

U. S. DEPARTMENT OF COMMERCE  
CIVIL AERONAUTICS ADMINISTRATION

Form 1227-1  
Replaces Form No. 12-2022-1

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------|
| 1. AIRCRAFT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MAKE<br>Grumman                             | MODEL<br>G73 Hallard                                                                                                                                                                                                                                                                                                                   | SERIAL NO.<br>J-14                                                                       | NATIONALITY AND REGISTRATION MARK<br>N2954              |
| 2. OWNER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | NAME (Firm, person, etc.)<br>Packer Pontiac |                                                                                                                                                                                                                                                                                                                                        | ADDRESS (Street and number, city, state and zip)<br>18650 Livernois<br>Detroit, Michigan |                                                         |
| 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)<br>MAJOR REPAIR MAJOR ALTERATION |
| A. AIRFRAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ***** (As described in item 1 above) *****  |                                                                                                                                                                                                                                                                                                                                        |                                                                                          | X                                                       |
| B. POWERPLANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |
| C. PROPELLER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |
| D. APPLIANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | TYPE AND MANUFACTURER                       |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |
| 4. AIRCRAFT WEIGHT AND BALANCE DATA. 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.<br>*AFTER the repairs and/or alterations described below were made.                                                                                                                                                                                                                                                                                                             |                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |
| CATEGORY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | EMPTY WEIGHT (Pounds)*                      | EMPTY CENTER OF GRAVITY (Inches from datum)*                                                                                                                                                                                                                                                                                           | USEFUL LOAD (Pounds)*                                                                    |                                                         |
| Stan. 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 9,261                                       | -11.46                                                                                                                                                                                                                                                                                                                                 | 3,489                                                                                    |                                                         |
| 5. CONFORMITY STATEMENT (Complete and check)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |
| a. AGENCY'S NAME AND ADDRESS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                             | b. KIND OF AGENCY                                                                                                                                                                                                                                                                                                                      |                                                                                          | c. CERTIFICATE NO.                                      |
| SUNNY SOUTH AIRCRAFT SERVICE<br>HOWARD COUNTY INTERNATIONAL AIRPORT<br>FORT LAUDERDALE, FLORIDA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                             | <input type="checkbox"/> U. S. Certificated Mechanic.<br><input type="checkbox"/> Foreign Certificated Mechanic.<br><input checked="" type="checkbox"/> Certificated Repair Station.<br><input type="checkbox"/> Manufacturer.<br><input type="checkbox"/> (Check if repair or alteration was made under delegation option procedure.) |                                                                                          | 3673                                                    |
| 6. 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.<br>March 14, 1956<br>(Date repair and/or alteration completed)                                                                                                                                                                                                                                                                     |                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |
| 6. APPROVAL FOR RETURN TO SERVICE (Check and complete appropriate items)<br>Pursuant to the authority specified below the unit identified in item 3 was inspected in the manner prescribed by the Administrator and is:<br><input checked="" type="checkbox"/> APPROVED BY <input type="checkbox"/> CAA Designee <input type="checkbox"/> Manufacturer <input type="checkbox"/> Canadian Department of Transport Inspector of Aircraft<br><input type="checkbox"/> REJECTED BY <input type="checkbox"/> CAA Aviation Safety Agent <input checked="" type="checkbox"/> Repair Station <input type="checkbox"/> Other (Specify)<br>March 14, 1956<br>(Date of approval or rejection) |                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |
| 7. TO BE COMPLETED ONLY BY CAA PERSONNEL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |
| a. <input type="checkbox"/> Forwarded for engineering comment <input type="checkbox"/> See attached memorandum<br>b. <input checked="" type="checkbox"/> Accepted <input type="checkbox"/> Reinspected <input type="checkbox"/> Spot Checked<br>(Date) (Date) (Date)<br>(Signature of authorized individual, title or identification number)<br>(Signature Aviation Safety Agent)                                                                                                                                                                                                                                                                                                  |                                             |                                                                                                                                                                                                                                                                                                                                        |                                                                                          |                                                         |

## 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 CAA for administrative purposes.

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

## 6. DESCRIPTION OF WORK ACCOMPLISHED:

The following radio equipment was removed from aircraft:

1. Narco, VTR, Modulator and antenna.
2. IN-26-X Range receiver.
3. IN-54-A Fixed loop antenna.

The following equipment was installed in aircraft:

1. 2 each ARC - Type 15D Omnis.
2. ARC-CD-1 Course director.
3. ARC-F-11-A Amplifier.
4. ARC-T-11 Transmitter.
5. R89B/ARN-5A Glide path receiver.

Radio equipment removal, installation and final check out performed by Radio Department, Sunny South Aircraft Service personnel, with approved type installation prints for the above mentioned equipment.

## WEIGHT AND BALANCE COMPUTATION

|                                     | <u>Wt.</u>   | <u>Arm</u> | <u>Moment</u> |
|-------------------------------------|--------------|------------|---------------|
| Aircraft (gross weight)             | 9,242.0      | - 11.56    | 106892.175    |
| Narco VTR                           | 7.5          | -141.0     | 1057.5        |
| Narco modulator                     | 6.75         | -184.0     | 1242.00       |
| Narco antenna                       | 5.25         | + 10.0     | 52.50         |
| IN-26-X Range receiver              | 42.0         | -181.0     | 7602.0        |
| IN-54-A Fixed loop antenna          | 4.5          | - 94.0     | 423.0         |
| (Installed Equipment)               |              |            |               |
| 2 each ARC, type 15D Omni equipment | 44.0         | -193.0     | 8492.0        |
| ARC-CD-1 Course director            | 8.6          | -105.0     | 903.0         |
| ARC-CD-1 Course director unit       | 2.0          | +261.0     | 522.0         |
| ARC-F-11-A Amplifier                | 8.0          | -105.0     | 840.0         |
| ARC-T-11 Transmitter                | 3.8          | -105.0     | 399.0         |
| R89B/ARN-5A Glide Path              | 18.8         | -105.0     | 1974.0        |
|                                     | 9,261.0 lbs. |            | 106078.175    |

New Empty Wt. 9,261. lbs.  
 New Empty Wt. C.G. - 11.46 lbs.  
 Useful load 3,489. 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. ☐