

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form Approved. Budget Bureau No. 41-R041.5.

**APPLICATION FOR AIRWORTHINESS CERTIFICATE
AND/OR ANNUAL INSPECTION OF AN AIRCRAFT**

INSTRUCTIONS

Please print or type. Submit this form to the Civil Aeronautics Administration Aviation Safety Field Representative.

1. TYPE OF APPLICATION. (Check which)

- a. ORIGINAL ISSUANCE OF CERTIFICATE
 b. ANNUAL INSPECTION FOR RENEWAL OF CERTIFICATE
 c. AMENDMENT OR MODIFICATION OF CURRENT CERTIFICATE
 d. RECERTIFICATION UNDER THE PROVISIONS OF CAR 8
 e. MULTIPLE CERTIFICATE UNDER THE PROVISIONS OF CAR 8
 f.

2. AIRWORTHINESS CLASSIFICATION (Check appropriate item(s))

It is requested that the Certificate of Airworthiness be issued to permit operation of the aircraft in the following airworthiness classification(s):

- a. STANDARD (NORMAL, UTILITY, ACROBATIC, TRANSPORT CATEGORIES)
 b. LIMITED (SEE CAR 9)
 c. RESTRICTED (SEE CAR 8)
 (Check the restricted special purpose operation(s) to be conducted)
 AGRICULTURAL AND PEST CONTROL
 AERIAL ADVERTISING
 AERIAL SURVEYING
 GLIDER TOWING
 PATROLLING
 FOREST AND WILDLIFE CONSERVATION
 WEATHER CONTROL
 OTHER
 d. EXPERIMENTAL
 (Check the type of experimental operation(s) to be conducted)
 RESEARCH AND DEVELOPMENT
 AMATEUR-BUILT
 DEMONSTRATION
 RACING
 EXHIBITION
 OTHER

3. AIRCRAFT IDENTIFICATION (Complete all items)

a. AIRCRAFT MAKE GRUMMAN	b. AIRCRAFT MODEL G-21A	c. AIRCRAFT SERIAL NO. 1172
d. ENGINE MAKE PRATT & WHITNEY	e. ENGINE MODEL R-985-AN4	

4. AIRCRAFT REGISTRATION INFORMATION (Complete all items)

a. REGISTERED OWNER'S FULL NAME Alaska Coastal-Ellis Airlines	b. PERMANENT MAILING ADDRESS 2 Marine Way Juneau, Alaska	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK N- 74676
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5. AIRCRAFT OWNER'S CERTIFICATION (Check and complete appropriate item)

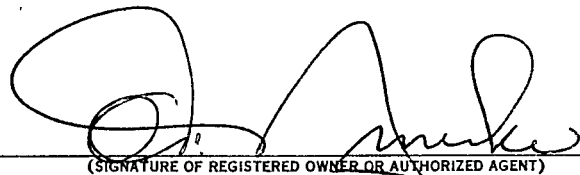
I hereby certify that I am the registered owner (or his agent) of the aircraft identified in Item 3 above which is registered* with the Civil Aeronautics Administration as required by the Regulations of the Administrator, Part 501 or 502 and when operated displays the following evidence of registration:

- a. CERTIFICATE OF REGISTRATION, FORM ACA-500 (PART A). DATE OF ISSUE _____
 b. APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B). FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON 10/1/62 (DATE)
 c. DEALER'S REGISTRATION CERTIFICATE, FORM ACA-1707, DATED _____

*In order to be eligible for registration an aircraft must be owned by a citizen of the United States, as defined by Section 1 (13) of the Civil Aeronautics Act of 1938, as amended.

ATTACHMENTS (Check which)

- ACA-319
 ACA-337
 ACA-317
 WEIGHT AND BALANCE REPORT
 DATA, DRAWINGS, ETC.
 UNAPPROVED DEVIATION DATA



(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

10/11/62

(DATE)

V.Pres.-Adm. & Finance

(TITLE)



**U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION**

AIRCRAFT INSPECTION REPORT

(To be completed by a CAA representative or approved repair station)

The aircraft described in Item 3 on the reverse of this form has been inspected and found to conform to the following: (Check and complete applicable items)

1. AIRCRAFT AND ENGINE CERTIFICATION BASIS

a. AIRCRAFT SPECIFICATION NO. _____ THROUGH SHEET REVISION NO. _____

b. AIRCRAFT LISTING PAGE NO. 98

c. AIRWORTHINESS DIRECTIVE SUMMARY 1962 THROUGH CARD NO. 62-22

d. CIVIL AIR REGULATION PART 8 (MODIFIED TYPE CERTIFICATE)

2. AIRCRAFT AND ENGINE OPERATING RECORDS

a. AIRCRAFT NEW—NO PREVIOUS OPERATION OR MAINTENANCE HISTORY

b. COMPLIANCE WITH APPLICABLE AIRWORTHINESS DIRECTIVES RECORDED

c. AIRCRAFT RECORDS INDICATE THE AIRFRAME HAS BEEN OPERATED A TOTAL OF 11144.7 HOURS

d. ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:

SERIAL NO.	TOTAL HOURS
<u>P227020</u>	<u>1701.6</u>
<u>14450</u>	<u>Unknown-ISO</u>
<u>176.3</u>	<u>176.3</u>

3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)

a. LAST AIRWORTHINESS INSPECTION CONDUCTED _____ (DATE)

BY AIRCRAFT MANUFACTURER BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
 BY MECHANIC, CERTIFICATE NO. _____
 b. PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED

a. OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
 b. CURRENT OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
 c. CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT
 d. CURRENT WEIGHT AND BALANCE INFORMATION IS AVAILABLE IN AIRCRAFT
 e. THIS INSPECTION HAS BEEN RECORDED IN THE AIRCRAFT RECORDS
 f. CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISSUED TO EXPIRE 5-15-59 (DATE)
 g. PREVIOUS FORM ACA-1362 WAS ISSUED 5-15-59 (DATE) BY V. M. DENISON (NAME OF ISSUING REPRESENTATIVE) 5-732 (DESIGNATION NO.)

5. CAA APPROVED REPAIR STATION CERTIFICATION

The aircraft described on the reverse has been inspected under the authority accorded certified repair station No. _____ by CAR 52 and was found to be:

AIRWORTHY UNAIRWORTHY

(REPAIR STATION AUTHORIZED SIGNATURE) _____ (DATE) _____

6. CAA REPRESENTATIVE CERTIFICATION

I HAVE INSPECTED THE AIRCRAFT DESCRIBED ON THE REVERSE AND FOUND IT AIRWORTHY UNAIRWORTHY (Check appropriate item)

DESIGNEE'S SIGNATURE _____ DESIGNATION NO. _____ DATE _____

AVIATION SAFETY AGENT'S SIGNATURE Stanley R. Fenner CAA DESIGNATION NO. AL-3 AL FSD-3 DATE 10/15/62

ATTACHMENT

ACCEPTED REINSPECTED SPOT CHECKED

Handwritten notes: "When not maintained and operated in accordance with operating certificates Nos. AL-501 & 501F. Available in aircraft in compliance with CAM 43.10." and "When not maintained and operated in accordance with operating certificates Nos. AL-501 & 501F."

UNITED STATES OF AMERICA — FEDERAL AVIATION AGENCY

STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS N74676	2. MANUFACTURER AND MODEL GRUMMAN G-21A	3. AIRCRAFT SERIAL NUMBER 1172	4. CATEGORY NORMAL
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5. AUTHORITY AND BASIS FOR ISSUANCE

This airworthiness certificate is issued pursuant to the Federal Aviation Act of 1958 and certifies that, as of the date of issuance, the aircraft to which issued has been inspected and found to conform to the type certificate therefor, to be in condition for safe operation, and has been shown to meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention on International Civil Aviation, except as noted herein.

Exceptions:

NONE

6. TERMS AND CONDITIONS

Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator, this airworthiness certificate is effective as long as the maintenance, preventative maintenance, and alterations are performed in accordance with Parts 21, 43, and 91 of the Federal Aviation Regulations, as appropriate, and the aircraft is registered in the United States.

DATE OF ISSUANCE 11-19-65 EXCHANGE	FAA REPRESENTATIVE <i>Stanley R. Ferber</i> STANLEY R. FERBER	DESIGNATION NUMBER AL-FSDO-3
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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.



UNITED STATES OF AMERICA
FEDERAL AVIATION AGENCY

CERTIFICATE OF AIRWORTHINESS

1. NATIONALITY AND REGISTRATION MARKS	2. MAKE AND MODEL OF AIRCRAFT	3. AIRCRAFT SERIAL NUMBER
N- 74676	GRUMMAN G-21A	1172

4. CATEGORIES

STANDARD

5. This Certificate of Airworthiness is issued pursuant to the Convention on International Civil Aviation dated 7 December 1944, and the Federal Aviation Act of 1958, in respect of the above-mentioned aircraft which is considered to be airworthy when maintained and operated in accordance with the foregoing and the pertinent Airplane Flight Manual.

10/15/62

DATE OF ISSUE

Stanley R. Ferber
Stanley R. Ferber

FAA REPRESENTATIVE

AL-3

DESIGNATION NO.

6. This aircraft is being maintained under a continuous inspection system in accordance with the terms of Operating Certificate No. AL-501

676

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

FOR FAA USE ONLY
OFFICE IDENTIFICATION
50-PS00-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) West Seaplane Ramp, Christiansted ST CROIX, U.S.V.I. 00820

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
CLAUDE AUSTIN C/O ANTILLES AIR BOATS, INC. ST CROIX, U.S.V.I. 00820	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	A & P 2227109
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

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

DATE NOVEMBER 1, 1978	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Claude Austin</i> CLAUDE AUSTIN
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION			CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT
DATE OF APPROVAL OR REJECTION NOVEMBER 1, 1978	CERTIFICATE OR DESIGNATION NO. IA 1617154	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles Freiling</i> CHARLES FREILING		

NOTICE

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

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

Increase maximum weight to 8750 lbs in accordance with STC SA 3630ME. See attached data.

Weight and balance correction entered in Aircraft Log Book.

NOTHING FOLLOWS

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

FOR FAA USE ONLY
OFFICE IDENTIFICATION
50-FSDO-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUDMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) West Seaplane Ramp, Christiansted, ST CROIX, U.S.V.I. 00820

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	..... (As described in item 1 above)			X	
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
VICTOR PINHEIRO ANTILLES AIR BOATS, INC. ST THOMAS, U.S.V.I. 00801	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	A & P 378437
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

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

DATE OCTOBER 31, 1978	SIGNATURE OF AUTHORIZED INDIVIDUAL VICTOR PINHEIRO <i>Victor Pinheiro</i>
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION OCTOBER 31, 1978	CERTIFICATE OR DESIGNATION NO. IA 1617154	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles R. Frezling</i> CHARLES R. FREZLING
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Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

NOTICE

8. DESCRIPTION OF WORK ACCOMPLISHED (if more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

- (1) Replaced hull nose bumping from Station #0 to Station #1 and nose rib assembly ref. Figure 72.
- (2) Installed new bow hatch stringer left and right; new skin ref. Figure 62, hull skin plating Diagram Skin #3 2024T3.032.
- (3) Replaced hull nose skin from Station #8 to Station #9 ref. Figure #62, hull skin plating Diagram Skin #5 2024T3.032, splice at Station #8 I/A/W page 113 (C) hull plating and par. #8, damage necessitating replacement and Figure #63.
- (4) Replaced pilot's cabin skin, top left side Station #9.5 to Station #12, ref. Figure 62, hull skin plating Diagram Skin #39. Patch skin #41 above windshield about 6" back skin splice used two rows of #4 rivets.
- (5) Installed new left, center and right windshield post center at Station #8 and left and right Station #9. Installed new windshields left and right.
- (6) Replaced panel at Station #9, see Figure #71 - Hull Structure, Pilot's Cabin ref. No. 5 panel 24 St. .064 replaced by 2024 T3.071.
- (7) Flight instrument panel modified to provide standardization throughout the fleet. Standardization of layout allows more efficient scanning of instruments by pilot and also permits improved arrangement of pitot, static and vacuum lines.
- a. Panel material: 24 St. .070 replaced by 2024 T3.125 anodized.
- Mounting: original G-21A location and shock mounts.
- (8) Replaced Hull Skin, left side, Station 11 to Station 13 in wheel-well above main gear support fitting, I/A/W Figure 63, Hull Skin Insertion Repair, insertion is 2024T3.040.
- (9) Repaired Bulhead Skin, Station 13, left and right side behind rear main gear fitting, from side of hull to wheel-well void up 23" splice I/A/W Figure 75 - Bulhead Repair Reference Diagram. Spliced vertical post Station 13, left side Hull Skin to Bulhead Insertion from bottom to 12" up.
- (10) Front center section box beam capstrip insertion repair left wing Station 42 to 57, cap is 2024T3.073 and goes aft to the first 7" angle in fuel tank, repair carried out as per Repair Manual, page 36, Figure 14 - Wing Box Beam Capstrip Repair.
- (11) Outer panel rear capstrip repair, left wing, corroded section removed and repair carried out as per Repair Manual, page 36, Figure 14. Station #211 to Station #256, Repair Plate 26" x 2" x 2024.073, fabric removed and replaced for convenience capstrip repair.
- (12) Inspected aircraft, found co-pilot foot pedals removed from hinge support assembly, floor closed out made into one piece, co-pilot control system and wheel removed, system removed for safety, passenger sits in co-pilot's seat. All work found satisfactory.
- (13) All work above done in accordance with Grumman Structure and Repair Manual, Nav. Aer. 01-85V-3, and AC 43-13-1A, Chapter 2, Section 3, and Chapter 3, Section 3.

NOTHING FOLLOWS

FOR FAA USE ONLY

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

OFFICE IDENTIFICATION
50-FSD0-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) West Seaplane Ramp, Christiansted, ST CROIX, U.S.V.I. 00820

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION				5. TYPE	
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	..... (As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
VICTOR PINHEIRO ANTILLES AIR BOATS, INC. ST THOMAS, U.S.V.I. 00801	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	A & P 378437
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

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

DATE OCTOBER 31, 1978	SIGNATURE OF AUTHORIZED INDIVIDUAL VICTOR PINHEIRO <i>Victor Pinheiro</i>
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/>	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION OCTOBER 31, 1978	CERTIFICATE OR DESIGNATION NO. IA 1617154	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles V. Breifling</i> CHARLES V. BREIFLING
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NOTICE

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

8. DESCRIPTION OF WORK ACCOMPLISHED (if more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

(1) Removed all existing seats and flooring, carrier aircraft installation. FAA Form 337, 4/27/78.

(2) Installed two each lounges manufactured under TSO-C39. See attached drawings (two sheets, G-21 1001).

(3) Installed four each seats manufactured under TSO-C39. See attached drawing (two sheets, G-21 1001).

(4) The above mentioned seats and lounges were attached to structure substantiation report date 15 June, 1969, #621-1, approved by DER LA-321 affixed to this report. Minor changes to this installation which do not affect the structural integrity of the installation, are as follows:

On each transverse floor beam, an angle was installed by riveting, which makes it possible to use 4 #5 AN470 rivets for attachments of seat channels to the floor beam on each transverse. Also in place of the Douglas Fir Plywood floor, G11Floor 5007A was substituted, see attached report.

(5) All above work done in accordance with AC 43-13-1A, Chapter 2, Section 3, Nav. Aer. 01-85V-3, and Structural Substantiation Installation of Floor, Seats and Three-place couch. Report DER LA-321.

----- NOTHING FOLLOWS -----

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION
50-PS10-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK 1174670
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) West Seaplane Ramp, Christiansted, ST CROIX, U.S.V.I. 00820

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦ (As described in item 1 above) ♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
CLAUDE AUSTIN c/o ANTILLES AIR BOATS, INC. CHRISTIANSTED, ST CROIX, USVI	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	A & P 2227109
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

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

DATE SEPTEMBER 27, 1978	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Claude Austin</i> CLAUDE AUSTIN
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION SEPTEMBER 27, 1978	CERTIFICATE OR DESIGNATION NO. IA 1617154	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles Premling</i> CHARLES PREMLING		

NOTICE

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

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

(1) Supersedes previous radio installation of March 1977.

(2) Removed two (2) each Genave Nav/Com transceivers Model Alpha 200 at Station #9, right side on rack fastened to cockpit overhead to existing structure.

(3) Installed one (1) Escort Nav/Com transceiver Model H110 per Narco Installation Manual and installed one (1) Bendix ADF T-12C Nav. Receiver, installed in accordance with Bendix Installation Manual.

Both installed per AC43-13-2, Chapter 2, Section 27.

See Weight and Balance Records and Equipment List and Electrical Load Analysis.

----- NOTHING FOLLOWS -----

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION
50-FSDO-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC	ADDRESS (As shown on registration certificate) West Seaplane Ramp, Christiansted, ST CROIX, U.S.V.I. 00820

3. FOR FAA USE ONLY

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION				5. TYPE	
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	..... (As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
CLAUDE AUSTIN C/o ANTILLES AIR BOATS INC CHRISTIANSTED, ST CROIX, U.S.V.I.	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	A & P 2227109
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

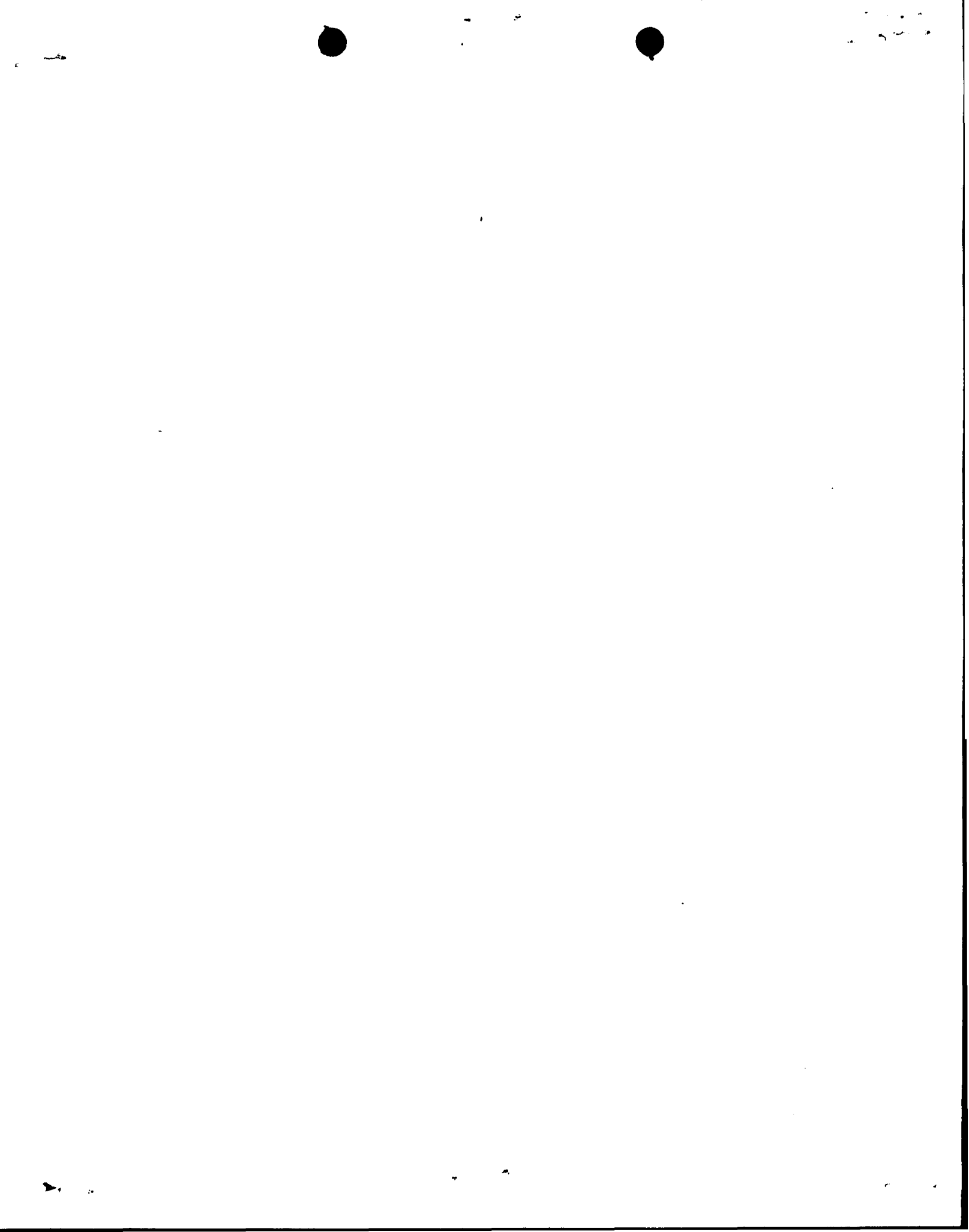
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and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

DATE SEPTEMBER 5, 1978	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>CLAUDE AUSTIN</i>
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION SEPTEMBER 5, 1978	CERTIFICATE OR DESIGNATION NO. IA 1617154	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles Freehling</i> CHARLES FREEHLING		



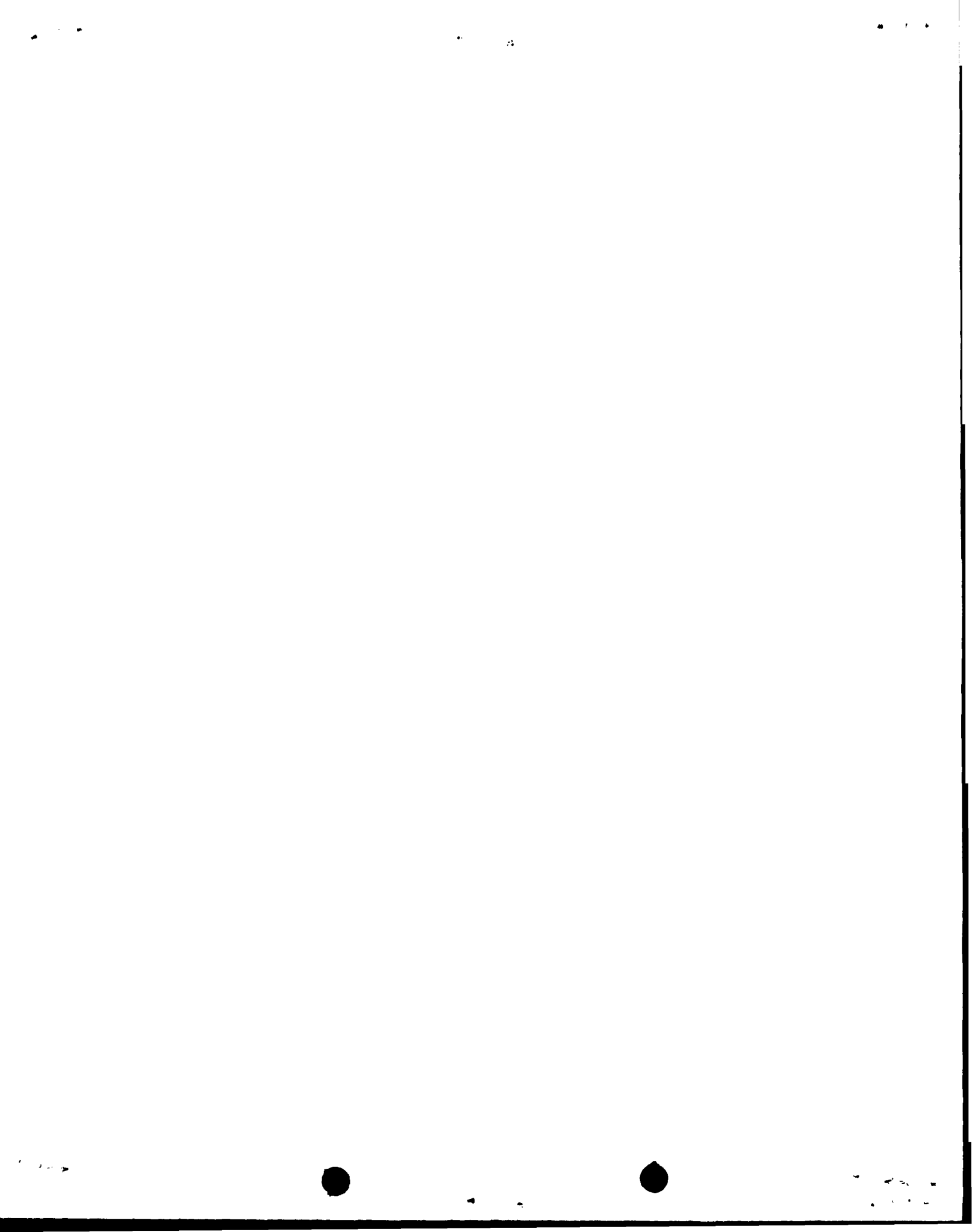
NOTICE

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

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

INSTALLED ALCOR INC. EXHAUST GAS TEMPERATURE
INDICATOR KIT # 326 I/A/W SUPPLEMENTAL TYPE
CERTIFICATE NUMBER SA96SW PER REPORT 68-145
F.A.A. APPROVED LIST DATED 4/26/77.

-----Nothing follows-----



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

FOR FAA USE ONLY

OFFICE IDENTIFICATION
SO-FSDO-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) CHRISTIANSTED, ST CROIX, U.S.V.I. 00820

3. FOR FAA USE ONLY

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION				5. TYPE	
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
ERIC CROSSFIELD C/O ANTILLES AIR BOATS, INC CHRISTIANSTED, ST CROIX	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	AP259766640
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

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

DATE 08/11/78	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Eric Crossfield</i>
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/>	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION 08/11/78	CERTIFICATE OR DESIGNATION NO. IA 1617154	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles K. ...</i>
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Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

NOTICE

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

INSTALLED SORM INDUSTRIES HORIZONTAL STABILIZER

FORWARD SUPPORT FITTING BKD. STA. 33,

PART NUMBER SI-12093-1,

IN ACCORDANCE WITH SORM INDUSTRIES FAA SEALED

DRAWING SI-4000.

----- Nothing follows -----

ADDITIONAL SHEETS ARE ATTACHED

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION
SO-FS80-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE <i>GRUMMAN</i>	MODEL <i>G-21A</i>
	SERIAL NO. <i>B-1172</i>	NATIONALITY AND REGISTRATION MARK <i>N74676</i>
2. OWNER	NAME (As shown on registration certificate) <i>ANTILLES AIR BOATS, INC</i>	ADDRESS (As shown on registration certificate) <i>CHRISTIANSTED ST. CROIX U.S.V.I. 00820</i>

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				
POWERPLANT	<i>Pratt & Whitney</i>	<i>R-985 - AN1</i>	<i>88789</i>	<input checked="" type="checkbox"/>	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
<i>Ralph E. Faxel Ft. Worth Engine Overhaul, Inc. Loc. 18 Meacham Field Ft. Worth, Tx. 76106</i>	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	<i>A&P 1263781</i>
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

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

DATE <i>April 6, 1978</i>	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Ralph E. Faxel</i>
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/>	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION <i>April 27, 1978</i>	CERTIFICATE OR DESIGNATION NO. <i>IA 1263781</i>	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Ralph E. Faxel</i>
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Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

NOTICE

8. DESCRIPTION OF WORK ACCOMPLISHED (if more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

April 6, 1978 this Pratt and Whitney R - 935 A11 ser. (E739 given major overhaul

Steel parts magnetized nonferrous parts xray inspected.

Crank cylinders installed, guides and seats replaced as needed.

Magnets overhauled, ignition harness rebuilt.

AD notes 57-0-2 cylinder studs, 60-5-1 crankshaft liners,

66-14-4 cam gear and 76-20-01 cylinderheads complied with this overhaul.

AD note 57-5-4 crankshaft threads complied with prior overhaul.

All clearances and tolerances with in limits as shown in Pratt and

Whitney overhaul manual for this engine.

Parts replaced and rework accomplished as needed.

Overhaul and inspection report under workorder # 270.

Engine test run April 27, 1978 for 1:15 min.

ADDITIONAL SHEETS ARE ATTACHED

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

FOR FAA USE ONLY
OFFICE IDENTIFICATION
SO-FSDO-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N 74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS	ADDRESS (As shown on registration certificate) SEAPLANE RAMP CHRISTIANSTED, ST. CROIX

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	..... (As described in item 1 above)				
POWERPLANT	Pratt & Whitney	A-985-ANI-14B	I7333	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS Caribbean Airmotive, Inc. P.O. Box 4973, Old San Juan Sta. San Juan, Puerto Rico 00907	B. KIND OF AGENCY <input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC <input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC <input checked="" type="checkbox"/> CERTIFICATED REPAIR STATION <input type="checkbox"/> MANUFACTURER	C. CERTIFICATE NO. A&P- I690355 #76I-22
--	---	--

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

DATE April 7-1977	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Tomás Daniel Ramos</i>
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify) A&P-1A-52850741
	FAA DESIGNEE	X REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION April 7-1977	CERTIFICATE OR DESIGNATION NO. 76I-22	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Jose L. Martinez</i>
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NOTICE

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

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

Engine received this station for overhaul.
Engine completely disassembly. All parts and components cleaned.
Perform inspection of all parts and components per P&W, aircraft engine overhaul manual. All steel parts Magnafluxed.
Aluminum parts inspected thoroughly and Zyglo checked.
Check crankshaft per P&W, crankshaft spect and trough chart.
Install overhaul magnetos by Caribbean Airmotive, Inc.
Engine assembled per P. & W., Overhaul instructions.
Test Cell run up proved satisfactory as per P&W, run up procedure.
Time since Mayor after run up test, 4 hrs 26 min.
The following P&W Service Bulletins are complied at this time.
1710-1703- 1718- 1758- 1783- 1000- 1175- 1183- 1710.

C&W, AD, 57-5-4, Crankshaft rework. 66-14-4, Cam reduction gear.
68-9-1, Flyweight & Linnors. 76-20-01. Cylids, head press, check.

NOTHING FOLLOWS.

ADDITIONAL SHEETS ARE ATTACHED

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

FOR FAA USE ONLY
OFFICE IDENTIFICATION **SJU FSDO**
756

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.,.	ADDRESS (As shown on registration certificate) WEST SEAPLANE RAMP, CHRISTIANSTED ST. CROIX U.S.V.I. 00820

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	..... (As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS		B. KIND OF AGENCY		C. CERTIFICATE NO.
ANDREW WHITNER c/o ANTILLES AIR BOATS, INC.,. CHRISTIANSTED, ST. CROIX, USVI. 00820		<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	ASP 88469604	
		<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC		
		<input type="checkbox"/> CERTIFICATED REPAIR STATION		
		<input type="checkbox"/> MANUFACTURER		

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

DATE 24 March 1977	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Andrew H. Whitner</i>
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION <i>March 25 1977</i>	CERTIFICATE OR DESIGNATION NO. 1617154 1A	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles A. Fiedling</i>
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Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

NOTICE

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

In order to facilitate inspection of rudder and elevator push-pull rods, Bell cranks and Bell crank attach fittings an inspection access door has been provided as follows:

A. One hold made on each side of the hull between hull stations nine and ten, 16.5 inches above the chine, 14.5 inches forward of each main gear wheel well. All corners 5/16" radius.

B. One doubler of 2024T3 X.050 X 10 3/4" X 9 3/4" riveted on the inside of the hole to restore skin strength at the location of the access hole. Double row of rivets used with 1" spacing as in skin joints of airframe.

C. Hole of 5 1/5" vertical dimension and 6.5" longitudinal dimension has been cut in the doubler and provides actual inspection facilities as mentioned above.

D. # 8 X 32 Gang-nut channel with 3/4" spacing provides the attachment of water tight cover constructed in the same manner as water tight doors on floats and large water tight door on wheel well on R/H side of hull. Cover installed on sealant surface and torqued in same manner as wheel well inspection door.

E. All work done in accordance with Grumman Structure and Repair Manual Nav. Aer. 01-85V-3, Page 196, Figure 110 and AC 43-13-1, Chapter 2, Section 3, Paragraph 60-684 AC-43-13-2, Chapter 1, Paragraphs 4 thru 8.

-----NOTHING FOLLOWS-----

□ ADDITIONAL SHEETS ARE ATTACHED

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION **SJU FSDO**
7-5-81

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.,.	ADDRESS (As shown on registration certificate) SEAPLANE RAMP, VETERANS DRIVE ST. THOMAS, U.S.V.I.

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	..... (As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
CHARLES R. FREEHLING P.O. Box 731 Fredericksted, St. Croix U.S.V.I. 00840	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	A&P 1617154
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

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

DATE	SIGNATURE OF AUTHORIZED INDIVIDUAL
18 March 1977	<i>Charles R. Freehling</i>

7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		
			<input checked="" type="checkbox"/>	
			<input type="checkbox"/>	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
18 March 1977	I.A. 1617154	CHARLES R. FREEHLING <i>Charles R. Freehling</i>

NOTICE

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

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

The installation of one (1) each left and right, Hartzell Propeller Hub Model # HC-B3Z30-2E. Found install on this aircraft in accordance with Hartzell Propellers Inc., STC SA1-52, Drawing # B1860.

Flight Manual modified for this installation.

-----NOTHING FOLLOWS.

ADDITIONAL SHEETS ARE ATTACHED

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

FOR FAA USE ONLY
OFFICE IDENTIFICATION **SJU FSD**
7-5-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.,.	ADDRESS (As shown on registration certificate) SEAPLANE RAMP, VETERANS DRIVE ST. THOMAS, U.S.V.I.

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	..... (As described in item 1 above)				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
CHARLES R. FREEHLING P.O. Box 731 Frédéricsted, St. Croix U.S.V.I.	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	A&P 1617154
	FOREIGN CERTIFICATED MECHANIC	
	CERTIFICATED REPAIR STATION	
	MANUFACTURER	

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

DATE 18 March 1977	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles R. Freehling</i>
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION 18 March 1977	CERTIFICATE OR DESIGNATION NO. I.A. 1617154	SIGNATURE OF AUTHORIZED INDIVIDUAL CHARLES R. FREEHLING <i>Charles R. Freehling</i>
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NOTICE

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

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

Installation of Carrier Aircraft Inc., seats and floor found to be installed in accordance with Drawings G-21-1001, G-21-1002 and G-21-1003, approved under TSO C-39. Two (2) each lounges manufactured by Carrier Aircraft, Inc., to TSO standards under TSO C-39. See attached drawing (2 sheets) G21 (1001). Four (40) each seats manufactured by Carrier Aircraft Inc., to TSO standards under TSO-C39. See attached drawing (2 sheets) G21 (1001). The mentioned seats and lounges were attached to structure per structure substantiation report date 15 June 1969 #621-1 approved by DER IA-321 affixed to this report. The aircraft equipment list, loading schedule and weight and balance date are revised as necessary to reflect these changes. All the mentioned work done in accordance with AC 43-13-1, chapter 2, section 2, paragraph 44-48, section 3, paragraph 60-67, and AC 43-13-2, chapter 1, paragraph 1-12, chapter 9, paragraph 130-136.

NOTHING FOLLOWS.

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION
STJ FSDO
7-5-01

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE GRUMMAN	MODEL G 21 A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK U.S.A. N 74676
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) VETERANS DRIVE ST. THOMAS, V.I. 00801
	3. FOR FAA USE ONLY	

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	..... (As described in item 1 above)				
POWERPLANT	PRATT & WHITNEY	985 An -1-14	JP-205355	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS Joe H. Stoy c/o Antilles Air Boats, Inc. Isala GRANDE Airport San Juan, Puerto Rico	B. KIND OF AGENCY		C. CERTIFICATE NO. 52858-41 A&P
	<input checked="" type="checkbox"/>	U.S. CERTIFICATED MECHANIC	
	<input type="checkbox"/>	FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/>	CERTIFICATED REPAIR STATION	
	<input type="checkbox"/>	MANUFACTURER	

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

DATE June 11, 1976	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Joseph H. Stoy</i>
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7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/>	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	<input type="checkbox"/>	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION 6-11-76	CERTIFICATE OR DESIGNATION NO. 1333009 A I	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Joseph H. Stoy</i>
---	--	---

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

NOTICE

8. DESCRIPTION OF WORK ACCOMPLISHED (if more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

Engine received this station for overhaul. Engine given inspection and completely dis-assembled. All parts cleaned and magnafluxed. All other parts cleaned and inspected in accordance with manufacturer's specifications and replaced with new parts where needed. Overhauled magnetos and harness installed. Test cell run up proved satisfactory as per manufacturer's specifications.

Time since overhaul 00:00 Hours.

FAA AD Note 66-14-4 previously complied with " "
 FAA AD Note 57-5-4 " "
 FAA AD Note 68-9-1 complied with " "
 FAA AD Note 56-6-2

SERVICE BULLETIN 1658-B previously complied with.

NOTHING FOLLOWS

□ ADDITIONAL SHEETS ARE ATTACHED

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION
ASO-FSDO-61

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.

1. AIRCRAFT	MAKE Grumman	MODEL G-21A
	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK U.S. N 74676
2. OWNER	NAME (As shown on registration certificate) Antilles Air Boats, Inc.	ADDRESS (As shown on registration certificate) Sea Plane Ramp, Veterans Drive ST. Thomas, V.I. 00801

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	As described in item 1 above				X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Claude Austin c/o Antilles Air Boats, Inc. ST. Thomas, V.I. 00801	<input checked="" type="checkbox"/> U.S. CERTIFICATED MECHANIC	AP 2227109
	<input type="checkbox"/> FOREIGN CERTIFICATED MECHANIC	
	<input type="checkbox"/> CERTIFICATED REPAIR STATION	
	<input type="checkbox"/> MANUFACTURER	

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

DATE September 28, 1975	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Claude Austin</i>
----------------------------	--

7. APPROVAL FOR RETURN TO SERVICE

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

BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	<input checked="" type="checkbox"/> INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION <i>December 17, 1975</i>	CERTIFICATE OR DESIGNATION NO. <i>1333009AI</i>	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Joseph H. Stof</i>
---	--	---

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

NOTICE

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

Removed Grumman G 21A Ring Cowl, p/n 13076, together with mounting brackets. Beechcraft C48 engine modified cowlings in accordance with Pan Air Corp. drawings EI-0104 dated 5/7/65 and EI-0104-1 dated 6/15/65.

Beechcraft cowl support brackets, p/n 18 S 5916 and engine cowlings, upper, p/n 404-185901-lower, p/n 185903 installed under S.T.C. #SAS515W dated 8/31/65.

Weight and balance correction entered in Air Craft Log Book.

ASO-FSDO-61/SJU
 Rcvd 12-03-75
 Chief
 242 (262) 410
 245 264
 246 265
 247 266
 250 267
 240a 260a
 250a 200a

1052-1802-37 APR 11 1966
FEDERAL AVIATION AGENCY

Form approved.
Budget Bureau No. 04-R060.

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

1. AIRCRAFT	MAKE GRUMMAN	MODEL G21A	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N74676
--------------------	------------------------	----------------------	---------------------------	--

2. OWNER	NAME (First, middle, last) ALASKA COASTAL-ELLIS AIRLINES	ADDRESS (Street and number, city, zone and State) 2, MARINE WAY, JUNEAU, ALASKA.
-----------------	--	--

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) ♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦♦				
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.
*AFTER the repairs and/or alterations described below were made.

CATEGORY	EMPTY WEIGHT (Pounds)*	EMPTY CENTER OF GRAVITY (Inches from datum)*	USEFUL LOAD (Pounds)*
STANDARD			

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS FAIRFY CANADA LTD. VICTORIA INTERNATIONAL AIRPORT SIDNEY, B.C. CANADA	b. KIND OF AGENCY <input type="checkbox"/> U. S. Certificated Mechanic. <input checked="" type="checkbox"/> Foreign Certificated Mechanic. <input type="checkbox"/> Certificated Repair Station. <input type="checkbox"/> Manufacturer. <input type="checkbox"/> (Check if repair or alteration was made under delegation option procedures.)	c. CERTIFICATE NO. DEPT. OF TRANSPORT APPROVAL NO. 5/59
---	---	--

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.

1st. March 1966

(Date repair and/or alteration completed)

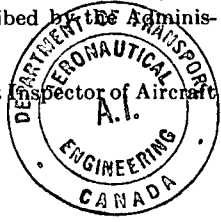
J. K. FIELDING

(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

<input checked="" type="checkbox"/> APPROVED	} BY	<input type="checkbox"/> FAA Designee	<input type="checkbox"/> Manufacturer	<input checked="" type="checkbox"/> Canadian Department of Transport Inspector of Aircraft
<input type="checkbox"/> REJECTED		<input type="checkbox"/> FAA Flight Standards Inspector	<input type="checkbox"/> Repair Station	<input type="checkbox"/> Other (Specify)



March 2/66
(Date of approval or rejection)

R. Schubert
(Signature of authorized individual; title or identification number)

7. TO BE COMPLETED ONLY BY FAA PERSONNEL

a. <input type="checkbox"/> Forwarded for engineering comment	<input type="checkbox"/> See attached memorandum	
b. <input checked="" type="checkbox"/> Accepted <u>3/30/66</u>	<input type="checkbox"/> Reinspected _____	<input checked="" type="checkbox"/> Spot Checked _____
(Date)	(Date)	(Date)
ALASKAN REGION FSDO-3 (FAA designation number)	<u>Stanley R. Ferber</u> (Signature Flight Standards Inspector)	



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. Maintenance operation "B" carried out IAW Chapter 9-11, Vol. 1. of Alaska Coastal-Elis Airlines Maintenance Manual.
2. 2, 3, 4 and 5 Checks carried out IAW Chapter 6-11, Vol. 1. of A.C.F.A. Maintenance Manual.
3. Hull and Centre section exterior stripped of paint and refinished.
4. Additional work carried out as detailed in W.C.L. Worksheets A0067.
5. A.S. Notes 68-21-2, 68-24-1, 68-27-2 complied with.

*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.

W-240
 3953
 001
 NEW ST.

U.S. DEPARTMENT OF COMMERCE
 CIVIL AERONAUTICS ADMINISTRATION

Form approved.
 Budget Bureau No. 41-R0524.

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

1. AIRCRAFT	MAKE Grumman Goose	MODEL G-21A	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N 74676
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2. OWNER	NAME (First, middle, last) Ellis Air Lines	ADDRESS (Street and number, city, zone and State) Box 1059 Ketchikan, Alaska
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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)				
b. POWERPLANT	PRATT & WHITNEY	R-985-AN-1	3467	XX	
c. PROPELLER					
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.*

**AFTER the repairs and/or alterations described below were made.*

CATEGORY	EMPTY WEIGHT (Pounds)*	EMPTY CENTER OF GRAVITY (Inches from datum)*	USEFUL LOAD (Pounds)*
Standard	6505	23.85	1495

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS WESTCOAST AIRCRAFT SALES AND SERVICE, INC. Boeing Field, Seattle, Wash.	b. KIND OF AGENCY <input type="checkbox"/> U. S. Certificated Mechanic. <input type="checkbox"/> Foreign Certificated Mechanic. <input checked="" type="checkbox"/> Certificated Repair Station. <input type="checkbox"/> Manufacturer. <input type="checkbox"/> (Check if repair or alteration was made under delegation option procedures.)	c. CERTIFICATE NO. 4104 <i>den</i>
--	--	---

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.

16 Sept 52
 (Date repair and/or alteration completed)

Leon J. Eichstaedt E 322202
 (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 and is

APPROVED } BY { CAA Designee Manufacturer Canadian Department of Transport Inspector of Aircraft
 REJECTED } CAA Aviation Safety Agent Repair Station Other (Specify)

10/3/53 (Date of approval or rejection) *W.A. Nebel* 8802
 (Signature of authorized individual; title or identification number)

7. TO BE COMPLETED ONLY BY CAA PERSONNEL

a. Forwarded for engineering comment See attached memorandum

b. Accepted 10-5-53 (Date) Reinspected _____ (Date) Spot Checked _____ (Date)

Reg. 5 A
ASDO 3
 (CAA designation number)

J. E. McCarthy
 (Signature Aviation Safety Agent)

238

INSTRUCTIONS

This form must be completed in duplicate each time a major repair and/or alteration is made of an aircraft, airframe, power-plant, 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.

8. DESCRIPTION OF WORK ACCOMPLISHED.*

Complete major overhaul of engine. All steel parts magna-flux inspected; all new seals and gaskets installed. All parts not within factory tolerance replaced. Installed overhauled magnetos #BB-20021 (RH) and #BB-14489 (LH), type SB9RN-3. Installed overhauled Carburetor #5682780, type NAR9B-18. Engine run-in on test cell in accordance with latest factory recommendations. Run-in satisfactory. Engine preserved for long-time storage.
NO OTHER.

Engine installed on right side of N 74676, no weight change.

RECEIVED

OCT 9 12 18 PM '53

ADMIN. & RECORDS BRANCH
V-300

*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.

W-240

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form approved.
Budget Bureau No. 41-R0524.

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

1. AIRCRAFT	MAKE GRUMMAN GOOSE	MODEL G-21A	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N 74676
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2. OWNER	NAME (First, middle, last) Ellis Air Lines	ADDRESS (Street and number, city, zone and State) Box 1059 Ketchikan, Alaska
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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)				
b. POWERPLANT	Pratt & Whitney	R-985-AN3	201269	XXX	
c. PROPELLER					
APPLIANCE	TYPE AND MANUFACTURER				

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)*
Standard	6505	23.85	2295

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS WESTCOAST AIRCRAFT SALES AND SERVICE, INC. Boeing Field, Seattle, Wash.	b. KIND OF AGENCY <input type="checkbox"/> U. S. Certificated Mechanic. <input type="checkbox"/> Foreign Certificated Mechanic. <input checked="" type="checkbox"/> Certificated Repair Station. <input type="checkbox"/> Manufacturer. <input type="checkbox"/> (Check if repair or alteration was made under delegation option procedures.)	c. CERTIFICATE NO. 4104
--	--	-----------------------------------

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.

10-13-52 (Date repair and/or alteration completed)

Sean J. Eichstadt **322202**
Sean J. Eichstadt (Signature of authorized individual)

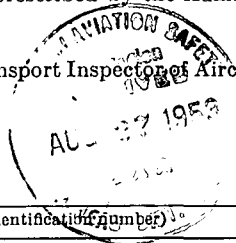
6. APPROVAL FOR RETURN TO SERVICE (Check and complete appropriate items)

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

APPROVED } BY { CAA Designee Manufacturer Canadian Department of Transport Inspector of Aircraft
 REJECTED } CAA Aviation Safety Agent Repair Station Other (Specify)

8/24/53 (Date of approval or rejection)

W.A. Nebel **8802**
W. A. Nebel (Signature of authorized individual; title or identification number)



7. TO BE COMPLETED ONLY BY CAA PERSONNEL

a. Forwarded for engineering comment See attached memorandum

b. Accepted 8-31-53 (Date) Reinspected _____ (Date) Spot Checked _____ (Date)

Reg. 5 A
ASDO

(CAA designation number)

J.E. McCarthy
J. E. McCarthy
(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, power-plant, 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.

8. DESCRIPTION OF WORK ACCOMPLISHED.*

Complete major overhaul of engine. All steel parts magna-flux inspected; all new seals and gaskets installed. All parts not within factory tolerances replaced. Installed overhaul magnetos #BB 17683 (LH) and #BB 17919 (RH). Installed overhauled carburetor #5641032. Engine run-in on test cell in accordance with latest factory recommendations. Run-in satisfactory. Engine preserved for long-time storage. NO OTHER.

*Engine installed on Left N74676
no weight change*

RECEIVED

SEP 4 11 35 AM '53

ADMIN. & RECORDS BRANCH
W-300

*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.

REPAIR AND ALTERATION FORM (AIRCRAFT, PROPELLERS, ENGINES, INSTRUMENTS)

(SEE REVERSE SIDE OF THIS FORM FOR INSTRUCTIONS)

1. AIRCRAFT	MAKE Grumman (Goose)	MODEL G21-A	SERIAL NO. 1172	NATIONALITY AND REGISTRATION MARK N 74676
2. OWNER	NAME (First, middle, last) Ellis Air Lines	ADDRESS (Street and number, city, zone, and State) Box 1059 Ketchikan, Alaska		

3. FILL IN INFORMATION IN THIS ITEM ONLY FOR THE UNIT REPAIRED AND/OR ALTERED

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check)	
				MAJOR REPAIR	MAJOR ALTERATION
a. AIRCRAFT	As described in item 1 above				X
b. PROPELLER BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER				

4. AIRCRAFT

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.

WEIGHT AND BALANCE DATA

AFTER the repairs and/or alterations described below were made.	EMPTY WEIGHT (Pounds) -----	EMPTY CENTER OF GRAVITY (Inches from datum)* no change -----	USEFUL LOAD (Pounds)*
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5. KIND OF AGENCY WHICH MADE REPAIRS AND/OR ALTERATIONS (Check)

MANUFACTURER APPROVED REPAIR STATION NO. _____ (Specify) CERTIFIED MECHANIC

6. AGENCY	NAME John W. Elliott	ADDRESS (Street and number, city, zone, and State) Ketchikan Alaska	DATE WORK ACCOMPLISHED 4/19/52
-----------	--------------------------------	---	--

7. DESCRIPTION OF WORK (ALL WORK MUST BE ACCOMPLISHED IN ACCORDANCE WITH PART 18 OF THE CIVIL AIR REGULATIONS AND ITS ASSOCIATED CIVIL AERONAUTICS MANUAL 18.)

Gust lock construction.
Two prong paw made of .052 18-8 steel, formed to fit center spoke and rim of control wheel. To this is welded a short piece of 18-8 rod. Over this is fitted a 1/2 in OD .050 wall th. tube riveted to rod with 5/32 17ST rivet. Other end of tube is fitted with a fork end, riveted in. Fork is drilled for 3/16 in. bolt and is fastened to instrument panel with an eye bolt (AN 43-10). Eye bolt passes through instrument panel, and 1/2 in. stiffener, is secured with nut and spacer. Lock is painted bright red to prevent pilot from trying to fly without first unlocking controls.

If more space is needed, continue on reverse, or attach separate sheets bearing aircraft registration mark.

FORWARDED FOR ENGINEERING APPROVAL
L. J. Miraldi 8-584 CAA 6-4-52

I CERTIFY that the above statements are true and correct to the best of my knowledge.

John W. Elliott (Signature of supervising mechanic) **A&E 301186** (Certificate number and rating) **4/19/52** (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

<input checked="" type="checkbox"/> APPROVED	DESIGNEE'S SIGNATURE	NO.	DATE
<input type="checkbox"/> REJECTED	CAA AGENT SIGNATURE <i>Norman H. Daller</i>	<input type="checkbox"/> ACCEPTED <input type="checkbox"/> REINSPECTED	DATE 7-11-52

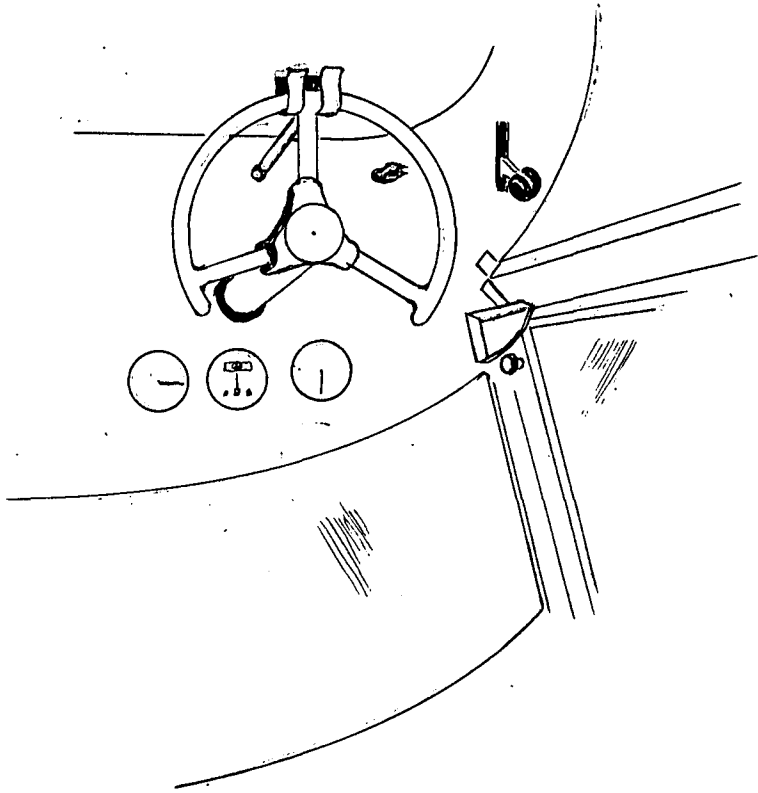
INSTRUCTIONS

1. This form must be filled out in duplicate each time a major repair and/or alteration is made of an aircraft, propeller, engine, or instrument.
2. When repairs and/or alterations are made which affect the operation limitations set forth in the Airplane Flight Manual or Form ACA-809, the aircraft shall not be returned to service until the operation limitations have been corrected by an authorized representative of the CAA.
3. Certificated mechanics must, in all cases, obtain approval of the repair and/or alteration from the CAA representative prior to returning the article to service.
4. The manufacturer of an aircraft, engine, propeller, or instrument, and a certificated repair station holding the appropriate rating may return the article to service without prior approval of an authorized CAA representative, provided the alteration and/or repair does not change any of the operation limitations.
5. Repair agencies will be guided as follows when completing this form.
 - a. For an Aircraft Repair and/or Alteration—Complete Items 1, 2, 3a, 4, 5, 6, and 7.
 - b. Mechanic—Submit to CAA representative for inspection and approval prior to returning the article to service. Upon approval, the CAA representative will return the original copy to the mechanic who should submit it to the aircraft owner.
 - c. Manufacturer or Approved Repair Station—Submit original to aircraft owner, forward copy to CAA district office or CAA agent prior to returning article to service.
 - d. For a Component Installed in an Aircraft—Complete Items 1, 2, 3 (b), c, or d, whichever is applicable, 4, 5, 6, and 7. Distribute copies as in a above.
 - e. For a Spare Component—Complete Items 3 (b), c, or d, whichever is applicable, 5, 6, and 7.
- Mechanic—Submit to CAA representative for inspection and approval. When approved, retain both copies of the form with the component until installation on an aircraft. At this time Items 1, 2, and 4 must be completed by the installing agency who will distribute the forms as follows: (No further approval of CAA is required, only a log-book entry by the installing agency is necessary.) After installation, original form should be submitted to aircraft owner, and copy forwarded to the nearest CAA district office or CAA agent.
- Manufacturer or Approved Repair Station—Handle same as for mechanics except that it is not necessary to submit to CAA representative for inspection or approval.

A clip is provided to left of lock on instrument panel for stowage

of lock.

Aileron controls are in neutral, and elevators just off bottom stops when lock is engaged.



Don J. A. ...
 ...
 ...

UNITED STATES OF AMERICA DEPARTMENT OF COMMERCE CIVIL AERONAUTICS ADMINISTRATION		OPERATION LIMITATIONS (STANDARD)	
ENGINE	MAKE P & W	MAKE Grumman	NATIONALITY AND REGISTRATION MARKS N74676
	MODEL 985-AN-6	MODEL G-21A	SERIAL NO. 1172 TYPE CERTIF. NO. 654

ENGINE AND AIR SPEED LIMITS NOT TO BE EXCEEDED

(All Values Are Maximum and Are NOT RECOMMENDED OPERATING LIMITS)

ENGINE LIMITS							TRUE INDICATED AIR SPEED		
	MINUTES	ALTITUDE	IN. HG.	R. P. M.	HP.	MIN. OCT.		M. P. H. LAND	M. P. H. SEA
TAKE-OFF	1	ANY	36.5	2300	450	87	CLIMB OR LEVEL FLIGHT	194	194
	1	ANY	33.5	2200	400	80			
*METO SEA LEVEL	FROM ---	10-	34.5	2200	400	80	GLIDE OR DRIVE (Smooth Air Only)	225	225
		5000	33.5	2200	400	80			
ALTIMETER	FROM ---	5000	33.5	2200	400	80	FLAPS EXTENDED	110	110

*METO—MAXIMUM EXCEPT TAKE-OFF

TAKE-OFF WEIGHT				LANDING WEIGHT			
LAND	8000	SEA	8000	LAND	8000	SEA	8000

C. G. LIMITS

LAND	(/ 20.5) TO (/ 33.0)	SEA	(/ 20.5) TO (/ 33.0)
------	--------------------------	-----	--------------------------

WEIGHT

SEE WEIGHT AND BALANCE DATA FOR LOADING INFORMATION

DATUM**WING LEADING EDGE AT FUSELAGE****CEILING****LIMITATIONS**

- (a) Without de-icers: 6000 ft. absolute (density altitude) with either engine inoperative.
- (b) With de-icers: Zero ft. (usable) in standard air at 8048 lbs. with either engine inoperative and the inoperative propeller idling in high pitch.

INSPECTOR'S OR DESIGNEE'S SIGNATURE <i>Norman H. Sallee</i>	DESIG. NO. 8-583-3	DATE October 16, 1951
--	-----------------------	--------------------------

ADDITIONAL LIMITATIONS YES NO (IF YES—SEE OVER)

THIS FORM MUST BE AVAILABLE IN THE AIRCRAFT WHEN OPERATED

Pursuant to Special Civil Air Regulation SR-337, as amended, this aircraft when being operated entirely within the Territory of Alaska under the provisions of Part 41 or 42 of the Civil Air Regulations is authorized to operate in accordance with the following limitations:

Maximum Weight (Take-Off and Landing)

Landplane	8800 lbs.
Seaplane	8800 lbs.

Propeller(s)

Ham. Std. Constant Speed 2D30/6101A-18
- Diam. 102 inches. Pitch settings shall be such that the following will be developed:

- (1) 2300 R.P.M. - 50 R.P.M. at 36.5 inches Manifold Pressure with
 - (a) Aircraft static on ground
 - (b) Propeller control in Full low pitch
 - (c) Throttle setting as required

- (2) 2200 R.P.M. - 50 R.P.M. at 34.5 in Hg. Manifold Pressure with
 - (a) Aircraft climbing after take-off at an airspeed of 110 M.P.H.
 - (b) Throttle setting as required

Date:

October 16, 1951

RECEIVED
COMMUNICATIONS SECTION
NOV 16 1951

Norman H. Salles

Norman H. Salles
C.A.A. Agent

OCT 29 2 04 PM '51

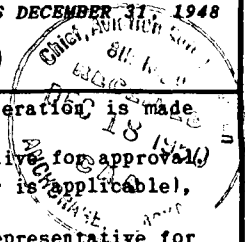
W-300

FORM ACA-337
(11-7-46)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

BUDGET BUREAU NO. 41-R052.1
APPROVAL EXPIRES DECEMBER 31, 1948

REPAIR AND ALTERATION FORM (AIRCRAFT, PROPELLERS, ENGINES, INSTRUMENTS)



INSTRUCTIONS - This form must be filled out in duplicate each time a major repair and/or alteration is made of an aircraft, propeller, engine, or instrument, as follows:

- (A) For an Aircraft - Complete items 1, 2, 3a, 4, 5, 6, and 7 and submit to CAA representative for approval.
- (B) For a Component Installed in an Aircraft - Complete items 1, 2, 3(b, c, or d, whichever is applicable), 4, 5, and 6, and submit as described in (A) above.
- (C) For a Spare Component - Complete items 3(b, c, or d), 5, and 6, and submit to CAA representative for approval. When approved, retain both copies of this form with the component until installation on an aircraft. At that time, items 1, 2, and 4 must be completed by the installing agency, which will then forward forms as described in (A) above.

1. AIRCRAFT	MAKE Grumman	MODEL G 21 A	SERIAL NO. 1172	CAA IDENTIFICATION MARK N 74676
2. OWNER	NAME (First, middle, last) Ellis Air Lines		ADDRESS (Street and number, city, zone, and state) Box 1059 Ketchikan Alaska	

3. FILL IN INFORMATION IN THIS ITEM ONLY FOR THE UNIT REPAIRED AND/OR ALTERED

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check)	
				MAJOR REPAIR	MAJOR ALTERATION
a. AIRCRAFT	(As described in item 1 above)				<input checked="" type="checkbox"/>
b. PROPELLER BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER				

The following items are to be completed by repair or alteration agency. However, in the case of a spare component, item 4 will not be completed until such component is installed in an aircraft. At this time, item 4 will be completed by the installing agency, if applicable.

4. AIRCRAFT	EMPTY WEIGHT (Pounds)* 6223	EMPTY CENTER OF GRAVITY (Inches from datum)* 22.94	USEFUL LOAD (Pounds)* 2377
-------------	---------------------------------------	--	--------------------------------------

*AFTER the repairs and/or alterations described below were made.

5. KIND OF AGENCY WHICH MADE REPAIRS AND/OR ALTERATIONS (Check)

MANUFACTURER APPROVED REPAIR STATION NO. _____ CERTIFIED MECHANIC

(SPECIFY)

6. AGENCY	NAME W. A. Nebel	ADDRESS (Street and number, city, zone, and state) Box 1059 Ketchikan Alaska	DATE WORK ACCOMPLISHED 11/21/50
-----------	----------------------------	--	---

DESCRIPTION OF WORK ACCOMPLISHED IN ACCORDANCE WITH PART 1B OF THE CIVIL AIR REGULATIONS AND ITS ASSOCIATED CIVIL AERONAUTICS MANUAL 1B. (If more space is needed, continue on reverse, or attach separate sheets bearing aircraft identification number.)

Install Valentine Model G 21-11Ldg. Gr. Modification

MT Wt.	6180	Arm	23.14	Moment	143005
Added	43	"	-5.00		*-215
MT Wt.	<u>6223</u>				<u>142790</u>

142790
6223 22.94" New C.G.

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

W.A. Nebel 382152 11-21-50
SIGNATURE OF SUPERVISING MECHANIC CERTIFICATE NUMBER AND RATING DATE

TO BE COMPLETED BY CAA REPRESENTATIVES

<input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED <input type="checkbox"/> FORWARDED FOR ENGINEERING APPROVAL	SIGNATURE OF DESIGNEE <i>John Sherman</i>	NUMBER 8800	DATE 11-21-50
	SIGNATURE OF INSPECTOR <i>John C. Bowen</i>	<input type="checkbox"/> ACCEPTED <input checked="" type="checkbox"/> REINSPECTED	DATE 12-11-50

TO: SAC, NEW YORK
FROM: SAC, PHOENIX
SUBJECT: [Illegible]

RE: [Illegible]

DATE: [Illegible]

REFERENCE: [Illegible]

1. [Illegible]

2. [Illegible]

3. [Illegible]

DEPT OF COMMERCE
CIVIL AERONAUTICS ADM
DEC 21 8 51 AM '50
MAIL ROOM-2
WASHINGTON

CIVIL AERONAUTICS ADMINISTRATION
ANCHORAGE, ALASKA

AIRCRAFT WEIGHT & BALANCE

AIRCRAFT: Make & Model Grumman G-21-A Serial No. 1172
Registration No. N 74676

Date: 1/17/50 Place Ketchikan, Alaska Scales Used: Dillion Dynamometer & Fair-
banks Beam

Weighing Witnessed By: John C. Bowen CAA

Aircraft Weighed as Follows:

1. EMPTY (Fuel and oil drained at system drains)
2. IN LEVEL FLIGHT ATTITUDE
3. FIXED EMERGENCY EQUIPMENT INCLUDED AS FOLLOWS:
 Lbs. at Ins. of Datum
4. DATUM IS Leading edge of Wing at 30" from C:L of Hull

See attached sketch

NOTE: Aircraft balanced in level flight position when suspended from lifting eye.

Total Empty Weight(W): 6180#

Empty Weight C.G. = 22.6 Ins. Aft of Datum

LOCATION OF EQUIPMENT ITEMS

ITEM	Weight (Lbs.)	Arm (Ins. from Datum)
Propeller and Propeller Accessories		
201 Constant Speed Propeller Controls	13	-23
302 Two Controllable Metal Propellers Hamilton Standard Hubs 2D30, Blades 6101		
Engine and Engine Accessories- Fuel and Oil System		
101 Two Engine Ring Cowls	56	-36
102 Two Oil Radiators	26	0
103 Two Starters Eclipse E-80		-12
108 Pressure Fire Extinguisher Lux A-1.21		-33
111 E Military R-985-AN 6 B Manual		
104 One Generator with control box Carburetors		
Landing Gear 32 x 8 Hayes		
Ellis Air Lines Water Rudder Model C		
305 12.50 Tail Wheel Goodrich		
301 Two Wing Tip Floats Liberty Type 17		
204 Two Batteries 34 Amp		
216 Miscellaneous		
Interior Equipment		
207 Radio Lear T30 R3 AB		
225 Cabin Heater Manifold		
Marquette Windshield Swipe		
Two Seats with Life Belts		Plus 24
Two Seats with Life Belts		Plus 62
Two Seats with Life Belts		Plus 102
Two Pilot Cushions with Life Belts		
One Emergency Seat with Life Belt		Plus 136
210 Two Windows in Cabin Doors	100	125
Four Tie Up Cleats		
One Ellis Spash Strip	12	
No Smoking and Belt Sign		
One Anchor and Line		
One CO2 and One Axe		
One Pyrene		
One Paddle with Hook		
Two Cans Emergency Rations		136
One Flashlight		
One First Aid Kit		

Investigation of the Air Supply and Control of Quantity,
Capacity and Pressure of the Engine IO 74676, and Serial
Number 1172, was conducted by the Army Air Corps, Dayton, Ohio,
on 1-17-50. The engine was weighed in level flight at 2500 RPM. A
Dillion Dynamometer was balanced with engine rotation
and fuel flow was 0. Fuel in tanks 0. Fuel in
tanks 0. All equipment listed on page
of this report is in place.

6200 Total Weight

3.5

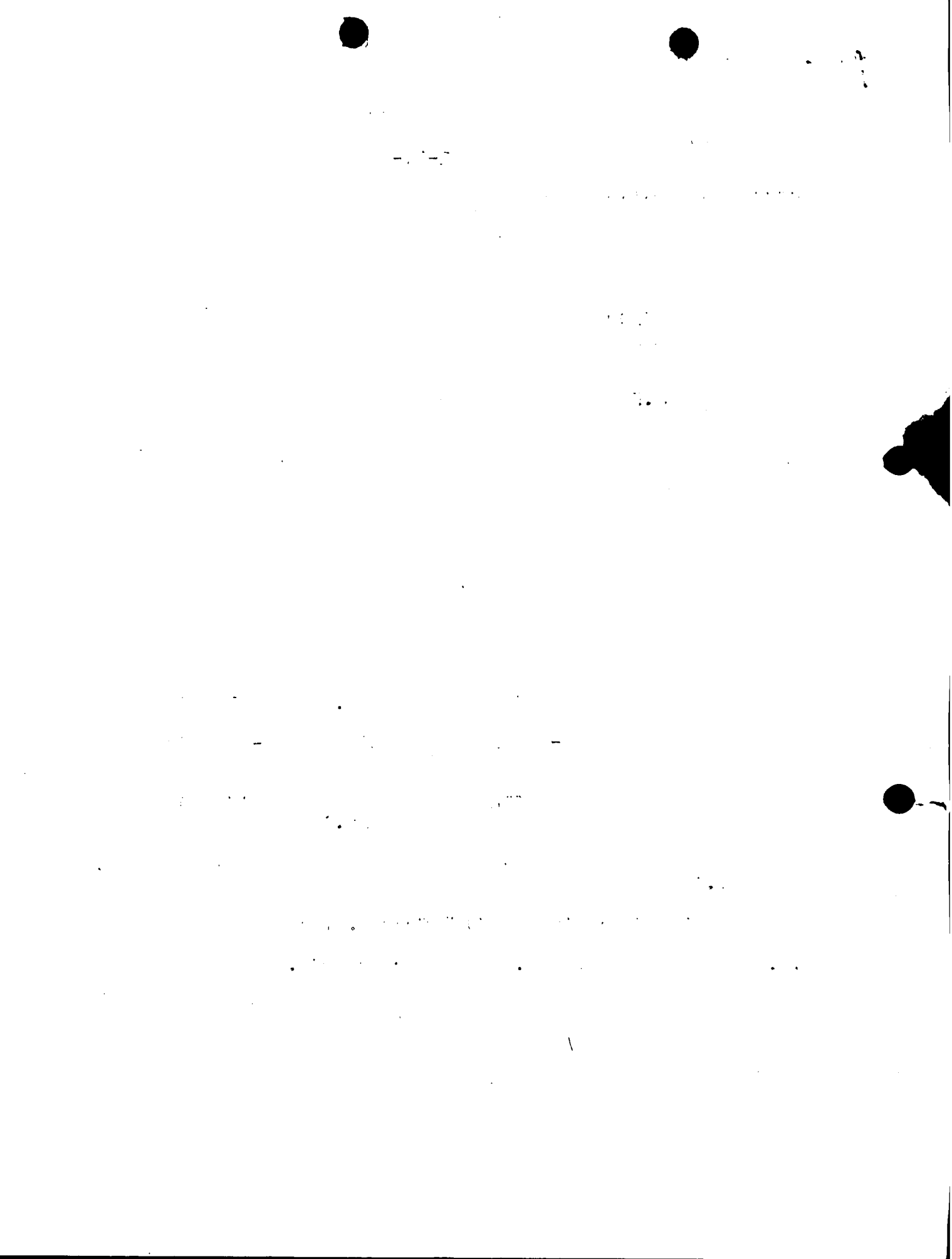
20#

6200	23.5	145700
- 20	290	- 5800
0		
0		
6180		139900
	22.6	

M A C 97.4

Datum Leading Edge Wing at 30 " from C.L. of Hull

C.G. Range Forward 20.5 " Rearward 33. "



UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

OPERATION LIMITATIONS (Standard)

CAA IDENT. MARK

N 74676

ENGINE	MAKE	AIRCRAFT	MAKE	DATE MFRD.	SERIAL NO.	DESIGNATION	TYPE CERT.
	MODEL		MODEL				
	SB-3		Grumman	9/35	1172	Land & Sea	654

ENGINE AND AIR SPEED LIMITS NOT TO BE EXCEEDED
(All Values Are Maximum and Are NOT RECOMMENDED OPERATING LIMITS)

ENGINE LIMITS							TRUE INDICATED AIR SPEED				
	MINUTES	ALTITUDE	IN. HG.	R. P. M.	H. P.	FUEL OCT.		WEIGHT	M. P. H.	KNOTS	
TAKE-OFF	1	- - 34.5	2200	400	80		CLIMB OR LEVEL FLIGHT	8000	194	169	
TAKE-OFF	1	- - 36.5	2300	450	87		GLIDE OR DIVE (Smooth Air Only)	8000	225	195	
SEA LEVEL	X	TO	- - 34.5	2200	400	87	FLAPS EXTENDED	8000	110	96	
		SEA LEVEL	5000	33.5	2200	400	87	CLIMB OR LEVEL FLIGHT	-	-	-
ALTITUDE		FROM	(Straight line manifold pressure variation from Sea level to					GLIDE OR DIVE (Smooth Air Only)	-	-	-
ALTITUDE								FLAPS EXTENDED	-	-	-
LOW IMP.	5000*		-	-	-	-	DATUM Wing Loading Edge At Fuselage.				
LOW IMP.	-		-	-	-	-					
HIGH IMP.	-		-	-	-	-					
HIGH IMP.	-		-	-	-	-					

USEABLE CEILINGS AND ADDITIONAL CONDITIONS*

CEILINGS (FT.)	WEIGHT	R. P. M.	M'FOLD PRESS.	FUEL OCT.	T. I. A. S.	PROP. DEICER	WING DEICER
6000	8000	Neto	Neto	87	-	No	No
Zero	8048	Neto	Neto	87	-	Yes	Yes

*Standard air, any engine inoperative, carburetor air intake on "cold air."
Idling in high pitch

MAXIMUM TAKE-OFF WEIGHT

MAXIMUM LANDING WEIGHT

LAND	8000 lbs.	SEA	8000 lbs.	LAND	8000 lbs.	SEA	8000 lbs.
------	-----------	-----	-----------	------	-----------	-----	-----------

OPERATIONS AUTHORIZED

See Weight and Balance data section for loading information.

INSPECTOR'S SIGNATURE
John C. Bowen
DATE
1/17/50

ADDITIONAL OPERATIONS AUTHORIZED YES NO (IF YES—SEE OVER)

THIS PLACARD MUST BE DISPLAYED IN VIEW OF THE PILOT

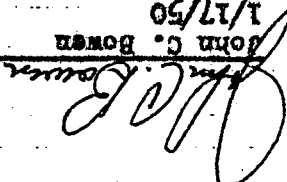
ADDITIONAL OPERATIONS AUTHORIZED

This aircraft is authorized to operate in accordance with the provisions of Special Civil Air Regulation SR-337 as not to exceed the following maximum weights:

Land, wheel equipped - 8800 lbs.

Sea - 8800 lbs.

John C. Bowen
1/17/50



UNITED STATES OF AMERICA DEPARTMENT OF COMMERCE CIVIL AERONAUTICS ADMINISTRATION	SPECIFICATION NO. <p style="text-align: center; font-size: 1.2em;">A654-2</p>	CAA IDENT. NO. (Only) <p style="text-align: center; font-size: 1.2em;">N 74676</p>
--	--	---

EQUIPMENT No.			SPECIAL EQUIPMENT			
NUMBER	NUMBER	NUMBER	NUMBER	ITEM (Description)	WGT.	ARM
201				Constant speed Propeller Controls	13	-23
302				Two Controllable Metal Propellers Hawthorn Hubs 2D30, Blades 6101	308	-52
101				Two Engine Ring Cowl	56	-36
102				Two Oil Radiators	26	--
103				Two Starters (Helipac K-30)	--	-12
108				Pressure Fire Extinguisher Lux A-1	21	-33
111E				Military R-985-AM 68 Manual	--	--
104				One Generator with control box Carburetors	--	--
				Landing Gear 32 x 8 Hayes	--	--
				Ellis Air Lines Water Rudder Model C	--	--
305				12.50 Tail Wheel Goodrich	--	--
301				Two Wing Tip Floats Liberty Type 17	--	--
204				Two Batteries 34 Amp	--	--
216				Miscellaneous	--	--
207				Radio Lear 130 R3 AB	--	--
225				Cabin heater Manifold	--	--
				Marquette Windshield Wiper	--	--
				Two Seats with Life Belts	--	A24
				Two Seats with Life Belts	00	A62
				Two Seats with Life Belts	--	A102
				Two Pilot Cushions with Life Belts	--	--
				One Emergency Seat with Life Belt	--	A136
				Two Windows in Cabin Doors	100	A125
				Four Tie Up Cleats	--	--
				One Ellis Splash Strip	12	--
				No Smoking and Belt Sign	--	--
				One Anchor and Line	--	--
				One CO2 and One Axe	--	--
				One Pyrene	--	--
				One Paddle with Hook	--	--
				Two Cans Emergency Rations	--	A136
				One Flashlight	--	--
				One first Aid Kit	--	--

(LAND)	C. G. LIMITS
NORMAL 20.5° to 33.0° (15.2%-28% MAC)	NORMAL 20.5° to 33.0° (15.2%-28% MAC)
IN FLIGHT	IN FLIGHT

DATE 1/17/50	INSPECTOR'S SIGNATURE <i>John C. Bowen</i>
---------------------	---

REPAIR AND ALTERATION RECORD

SUPPLEMENTAL PAGE NO.	ISSUED (Date)	BY	TITLE
REPAIR AND ALTERATION FORM DATED			
LOCATION AND BRIEF DESCRIPTION OF REPAIR			
REPAIR AND ALTERATION FORM DATED		BY (Agency name and number)	
REPAIR AND ALTERATION FORM DATED			
LOCATION AND BRIEF DESCRIPTION OF REPAIR			
REPAIR AND ALTERATION FORM DATED		BY (Agency name and number)	
REPAIR AND ALTERATION FORM DATED			
LOCATION AND BRIEF DESCRIPTION OF REPAIR			
REPAIR AND ALTERATION FORM DATED		BY (Agency name and number)	
REPAIR AND ALTERATION FORM DATED			
LOCATION AND BRIEF DESCRIPTION OF REPAIR			
REPAIR AND ALTERATION FORM DATED		BY (Agency name and number)	
REPAIR AND ALTERATION FORM DATED			
LOCATION AND BRIEF DESCRIPTION OF REPAIR			

REPAIR AND ALTERATION FORM (AIRCRAFT, PROPELLERS, ENGINES, INSTRUMENTS)

INSTRUCTIONS - This form must be filled out in duplicate each time a major repair and/or alteration is made of an aircraft, propeller, engine, or instrument, as follows:

- (A) For an Aircraft - Complete items 1, 2, 3a, 4, 5, 6, and 7 and submit to CAA representative for approval.
- (B) For a Component Installed in an Aircraft - Complete items 1, 2, 3(b, c, or d, whichever is applicable), 4, 5, and 6, and submit as described in (A) above.
- (C) For a Spare Component - Complete items 3(b, c, or d), 5, and 6, and submit to CAA representative for approval. When approved, retain both copies of this form with the component until installation on an aircraft. At that time, items 1, 2, and 4 must be completed by the installing agency, which will then forward forms as described in (A) above.

1. AIRCRAFT	MAKE Grumman	MODEL G-21-A	SERIAL NO. 1172	CAA IDENTIFICATION MARK N 74676
2. OWNER	NAME (First, middle, last) Ellis Air Lines			
	ADDRESS (Street and number, city, zone, and state) Box 1059 Ketchikan Alaska			

3. FILL IN INFORMATION IN THIS ITEM ONLY FOR THE UNIT REPAIRED AND/OR ALTERED

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check)	
				MAJOR REPAIR	MAJOR ALTERATION
a. AIRCRAFT	(As described in item 1 above)				Annual
b. PROPPELLER b. BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER				

The following items are to be completed by repair or alteration agency. However, in the case of a spare component, item 4 will not be completed until such component is installed in an aircraft. At this time, item 4 will be completed by the installing agency, if applicable.

4. AIRCRAFT	EMPTY WEIGHT (Pounds)* 5964	EMPTY CENTER OF GRAVITY (Inches from datum)* 21.8	USEFUL LOAD (Pounds)* 2636
-------------	---------------------------------------	---	--------------------------------------

*AFTER the repairs and/or alterations described below were made.

5. KIND OF AGENCY WHICH MADE REPAIRS AND/OR ALTERATIONS (Check)

MANUFACTURER
 APPROVED REPAIR STATION NO. _____
 CERTIFIED MECHANIC
 (SPECIFY)

AGENCY	NAME J.L. Sherman	ADDRESS (Street and number, city, zone, and state) Box 1059 Ketchikan Alaska	DATE WORK ACCOMPLISHED Feb 5 1949
--------	-----------------------------	--	---

7. DESCRIPTION OF WORK ACCOMPLISHED IN ACCORDANCE WITH PART 18 OF THE CIVIL AIR REGULATIONS AND ITS ASSOCIATED CIVIL AERONAUTICS MANUAL 18. (If more space is needed, continue on reverse, or attach separate sheets bearing aircraft identification mark)

Inspected, repaired, and painted all interior metal. Recovered all fabric
 Installed inspection plates top side stabilizer over strut fitting.
 Replaced one cracked front stabilizer hinge fitting.
 Removed corner front seats and installed two Barkley Grow seats
 Converted flat vacuum system to pumps
 Installed life jackets all seats
 Installed full load shock mount on Lear Radio panel. Moved power supply to bow over vacuum tank

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

SIGNATURE OF SUPERVISING MECHANIC J.L. Sherman	CERTIFICATE NUMBER AND RATING 12761	DATE Feb 5 1949
--	---	---------------------------

TO BE COMPLETED BY CAA REPRESENTATIVES

<input type="checkbox"/> APPROVED <input type="checkbox"/> REJECTED <input type="checkbox"/> FORWARDED FOR ENGINEERING APPROVAL	SIGNATURE OF DESIGNER J.L. Sherman	NUMBER 8216	DATE Feb 5 1949
	SIGNATURE OF INSPECTOR J.P. Ryan	<input checked="" type="checkbox"/> ACCEPTED	DATE 2/10/49
		<input type="checkbox"/> REINSPECTED	

Strip paint from entire exterior of ship checked for corrosion and painted with Ellis standard colored Primer

Installed Tie up cleats two front and two rear

Two rear Grumman seats fixed for reclining back to take stretcher

Installed no smoking Seat Belt Sign

Installed Ellis Amphibious Wheel indicator

Install Fuel pressure warning lights

Installed CO2 rear of cabin

Moved switch panel from Dash to over pilot seat

Moved Generator control box from nacelle to cockpit

3038

2.1.1

1478

WASHINGTON
MAIL ROOM 3
JUN 20 9 37 AM '45
DEPT OF COMMERCE
MERCHANDISE ADM

5/1/45

[Handwritten signature]

MEMORANDUM FOR THE DIRECTOR

RE: [Illegible]

DATE: [Illegible]

TO: [Illegible]

FROM: [Illegible]

SUBJECT: [Illegible]

[Illegible]

[Illegible]

[Illegible]

[Illegible]

[Illegible]

[Illegible]

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[Illegible]

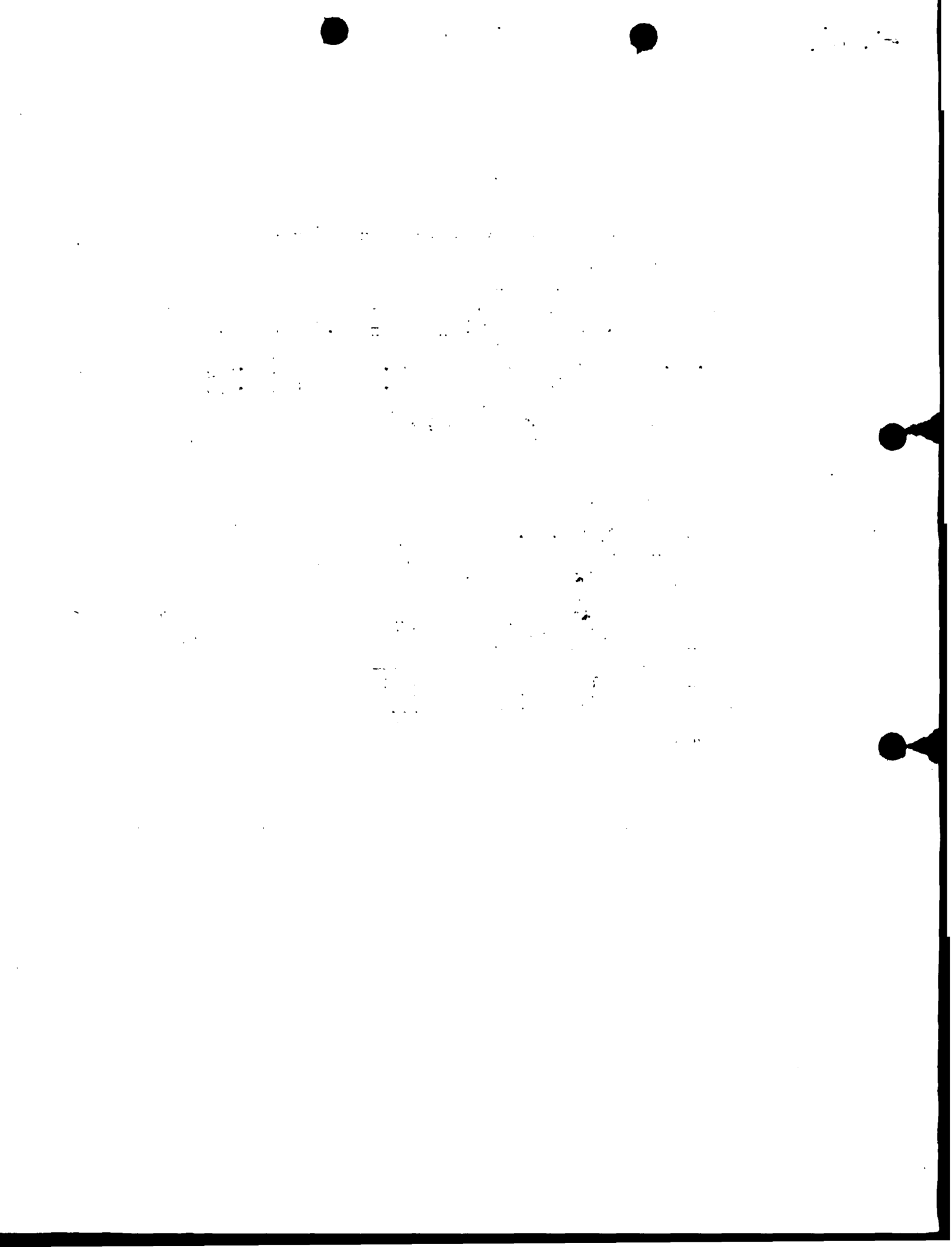
Reference Aircraft Specifications A - 654 - 3

Weighing Equipment Calibrated
 Engines R 985 - AN - 6B (two)
 Horsepower maximum except take-off 400 horsepower each
 Therefore, minimum fuel = $\frac{800}{12} = 66.66$ gallons
 C. G. Range Forward +20.5 inches (15.2%)
 Rearward +33.0 inches (28.0%)
 Datum wing leading edge at fuselage
 Maximum weight 8600 pounds

Summary Airplane Weight Empty

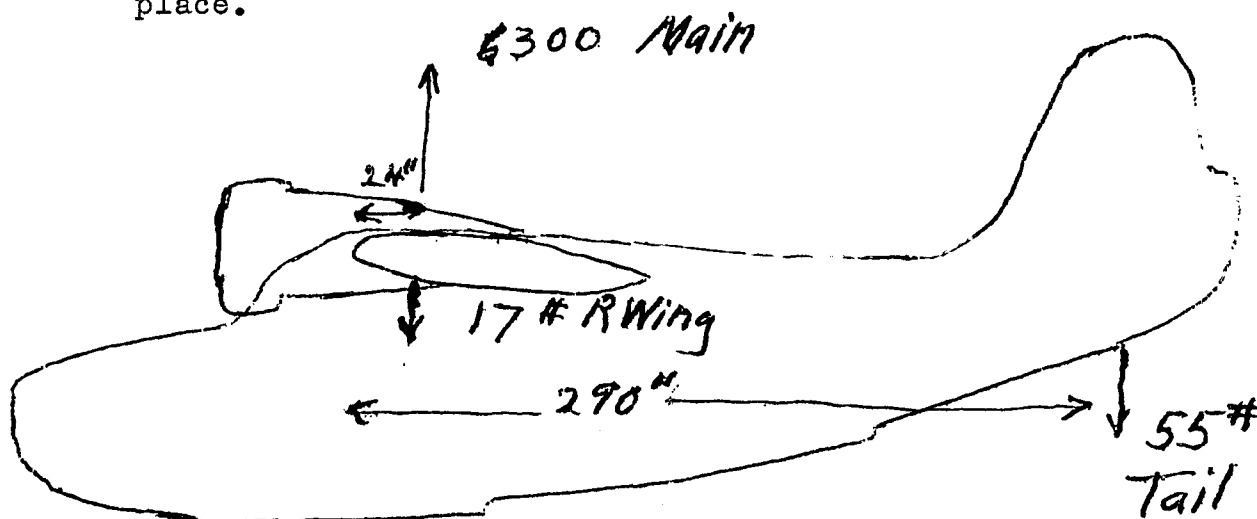
Weight Empty C. G.
 Useful Load
 Loading Schedule
 Place 9
 Airplane Weight Empty
 Fuel for Place (66)
 Oil (12 gallons)
 Baggage
 Pilot and Passenger
 Passengers Cabin (7)

5964
~~23745~~ " 21.8
~~2650~~ 2636
 See Page 4
 5964
 390
 90
 676
 340
1190
 Load 8600

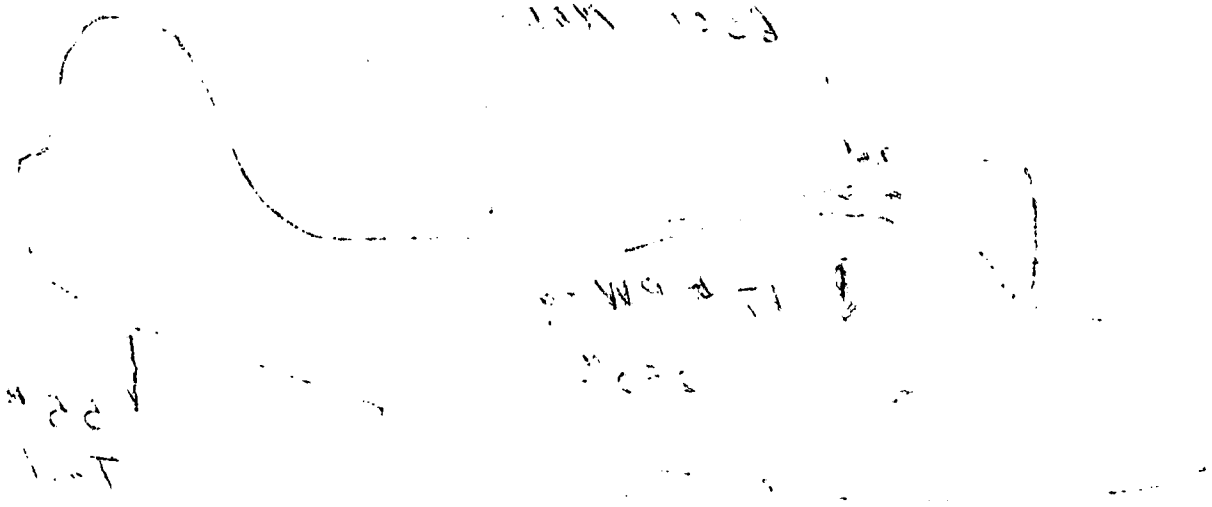


Actual Weight and Balance

1. Determination of Weight Empty and Center of Gravity, airplane Grumman G-21A, bearing NC 74676 and Serial 1172 was weighed in Ellis Air Lines Maintenance Hangar, Ketchikan, Alaska, on February 6, 1949. The airplane was weighed in level flight position on Dillion Dynamometer and balanced with spring tension scales from tail eye and wing tie-down ring. Fuel tanks were dry and oil tanks had $13\frac{1}{2}$ gallons. All equipment listed on Page 5 of this report was in place.



Item	Weight	Arm	Moment
Main reaction	6300	+24"	146880
scale error	-159		
Level and sling	- 4		
Tail reaction	- 55	+290"	-15950
R Wing reaction	- 17		
Oil $13\frac{1}{2}$ gallons	-101	+ 8"	- 808
Weight Empty	5964	23.45	130122



1. R 5M

2. R 5M

3. R 5M

4. R 5M
5. R 5M

II Forward C. G. Extreme	Weight	Arm	Moment
Airplane Weight Empty	5964	23.5	146880
Oil (13 gallons)	97	8	776
Pilot and Passenger	340	- 5	- 1700
Baggage (bow)	300	-65	-19500
Minimum Fuel (67 gallons)	<u>402</u>	<u>30</u>	<u>12060</u>
	7103	19.5	138516

Forward C. G. Extreme of 19.5 exceeds limit of 20.5, therefore,
Loading Schedule required-
Placard no baggage in bow with empty cabin

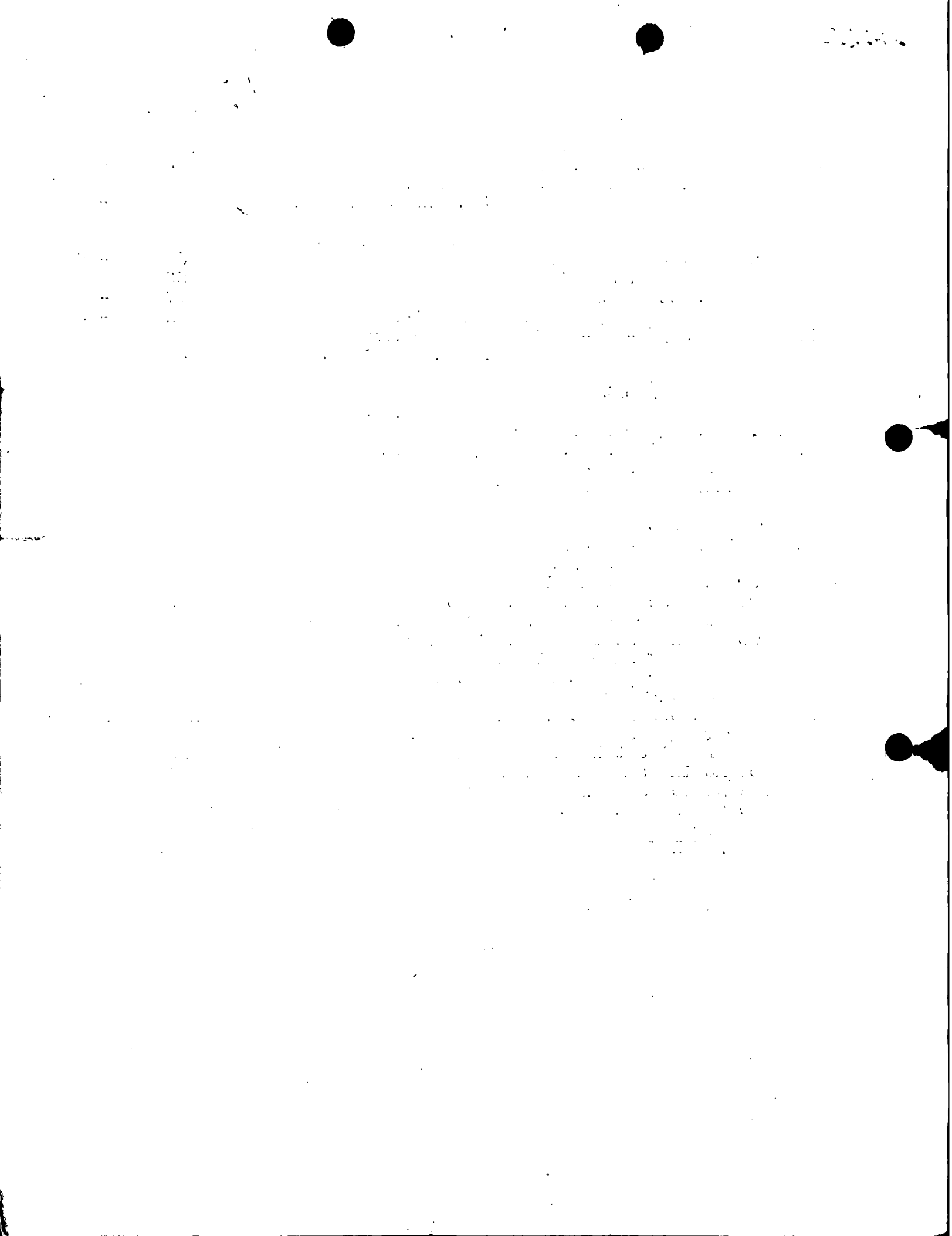
III Rearward C. G. Extreme

Airplane Weight Empty	5964	23.5	146880
Oil (13 gallons)	97	8	776
Fuel (140 gallons)	840	30	25200
Pilot	170	- 5	- 850
Passengers (2)	340	24	8160
Passengers (2)	340	62	21080
Passengers (2)	340	102	34680
Passenger (1)	170	136	23120
Baggage	<u>300</u>	<u>169</u>	<u>50700</u>
	8561	36.18	309746

Rearward C. G. of 36.18 exceeds limit of 33., therefore, Loading
Schedule required-
Placard 140 gallons maximum fuel with gross load



Equipment List	Weight	Arm
Propeller and Propeller Accessories		
201 Constant Speed Propeller Controls	13	-23
302 Two Controllable Metal Propellers Hamilton Standard Hubs 2D30, Blades 6167A-12308		-52
Engine and Engine Accessories - Fuel and Oil System		
101 Two Engine Ring Cowls	56	-36
102 Two Oil Radiators	26	0
103 Two Starters Eclipse	77	-12
108 Pressure Fire Extinguisher Lux A-1	21	-33
111 E Military R-985-AN 6 B Manual		
104 One Generator with Control Box Carburetors	632	
Landing Gear and Floats		
Ellis Air Lines Water Rudder Model C		
305 12.50 Tail Wheel Goodrich		
301 Two Wing Tip Floats Liberty Type 17		
204 Two Batteries 34 Amp		
216 Miscellaneous Instruments		
Interior Equipment		
207 Radio Lear T30 R3 AB		
225 Cabin Heater Manifold Marquette Windshield Swipe		
Two Grumman Seats with life belts	9	
Two McArthur Seats with life belts		
Two Barkley Seats with life belts		
Two Pilot Cushions with life belts		
One Emergency Seat with life belt		
Two Cans Rations		
210 Two Windows in Cabin Doors	100	125
Four Tie Up Cleats		
One Experimental Splash Strip	12	
No Smoking and Belt Sign		
One Anchor and Line		
One CO2 and One Axe		
One Pyrene		
One Paddle with Hook		
Two Cans Emergency Rations		
One Flash Light		
One First Aid Kit		



MA. A-308

[Handwritten initials]

FORM **ACA-305**
(3-7-46)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

BUDGET BUREAU NO. 41-R041.2
APPROVAL EXPIRES FEBRUARY 15, 1947

APPLICATION FOR AIRWORTHINESS CERTIFICATE AND/OR
ANNUAL INSPECTION OF AN AIRCRAFT

INSTRUCTIONS

Please submit this form to the Civil Aeronautics Administration Field Representative.

APPLICATION (Check) <input type="checkbox"/> AIRWORTHINESS CERTIFICATE <input checked="" type="checkbox"/> ANNUAL INSPECTION	CAA IDENTIFICATION <input checked="" type="checkbox"/> NC <input type="checkbox"/> NX <input type="checkbox"/> NR <input type="checkbox"/> OTHER (Specify) <u>74676</u>
--	--

AIRCRAFT		
MAKE Grumman	MODEL G 21 A	
REGISTRATION NO. 1172 74676	MANUFACTURER'S SERIAL NO. 1172	DATE MANUFACTURED 3-43

ENGINE		
MAKE Wasp Jr.	Pratt & Whitney	MODEL R 985-AN 6
		RATED H.P. 450
(Check whether) <input type="checkbox"/> NEW <input type="checkbox"/> USED <input checked="" type="checkbox"/> OVERHAULED	IF OVERHAULED, STATE BY WHOM Grand Central Glendale Calif.	DATE OF OVERHAUL 8-26-47

(Check which) AIRCRAFT NOW REGISTERED WITH THE ADMINISTRATION APPLICATION FOR REGISTRATION AND BILL OF SALE (FORMS ACA-501 AND 502) ATTACHED

OWNER'S NAME Ellis Air Lines	PERMANENT ADDRESS (Street and No., City, Zone, State) Box 1059 Ketchikan Alaska
--	---

ATTACHMENTS (Check which) <input type="checkbox"/> ACA-319 <input checked="" type="checkbox"/> WEIGHT AND BALANCE REPORT <input checked="" type="checkbox"/> ACA-337 <input type="checkbox"/> SPECIAL APPROVALS <input type="checkbox"/> ACA-805 <input type="checkbox"/> DATA, DRAWINGS, ETC. <input type="checkbox"/> ACA-317 <input type="checkbox"/> UNAPPROVED DEVIATION DATA	I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE Ellis Air Lines J.L. Sherman AUTHORIZED AGENT Vive President DATE <u>2-5-49</u> TITLE
--	---

FORM **ACA-305a** (FORMERLY ACA-307) AIRCRAFT INSPECTION REPORT
(To be completed by a CAA inspector or a designated inspector or representative)

IT HAS BEEN DETERMINED THAT THE AIRCRAFT DESCRIBED IN 305 ABOVE IS IN CONFORMITY WITH THE FOLLOWING

LISTING IN INSPECTOR'S HANDBOOK, CHAP. XVIII	AIRCRAFT SPECIFICATION	AIRWORTHINESS DIRECTIVE
PAGE NO. 109	T.C. NO. A654-2	SERIAL NO. A-654-2
EFFECTIVE NOTES		EFFECTIVE NOTES
		48-14-2 49-16-2
		48-18-1

OTHER (Describe)
**Flap Vacuum taken from one pump
Instrument Vacuum from other**

EXCEPTIONS, IF ANY (If additional space is required, use reverse).

<input checked="" type="checkbox"/> FORM ACA-319 (Return to owner) APPROVED BY <i>John Elliott</i>	MECH. CERTIF. AND RATING NO. A & E 301186	DATED 2-5-49
<input checked="" type="checkbox"/> FORM ACA-1362 CERTIFICATE VALID TO (Specify date) 2-5-50		

AIRCRAFT AIRWORTHINESS CERTIFICATE WITH OPERATION LIMITATIONS FORM (ATTACHED) WAS ISSUED

FINDINGS		
<input checked="" type="checkbox"/> AIRWORTHY	DESIGNEE'S SIGNATURE AND NO. J.L. Sherman 8216	DATE 2-5-49
<input type="checkbox"/> UNAIRWORTHY	CAA INSPECTOR'S SIGNATURE <i>Marmaduke Bryan</i>	DATE 2/6/49
		<input checked="" type="checkbox"/> ACCEPTED <input type="checkbox"/> REINSPECTED

REASON FOR DISAPPROVAL, OR REMARKS (Indicate if you have used the reverse to continue this or other item Yes No)

am 9-12-41 NWX

Do not sign

acc. 5-29-49

acc 12-28-30 NWX

11-7-46

JEG

RECEIVED
JUN 16 1 59 PM '48
CIVIL AERONAUTICS
8TH REGIONAL OFFICE
ANCHORAGE, ALASKA

DEPT OF COMMERCE
CIVIL AERONAUTICS ADMIN
JUN 20 9 37 AM '48
MAIL ROOM 3
WASHINGTON

APPLICATION FOR AIRWORTHINESS CERTIFICATE AND/OR
ANNUAL INSPECTION OF AN AIRCRAFT

INSTRUCTIONS

Please submit this form to the Civil Aeronautics Administration Field Representative.

APPLICATION (Check) <input type="checkbox"/> AIRWORTHINESS CERTIFICATE <input type="checkbox"/> ANNUAL INSPECTION	CAA IDENTIFICATION <input type="checkbox"/> NC <input type="checkbox"/> NX <input type="checkbox"/> NR <input type="checkbox"/> OTHER (Specify) <u>74676</u>
---	---

AIRCRAFT

MAKE <u>Crumpton</u>	MODEL <u>Q 21</u>
REGISTRATION NO. <u>74676</u>	MANUFACTURER'S SERIAL NO. <u>1172</u>
DATE MANUFACTURED <u>3-43</u>	

ENGINE

MAKE <u>987 Jrs</u>	MODEL <u>Right 1905-AN5 Left 1905-AN3</u>	RATED H.P. <u>450</u>
(Check whether) <input type="checkbox"/> NEW <input type="checkbox"/> USED <input type="checkbox"/> OVERHAULED	IF OVERHAULED, STATE BY WHOM <u>read Central California</u>	DATE OF OVERHAUL

(Check which)
 AIRCRAFT NOW REGISTERED WITH THE ADMINISTRATION
 APPLICATION FOR REGISTRATION AND BILL OF SALE (FORMS ACA-501 AND 502) ATTACHED

OWNER'S NAME <u>Ellis Air Lines</u>	PERMANENT ADDRESS (Street and No., City, Zone, State) <u>1277 Congress Mitchikan Lake</u>
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ATTACHMENTS (Check which) <input type="checkbox"/> ACA-319 <input checked="" type="checkbox"/> ACA-337 <input type="checkbox"/> ACA-805 <input type="checkbox"/> ACA-317 <input checked="" type="checkbox"/> WEIGHT AND BALANCE REPORT <input checked="" type="checkbox"/> SPECIAL APPROVALS <input type="checkbox"/> DATA, DRAWINGS, ETC. <input type="checkbox"/> UNAPPROVED DEVIATION DATA	I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE <u>Ellis Air Lines</u> <u>J. J. Sherman</u> OWNER OR AUTHORIZED AGENT <u>Vice President</u> DATE <u>1-31-48</u> TITLE
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FORM **ACA-305a** (FORMERLY ACA-307) AIRCRAFT INSPECTION REPORT
(To be completed by a CAA inspector or a designated inspector or representative)

IT HAS BEEN DETERMINED THAT THE AIRCRAFT DESCRIBED IN 305 ABOVE IS IN CONFORMITY WITH THE FOLLOWING

LISTING IN INSPECTOR'S HANDBOOK, CHAP. XVIII	AIRCRAFT SPECIFICATION	AIRWORTHINESS DIRECTIVE
PAGE NO. <u>100</u>	T.C. NO. <u>A 650-2</u>	SERIAL NO. <u>A-650-3</u>
EFFECTIVE NOTES	NO. <u>65-1</u>	EFFECTIVE DATE <u>65-33-1</u>

OTHER (Describe)
Ellis Air Lines Model C water ladder
has been approved for installation on D.C. 80821

EXCEPTIONS, IF ANY (If additional space is required, use reverse)

<input checked="" type="checkbox"/> FORM ACA-319 (Return to owner)	APPROVED BY <u>J. J. Elliott</u>	MECH. CERTIF. AND PLATING NO. <u>78 3216</u>	DATE <u>1-3-48</u>
<input type="checkbox"/> FORM ACA-1362 ISSUED	CERTIFICATE NO. <u>1-5149</u>	DATED TO (Specify date)	

AIRCRAFT AIRWORTHINESS CERTIFICATE WITH OPERATION LIMITATIONS FORM (ATTACHED) WAS ISSUED

FINDINGS

<input checked="" type="checkbox"/> AIRWORTHY <input type="checkbox"/> UNAIRWORTHY	DESIGNEE'S SIGNATURE AND NO. <u>J. J. Sherman</u> <u>8216</u>	DATE <u>1-3-48</u>
CAA INSPECTOR'S SIGNATURE <u>J. J. Sherman</u>	<input checked="" type="checkbox"/> ACCEPTED <input type="checkbox"/> REINSPECTED	DATE <u>2/10/48</u>

REASON FOR DISAPPROVAL, OR REMARKS (Indicate if you have used the reverse to continue this or other item) Yes No

Handwritten: 2-10-49

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REPAIR AND ALTERATION FORM (AIRCRAFT, PROPELLERS, ENGINES, INSTRUMENTS)

INSTRUCTIONS - This form must be filled out in duplicate each time a major repair and/or alteration is made of an aircraft, propeller, engine, or instrument, as follows:

- (A) For an Aircraft - Complete items 1, 2, 3a, 4, 5, 6, and 7 and submit to CAA representative for approval.
- (B) For a Component Installed in an Aircraft - Complete items 1, 2, 3(b, c, or d, whichever is applicable), 4, 5, and 6, and submit as described in (A) above.
- (C) For a Spare Component - Complete items 3(b, c, or d), 5, and 6, and submit to CAA representative for approval. When approved, retain both copies of this form with the component until installation on an aircraft. At that time, items 1, 2, and 4 must be completed by the installing agency, which will then forward forms as described in (A) above.

1. AIRCRAFT	MAKE Grumman	MODEL G 21 A	SERIAL NO. 1172	CAA IDENTIFICATION MARK NC 74676
2. OWNER	NAME (First, middle, last) Ellis Air Lines		ADDRESS (Street and number, city, zone, and state) 1277 Tongass Ketchikan Alaska	

3. FILL IN INFORMATION IN THIS ITEM ONLY FOR THE UNIT REPAIRED AND/OR ALTERED

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check)	
				MAJOR REPAIR	MAJOR ALTERATION
a. AIRCRAFT	(As described in item 1 above)				X
b. PROPELLER BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER				

The following items are to be completed by repair or alteration agency. However, in the case of a spare component, item 4 will not be completed until such component is installed in an aircraft. At this time, item 4 will be completed by the installing agency, if applicable.

4. AIRCRAFT	EMPTY WEIGHT (Pounds)* 5678	EMPTY CENTER OF GRAVITY (Inches from datum)* 21.6	USEFUL LOAD (Pounds)* 2322
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*AFTER the repairs and/or alterations described below were made.

5. KIND OF AGENCY WHICH MADE REPAIRS AND/OR ALTERATIONS (Check)

MANUFACTURER APPROVED REPAIR STATION NO. _____ CERTIFIED MECHANIC

(SPECIFY)

6. AGENCY	NAME J.L. Sherman	ADDRESS (Street and number, city, zone, and state) Box 1059 Ketchikan Alaska	DATE WORK ACCOMPLISHED 1-3-48
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7. DESCRIPTION OF WORK ACCOMPLISHED IN ACCORDANCE WITH PART 18 OF THE CIVIL AIR REGULATIONS AND ITS ASSOCIATED CIVIL AERONAUTICS MANUAL 18. (If more space is needed, continue on reverse, or attach separate sheets, bearing aircraft identification mark)

Install Ellis Air Lines Model C Water Rudder (Approved for NC 88821)

Install passenger seat rear cabin bulkhead

Weight and Balance enclosed

Install Spray strips bow of hull

Install lear radio

Install indshield swipe

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

J.L. Sherman 8216 1-3-48

SIGNATURE OF SUPERVISING MECHANIC CERTIFICATE NUMBER AND RATING DATE

TO BE COMPLETED BY CAA REPRESENTATIVES

<input checked="" type="checkbox"/> APPROVED	SIGNATURE OF DESIGNEE <u>J.L. Sherman</u>	NUMBER 8216	DATE 1-3-48
<input type="checkbox"/> REJECTED		SIGNATURE OF INSPECTOR <u>Morman J. Boyon</u>	<input checked="" type="checkbox"/> ACCEPTED	DATE 2/10/48
<input type="checkbox"/> FORWARDED FOR ENGINEERING APPROVAL		<input type="checkbox"/> REINSPECTED	

U.S. AIR FORCE
OFFICE OF THE
SECRETARY

5-355

11.6

22/8

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[Handwritten signature]

ELLIS AIR LINES

P. O. BOX 1059

KETCHIKAN, ALASKA

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GRUMMAN AIRCRAFT CORPORATION

REPORT NO. 1

WEIGHT AND BALANCE OF MODEL G 21A

SERIAL NO. 1172

IDENTIFICATION MARK NC 74676

DATE JAN. 20, 1948

PREPARED BY

J. L. Sherman

CHECKED BY

Walt Nebel

WITNESSED BY

J. L. Sherman

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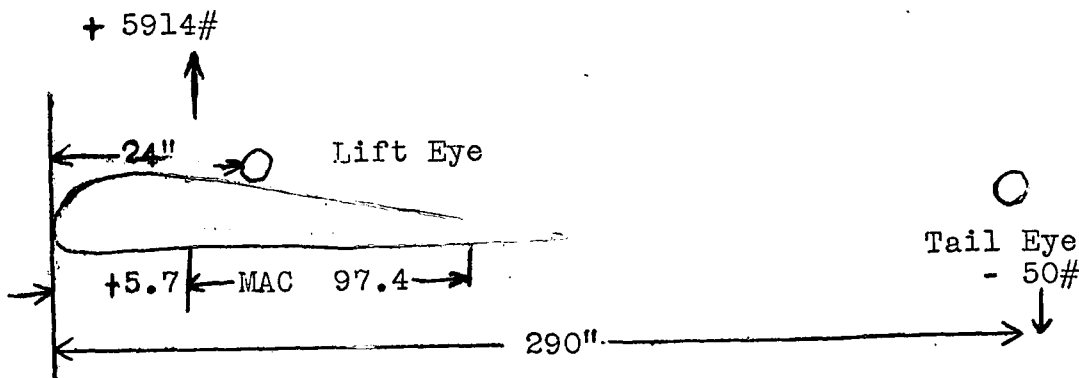
ELLIS AIR LINES

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AIRCRAFT EMPTY WEIGHT

Empty weight as weighed (in level landing position)



Left Wing at 261" from Lift Eye - 23#

	<u>Scale</u>	<u>Tare</u>	<u>Net</u>
Lift Eye	+5914#	4	5910
Tail Eye	- 50		- 50
Left Wing Eye	- 23		- 23
Scale Error	- 159		- 159

Scale Error arrived by weighing known weight at 4000#. We believe the error will increase at 6000# but have been unable to check.

Gas Empty
Oil Drained

Empty Weight

5678

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Lift Eye is 24" aft Leading Edge of Wing

$$\text{Empty C. G.} = \frac{- 50 \times 266}{5678} = - 2.3$$

$$\text{C. G. is } 24 - 2.3 = 21.7$$

Empty weight as weighed includes the following:

Item #	302	2	controllable metal props 2D30 - 6101A
	2026	2	electric eclipse F141 starters
	101	2	engine regular cowls
	102	2	oil radiators UAP # U3160
	201	2	constant speed prop controls
	108	1	pressure fire extinguisher Lux A1
	301	2	wing tip floats Grumman Design 13000
	104	1	generator 25 AMP
	204c2	2	exide 6 - TAS - 9 - 1
	216		miscellaneous instruments
	210		window in emergency seat <i>door</i>
	207		radio lear T 305R 3 AB 25#

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Most Forward C. G. Condition

	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Empty Weight as Weighed	5678	+21.7	123213
Oil 15 gals.	113	+ 8	+ 904
Fuel 67 gals.	402	+30	+ 12060
Pilot	170	- 5	- 850
Passenger (Cockpit)	170	- 5	- 850
	6533	20.5	134477

Most Rearward C. G. Condition

	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Empty Weight as Weighed	5678	+21.7	123213
Oil 15 gals.	113	+ 8	+ 904
Fuel 67 gals.	402	+30	+ 12060
Pilot	170	- 5	- 850
2 Passengers (Front)	340	+18	6120
2 Passengers (Middle)	340	+62	21080
2 Passengers (Rear)	340	+102	34680
1 Passenger (Auxiliary)	170	+136	23120
Rations	100	+169	16900
Baggage in Rear	100	+169	16900
	7753	32.77	254127

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C. G. Gross Load

	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Empty Weight as Weighed	5678	+ 21.7	123213
Oil 15 gals.	113	+ 8	904
Fuel 96 $\frac{1}{2}$ gals.	580	+ 30	17400
Pilot	170	- 5	- 850
Passenger (Cockpit)	170	- 5	- 850
Anchor and Lines	40	- 88	- 3520
Baggage Forward	260	- 65	- 16900
2 Passengers (Front)	340	+ 18	6120
2 Passengers (Middle)	340	+ 62	21080
2 Passengers (Rear)	340	+102	34680
1 Passenger (Auxiliary)	170	+136	23120
Rations	100	+169	16900
Baggage in Rear	<u>300</u>	<u>+169</u>	<u>50700</u>
Provisional Gross	8600	31.62	271997

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DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
Washington

FERRY PERMIT, TEMPORARY REGISTRATION AND AIRWORTHINESS CERTIFICATE.

Name Joseph R. James Date February 12, 1947

Address Le Claire Hotel, Moline, Illinois

This is your authority to ferry Grumman Aircraft, Model JRF-6B ✓

Army Identification No. 66333 *nc - 74676*, Manufacturer's Serial Number _____

1172, date of manufacture _____. This temporary certificate for ferry is valid only when the owner or his agent has found this aircraft airworthy for the purpose of this flight, and the owner assumes all responsibility

for such flight from Cal-Aero Airport, Ontario, Calif.
to Grand Central, Glendale
Long Beach, Calif.

After the flight the attached Form ACA-501, properly executed, together with DFC bill of sale, should be presented to your local inspector for assignment of registration number, which must be painted on the aircraft as set forth in Section 60.32 of the Civil Air Regulations. Application (ACA-305) for an Airworthiness Certificate may be made to an Inspector of the Administration. This certificate is valid only when the aircraft is flown by a certificated pilot. No person other than a necessary and valid member of the crew may be carried.

This authority expires upon arrival at the destination, and not later than

February 22, 1947 (Date).

A. S. Ward
Inspector, General Inspection Division

REMITTANCE \$ 5 applied on B
this Certificate.

S/C No. 031584

NOTE: Title to subject aircraft transferred by DFC bill of sale or equivalent title document dated _____

Howard E. Rice
D. P. C. Supervisor

February 12, 1947
(Date)

DISTRIBUTION:

- Original: 1st copy: To Pilot. This copy must be presented by owner to Inspector at time of issuance of airworthiness certificate.
- Duplicate: 2nd copy: Forwarded by DPC to issuing Inspector to be forwarded to Inspector concerned.
- Duplicate: 3rd copy: Forwarded by DPC to issuing Inspector for filing with aircraft folder papers submitted to Washington.

SPECIAL INSTRUCTIONS TO OWNER
FOR REGISTERING AIRCRAFT

If the purchaser from DPC desires to sell the aircraft before it is registered in his name and/or put into airworthy condition or cannot be issued an airworthiness certificate, it will be satisfactory to issue a regular ferry permit (not Army Surplus Ferry Permit) authorizing movement of the aircraft from the base to where new owner desires to take it. HOWEVER, before the second flight, the following procedure should be followed with regard to registration and title transfer:

- (1) If Form ACA-500-A bearing registration number has been issued to purchaser who obtained title from DPC and he desires to sell the aircraft, the new owner should obtain a bill of sale (ACA-502 or its equivalent) and present same together with Form ACA 501 (both properly executed) to the inspector; and simultaneously the vendor should endorse the original ACA-500-A over to the new owner. When these required actions have been accomplished, and the registration numbers have been painted on the aircraft as set forth in Section 60.52 of the Civil Air Regulations, the ferry permit for the second flight may be granted.
- (2) If, after arrival at destination, the original purchaser desires to sell the aircraft before he submits his ACA-501 and bill of sale, or in advance of the issuance of ACA-500-A in his name, the second purchaser should submit an ACA-501 in his name, together with the original bill of sale from DPC to the first purchaser and the bill of sale (ACA-502) from the first purchaser to the new applicant. (In other words, the continuity of title in the aircraft must be established for recordation purposes and before issuance of an aircraft registration certificate.)
- (3) With regard to aircraft transfers involving conditional sales contracts, mortgages, etc., such transfers should not be handled by inspectors. Such matters are for direct handling by AIRCRAFT REGISTRATION AND RECORDATION in WASHINGTON.

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