within an inch of tank to permit wrinkles to be pulled from top of wing. Dope cloth to this area and allow to dry. When dry apply dope to top of tank, stretch fabric toward fuselage to remove slack between second and third ribs. Cut out a finishing cloth grommet to apply around filler neck. Refinish top patch and re-install fairing strips.

Placard to be placed near filler cap:

"FUEL 9 GALLONS"

"FACE VENT FORWARD"

Placard to be placed near tank shut-off valve:

AUXILLIARY FUEL—9 GALLONS
TURN VALVE ON WHEN MAIN TANK
GETS BELOW ¼ FULL. TURN VALVE
OFF BEFORE REFILLING TANK.
TRANSFER FUEL IN LEVEL FLIGHT
ONLY.