

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.
B-63
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- 79901

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:

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 9921.9 HOURS
d. ☒ ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:

SERIAL NO.	TOTAL HOURS
21430	4423.5
18459	Unknown-ISO 742.0
SERIAL NO.	TOTAL HOURS
SERIAL NO.	TOTAL HOURS

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

- a. LAST AIRWORTHINESS INSPECTION CONDUCTED _____ (DATE)
Inspection under continuous maintenance system in accordance with operating certificate Nos. AL-501 & 501F.
b. ☐ PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER
c. ☐ BY MECHANIC, CERTIFICATE NO. _____
d. ☐ BY APPROVED REPAIR STATION, CERTIFICATE NO. _____

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
g. ☒ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 5-15-59
BY V. M. DENISON (NAME OF ISSUING REPRESENTATIVE) 5-15-59 (DATE)
AL-501 & 501F. (DESIGNATION NO.)

5. CAA APPROVED REPAIR STATION CERTIFICATION

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

- ☐ AIRWORTHY
☐ UNAIRWORTHY

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	CAA DESIGNATION NO.	DATE
10/15/62		
ACCEPTED		
REINSPECTED		
SPOT CHECKED		

☐ ATTACHMENT

UNITED STATES OF AMERICA — FEDERAL AVIATION AGENCY
STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N79901	GRUMMAN G-21A	B63	NORMAL
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	
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.			
FAA Form 1362 (7-65)		0052-040-8000 (8100)	

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- 79901	GRUMMAN G-21A	B-63
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 <i>Stanley R. Ferber</i> AL-3 DATE OF ISSUE FAA REPRESENTATIVE DESIGNATION NO.		
6. This aircraft is being maintained under a continuous inspection system in accordance with the terms of Operating Certificate No. AL-501		

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION

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

1. AIRCRAFT	MAKE GRUMMAN	MODEL G-21A
	SERIAL NO. B63	NATIONALITY AND REGISTRATION MARK N79901
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIRBOATS INC.	ADDRESS (As shown on registration certificate) WEST SEAPLANE, RAMP CHRISTIANSTED, ST. CROIX 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) *****				
POWERPLANT	PRAATT & WHITNEY	R-905-AN1	JP 206275	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS ENGINE SUPPORT, INC. RT. 2 BOX 513 SEBRING AIR TERMINAL SEBRING, FLA. 33870	B. KIND OF AGENCY ☐ U.S. CERTIFICATED MECHANIC ☐ FOREIGN CERTIFICATED MECHANIC ☒ CERTIFICATED REPAIR STATION ☐ MANUFACTURER	C. CERTIFICATE NO. 3510 POWER PLANT CLASS 1 & 2
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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 December 28, 1970	SIGNATURE OF AUTHORIZED INDIVIDUAL JAMES W. TURNER
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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	X REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION December 28, 1970		CERTIFICATE OR DESIGNATION NO. 3510	SIGNATURE OF AUTHORIZED INDIVIDUAL JAMES W. TURNER	

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 receiving inspection, completely disassembled and all parts cleaned. All steel parts magnafluxed. All parts inspected in accordance with manufacturer's specifications and replaced where necessary. Engine, magnetos and harness completely overhauled. Test house run of engine satisfactory. Time since overhaul 00:00 hours.

FAA A.D. Note 78-8-7 complied with (ultra-sonic check of cylinder heads)
 FAA A.D. Note 56-6-2 complied with (Cylinder & stud inspection).
 FAA A.D. Note 57-5-4 complied with (Crankshaft).
 FAA A.D. Note 57-14-4 complied with (One piece cam reduction gear).
 FAA A.D. Note 53-9-1 complied with (Fly weights & fly weight liners).
 Service Bulletin 1540 complied with (Reworked Master Rod bearing).
 Service Bulletin 1552-2 complied with (Converted from ball-plain blower parts listings on file this station under W007015)

☐ ADDITIONAL SHEETS ARE ATTACHED

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION

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 G21A
	SERIAL NO. B63	NATIONALITY AND REGISTRATION MARK N79901
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIRBOATS INC.	ADDRESS (As shown on registration certificate) WEST SEA PLANE RAMP CHRISTIANSTED, ST. CROIX 00820

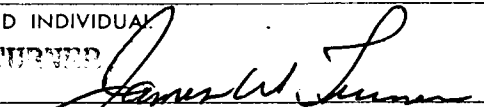
3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION				5. TYPE	
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				
POWERPLANT	PRATT & WHITNEY	P-985-14D	5066	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

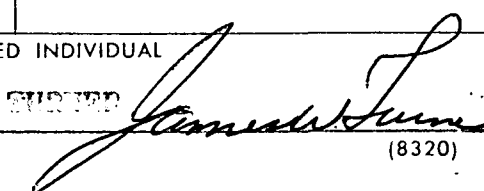
A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
ENGINE SUPPORT, INC. RT. 2 BOX 513 SEBRING AIR TERMINAL SEBRING, FLA. 33870	U.S. CERTIFICATED MECHANIC	3010 POWER PLANT CLASS 1 & 2
	FOREIGN CERTIFICATED MECHANIC	
	☒ CERTIFICATED REPAIR STATION	
	MANUFACTURER	

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 December 14, 1970	SIGNATURE OF AUTHORIZED INDIVIDUAL JAMES W. TURNER 
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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 December 14, 1970	CERTIFICATE OR DESIGNATION NO. 3010	SIGNATURE OF AUTHORIZED INDIVIDUAL JAMES W. TURNER 		

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 given receiving inspection, completely disassembled and all parts cleaned. All steel parts magnafluxed. All parts inspected in accordance with manufacturer's specifications and replaced where necessary. Engine, magnetos and harness completely overhauled. Test house run of engine satisfactory. Time since overhaul 00:00 hours.

FVA A.D. Note 56-6-2 complied with (Cylinder & Stud Inspection).
 FVA A.D. Note 57-5-4 complied with previously (Crankshaft).
 FVA A.D. Note 66-14-4 complied with previously (One piece cam reduction gear).
 FVA A.D. Note 68-9-1 complied with (Fly weights & fly weight liners).
 FVA A.D. Note 78-08-07 complied with (Transmission check of cylinder heads).
 Parts listings on file this station under WC#7000

☐ ADDITIONAL SHEETS ARE ATTACHED

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. B-63	NATIONALITY AND REGISTRATION MARK N79901
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.
CLAUDE AUSTIN C/o ANTILLES AIR BOATS INC CHRISTIANSTED, ST CROIX, U.S.V.I.	☒ U.S. CERTIFICATED MECHANIC	A & P 2227109
	☐ FOREIGN CERTIFICATED MECHANIC	
	☐ CERTIFICATED REPAIR STATION	
	☐ MANUFACTURER	

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 CLAUDE AUSTIN <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	☒ INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		

DATE OF APPROVAL OR REJECTION SEPTEMBER 5, 1978	CERTIFICATE OR DESIGNATION NO. IA 1617154	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles Freehling</i> CHARLES FREEHLING
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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.)

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-----

☐ ADDITIONAL SHEETS ARE ATTACHED

FEDERAL AVIATION AGENCY MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)				Form Approved Budget Bureau No. 04-R060.1 FOR FAA USE ONLY OFFICE IDENTIFICATION 50-FSDO-6/	
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.	B-63		NATIONALITY AND REGISTRATION MARK	N79901
2. OWNER	NAME (As shown on registration certificate)			ADDRESS (As shown on registration certificate)	
	Antilles Air Boats Inc.			Christiansted, St. Croix	
3. FOR FAA USE ONLY					
4. UNIT IDENTIFICATION					5. TYPE
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	♦♦♦♦♦♦♦♦♦♦ (As described in item 1 above) ♦♦♦♦♦♦♦♦♦♦				
POWERPLANT	Pratt & Whitney	R-985-14B	42-5496	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				
6. CONFORMITY STATEMENT					
A. AGENCY'S NAME AND ADDRESS			B. KIND OF AGENCY		C. CERTIFICATE NO.
Caribbean Airmotive, Inc. P.O. Box 4973, Old San Juan Sta. San Juan, Puerto Rico 00907			X	U.S. CERTIFICATED MECHANIC	A&P-1690355 #101-22
				FOREIGN CERTIFICATED MECHANIC	
			X	CERTIFICATED REPAIR STATION	
				MANUFACTURER	
D. I certify that the repair and/or alteration made to the unit(s) identified in item 4 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.					
DATE May 24-1977			SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Tom O'Neill</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 Agency and is ☒ APPROVED ☐ REJECTED					
BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	X	INSPECTION AUTHORIZATION	OTHER (Specify) 1A-52858-41
	FAA DESIGNEE	X	REPAIR STATION	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION May 24-1977		CERTIFICATE OR DESIGNATION NO. #101-22		SIGNATURE OF AUTHORIZED INDIVIDUAL <i>George L. Montoya</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 completely disassembled. 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 Zyglochecked. Crankshaft overhaul by Design & Engineering Co. FAA Repair Sta # 5016. Install overhaul magnetos by Caribbean Automotive Inc. FAA Repair Sta. #161-22. Engine assembled per P&W, Overhaul Instructions. Test cell run up proved satisfactory as per P&W, run up procedure. Time since mayor after running 4hrs. total. The following P&W, Service bulletins are complied at this time. 1710-1703-1758-1783-1000-1175-1183-1710. C&W AD. 57-5-4, Crankshaft rework. 14-4 Cam reduction gear. 68-9-1 Flyweight and liners. 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**
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. B-63	NATIONALITY AND REGISTRATION MARK N79901
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.	REPAIR	ALTER- ATION
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	☒ 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	☒	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>	

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 # D1860.

Flight Manual modified for this installation.

NOTHING FOLLOWS.

☐ ADDITIONAL SHEETS ARE ATTACHED

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION

SO-P500-61

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. B-63	NATIONALITY AND REGISTRATION MARK U.S.A. N79901
2. OWNER	NAME (As shown on registration certificate)	ADDRESS (As shown on registration certificate)
	ANTILLES AIR BOATS, INC.	CHRISTIANSTED, ST. CROIX 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) *****				
POWERPLANT	Pratt & Whitney	R-985 ANI	17955	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Caribbean Airmotive, Inc. P.O.Box 4973, Old San Juan Sta. San Juan, Puerto Rico 00907	☒ U.S. CERTIFICATED MECHANIC	#76I-22
	☐ FOREIGN CERTIFICATED MECHANIC	
	☒ CERTIFICATED REPAIR STATION	#76I-22
	☐ 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 July 21-1977	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Tom's O'Neill</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	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION July 21-1977	CERTIFICATE OR DESIGNATION NO. #76I-22	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>George L. Martinez</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.)

This engine received this station for overhaul. Engine completely disassembly. All parts cleaned. Perform inspection of all parts and components per P&W aircraft engine overhaul Manual. All steel parts Magnafluxed. Aluminum parts Inspected throughly and Zyglo checked. Engine assembled per P&W, Overhaul Manual. Test cell run up proved Satisfactory as per P&W run up procedure. Time since overhaul 3 hrs.20 min. The following P&W, Service Bulletins are complied at this time.
I767--I703--I7I8--I000--II83--I7I0.

A/D, been complied at this time.
57-5-4--66-I4-4--68-9-I--76-20-0I.

NOTHING FOLLOWS.

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION
SO - FS20-61

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 G21-A
	SERIAL NO. B-63	NATIONALITY AND REGISTRATION MARK N79901
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) CHRISTIANSTEDT ST. CROIX 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)				
POWERPLANT	Pratt & Whitney	R-985-I4B	215486	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 ☒ U.S. CERTIFICATED MECHANIC ☐ FOREIGN CERTIFICATED MECHANIC ☒ CERTIFICATED REPAIR STATION ☐ MANUFACTURER	C. CERTIFICATE NO. #761-22 #761-22
--	---	--

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 July 20-1977	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>James O'Neil</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) #761-22
	FAA DESIGNEE	☒ REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION July 20-1977	CERTIFICATE OR DESIGNATION NO. #761-22	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Joseph F. McHenry</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.)

This engine received this Station for overhaul.

Engine completely dissassembly. 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. Engine assembled per P&W, overhaul manual. Test cell run up proved Satisfactory as per P&W, run up procedure. Time since mayor overhaul 3hrs 20 min. The following P&W Service Bulletins are complied at this time. I767-- I703--I718--I783--I000--II75--II83-- I710.

A/D, been complied at this time.

57-5-4, 66-14-4, 68-9-1 76-20-01.

NOTHING

FOLLOWS.

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION **SJU FSDO**
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. B-63	NATIONALITY AND REGISTRATION MARK N79901
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.	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	☒ 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>
------------------------------	---

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		

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>
---	---	---

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 (4) each seats manufactured by Carrier Aircraft Inc., to TSO standards under TSO-C39. See attached drawings (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 LA-321 affixed to this report. The aircraft equipment list, loading schedule and weight and balance data 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.

2870 E WARDLOW RD
LONG BEACH CALIF 90807

10 JUNE 1969

STRUCTURAL SUBSTANTIATION
INSTALLATION OF FLOOR, SEATS
& 3 PLACE COUCH IN GRUMMAN
MODEL G-21 AIRCRAFT.

FOR CARRIER AIRCRAFT INC.
LONG BEACH AIRPORT
L.B. CALIF. 90807

NO OF PAGES 3

REF. DWGS: G21-1001, 2 SHTS

APPROVED: *Thomas L. Cox* DER LA-321
APPVD: *A. J. Willauer* CAL-VOLAIR

10 JUN 1967

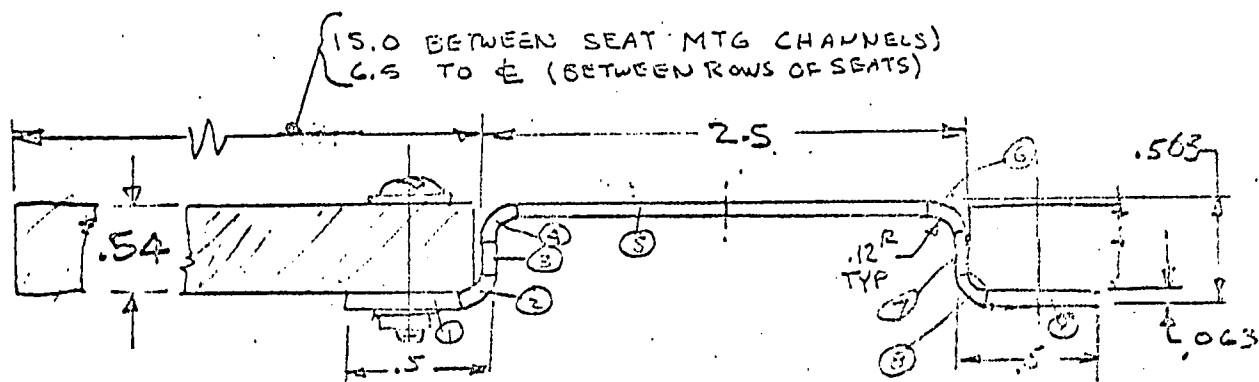
FLOOR BEAM ANALYSIS:

THE MOST CRITICAL LOAD IS FROM FWD CONDITION (1656[#]@ SEAT BELT)
 REACTED NEAR THE CENTER OF ONE OF THE 10.0 BAYS

$$LOAD = \frac{1656 (21.5)}{13.5} = 2640 \text{ LBS}$$

$$M_{MAX} = \frac{Pab}{a+b} = M_{MAX} = \frac{2640 (5.25) (4.75)}{10} = 6580 \text{ IN-LBS (TOTAL LOAD ON 2 BEAMS)}$$

SECTION PROPERTIES: (REF DWG G21-1001 SHT1)



FOR CHANNEL ONLY: MATL= 2024-T3 ALUM.

	A	Y	AY	AY ²	I _o
.12X.063 1	.0202	.031	.00062	.000019	—
.12X.063 2	.0158	.086	.00136	.000117	.00004
.108X.063 3	.0118	.281	.00331	.000932	—
R 4	.0158	.398	.00630	.002510	.00004
L.063 5	.1838	.532	.07200	.038650	.00004
6	.0158	.398	.00630	.002510	.00004
7	.0118	.281	.00331	.000932	—
8	.0158	.086	.00136	.000117	.00004
.12X.063 9	.0202	.031	.00062	.000019	—
Σ	.2610	ȳ=.368	.09618	.045806	.00016

$$I_{NA} = .010566 \text{ IN}^4$$

$$F_b = 61000 \text{ PSI (MIL-HDBK-5)}$$

$$M = \frac{61000 (.0106)(2)}{.368} = 3510 \text{ IN-LBS ALLOW}$$

$$\begin{aligned} & 6540 - \text{MAX MOMENT} \\ & - 3510 \text{ ALLOW IN CHANNELS} \\ & \hline & 3030 \text{ APPLIED TO FLOOR} \end{aligned}$$

ALLOW FLOOR LOAD = $149.2(215) = 32101 \text{ IN-LBS}$
 (USING .460 THICK DOUGLAS FIR PLYWOOD - ANC-18)
 (CONSERVATIVE AS .540 THK PLYWOOD
 IS ACTUALLY INSTALLED PER DWG
 G-21-1001)

$$MS = \frac{3210}{3030} - 1 = \underline{\underline{.058}}$$

THE FLOOR SOCKETS TO HOLD SEATS ON THE CHANNEL
 ARE ATTACHED WITH (4) AN3 BOLTS - $P_3 = 2126 \text{ LBS}$

ASSUME
 (SHEAR CARRIED BY
 FRONT LEGS ONLY)

$$\text{FWO LOAD PER LEG} = \frac{1656}{2} (1.33) = 1035 \text{ LBS} \quad M = \text{HIGH}$$

BEARING OF BOLTS IN CHANNEL:

$$.190 (.063) (92000) = 1100 \text{ LBS}$$

$$MS = \frac{1100(4)}{1035} - 1 = \underline{\underline{3.25}}$$

BEARING IN STEEL PLATE O.K. BY COMPARISON.

TENSION LOAD PER BOLT =

$$\frac{1656(215)(1.33)}{2(13.5)} = 1750 \text{ LBS/LEG OR } 438 \text{ LBS/BOLT}$$

$$P_t = 2259 \text{ LBS (MIL-HDBK-5)}$$

$$MS = \frac{2259}{438} - 1 = \underline{\underline{4.15}}$$

FOR CONNECTION BETWEEN LEG & SOCKET: AN3 BOLT
 VERT LOAD = 1750 LBS

DOUBLE SHEAR ON BOLT: ALLOW = $2126(2) = 4252 \text{ LBS}$

$$\text{BEARING IN .058 TUBE: } .190 (.058) (2) (90000) = 1985 \text{ LBS}$$

$$MS = \frac{1985}{1750} - 1 = \underline{\underline{.12}}$$

THE CHANNELS ARE RIVETED TO EACH TRANSVERSE
BEAM WITH 2 AN470AD4 RIVET - ALLOW = 338 LBS SHEAR EACH
(MIL-HDBK-5)

$$338(2) = 776 \text{ lbs/channel}$$

$$\text{APPLIED LOAD} = \frac{1656(1.33)}{4} = 551 \text{ LBS}$$

(FROM FWD LOAD)

$$MS = \frac{776}{551} - 1 = .41$$

CARRIER

AIRCRAFT, INC.

LONG BEACH AIRPORT • PHONE 427-0760 • LONG BEACH, CALIFORNIA

MAILING ADDRESS:
P. O. Box D
LAKEWOOD, CALIFORNIA 90714

December 1, 1971

Antilles Air Boats
39 Strand St.,
Christiansted
St. Croix
U.S. Virgin Islands

Attention: Captian Gillies

The Carrier Aircraft type passenger seats and lounges installed in your Grumman G 21A Aircraft are approved by FAA, and manufactured under TSO-C39.

Reference FAA letter WE-130/8150, dated Sept. 15th, 1969.

Sincerely,



Robert Carrier

RC/ibp

COMPLETE INTERIOR SERVICE

CARRIER

AIRCRAFT, INC. LONG BEACH AIRPORT • DEPT. 22 • LONG BEACH, CALIFORNIA

MAILED 1000
P.O. BOX 10
LONG BEACH, CALIF. 90714

June 24, 1969

Chief, Aircraft Engineering Division
Federal Aviation Administration
Post Office Box 92007, Worldway Postal Center
Los Angeles, California 90009

Authorization is hereby made for inclusion of this article in the FAA standard order procedures.

The undersigned hereby certifies that the article listed below by model number, which has been tested and meets the performance standards of Technical Standard Order C39. In addition, all other applicable provisions of Part 37 of the Federal Aviation Regulations have been met.

The technical data required by the TSO and the quantity shown are identified as follows:

The required quality control data is submitted under separate cover.

Authorization to use TSO identification on this article is requested.

Seat forward facing single - Model 101

CARRIER AIRCRAFT, INC.

William C. MacCell,
President

NOTED

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

WESTERN REGION

P.O. BOX 92007, WORLDWAY FLEET CENTER
LOS ANGELES, CALIFORNIA 90009

15 SEP 1969



IN REPLY

REFER TO: WE-130/8150

Carrier Aircraft, Inc.
2750 East Wardlow Road
Long Beach, California.

Attention: Mr. William C. Waddell
President

Subject : Carrier Aircraft, Inc., Seat Models 101 Forward Facing, and
102 Side Facing, Technical Standard Order C39

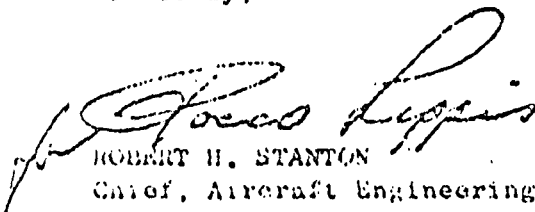
Gentlemen:

Your 24 June 1969 applications for authorization to use the technical standard order procedures, received in this office on 31 July 1969, have been reviewed. The certifications of conformance with the requirements of Subpart A of Part 37 and TSO-C39 are acceptable. The quality control data in Carrier Aircraft, Inc. Quality Control Manual dated 1 July 1969 are adequate. A copy is on file in Aircraft Engineering District Office Number 48, Long Beach, California.

Effective this date, you are authorized to use the technical standard order procedures as prescribed by Part 37 of the Federal Aviation Regulations, and to identify the subject seats with the applicable TSO marking, as required by TSO-C39.

This authorization pertains only to manufacturing operations at the above address, and this office must be notified in advance of any proposed relocation.

Sincerely,


ROBERT H. STANTON
Chief, Aircraft Engineering Division

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION
SD-FS DO-75-61

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. B-63	NATIONALITY AND REGISTRATION MARK N 79901 U.S.A.
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. 00801

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE	
				REPAIR	ALTERATION
AIRFRAME	CLEVELAND WHEELS & BRAKES (As described in item 1 above) AIRCRAFT PRODUCTS, INC.	30-91 BRAKES 40-127 WHEELS	N/A		X
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Claude Austin ANTILLES AIR BOATS, INC. St. Thomas, U.S.V.I. 00801	☒ U.S. CERTIFICATED MECHANIC	A&P 2227109
	☐ 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 January 12, 1976	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	☒	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION January 12, 1976	CERTIFICATE OR DESIGNATION NO. AI 1333009	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Joseph H. Stoy</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.)

Removed main landing gear wheels (2) Hayes Model #G3-56A together with Brake Assemblies (2) Hayes Model H-2-102.

Installed Cleveland Aircraft Products, Inc. (2) Brake Assemblies Model #30-91 together with (2) Wheel Assemblies Model #40-127 32 X 8.8 Type VII.

Weight Removed = 80 lbs. @ ARM 10" = $\frac{1000}{80}$ = .8 I.U.

Weight Added = 119 lbs. @ ARM 10" = $\frac{1190}{1000}$ = 1.19 I.U.

Weight Change = +39 lbs. Moment Change = -.39 I.U.

REF: DRWG #40-127
DRWG #30-91

STC #SA 99 GL December 03, 1975

NOTHING FOLLOWS

ASO-FSDO-61/SJU
Rcvd 5-8-76
Chief
242 262
245 264
246 265
247 266
250 267
240a 260a
250a 260a

ADDITIONAL SHEETS ARE ATTACHED

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION
SJU FSDO

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. B63	NATIONALITY AND REGISTRATION MARK U. S. A. N79901
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) Seaplane Ramp, Veterans Drive St. Thomas, V. I. 00801

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 Charles Freehling c/o Antilles Air Boats, Inc. St. Thomas, V. I. 00801	B. KIND OF AGENCY ☒ U.S. CERTIFICATED MECHANIC ☐ FOREIGN CERTIFICATED MECHANIC ☐ CERTIFICATED REPAIR STATION ☐ MANUFACTURER	C. CERTIFICATE NO. A & P 1617154
--	--	-------------------------------------

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 26, 1974	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Charles 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		

DATE OF APPROVAL OR REJECTION 3/26/78	CERTIFICATE OR DESIGNATION NO. 1908104	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>John C. [Signature]</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 engine ring cowl, p/n 13076, together with mounting brackets.

Beechcraft C-18 engine cowlings modified in accordance with Pan Air Corp. drawings EL-0104 dated 5/7/65 and EL-0104-1 dated 6/15/65.

Beechcraft cowl support brackets, p/n 188 5916 and engine cowlings, upper, p/n 404-185901 - lower, p/n 185903 installed under S.T.C. #8A551SW dated 8/31/65.

Weight and balance correction entered in aircraft log book.

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

ASO-FSDO-61/SJU
Rcvd 4-7-75
Chief
242
245
246
247
250
250a
250a
250a

☐ ADDITIONAL SHEETS ARE ATTACHED

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION

SAN JUAN

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	MODEL
	SERIAL NO.	NATIONALITY AND REGISTRATION MARK
2. OWNER	NAME (As shown on registration certificate)	ADDRESS (As shown on registration certificate)

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.
Dale E. Bartholomew % Antilles Air Boats, Inc. St. Thomas, V. I. 00801	☒ U.S. CERTIFICATED MECHANIC	A & P 1814610
	☐ 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	SIGNATURE OF AUTHORIZED INDIVIDUAL
04/25/73	Dale E. Bartholomew

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	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
04/25/73	IA1496292	H. J. Everett

□ ADDITIONAL SHEETS ARE ATTACHED

ASO-FSDO-61/SJU
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NOTHING FOLLOWS.

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 60-68. AC-43-13-2, Chapter 1, Paragraphs 4 thru 8.

D. # 8 X 32 Gang-nut channel with 3/4" spacing provides the attachment of water heat 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.

C. A hole of 5 1/4" vertical dimension and 6.5" longitudinal dimension has been cut in the doubler and provides actual inspection facilities as mentioned above.

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.

A. One hole 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.

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

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

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

REPAIR AND MAINTENANCE
(Airframe, Powerplant, Propeller, or Appliance)

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 <i>GRUMMAN</i>	MODEL <i>G-21A</i>
	SERIAL NO. <i>B-63</i>	NATIONALITY AND REGISTRATION MARK <i>N-79901</i>
2. OWNER	NAME (As shown on registration certificate) <i>ANTILLES AIR BOATS, INC.</i>	ADDRESS (As shown on registration certificate) <i>SEAPLANE RAMP, VETERANS DRIVE ST. THOMAS, U.S. VIRGIN ISLANDS</i>

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.
<i>Dale Bartholemew c/o ANTILLES AIR BOATS, INC</i>	☒ U.S. CERTIFICATED MECHANIC	<i>1814610 A&P</i>
	☐ 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 of 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>7/3/72</i>	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Dale Bartholemew</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	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION <i>7/3/72</i>		CERTIFICATE OR DESIGNATION NO. <i>AI 1428780</i>	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Mark C. Chione</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.)

Recovered right wing from station 97 to station 137 top and bottom, using grade "A" fabric and CAB dope. All work performed in accordance with Grumman Structural Repair Manual section 8, Fabric Repair and Attachment and AC43-13-1, chapter 3, fabric covering section 1 and section 2.

Replaced center section rear top capstrip from station 38 left to station 44 right. Replaced skin from station 42 left to station 42 right aft one rib and forward six (6) inches.

Replaced all of top skin right wing from station 42 to station 65.

All work performed in accordance with Grumman Structural Repair Manual section 2, Wing Group and AC43-13-1, chapter 2, Aircraft Metal Structures section 3, Metal Repair Procedures.

NOTHING FOLLOWS

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

FOR FAA USE ONLY

OFFICE IDENTIFICATION
FSDO SJU - 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 <i>Grumman</i>	MODEL <i>G-21A</i>
	SERIAL NO. <i>B-63</i>	NATIONALITY AND REGISTRATION MARK <i>N-79901</i>
2. OWNER	NAME (As shown on registration certificate) <i>ANTILLES AIR BOATS</i>	ADDRESS (As shown on registration certificate) <i>SEAPLANE RAMP-VETERANS DRIVE ST THOMAS, U.S. VIRGIN ISLANDS</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	PRATT & WHITNEY	R985-AN1	201671	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
ENGINE SUPPORT, INC. SEBRING AIR TERMINAL P.O. BOX 631 SEBRING, FLORIDA	☐ U.S. CERTIFICATED MECHANIC	3610 POWER PLANT CLASS 1 & 2
	☐ 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 <i>December 31, 1971</i>	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Burt M. Peterson</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	CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION <i>December 31, 1971</i>		CERTIFICATE OR DESIGNATION NO. <i>3610</i>	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>Burt M. Peterson</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.)

Engine received this station for overhaul. Engine given receiving inspection, completely disassembled and all parts cleaned. All steel parts magnafluxed. All parts inspected in accordance with manufacturer's specifications and replaced where necessary. Engine, magnetos and harness completely overhauled. Test house run of engine satisfactory. Time since overhaul 00:00 hours.

FAA A.D. Note 56-6-2 complied with (Cylinder Inspection).
 FAA A.D. Note 57-5-4 has been complied with (Crankshaft).
 FAA A.D. Note 66-14-4 (One Piece Cam Reduction Gear) complied with.
 FAA A.D. Note 68-9-1 (Fly Weights and Fly Weight Liners) complied with.

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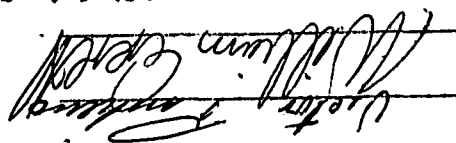
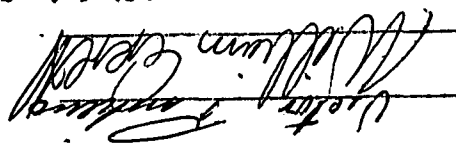
FEDERAL AVIATION AGENCY MAJOR REPAIR AND ALTERATION (Airframe, Powerplant, Propeller, or Appliance)				Form Approved Budget Bureau No. 04-R060.1 FOR FAA USE ONLY OFFICE IDENTIFICATION 1-5-61	
INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form.					
1. AIRCRAFT	MAKE	GRUMMAN		MODEL	G-21A
	SERIAL NO.	B-63		NATIONALITY AND REGISTRATION MARK	N-79901
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. Virgin Islands 00801	
	3. FOR FAA USE ONLY				
4. UNIT IDENTIFICATION					5. TYPE
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTER- ATION
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 c/o Antilles Air Boats, Inc. St. Thomas, U.S.V.I.		X ☒ U.S. CERTIFICATED MECHANIC		AGP 378437	
		☐ 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			SIGNATURE OF AUTHORIZED INDIVIDUAL		
11/19/70					
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 Agency and is ☒ APPROVED ☐ REJECTED					
BY	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	X	INSPECTION AUTHORIZATION	
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	
DATE OF APPROVAL OR REJECTION		CERTIFICATE OR DESIGNATION NO.		SIGNATURE OF AUTHORIZED INDIVIDUAL	
11/19/70		IA1496292		William Everett	

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 damaged section of hull skin from hull station 9.5 to hull station 16.5, as shown on Grumman Structure and Repair Manual NAV AER 01-85VA-3, Page 16, Figure 3.
- (2) Inspected structure and replaced hull bottom "Z" Angles per Grumman Structure and Repair Manual Section 4, Pages 111-117.
Hull OK to re-skin:

VICTOR PINHEIRO

 WILLIAM EVERETT


- (3) Installed hull bottom skin as specified in Structure and Repair Manual Pages 111-117, Section 4.
- (4) Spliced in section of keel from hull station 8 to hull station 16.5. Per Grumman Structure and Repair Manual, Page 126, Section 4, Fig. 67.
- (5) All work done in accordance with AC 43-13-1, Chapter 2, Section 3, Paragraph 60-68 and AC 43-13-2.

NOTHING FOLLOWS

ADDITIONAL SHEETS ARE ATTACHED

RESTRICTED

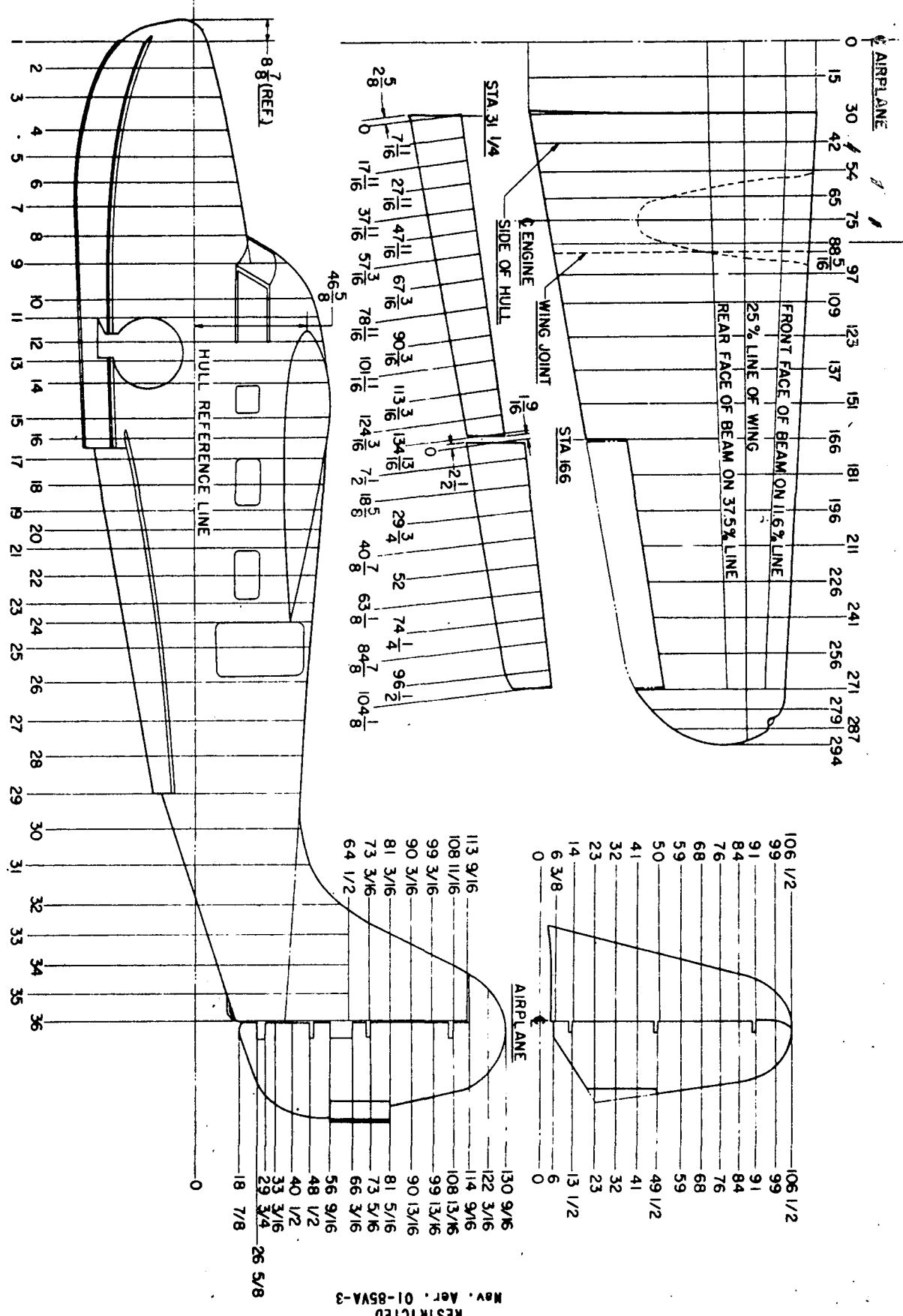


Figure 3 - Stations Diagram

RESTRICTED
Nav. Aer. 01-85VA-3

REF. NO.	NUMBER REQ'D.	LOCATION	THICK-NESS	SIZE	REF. NO.	NUMBER REQ'D.	LOCATION	THICK-NESS	SIZE
1	1	NOSE BUMPING	.051	48X58	23	IL-IR	STA.* 31-32	.028	17X70
2	IL-IR	DECK STA.* 1-3	.028	24X26	24	IL-IR	STA.* 32-33	.028	17 1/2X59
3	1	DECK STA.* 3-6	.028	39X48	25	IL-IR	STA.* 33-34	.028	14X70
4	IL-IR	UPPER SIDE STA.* 3-9	.028	20X75	26	IL-IR	STA.* 34-35	.028	14 1/2X66
5	1	DECK STA.* 6-9	.032	40X57	27	IL-IR	STA.* 35-36	.028	14X62
6	IL-IR	LOWER SIDE WHEEL POCKET	.028	23X126	*28	IL-IR	FIN FAIRING	.032	36X36
7	IL-IR	SIDE STA.* 9-14	.040	35X51	*29	IL-IR	BOTTOM FRONT OUTER	.064	18 1/2X110
8	IL-IR	UPPER SIDE STA.* 9 1/2-16	.028	36X69	30	IL-IR	BOTTOM FRONT INNER	.057	34X175
10	IL-IR	SIDE WHEEL POCKET	.028	37X110	31	IL-IR	BOTTOM REAR	.040	34X153
11	IL-IR	UPPER SIDE STA.* 16-24	.028	27X81	32	IL-IR	MIDDLE SIDE	.028	16X99
12	IL-IR	SIDE STA.* 14-24	.028	30X101	33	1	TAIL WHEEL FAIRING	.051	10X17
14	IL-IR	SIDE STA.* 24-26	.040	24X28	*34	1	BOW WALK	.051	16X45
15	IL-IR	STA.* 26-27	.028	19X81	*35	1	FIN FAIRING	.040	39X45
16	IL-IR	STA.* 27-28	.028	20X77 1/2	36	1	FIN BOTTOM	.028	38X82
17	IL-IR	STA.* 28-29	.028	22X73 1/2	37	1	FIN CENTER	.028	33X68
18	IL-IR	TOP CENTER STA.* 16-26	.028	28X102	38	1	FIN TOP	.028	27X46
19	IL-IR	TOP OUTER STA.* 16-24	.028	7 1/2X76	*39	IL-IR	DOVE SIDE - OUTER	.028	15X34
20	IR	TOP DECK OUTER STA.* 24-26	.028	24 1/2X28	40	IL-IR	DOVE TOP - CENTER	.028	8X49
21	IL-IR	STA.* 29-30	.028	19X80	41	IL-IR	DOVE CENTER - INTERMEDIATE	.028	8 1/4X39
22	IL-IR	STA.* 30-31	.028	17X70	42	IL-IR	DOVE OUTBOARD - INTERMEDIATE	.028	8 3/4X34

NOTE.

ALL MATERIAL 24ST ALUMINUM ALLOY SHEET UNLESS OTHERWISE NOTED.

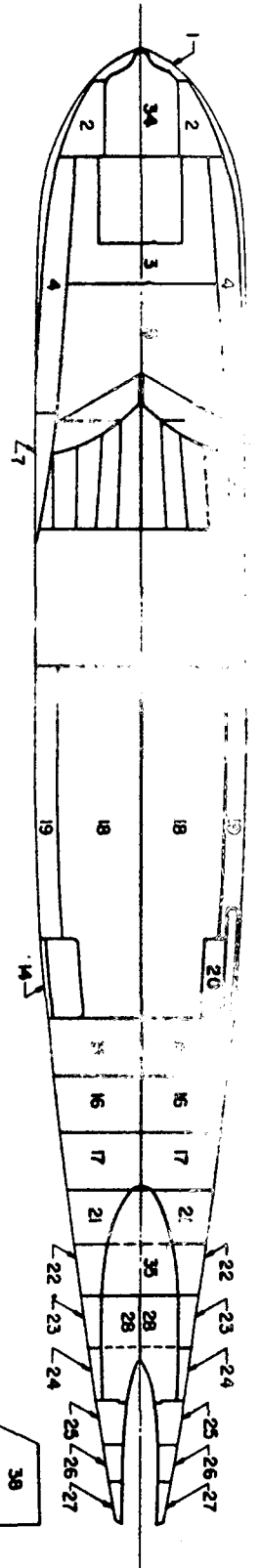
NOTE.

* REF. NO. 28 - 35 1/2H
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 * REF. NO. 34 - 152S 14H
 * REF. NO. 35 - 35 1/2H
 * REF. NO. 39 - 52S 1/2H

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 May. Agr. 01-85V-3

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NOTE:
ALL SKIN JOINTS OR REPAIRS MADE
FORWARD OF STATION #9 OR IN SHADED
AREA AS SHOWN ARE TO BE WATERTIGHT.

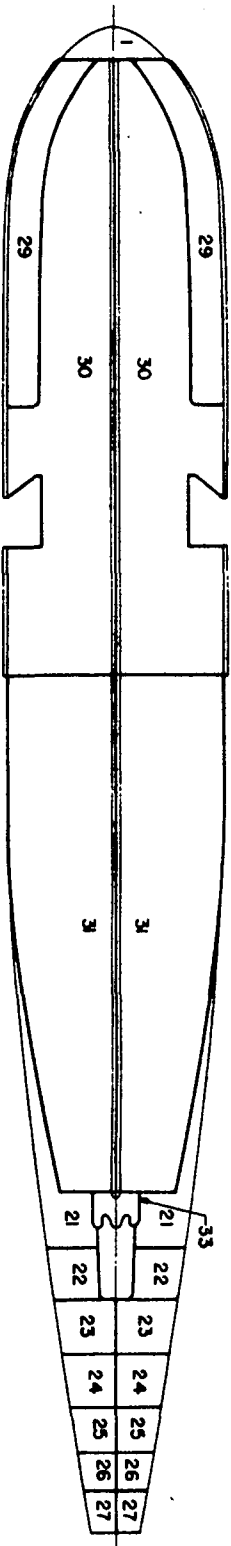
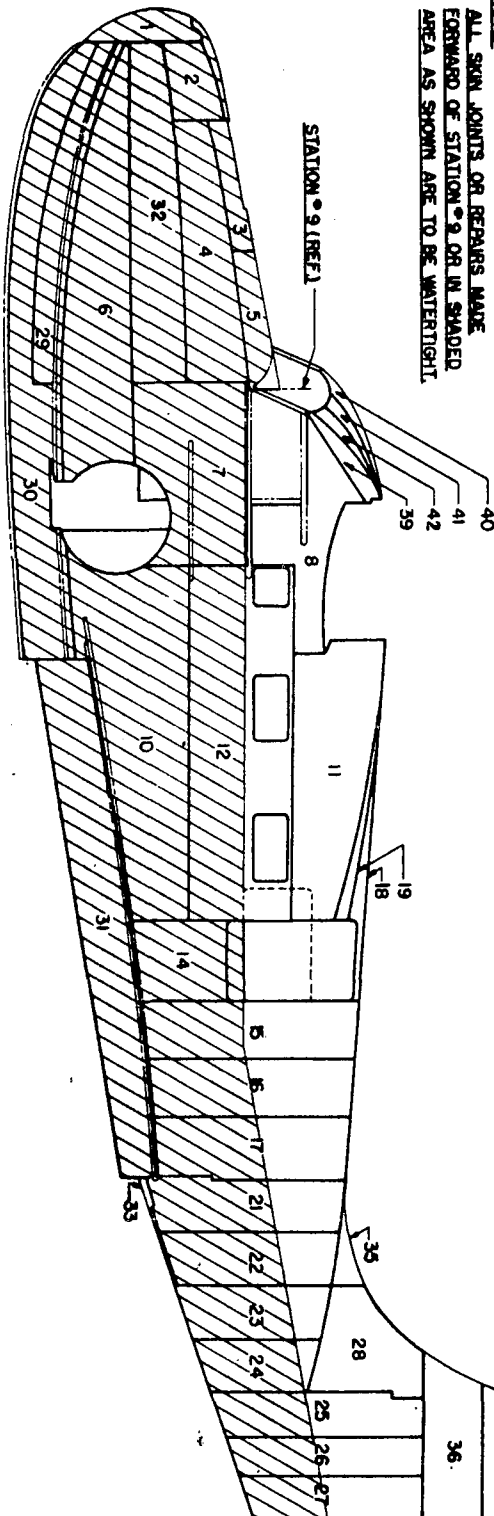


Figure 62 - Hull Skin Plating Diagram (Sheet 1)

RESTRICTED
Nav. Aer. 01-85V-3

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION
SJU 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 G-21A	MODEL G-21A
	SERIAL NO. B-63	NATIONALITY AND REGISTRATION MARK N-79901
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) Seaplane Ramp-Veterans Drive St. Thomas, US Virgin Islands

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION				5. TYPE	
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				
POWERPLANT	PRATT & WHITNEY	R985-AN3	011768	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
ENGINE SUPPORT, INC. SEBRING AIR TERMINAL P.O. Box 631 SEBRING, FLORIDA	☐ U.S. CERTIFICATED MECHANIC	3610 POWER PLANT CLASS 1 & 2
	☐ 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 September 16, 1970	SIGNATURE OF AUTHORIZED INDIVIDUAL George W. Dumont, Chief Inspector
----------------------------	---

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 September 16, 1970		CERTIFICATE OR DESIGNATION NO. 3610	SIGNATURE OF AUTHORIZED INDIVIDUAL George W. Dumont, Chief Inspector	

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 receiving inspection, completely disassembled and all parts cleaned. All steel parts magnafluxed. All parts inspected in accordance with manufacturer's specifications and replaced where necessary. Engine, magnetos and harness completely overhauled. Test house run of engine satisfactory. Time since overhaul 00:00 hours.

FAA A.D. Note 56-6-2 complied with (Cylinder Inspection).
 FAA A.D. Note 57-5-4 has been complied with (Crankshaft).
 FAA A.D. Note 66-14-4 (One Piece Cam Reduction Gear) complied with.
 FAA A.D. Note 68-9-1 (Fly Weights and Fly Weight Liners) complied with.

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□ ADDITIONAL SHEETS ARE ATTACHED

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DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION

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 <i>Cessna 441</i>	MODEL <i>G-21-A</i>
	SERIAL NO. <i>TC-654</i>	NATIONALITY AND REGISTRATION MARK <i>N-79901</i>
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate) 39 Strand St., Christiansted, St. Croix, US Virgin Islands

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	R985-AN1	24789	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
EIGHTH AIR DEPOT, INC. SEBRING AIR TERMINAL P.O. Box 631 SEBRING, FLORIDA	☐ U.S. CERTIFICATED MECHANIC	3610 POWER PLANT CLASS 1 & 2
	☐ 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 April 21, 1970	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>George W. Dumont</i> George W. Dumont, Chief Inspector
-------------------------------	---

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 April 21, 1970		CERTIFICATE OR DESIGNATION NO. 3610	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>George W. Dumont</i> George W. Dumont, Chief Inspector	

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 receiving inspection, completely disassembled and all parts cleaned. All steel parts magnafluxed. All parts inspected in accordance with manufacturer's specifications and replaced where necessary. Engine, magnetos and harness completely overhauled. Test house run of engine satisfactory. Time since overhaul 00:00 hours.

FAA A.D. Note 56-6-2 complied with (Cylinder Inspection).
FAA A.D. Note 57-5-4 has been complied with (Crankshaft).
FAA A.D. Note 66-14-4 (One Piece Cam Reduction Gear) complied with.
FAA A.D. Note 68-9-1 (Fly Weights and Fly Weight Liners) complied with.

☐ ADDITIONAL SHEETS ARE ATTACHED

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY

OFFICE IDENTIFICATION
SJU FSDO

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 <i>Cessna</i>	MODEL <i>441</i>
	SERIAL NO. <i>B-63</i>	NATIONALITY AND REGISTRATION MARK <i>N77201</i>
2. OWNER	NAME (As shown on registration certificate)	ADDRESS (As shown on registration certificate)
	ANTILLES AIR BOATS, INC.	39 Strand St., Christiansted St. Croix, US Virgin Islands

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	***** (As described in item 1 above) *****				
POWERPLANT	PRATT & WHITNEY	R985-AN14B	20758	X	
PROPELLER					
APPLIANCE	TYPE				
	MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
EIGHTH AIR DEPOT, INC. SEBRING AIR TERMINAL P.O. Box 631 SEBRING, FLORIDA	☐ U.S. CERTIFICATED MECHANIC	3610 POWER PLANT CLASS 1 & 2
	☐ 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 March 4, 1970	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>George W. Dumont</i> George W. Dumont, Chief Inspector
---------------------------	--

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 March 4, 1970		CERTIFICATE OR DESIGNATION NO. 3610	SIGNATURE OF AUTHORIZED INDIVIDUAL <i>George W. Dumont</i> George W. Dumont, Chief Inspector	

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 receiving inspection, completely disassembled and all parts cleaned. All steel parts magnafluxed. All parts inspected in accordance with manufacturer's specifications and replaced where necessary. Engine, magnetos and harness completely overhauled. Test house run of engine satisfactory. Time since overhaul 00:00 hours.

FAA A.D. Note 56-6-2 complied with (Cylinder Inspection).
FAA A.D. Note 57-5-4 has been complied with (Crankshaft).
FAA A.D. Note 66-14-4 (One Piece Cam Reduction Gear) complied with.
FAA A.D. Note 68-9-1 (Fly Weights and Fly Weight Liners) complied with.

FILE COPY
ESDO

3/16/70

SUPV. *[Signature]*
CIRC. DIST.

251
252
253
254
255
256
262
263
264
267
200a
200b
200c

☐ ADDITIONAL SHEETS ARE ATTACHED

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form approved.
Budget Bureau No. 41-R052.4.

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

1. AIRCRAFT	MAKE Grumman Goose	MODEL G-21 A	SERIAL NO. B 63	NATIONALITY AND REGISTRATION MARK N 79901 Left
2. OWNER	NAME (First, middle, last) Ellis Air Lines		ADDRESS (Street and number, city, zone and State) Box 1059 Ketchikan, 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	PRATT & WHITNEY	R-985-AN-1	24747	XXI	
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	6460	24.2	2340

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 ☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	c. CERTIFICATE NO. 4104
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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.

10-9-52

(Date repair and/or alteration completed)

Leon J. Eichstaedt **E322202**
Leon J. Eichstaedt

(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)

9/26/52

(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 **9-9-53** ☐ Reinspected ☐ Spot Checked

Reg. 6 A

ASDO 3

(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 overhauled magnetos #BB 10612 (LH) and #BB 6534 (RH). Installed overhauled carburetor #5566285. Engine run-in on test cell in accordance with latest factory recommendations. Run-in satisfactory. Engine preserved for long-time storage. NO OTHER.

Installed on N79901 left

RECEIVED
SEP 14 10 59 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 G-21-A	SERIAL NO. B-63	NATIONALITY AND REGISTRATION MARK N79901
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				
b. PROPELLER BLADE OR HUB	Hamilton standard	2030-237/6101A-10	Hub 7-10371 Blade 42-6053 42-6054	X	
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) 6460	EMPTY CENTER OF GRAVITY (Inches from datum)* 24.2	USEFUL LOAD (Pounds)* 1540
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5. KIND OF AGENCY WHICH MADE REPAIRS AND/OR ALTERATIONS (Check)

☐ MANUFACTURER☒ APPROVED REPAIR STATION NO. **4102**

(Specify)

☐ CERTIFIED MECHANIC

6. AGENCY	NAME Northwest Propeller Repair	ADDRESS (Street and number, city, zone, and State) 7777 Airport Way Boeing Field - Box 20 Seattle 8, Wash.	DATE WORK ACCOMPLISHED 9/19/52
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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.)

Propeller major-overhauled, repaired, refinished (anodized). All components inspected for airworthiness & conformity to C.A.A. specifications. Steel parts magnafluxed as prescribed in Mfg. Service Manual. Hub nuts re-plated as needed. Rear Cone-Seal lapped. Cylinder OD "mirror"-refinished. Blade Thrust Bearing Races re-ground to remove salt-water corrosion pits. Blades filed, re-ground as needed to remove nicks & water-erosion etc. & to refinish & anodize; re-painted two sides. Blade torque & Counterweight Thrust Washer clearances re-established within P.C. limits, at re-assembly. Propeller tracked, balanced, lubricated, angles set 15° to 24° at 42" stations.

REMARKS: All seals & gaskets except blade groove retainers, Blade Bearings, Blade Chafing Rings.

NOTE: Blades re-indexed to 11° - 26° at 42" stations. EZ 7/2 Right engine.

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

☐ FORWARDED FOR
ENGINEERING
APPROVAL

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

<i>W. A. Nebel</i> W. A. Nebel, Chf. Inspr. (Signature of supervising mechanic)	611802 Limited-Prop (Certificate number and rating)	9/19/52 (Date)
---	--	-------------------

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED ☐ REJECTED	DESIGNEE'S SIGNATURE W. A. Nebel	NO. 8802	DATE 9/10/53
	CAA AGENT SIGNATURE J. E. McCarthy	☒ ACCEPTED ☐ REINSPECTED	DATE 9-21-53

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-309, 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 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.

16-54010-2 U. S. GOVERNMENT PRINTING OFFICE



DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATIONForm Approved.
Budget Bureau No. 41-R052.2.

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

(SEE REVERSE SIDE OF THIS FORM FOR INSTRUCTIONS)

1. AIRCRAFT	MAKE Grumman Goose	MODEL G 21-A	SERIAL NO. B 63	NATIONALITY AND REGISTRATION MARK N79901
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				
b. PROPELLER BLADE OR HUB	Hamilton Standard	2750-237/G1011-10	Blades 43-6037 42-6030	X	
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)*	USEFUL LOAD (Pounds)*
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5. KIND OF AGENCY WHICH MADE REPAIRS AND/OR ALTERATIONS (Check)

☐ MANUFACTURER☒ APPROVED REPAIR STATION NO. 4103
(Specify)☐ CERTIFIED MECHANIC

6. AGENCY	NAME Northwest Propeller Repair	ADDRESS (Street and number, city, zone, and State) 7777 Airport City Boeing Field - Box 28 Seattle 5, Wash.	DATE WORK ACCOMPLISHED 9/19/52
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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.)

Propeller overhauled, repaired, re-balanced (anodized). All components inspected for airworthiness & conformity to C.A.A. specifications. Steel parts magnafluxed per RPP Service Manual specifications. Hub parts re-plated as needed. Rear Cone-Seat lapped. Cylinder OD "minor"-refinished. Blade Thrust Bearing Races re-ground to remove corrosion pits. Blades filed & re-ground as needed to remove nicks & water-erosion & refinish & anodize. Blade Sprockets re-painted. Blade torque & Counterweight Thrust anchor clearances re-established within LRP limits, at re-assembly. Propeller track, balanced, lubricated, angle set 11° to 26° at 48" stations.

REPLACEMENT PARTS: Counterweight screws, Blade Bearings, 1 Chasing Ring, Spider Ring.

In stalled on the left engine

ALL

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

☐ FORWARDED FOR
ENGINEERING
APPROVAL

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

W. A. Nebel
(Signature of supervising mechanic)011800 Limited-Trops
(Certificate number and rating)9/19/52
(Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED ☐ REJECTED	DESIGNEE'S SIGNATURE W. A. Nebel	NO. 8802	DATE 8/18/53
	CAA AGENT SIGNATURE	☐ ACCEPTED ☐ REINSPECTED	DATE

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-309, 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.

RECEIVED
AUG 27 9 17 AM '53
ADMIN. & RECORDS BRANCH
V-300

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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. B-63	NATIONALITY AND REGISTRATION MARK N 79901
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) *****				
b. PROPELLER BLADE OR HUB					
c. ENGINE	Pratt & Whitney	R-985-AN6B	6425	xxx	
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) 6460	EMPTY CENTER OF GRAVITY (Inches from datum)* 24.2	USEFUL LOAD (Pounds)* 2340
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5. KIND OF AGENCY WHICH MADE REPAIRS AND/OR ALTERATIONS (Check)

☐ MANUFACTURER ☒ APPROVED REPAIR STATION NO. **4104** (Specify) ☐ CERTIFIED MECHANIC

6. AGENCY	NAME WestCoast Aircraft Sales & Service Inc., Boeing Field, Seattle 8, Wash.	ADDRESS (Street and number, city, zone, and State)	DATE WORK ACCOMPLISHED 4-3-52
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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.)

Complete major overhaul on engine. All steel parts magnafluxed. All seals and gaskets replaced, and all other necessary engine parts installed. Bosch magnetos #4360 and #4579, and carburetor #5604632 overhauled, and all necessary parts replaced. Engine run in on test stand in accordance with latest factory recommendations. Run in satisfactory. NO OTHER.

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

☐ FORWARDED FOR
ENGINEERING
APPROVAL

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

Leo J. Eichstaedt
Leo J. Eichstaedt
(Signature of supervising mechanic)

E322202
(Certificate number and rating)

4-3-52
(Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED ☐ REJECTED	DESIGNEE'S SIGNATURE W. A. Nebel CAA AGENT SIGNATURE	NO. 8802 ☐ ACCEPTED ☐ REINSPECTED	DATE 8/18/53 DATE
---	---	---	--------------------------------

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-309, 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.
 - e. Distribute copies as in a above.
 - f. For a Spare Component—Complete Items 3 (b, c, or d, whichever is applicable), 5, 6, and 7.
- g. 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.
- h. 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.

16-54010-2 U. S. GOVERNMENT PRINTING OFFICE

RECEIVED
AUG 27 9 17 AM '53
ADMIN. & RECORDS BRANCH
17-300

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

OPERATION LIMITATIONS (PART 1)

ENGINE	MAKE P & W	AIRCRAFT	MAKE Grumman	NATIONALITY AND REGISTRATION MARKS N7401	
	MODEL 985-AN6		MODEL G-21A	SERIAL NO. 2-63	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	07	CLIMB OR LEVEL FLIGHT		
	1	ANY	33.5	2200	400	80		194	194
SEA LEVEL		TO					GLIDE OR DRIVE (Smooth Air Only)		
		--	34.5	2200	400	80		225	225
ALTITUDE	FROM						FLAPS EXTENDED		
	--	5000	33.5	2200	400	80		110	110

*METO—MAXIMUM EXCEPT TAKE-OFF

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

C. G. LIMITS

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

WEIGHT

SEE WEIGHT AND BALANCE DATA FOR LOADING INFORMATION

DATUM

WING LEADING EDGE AT LUGELAGE

CEILINGS

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 3048 lbs. with either engine inoperative and the inoperative propeller idling in high pitch.

INSPECTOR'S OR DESIGNEE'S SIGNATURE <i>W. J. Sallers</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

8500 lbs.

Propeller(a)

Eng. 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

NOTICES ELIMINATED

RECEIVED

Date: Oct. 16, 1951

15. 11 10 2 07 18

Norman H. Salles
Norman H. Salles
C.A. A. Agent

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. B63	CAA IDENTIFICATION MARK N 79901
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
AIRCRAFT	(As described in item 1 above)			X	
PROPELLER					
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)* 6210	EMPTY CENTER OF GRAVITY (Inches from datum)* 24 "	USEFUL LOAD (Pounds)*
-------------	---------------------------------------	---	-----------------------

*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	DATE WORK ACCOMPLISHED June 8 1950
--------	-----------------------------	---	--

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)

Recovered all fabric surfaces
Install new push rod tube for aileron at center section
Removed paint and refinished hull
Install new instrument panel and overhauled instruments
Install oil warning lights
Install new wing hinge bolts
Replaced all landing gear parts with magnflux parts

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

J.L. Sherman **12761**

June 8 1950

SIGNATURE OF SUPERVISING MECHANIC

CERTIFICATE NUMBER AND RATING

DATE

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED ☐ REJECTED ☐ FORWARDED FOR ENGINEERING APPROVAL	SIGNATURE OF DESIGNEE J.L. Sherman	NUMBER 8800	DATE June 8 1950
	SIGNATURE OF INSPECTOR John C. Bowen	☒ ACCEPTED ☐ REINSPECTED	DATE 5/23/50

2008

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Figure 1

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DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMIN.
JUL 3 10 45 AM '50
MAIL ROOM - 3
WASHINGTON 25

CIVIL AERONAUTICS ADMINISTRATION
ANCHORAGE, ALASKA

AIRCRAFT WEIGHT & BALANCE

AIRCRAFT: Make & Model Grumman G-21-A Serial No. B-63
Registration No. N 79901

DATE 1/17/50 PLACE Ketchikan, Alaska SCALES USED _____
WEIGHING WITNESSED BY John C. Bowen C.A.A.

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:
None Lbs. at _____ Ins. _____ of Datum
For'd/Aft
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.

SKETCH OF WEIGHING METHOD AND MAJOR DIMENSIONS

	Scale Weight (Lbs.)	Tare (Lbs.)	Net Weight (Lbs.) (Scale Wt.-Tare)
Left Main Weight Point (W_L)	6210	0	6210
Right Main Weight Point (W_R)			
Nose or Tail Weight Point (W _a)			
Total Empty Weight (W)			6210

Empty Weight C.G. = 23.5 Ins. Aft of Reference datum
for'd/aft

Empty Weight C.G. = _____ Ins. _____ of _____

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	8101	
Engine and Engine Accessories-Fuel and Oil System		
101 Two Engine Ring Cows	56	-36
102 Two Oil Radiators	26	0
103 Two Starters Eclipse E-80		-12
108 Pressure Fire Extinguisher Lux	A-1.21	-33

* Use plus (+) sign for arms of items aft of datum and minus (-) sign for arms forward of datum.

111 E Military R-985-AN 6 B Manual

104 One Generator with control box Carburetors

Landing Gear 32 x 8 Rayes

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 Windshild Swipe

Two Seats with Life Belts

Plus 24

Two Seats with Life Belts

Plus 62

REMARKS:

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 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

136

One Flashlight

One First Aid Kit

UNITED STATES OF AMERICA DEPARTMENT OF COMMERCE CIVIL AERONAUTICS ADMINISTRATION		OPERATION LIMITATIONS (Standard)			CAUTION. MARK N 79901	
ENGINE	MAKE P & W	AIRCRAFT Grumman	DATE MFRD. 8/8/44	SERIAL NO. B-63	DESIGNATION Land & Sea	TYPE CERT. 654
	MODEL R-985-AW6		MODEL			

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	MAXIMUM EXCESS TAKE-OFF	(Straight line manifold pressure variation from Sea level to 5000')					GLIDE OR DIVE (Smooth Air Only)	-	-	-
ALTITUDE		-	-	-	-	-	FLAPS EXTENDED	-	-	-
LOW IMP.		-	-	-	-	-	DATUM Wing Leading 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	k -	Yes	Yes

*Standard air, any engine inoperative, carburetor air intake on "cold air."
~~Exceeding maximum gross weight~~
Idling in high pitch

MAXIMUM TAKE-OFF WEIGHT

MAXIMUM LANDING WEIGHT

800 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. Brown
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 at not to exceed the following maximum weights:

Land, wheel equipped - 8800 lbs.

Sea - 8800 lbs.

John C. Bowen
John C. Bowen
1/17/50

UNITED STATES OF AMERICA DEPARTMENT OF COMMERCE CIVIL AERONAUTICS ADMINISTRATION		SPECIFICATION NO. A654-2		CAA IDENT. NO. (Only) N 79901		
EQUIPMENT No.			SPECIAL EQUIPMENT			
NUMBER	NUMBER	NUMBER	NUMBER	ITEM (Description)	WGHT.	ARM
201				Constant Speed Propeller Con- trols	13	-23
302				Two Constrollable Metal Propellers HamStd. Hubs 2D30, Blades 6101	303	-52
101				Two Engine Ring Cowlis	56	-36
102				Two Oil Radiators	26	0
103				Two Starters Eclipse R-80	--	-12
108				Pressure Fire Extinguisher Lux A-21	--	-33
111E				Wickroy Military R-985-AE-68 Manual	--	--
104				One Generator with control box Carburetors	--	--
				Landing Gear 32 x 8 Rayes	--	--
				Ellis Air Lines Water Rudder Model C	--	--
				12.50 Tail Wheel Goodrich	--	--
301				Two Wing Tip Floats Liberty Type 17	--	--
204				Two Batteries 34 Amp	--	--
216				Miscellaneous	--	--
207				Radio Lear T30 R3 AB	--	--
225				Cabin Heater Manifold	--	--
				Marquette Windshield Swipe	--	--
				Two Seats with Life Belts	--	/24
				Two Seats with Life Belts	--	/62
				Two Seats with Life Belts	--	/102
				Two Pilot Cushions with Life Belts	--	--
				One Emergency Seat with Life Belt	--	/136
210				Two Windows in Cabin Doors	100	/125
				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	--	/136
				One Flashlight	--	--
				One First Aid Kit	--	--
(LAND)		C. G. LIMITS		(SEA)		
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 John C. Bowen <i>John C. Bowen</i>				

16-23-1 U. S. GOVERNMENT PRINTING OFFICE

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. B 63	CAA IDENTIFICATION MARK N 79901
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) Grumman G 21 A B 63				X
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)* 3000	EMPTY CENTER OF GRAVITY (Inches from datum)* 100	USEFUL LOAD (Pounds)* 3000
-------------	---------------------------------------	--	--------------------------------------

*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) 2229 First Ave,	DATE WORK ACCOMPLISHED July 15 1948
-----------	-----------------------------	--	---

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)

Removed 5 2/4" of step This amount added to P series rails
Removed Geiger tubing Removed Automatic Pilot tubing and controls
Removed dual controls Removed Antenna Mast removed Wires and controls
Installed fiber glass insulation and cabin lining
Installed wiring nacelles with flex fuel and oil lines
Replaced all wiring Installed 3/16 stainless steel control cables

020 v -

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

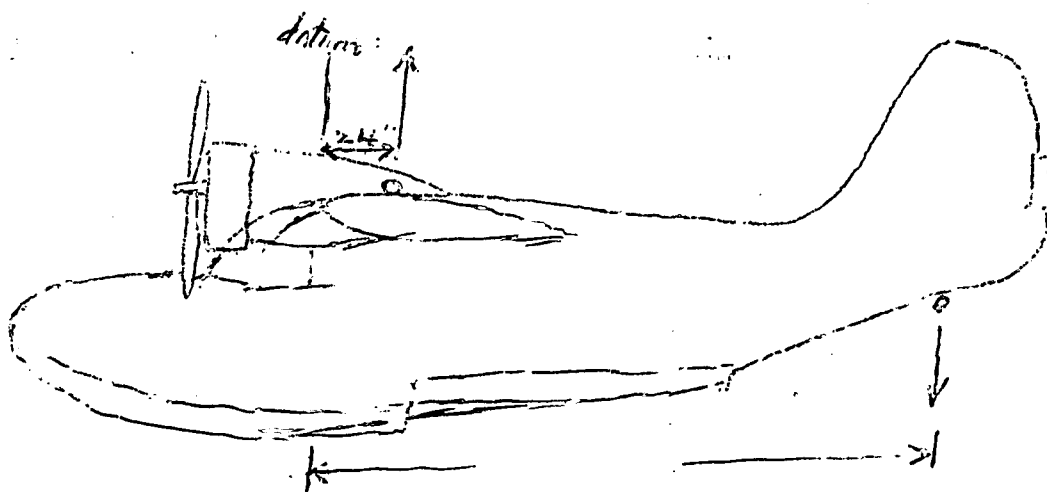
J.L. Sherman A & E 12.761 July 15 1948
SIGNATURE OF SUPERVISING MECHANIC CERTIFICATE NUMBER AND RATING DATE

TO BE COMPLETED BY CAA REPRESENTATIVES

☐ APPROVED	SIGNATURE OF DESIGNEE	NUMBER	DATE
☐ REJECTED			
☐ FORWARDED FOR ENGINEERING APPROVAL	SIGNATURE OF INSPECTOR <u>Norman J. Bryan</u>	☒ ACCEPTED	DATE <u>Aug 10 - 48</u>
		☐ REINSPECTED	

Installation

	Seals	Weight
Water Tanker 1111 Air Lines Model 6	88	+
2 passenger seats cabin front with 1120 jackets	60	+
1 auxiliary seat cabin rear	6	+
Four Radio Trans. and Rec.	13	+
Power supply	18	-
Engine and fuel tank	16	-



Left Wing 17# for Level - 17

Lift Lug 6117# - 4# = 6113

Tail Lug - 25 for Level = - 25

Scale Error at 6000# = -159

Actual Empty Weight = 5912#

$$CG = \frac{-25 \times 266}{5912} = -1.12 + 24 = 22.88 \text{ AFT}$$

Datum

FORM **ACA-305**DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATIONBUDGET BUREAU NO. 41-R041.2
APPROVAL EXPIRES FEBRUARY 15, 1947APPLICATION FOR AIRWORTHINESS CERTIFICATE AND/OR
ANNUAL INSPECTION OF AN AIRCRAFT

INSTRUCTIONS

Please submit this form to the Civil Aero-
nautics Administration Field Representative.

APPLICATION (Check)

- ☐
- AIRWORTHINESS CERTIFICATE
-
- ☐
- ANNUAL INSPECTION

CAA IDENTIFICATION

- ☐
- NC
- ☐
- NX
- ☐
- NR
- ☐
- OTHER (Specify)
- 755 1

AIRCRAFT

MAKE

MODEL

REGISTRATION NO.

MANUFACTURER'S SERIAL NO.

DATE MANUFACTURED

ENGINE

MAKE

MODEL

RATED H.P.

(Check whether)

IF OVERHAULED, STATE BY WHOM

DATE OF OVERHAUL

- ☐
- NEW
- ☐
- USED
- ☐
- OVERHAULED

(Check which)

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

OWNER'S NAME

PERMANENT ADDRESS (Street and No., City, Zone, State)

ATTACHMENTS (Check which)

- ☐
- ACA-319
- ☐
- WEIGHT AND BALANCE REPORT
-
- ☐
- ACA-337
- ☐
- SPECIAL APPROVALS
-
- ☐
- ACA-805
- ☐
- DATA, DRAWINGS, ETC.
-
- ☐
- ACA-317
- ☐
- UNAPPROVED DEVIATION DATA

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE

OWNER OR AUTHORIZED AGENT

DATE

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.

T.C. NO.

SERIAL NO.

EFFECTIVE NOTES

NO.

EFFECTIVE NOTES

OTHER (Describe)

EXCEPTIONS, IF ANY (If additional space is required, use
reverse)FORM ACA-319
(Return to
owner)

APPROVED BY

MECH. CERTIF. AND RATING NO.

DATED

FORM ACA-1362
ISSUED

CERTIFICATE VALID TO (Specify date)

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

FINDINGS

☐ AIRWORTHY

DESIGNED'S SIGNATURE AND NO.

DATE

☐ UNAIRWORTHY

CAA INSPECTOR'S SIGNATURE

☒ ACCEPTED

DATE

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

RECEIVED

DEPT OF COMMERCE
CIVIL AERONAUTICS ADM.
SEP 29 8 12 AM '48
MAIL ROOM
WASHINGTON

RECEIVED
SEP 24 9 45 AM '48
CIVIL AERO. ADMIN.
EIGHTH REGIONAL OFFICE
ANCHORAGE, ALASKA