US Department of Transportation
Federal Aviation Administration

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

OMB No. 2120-0020
Exp: 8/31/2014

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark: N7356	Serial No.: J56	
	Make: Grumman	Model: G-73	Series:
2. Owner	Name *(As shown on registration certificate)*: John Mayes	Address *(As shown on registration certificate)*: Address: 2101 Arrowhead Drive Hangar 38; City: Carson City; State: NV; Zip: 89706; Country:	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☒	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address
Name: Arnold Peterson
Address: 218 Buena Vista CT
City: Gardnerville State: NV
Zip: 89460 Country:

B. Kind of Agency
- [x] U. S. Certificated Mechanic
- [ ] Foreign Certificated Mechanic
- [ ] Certificated Repair Station
- [ ] Certificated Maintenance Organization
- [ ] Manufacturer

C. Certificate No.: 2264277A&P

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.

Extended range fuel per 14 CFR Part 43 App. B ☐

Signature/Date of Authorized Individual: 8-5-19

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is [x] Approved [ ] Rejected

BY
- [ ] FAA Flt. Standards Inspector
- [ ] Manufacturer
- [ ] Maintenance Organization
- [ ] Persons Approved by Canadian Department of Transport
- [ ] FAA Designee
- [ ] Repair Station
- [X] Inspection Authorization
- Other *(Specify)*

Certificate or Designation No. 2264277

Signature/Date of Authorized Individual: 8-5-19

FAA Form 337 (10/06)

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.)

N7356	8-5-19
Nationality and Registration Mark	Date

Installed JP Instruments EDM-960 Primary Series Engine Data Management System in accordance with STC SA01828SE and FAA approved Installation Manual Report number 909, Revision E dated 11-16-2016. See attached Permission to use STC Letter dated April 9, 2019.

Weight and Balance, and Equipment List revised to reflect this installation.

For Instructions for Continued Airworthiness see attached JP Instruments ICA Supplement number 960-01dated 4-8-2014.

----------end----------

☑ Additional Sheets Are Attached

J.P. INSTRUMENTS
3185-B Airway Avenue
Costa Mesa, California 92626
Ph. (714) 557-3805
(800) 345-4570
FAX (714) 557-9840
April 9, 2019

Subject: Permission to use STC.

To whom it may concern,

J.P. Instruments holder of STC SA01828SE grants to the purchaser, John Mayes Owner of Registration #N7356, and Company APRI Aviation, Inc. of an EDM-960 series display PN 790000-C-120, and two EDM-950's PN 790000-B-245 permission to use applicable, data, kit, parts, of STC mentioned above for the purpose of installation of an EDM-960 series primary instrument for Aircraft Model Grumman Mallard Serial # J-56. This is a onetime authorization to use our STC SA01828SE data for the installation of the EDM-960 Primary Engine data management system. It is the responsibility of the Aircraft Owner, Installer, and or FAA administrator to determine the applicability and eligibility of the data, kit and parts of STC SA01828SE. Furthermore, it is the responsibility of the Installing Agency authorized by the FAA Administrator to determine airworthiness in that the final installation conforms to the applicable data mentioned herein. The installation of J.P. Instruments (JPI) Primary Engine Data Management System will be in accordance with JPI Installation manual for the EDM 960, Report 909, dated February 22, 2009, or later FAA approved revision, and will comply with all applicable airworthiness requirements for this installation. By purchase and or installation of said EDM display PN 790000-C-120 and two EDM-950's PN 790000-B-245 you release JPI from any and all liability associated with this installation to include any expenses incurred during or after initial installation. Please contact me directly at (714) 557-3805 for any deviations to the authorization requirements as specified above.

Sincerely,

Joseph Pollizzotto
President

Acknowledged that a copy of this letter was received:
Owner's initials _____ Date 4-9-19

United States of America

Department of Transportation Federal Aviation Administration

Supplemental Type Certificate

Number SA01828SE

This certificate, issued to

J. P. Instruments
3185 Airway Ave, Suite B
Costa Mesa, CA 92626-4601

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part **23** *of the* **Federal Aviation** *Regulations.*

Original Product—Type Certificate Number: *Make:* *Model:*

*See Attached FAA Approved Model List No. SA01828SE for a List of Approved Airplane Models and Applicable Airworthiness Regulations.

Description of the Type Design Change: Installation of J.P. Instruments (JPI) EDM-960 Primary Engine Data Management System in accordance with the Installation Manual for the EDM-960, Report No. 909, Revision NC, dated February 22, 2009 or later FAA-approved revision.

Limitations and Conditions: Approval of this change in type design applies to the airplanes listed on the Approved Model List (AML) only. This approval should not be extended to other aircraft of these models unless the installer determines that the relationship between this change and any other previously incorporated approved modifications will introduce no adverse effect upon the airworthiness of that aircraft. A copy of this Certificate, FAA approved AML No. SA01828SE, Revision IR, dated March 27, 2009, and FAA-approved Airplane Flight Manual Supplement No. 960-001, dated March 27, 2009, or later approved revisions must be maintained as part of the permanent records for the modified aircraft.

If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: February 13, 2008 *Date reissued:*

Date of issuance: March 31, 2009 *Date amended:*

FEDERAL AVIATION ADMINISTRATION

By direction of the Administrator

(Signature)

Acting Manager, Seattle Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA FORM 8110-2(10-68)

J.P.Instruments Inc..
3185B Airway Ave
Costa Mesa CA 92626
714 557 3805 Fax 714 557 9840

EDM 960
Instructions for Continued Airworthiness

Supplement No: 960-01
Revision: IR

Prepared by:

_____ 02/06/2014
Joe Polizzotto

Before performing any procedures contained in this manual the user should verify they have the latest ICA revision.
Please check web site at www.JPInstruments.com for the latest revision of this manual.
The registered owner on file at JPI will also be notified of any changes.

Revision History

REVISIONS			
Rev.	Reason/Description	Requested/ Changed By	Date
IR	Complete Document	N/A	02/06/2014
A	Removed duplicate Airworthiness Limitations in Section 18. In Section 2 Clarified "identical to" with report JPI No 909 Corrected invalid internet address Section 11 for service information	FAA	04/08/2014

List of Effective Pages

This document is controlled and revised as a complete unit and does not contain pages of various revisions. All pages are of the same revision as indicated on the cover page and also indicated at the bottom of each subsequent page. The effective pages consist of the sections as noted in the Table of Contents.

Distribution of Revisions

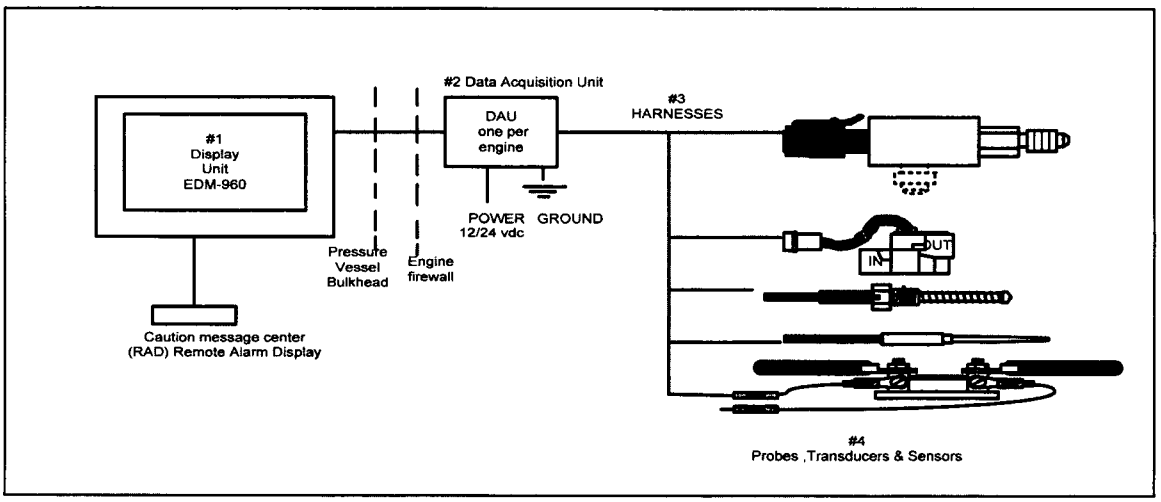
Notification of changes to this ICA will be sent to all EDM-960 owners on record. The changed document will be available at JPInstruments.com. Paper copies will be available on request, contact J.P.Instruments at 714-557-3805

1.0 Introduction

This document contains the instructions for continued airworthiness (ICA). This ICA was written in the format contained in the GAMA Specification No. 2 which was specified by FAA Order 8110.54A. This ICA conforms to the requirements specified by Part 23, Appendix G and FAA Order 8110.54A. The FAA guidance includes sections that are not applicable to the EDM-960 system, only applicable sections have been addressed in this document.

2.0 System Description

The EDM-960 is a combined electronic indicating system made up of one Display Unit and two Data Acquisition Units one mounted behind each engine. The Display Unit presents powerplant parameters to the pilot. It replaces all previous primary digital and/or analog instruments: This system performs monitoring tasks only; it does not perform any engine or aircraft system controlling functions. The EDM-960 System consists of four major components: the Display Unit PN 790000-C, two DAU Data Acquisition Units, PN 790000-B; probes transducers and sensors; and the connecting wiring and harnesses.



2.1 Display Unit Pn 790000-C

The EDM-960 receives, processes and displays the Serial data on a VGA TFT color display. In addition, the EDM-960 receives GPS data. The EDM-960 also transmits fuel flow and OAT data to a GPS and controls the external Master Caution Message Center (RAD) Remote Access Display.

2.2 Data Acquisition Unit (DAU) EDM-950

The EDM-950 is a 5.25" x 5.25" x 1.75" module that incorporates two 26-pin, two 15-pin and one 9-pin D-sub connectors. The EDM-950 incorporates 32-temperature channels, 6-high impedance pressure channels , 2-amp channel, 2 Frequency (RPM and Fuel Flow) channels, 4-capacitive fuel level channels, 4-resistive fuel level channels.
The EDM-950 channels convert signals from the probes, transducers and sensors to a digital format. This data is transmitted to the Display PN 790000-C via three wire Serial Bus.
The EDM-950 is FAA, TSO and STC approved, and is installed per J.P.Instruments Inc. installation instruction report 909.

2.3 Harnesses

The extension cables route the signals from the probes, transducers and sensors to the DAUs. These extension cables are FAA approved. The installation of these extension cables are per J.P.Instruments Inc. installation instruction report 909.

2.4 Probes, Transducers and Sensors

These components are used to measure pressures, temperatures, fuel flow, volts, amps, fuel levels and many other engine and aircraft system functions. The analog signals produced by the transducers and probes are routed through the extension cables to the various EDM-950 inputs.

These probes, transducers and sensors are TSO approved and currently are used on other J.P.Instruments Inc. STC'd, TSO'd products. The installation of these probes, transducers and sensors are per J.P.Instruments Inc. installation instruction report 909.

2.5 EDM-960 System Parts List

See section 35 Component Parts List in Report 909 Installation Instructions

3.0 Applicable Documents

The following documents are listed for reference only.
Each document is applicable only to the extent specified herein.

Report 909	EDM-960 Installation Instructions

4.0 Control & Operation Information

All of the engine and aircraft functions monitored by the EDM-960 are displayed on the Display Unit after power-up. There are no other display screens.

Fuel Level calibration is performed during the initial installation of the EDM-960 and should not require recalibration. Changing or repairing the EDM-960 display and/or EDM-950 will not affect fuel level calibration. However, if a fuel probe is replaced, fuel level calibration will be required.

To calibrate the fuel level for a specific fuel tank, see section 28 and 29 in the installation Report 909

5.0 Airworthiness Limitations

There are no new or additional airworthiness limitations with installation of the EDM-960 system.

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sections. 43.16 and 91.403 of the Federal Aviation Regulations, unless an alternative program has been FAA approved.

6.0 Interior Placards

There are no markings or placards required in conjunction with the EDM-960 System.

7.0 Charts and Wiring Diagrams

All installation diagrams, schematics and charts are located in the EDM-960 Installation Instructions (Report 909).

8.0 Overhaul Time Limits

The EDM-960 system and accessories have no overhaul time limits.

9.0 Maintenance Instructions

Maintenance checks should be performed every 100 hour and/or at the annual inspection. Check all system components for the following: leaks on or around transducers, loose fittings, chaffing and/or breakage of any cables or wires and loose connections. Probes must be checked for proper installation. This includes checking all hose clamps and fittings for security. Verify that the unit is operating and functioning properly by performing the procedures in Sections 5. and 6 of the EDM-960 Installation Instructions (Report 909). On pressurized aircraft, check the sealant for security where the serial wires pass through the pressure bulkhead to the Display Unit.

10.0 Protective Treatment

There are no applications of protective treatments required for the EDM-960 system and its components.

11.0 Servicing

Servicing is "on condition" only. There are no field adjustments or calibration requirements for the EDM-960 system after it has been properly installed, checked off and signed-off by the respective authority. All servicing of the EDM-960 system and accessories must be accomplished by J.P.Instruments Inc. (JPI). Probes, transducers, sensors and the display unit are limited to removal and replacement with JPI manufactured new or JPI remanufactured components. Location and access to the components are described in the EDM-960 Installation Instructions (Report 909).

For servicing information contact J.P.Instruments Inc. at (714) 557-3805 or support@jpinstruments.com.

12.0 Removal

Guidance on removal of the EDM-960 system and/or accessories is provided in the EDM-960 Installation Instructions (Report 909). Removal must be performed in accordance with applicable airworthiness standards.

13.0 Installation and Replacements

Installation of the EDM-960 and/or accessories must be performed in accordance with the EDM-960 Installation Instructions (Report 909) and in accordance with applicable airworthiness standards.

14.0 Troubleshooting

Troubleshooting the EDM-960 system and accessories, including probes, transducers and sensors, must be performed in accordance with the Troubleshooting Section found in the EDM-960 Installation Instructions (REPORT 909) section 39. Troubleshooting is limited to identification of a defective component. A component's internal workings should only be repaired by J.P.Instruments Inc.

15.0 Special Instructions

There are no special instructions required for the EDM-960 System.

16.0 Special Inspection Requirements

There are no special inspection requirements for the EDM-960 System.

17.0 Special Tools

There are no special tools required for working on the EDM-960 System.

18.0 Revisions

These Instructions for Continued Airworthiness have been reviewed and accepted by the FAA. In the event that a revision is required the revision will be submitted to the FAA for review and acceptance. Before performing any procedures contained in the manual the user should verify they have the latest revision by Checking the web site at www.JPInstruments.com for the latest revision of this manual. Owners of record will also be notified by mail or e-mail of a revision update. The revised Instructions for Continued Airworthiness must become a part of the aircraft records and a logbook entry made noting the revision

US Department of Transportation
Federal Aviation Administration

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

OMB No. 2120-0020
Exp: 8/31/2014

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark: N7356	Serial No.: J56	
	Make: Grumman	Model: G-73	Series:
2. Owner	Name *(As shown on registration certificate)*: John Mayes	Address *(As shown on registration certificate)*: Address 1905 N Lamar Blvd; City Austin; State TX; Zip 78705; Country	

3. For FAA Use Only

"THE Jetz IDENTIFIED HEREIN COMPLIES WITH THE APPLICABLE AIRWORTHINESS REQUIREMENTS AND IS APPROVED FOR THE ABOVE DESCRIBED AIRCRAFT, SUBJECT TO CONFORMITY INSPECTION BY A PERSON AUTHORIZED IN FAR 43 SECTION 43.7"

DATE 7/12/16 FAA INSPECTOR [signature]

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☒	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address
Name: Arnold Peterson
Address: 218 Buena Vista CT
City: Gardnerville State: NV
Zip: 89460 Country:

B. Kind of Agency
- [x] U. S. Certificated Mechanic
- [ ] Foreign Certificated Mechanic
- [ ] Certificated Repair Station
- [ ] Certificated Maintenance Organization
- [ ] Manufacturer

C. Certificate No. 2264277A&P

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.

Extended range fuel per 14 CFR Part 43 App. B ☐

Signature/Date of Authorized Individual [signature] 7-12-16

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY								
		FAA Flt. Standards Inspector		Manufacturer		Maintenance Organization		Persons Approved by Canadian Department of Transport
		FAA Designee		Repair Station	X	Inspection Authorization		Other *(Specify)*

Certificate or Designation No. 2264277

Signature/Date of Authorized Individual [signature] 7-12-16

FAA Form 337 (10/06)

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.)

N7356	6-15-2016
Nationality and Registration Mark	Date

Installed Hartzell Engine Technologies 7655T Skytronics alternator kits on Pratt & Whitney R1340 engines.

Alternators kits installed using original hardware, location, wiring, attached Skytronics wiring diagram, attached Maintenance instructions, attached drawing, and attached trouble shooting for 24 volt negative ground alternator.

All work done in accordance with AC43.13-1B/2B Chapter 11, Section 3, 4, 5, 8.

Weight and Balance revised to reflect alternator installation.

For continued airworthiness see attached Skytronics Maintenance instructions for Jasco Alternator System.

Alternator system is STC approved under SH191WE, SH194WE, SH2303SW, and SA348NW for other aircraft installations.

----------end----------

☑ Additional Sheets Are Attached

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.

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Alternator system is STC approved under SH191WE, SH194WE, SH2303SW, and SA348NW for other aircraft installations.

----------end----------

☑ Additional Sheets Are Attached

SKYTRONICS INCORPORATED

Maintenance Instructions for the Jasco Alternator System

Compared to the best generator, the **Jasco** Alternator is lighter, more reliable, delivers more power, and requires less maintenance. In addition, you can extend the life of your **Jasco** charging systems by following these basic maintenance instructions.

1. Inspect ram air inlet for obstructions prior to flight as part of your walk around.

2. Remove gear driven alternators every **250** hours and inspect rubber drive gear bushings for alignment, wear, or deformity. If damage is discovered, these inexpensive parts can be purchased from **Skytronics** to extend the life of your charging system. Install new bushings in the reverse order of removal. Torque nut P/N AN320-5 or nut P/N 5239 to 15-20 ft. lbs.

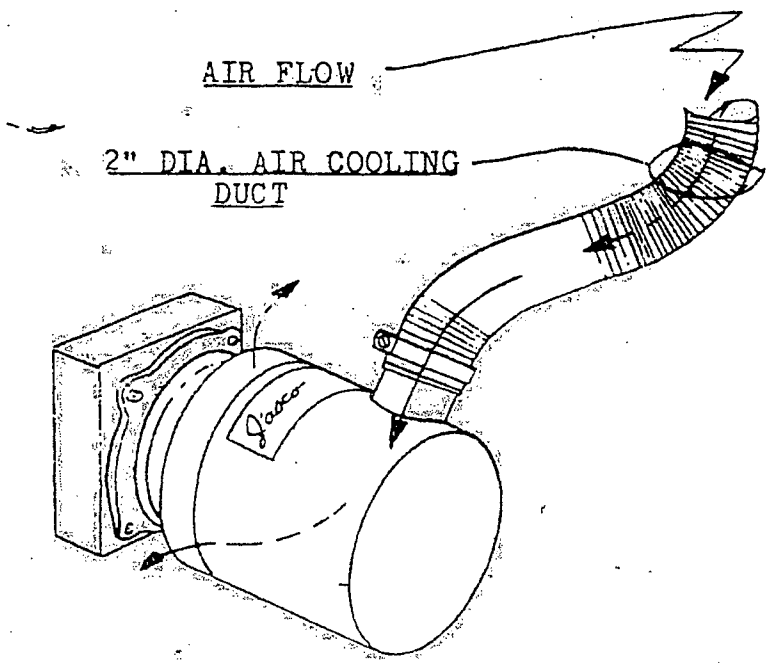
3. Minor adjustment of system charging and voltage can be accomplished by adjusting the regulator variable resistor, located under the white protective cap on your **Jasco** regulator. The variable resistor is very sensitive and requires only a slight adjustment to bring system voltage to required levels. Your **Jasco** charging system is factory set, and should require no adjustment out of the box.

4. For abnormal operations including blown circuit breakers, failed fuses, erratic charging, no output or over voltage problems, contact the **Skytronics Inc**. service department at **1-800-421-6846**. We offer **free** factory evaluation including bench check of both alternator and controller. In addition, our factory overhaul of your **Jasco** charging system carries the same warranty as a new system. **Skytronics, Inc.** is the only factory authorized repair station for your **Jasco** charging system, accept no substitute.

5. To ensure normal operation of your **Jasco** Alternator and Controller: Upon **1000 hours** of operation it is recommended to return your units to the factory for a complete inspection, testing and/or overhaul.

Skytronics is the only **FAA Approved** facility for repairs and/or overhauls of the **Jasco** Alternator Systems.

227 Oregon St. P.O.Box 807 El Segundo, CA 90245 FAA Repair Station AE3R368L
Tel: (310)322-6284 (800)421-6846 Fax:(310)322-6160 www.skytronicsinc.com



TYPICAL COOLING FOR JASCO ALTERNATOR

HELICOPTER APPLICATION

ROUTE AIR COOLING DUCT TO COOLING SHROUD: SUPPORT DUCT TO PREVENT OBSTRUCTION TO AIR FLOW.

FIXED WING APPLICATION

ROUTE RAM AIR COOLING DUCT TO RAM AIR COOLING INLET: SUPPORT DUCT TO PREVENT OBSTRUCTION TO AIR FLOW.

COOLING INLET SHOULD BE EXTERNAL TO AIRCRAFT ENGINE COMPARTMENT AIR. IT IS RECOMMENDED TO PROVIDE A SEPARATE AIR SCOOP INLET TO RAM AIR COOLING DUCT. (DO NOT CONNECT TO HEATER BOX.)

CAUTION

DO NOT OPERATE ALTERNATOR WITHOUT SUPPLYING ADEQUATE COOLING AIR TO THE ALTERNATOR. OPERATING ALTERNATOR WITHOUT ADEQUATE COOLING WILL DAMAGE ALTERNATOR. OPERATION OF ALTERNATOR WITHOUT ADEQUATE COOLING VOIDS WARRANTY.

SKYTRONICS, INC.
EL SEGUNDO, CALIF.

MATERIAL	DATE 12/22/78	DWN. BY HP
SPEC.	SCALE	APPR. BY JES
FINISH	DIMENSION TOLERANCE ± .005 UNLESS OTHERWISE SPECIFIED	

RECOMMENDED COOLING FOR JASCO ALTERNATOR INSTALLATION.

DWG. NO. 5016

Troubleshooting the JASCO alternator

ALTERNATOR SYSTEM TEST

1. SYSTEMS VOLTAGE TESTS - HOW TO START!

To aid in troubleshooting the Jasco Alternator System or to check out a new installation, the following voltage measurements, monitored at application system locations, will define to the operator proper system performance prior to start-up. To insure reasonable results, the operator should use a voltmeter, which is within calibration limits.

The schematics in figures 2 and 4 depict the location of voltmeter in the system to monitor the applicable voltage levels. The voltage readings indicated are for reference purposes, as actual values are dependent upon the level or storage state of your battery.

Use figure 2 for all 12 volt JASCO Alternator Systems with internal spike protection Regulator J12M20SP.

Use figure 4 for all 24 volt JASCO Alternator Systems with internal spike protection Regulator J12M24SP.

IF YOU HAVE AN OLDER MODEL REGULATOR CALL FOR DIFFERENT SCHEMATIC. 800-421-6846

When performing the measurement tests listed on figures 2 & 4, the following conditions should exist: Engine stopped; Battery switch closed; Alternator/Field switch closed.

2. ADDITIONAL CHECKS - IS THE PROTECTOR DEFECTIVE?

Check for a shorted suppressor or protector. If you have an old style external protector (SVP-3, SVP-4) in line, disconnect the protector and observe system function. Proper operation indicates a defective protector. On units with combined Regulator/Protector systems, simply disconnect the orange lead from the regulator and measure resistance between the orange and black leads. Resistance for 24 Volt systems should be not less than 1500 OHMS and 12 Volt systems should not read lower than 1200 OHMS.

3. ADDITIONAL CHECKS - IS ALTERNATOR DEFECTIVE?

Isolate the alternator and check for output. Turn the master switch of the aircraft to the "OFF" position, disconnect the Voltage Regulator and external protectors (SVP-3 or SVP-4) if still in use. *To insure reasonable results, the operator should use a hand held voltmeter, which is within calibration limits.*

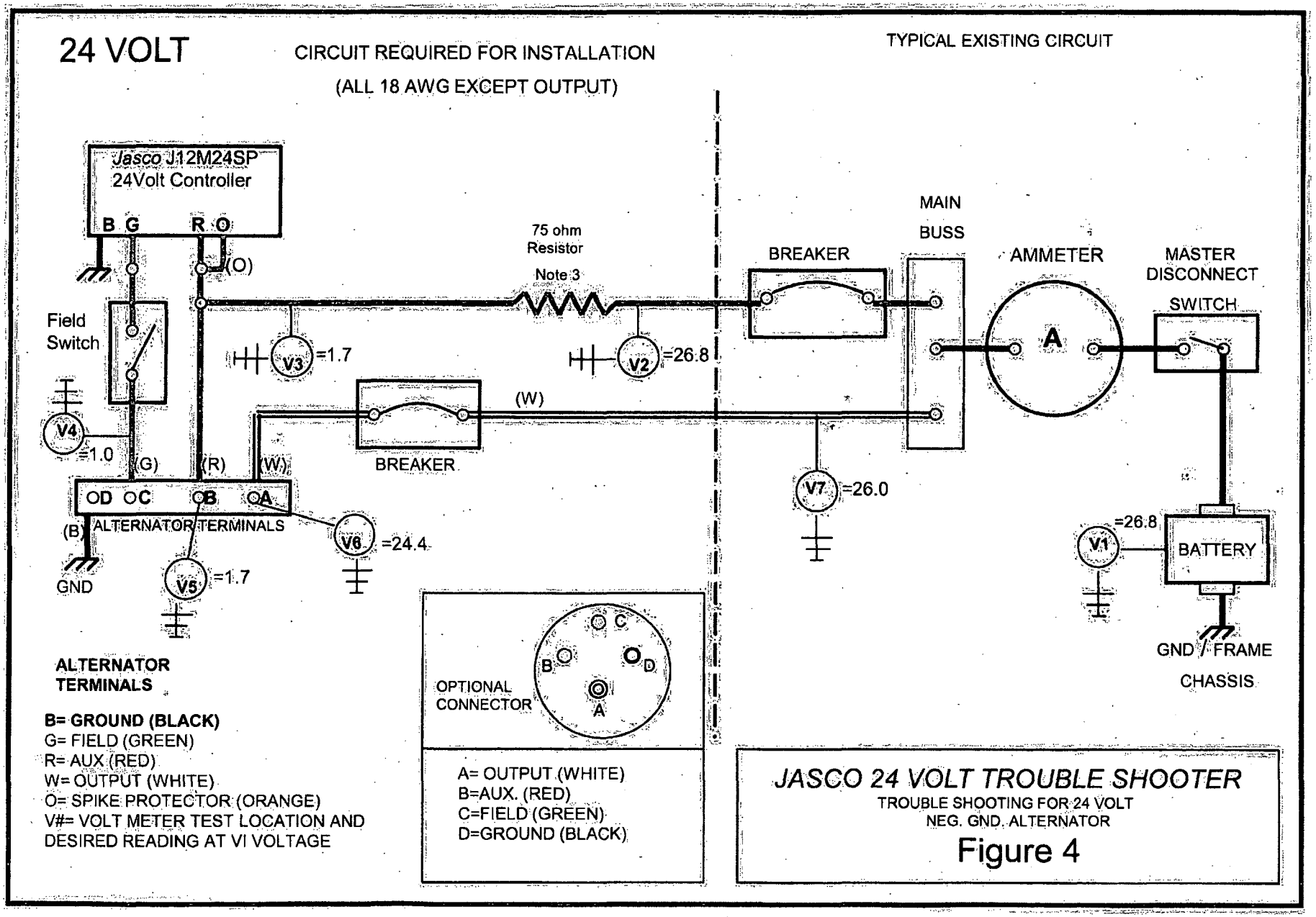
Caution: ***Failure to disconnect the Voltage Regulator, Voltage Protector or the Voltage Controller (Regulator and Protector combined) will result in damage to these units and voids warranty.*** This can be accomplished by disconnecting the green and red wire at the alternator post(s). ***Turn off all accessory equipment (all electrical loads).*** Connect a jumper wire from a battery voltage source directly to the field (green wire post/terminal) of the alternator -***alligator clamps recommended, do not hard wire; jumper should be connected after start of engine.*** Be sure this connection makes a direct circuit to the alternator field terminal. You are now ready to operate the alternator in an un-regulated state. Turn the master switch to the "ON" position and start the engine. Increase engine RPM to ensure the alternator shaft speed is over 3000 RPM. Connect jumper –alligator clamp to field post. With hand held volt meter quickly take voltage measurements at auxiliary (red wire post) of alternator to ground.

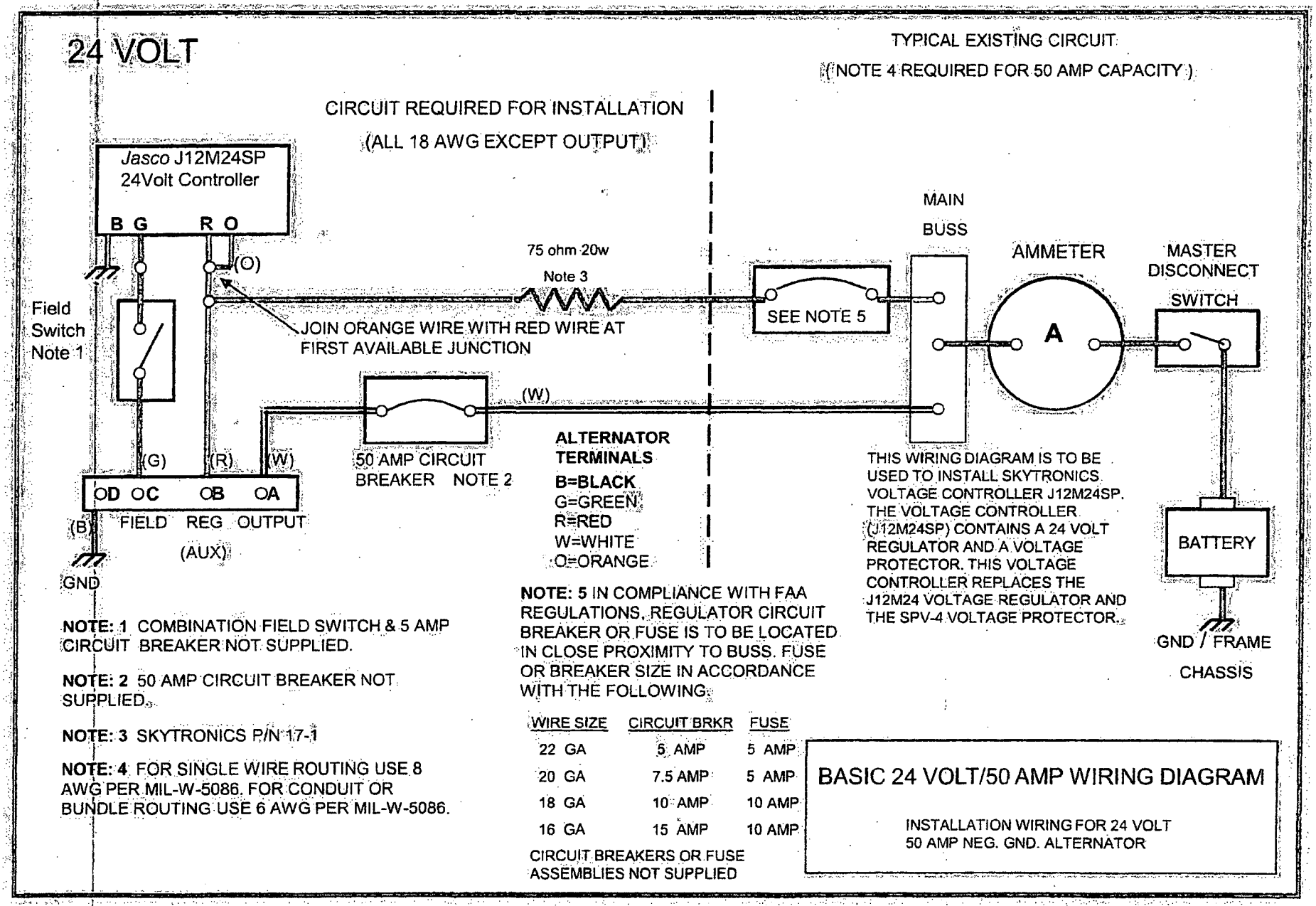
Caution: System damage can result if the alternator is operated for over 45 seconds with the jumper wire connected during this troubleshooting test. Failure to comply with this requirement voids warranty.

Full current output rating of the alternator should occur, and 2 to 3 times the system voltage should occur. If not, then the alternator is defective. If full output is observed, the alternator is good and either the wiring or the regulator is probably defective.

SKYTRONICS IS THE ONLY FAA AUTHORIZED REPAIR STATION FOR THE JASCO ALTERNATOR SYSTEMS. For further information please refer to diagram.

sales@skytronicsinc.com©


24 VOLT
CIRCUIT REQUIRED FOR INSTALLATION
(ALL 18 AWG EXCEPT OUTPUT)
TYPICAL EXISTING CIRCUIT
Jasco J12M24SP
24Volt Controller
B G
R O
(O)
Field
Switch
V4
=1.0
(G)
(R)
(W)
OD OC OB OA
(B)
ALTERNATOR TERMINALS
GND
V5
=1.7
V6
=24.4
V3
=1.7
75 ohm
Resistor
Note 3
V2
=26.8
(W)
BREAKER
BREAKER
MAIN
BUSS
V7
=26.0
AMMETER
A
MASTER
DISCONNECT
SWITCH
V1
=26.8
BATTERY
GND / FRAME
CHASSIS
ALTERNATOR
TERMINALS
B= GROUND (BLACK)
G= FIELD (GREEN)
R= AUX (RED)
W= OUTPUT (WHITE)
O= SPIKE PROTECTOR (ORANGE)
V#= VOLT METER TEST LOCATION AND
DESIRED READING AT VI VOLTAGE
OPTIONAL
CONNECTOR
C
B
D
A
A= OUTPUT (WHITE)
B=AUX. (RED)
C=FIELD (GREEN)
D=GROUND (BLACK)
JASCO 24 VOLT TROUBLE SHOOTER
TROUBLE SHOOTING FOR 24 VOLT
NEG. GND. ALTERNATOR
Figure 4


24 VOLT
TYPICAL EXISTING CIRCUIT
(NOTE 4 REQUIRED FOR 50 AMP CAPACITY)
CIRCUIT REQUIRED FOR INSTALLATION
(ALL 18 AWG EXCEPT OUTPUT)
Jasco J12M24SP
24Volt Controller
B G
R O
(O)
75 ohm 20w
Note 3
Field
Switch
Note 1
JOIN ORANGE WIRE WITH RED WIRE AT
FIRST AVAILABLE JUNCTION
SEE NOTE 5
MAIN
BUSS
AMMETER
A
MASTER
DISCONNECT
SWITCH
(W)
50 AMP CIRCUIT
BREAKER NOTE 2
ALTERNATOR
TERMINALS
B=BLACK
G=GREEN
R=RED
W=WHITE
O=ORANGE
(G)
(R)
(W)
OD OC OB OA
(B)
FIELD REG OUTPUT
(AUX)
GND
THIS WIRING DIAGRAM IS TO BE
USED TO INSTALL SKYTRONICS
VOLTAGE CONTROLLER J12M24SP.
THE VOLTAGE CONTROLLER
(J12M24SP) CONTAINS A 24 VOLT
REGULATOR AND A VOLTAGE
PROTECTOR. THIS VOLTAGE
CONTROLLER REPLACES THE
J12M24 VOLTAGE REGULATOR AND
THE SPV-4 VOLTAGE PROTECTOR.
BATTERY
GND / FRAME
CHASSIS
NOTE: 1 COMBINATION FIELD SWITCH & 5 AMP
CIRCUIT BREAKER NOT SUPPLIED.
NOTE: 2 50 AMP CIRCUIT BREAKER NOT
SUPPLIED.
NOTE: 3 SKYTRONICS P/N 17-1
NOTE: 4 FOR SINGLE WIRE ROUTING USE 8
AWG PER MIL-W-5086. FOR CONDUIT OR
BUNDLE ROUTING USE 6 AWG PER MIL-W-5086.
NOTE: 5 IN COMPLIANCE WITH FAA
REGULATIONS, REGULATOR CIRCUIT
BREAKER OR FUSE IS TO BE LOCATED
IN CLOSE PROXIMITY TO BUSS. FUSE
OR BREAKER SIZE IN ACCORDANCE
WITH THE FOLLOWING:
WIRE SIZE CIRCUIT BRKR FUSE
22 GA 5 AMP 5 AMP
20 GA 7.5 AMP 5 AMP
18 GA 10 AMP 10 AMP
16 GA 15 AMP 10 AMP
CIRCUIT BREAKERS OR FUSE
ASSEMBLIES NOT SUPPLIED
BASIC 24 VOLT/50 AMP WIRING DIAGRAM
INSTALLATION WIRING FOR 24 VOLT
50 AMP NEG. GND. ALTERNATOR

US Department of Transportation
Federal Aviation Administration

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

Form Approved OMB No. 2120-0020 11/30/2007

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark: USA N7356	Serial No.: J56	
	Make: Grumman	Model: G-73	Series: Mallard
2. Owner	Name *(As shown on registration certificate)*: Mayes, John	Address *(As shown on registration certificate)*: Address 1905 North Lamar Blvd; City Austin; State TX; Zip 78705; Country USA	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☐	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	
Name: Aviation Classics, Ltd.	☐ U. S. Certificated Mechanic	☐ Manufacturer
Address: Reno-Stead Airport	☐ Foreign Certificated Mechanic	C. Certificate No.
City: Reno State: NV	☒ Certificated Repair Station	NA3R703L
Zip: 89506 Country: USA	☐ Certificated Maintenance Organization	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.

Extended range fuel per 14 CFR Part 43 App. B ☐

Signature/Date of Authorized Individual: September 23, 2015 Dale Dekker

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY								
		FAA Flt. Standards Inspector		Manufacturer		Maintenance Organization		Persons Approved by Canadian Department of Transport
		FAA Designee	X	Repair Station		Inspection Authorization		Other *(Specify)*

Certificate or Designation No.: NA3R703L

Signature/Date of Authorized Individual: September 23, 2015 Dale Dekker

FAA Form 337 (10-06)

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.)

USA N7356	09/23/2015
Nationality and Registration Mark	Date

Installed a Garmin GDL 88 ADS-B UAT Transceiver system in accordance with the FAA Approved Master Drawing List, 005-00645-02, Rev. 7, dated 1/7/2015, FAA Approved Flight Manual Supplement, 190-01310-02, Rev. 2, dated 1/7/2015, and Garmin GDL 84/88 Part 23 AML/STC Installation Manual p/n:190-01310-00, dated December 2014, Revision 5. This installation approved by STC SA02119SE. ----------END----------

☐ Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

OMB No. 2120-0020
Exp: 8/31/2014

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark: N7356	Serial No.: J56	
	Make: Grumman	Model: G-73	Series:
2. Owner	Name *(As shown on registration certificate)*: John Mayes	Address *(As shown on registration certificate)*: Address: 2414 Exposition Blvd., Suite 280; City: Austin; State: TX; Zip: 78703-2261; Country: USA	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☒	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address
Name: Arnold Peterson
Address: 2323 P-51 CT
City: Minden State: NV
Zip: 89423 Country: USA

B. Kind of Agency
- [x] U. S. Certificated Mechanic
- [ ] Foreign Certificated Mechanic
- [ ] Certificated Repair Station
- [ ] Certificated Maintenance Organization
- [ ] Manufacturer

C. Certificate No.: 2264277A&P

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.

Extended range fuel per 14 CFR Part 43 App. B ☐

Signature/Date of Authorized Individual: 8-8-14

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is [x] Approved [ ] Rejected

BY								
		FAA Flt. Standards Inspector		Manufacturer		Maintenance Organization		Persons Approved by Canadian Department of Transport
		FAA Designee		Repair Station	X	Inspection Authorization		Other *(Specify)*

Certificate or Designation No. 2264277 A&P IA

Signature/Date of Authorized Individual: 8-8-14

FAA Form 337 (10/06)

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.)

N7356	8-8-2014
Nationality and Registration Mark	Date

Installed Airwolf oil filter kits AFC-K015 in accordance with STC SA01282NY. Filters mounted to engine mount below oil cooler with supplied hardware.
Equipment list revised, weight and balance changed to reflect oil filter installation.

----------end----------

☑ Additional Sheets Are Attached

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

A/C Make : GRUMMAN **Model:** G 73 **S/N:** J 56 **Reg#:** 7356

Revision: Date: 11-11-10

This sixteen item checklist are Instructions for Continued Airworthiness (ICA), to comply with FAA Handbook Bulletin for Airworthiness (HBAW-98-18 Dated October 7, 1998), are applicable to the aircraft above when the following equipment is installed:

SYSTEM: Airwolf Remote Mount Oil Filter System.

Airwolf Filter Corp
15369 Madison Rd
Middlefield, OH 44062

ITEM	CHECKLIST INFORMATION
1.	**Introduction:** This section briefly describes the aircraft, engine, propeller, or component that has been altered. Include and other information on the content, scope, purpose, arrangement, applicability, definitions, abbreviations, precautions, units of measurement, reverenced publications, and distribution of the ICA as applicable. **Comment:** G 73 (Aircraft Model) **with Pratt & Whitney** 1340 (Engine Model) **engine.**
2.	**Description:** Of the major alteration, it's function including an explanation of it's interface with other systems, if any. **Comment: Installation of Airwolf Remote Mounted Oil Filter Kit P/N AFC-K015**
3.	**Control:** Operation information: Or special procedures if any. **Comment: Pre-heating of both the engine and engine oil is recommended prior to starting the engine during periods of cold weather where the temperature is 30°F or below.**
4.	**Servicing information:** Such as types of fluids used, servicing points, and location of access panels, as appropriate. **Comment: Oil System to be serviced in accordance with Pratt & Whitney Service Bulletin 1183 Revision T or higher. Oil should be changed at least once each 12 months. Cut the old filter open with Airwolf AFC-570 oil filter cutter at each oil change and inspect for metal contamination or any evidence that may indicate impending engine problems.**
5.	**Maintenance Instructions**: Such as recommended inspection/maintenance periods in which each of the major alteration components are inspected, cleaned, lubricated, adjusted, tested, including applicable wear tolerances and work recommended at each scheduled maintenance period. This section can refer to the manufactures instructions for the equipment installed where appropriate e.g. functional checks, repairs, inspections.) It should also include any special notes, cautions, or warnings as applicable. **Comment: Inspect for security at each annual or 100 hr . inspection. After any oil change, always ground run the engine and check for leaks before flight.**
6.	**Trouble shooting information:** Information describing probably malfunctions, how to recognize those malfunctions, and the remedial actions to be taken. **Comment:__N/A**
7.	**Removal and replacement information:** This section describes the order and method of removing and replacing products, parts, and any necessary precautions. This section should also describe or refer to the manufacture's instructions to make required tests trim checks, alignment, calibrations, center of gravity changes, lifting or shoring, etc., if any. **Comments:__N/A**
8.	**Diagrams:** Of access plates and information, if needed, to gain access for inspection. **Comment:__N/A**
9.	**Special inspection requirements:** Such as X-ray, ultrasonic testing, or magnetic particle inspection, if required. **Comment: __N/A**
10.	**Application of protective treatments:** To the affected area after inspection and/or maintenance, if any. **Comment:__N/A**

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

11.	**Data: Relative to structural fasteners such as type, torque, and installation requirements if any.** **Comment:__N/A**
12.	**List of special tools:** Special tools that are required, if any. **Comment:__N/A**
13.	**For commuter category aircraft:** The following additional information must be furnished, as applicable: A. Electrical Loads B. Methods of balancing flight controls. C. Identification of primary and secondary structures>\ D. Special repair methods applicable to the airplane. **Comment:__N/A**
14.	**Recommended overhaul periods:** Are required to be noted on the ICA when an overhaul period has been set by the manufacturer of a component, or equipment. If there is no overhaul period, the ICA should state for item 14: "No additional overhaul time limitations." **Comment:__N/A**
15.	**Airworthiness Limitation Section:** Include any "approved" airworthiness limitations identified by the manufacturer of FAA type Certificate Holding Office (e.g., An STC incorporated in a larger field approved major alteration may have an airworthiness limitation.) The FAA inspector should not establish, alter, or cancel airworthiness limitations without coordinating with the appropriate FAA type Certificate Holding Office. If there are no changes to the airworthiness limitations, the ICA should state for item 15: "No additional airworthiness limitations" or " Not Applicable." **Comment:__N/A**
16.	**Revision:** This section should include information on how to revise the ICA. For example, a letter will be submitted to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspection accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date_____) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (date_____)." Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location, date of the Form 337. **Comment:__ A letter will be submitted to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date_____) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (date_____)." Once the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location, date of the Form 337.**

NOTE:

Implementation and Record Keeping: For major alterations performed in accordance with FAA Field Approval policy, the owner operator operating under part 91 is responsible for ensuring that the ICA is made part of the applicable section 92.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry recorded the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 5/28/98) along with a statement that the ICA is now part of the aircraft's inspection/maintenance requirements.

For major alterations performed in accordance with field approval on air carrier aircraft, the air carrier operator is responsible for ensuring that the ICA is made part of the applicable inspection/maintenance program for their aircraft. If a procedure is not currently included in the operator's manual to incorporate ICA, this process will need to be appropriately addressed (i.e. the operator submits a revision to its maintenance program to the applicable certificate-holding district office (CHDO).

For aircraft inspected under an Approved Aircraft Inspection Program (AAIP), the operator will submit a change to the CHDO in accordance with section 135.419b).

For air carrier aircraft inspected using an annual/100 hour inspection program, a reference to the new ICA will be made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., ICA are located/attached to Block 8 of FAA Form 337, dated 5/28/98). In addition, the operator will request a revision to the operator's Operations Specifications, additional maintenance requirements, which incorporates the ICA into the inspection program.

United States of America

Department of Transportation -- Federal Aviation Administration

Supplemental Type Certificate

Number SA01282NY

This certificate issued to

Airwolf Filter Corp
15369 Madison Rd.
Middlefield, OH 44062

*certifies that the change in the type design for the following product with the limitations and conditions thereto as specified hereon meets the airworthiness requirements of Part * of the * Regulations.*

Original Product Type Certificate Number: * See attached FAA Approved Model List (AML)
Make: * No. SA01282NY for list of approved airplane models
Model: * and applicable installation instructions

Description of Type Design Change:
Installation of Airwolf remote mounted engine oil filter kit AFC-K015 on aircraft powered by Pratt & Whitney radial reciprocating engine Series R-985, R-1340 and R-1830.

Limitations and Conditions:
1. Airwolf Oil Filter Model AFC-600 (Champion) is eligible only with R-985 series engines.
2. Airwolf Oil Filter Model AFC-700 (Fram) is eligible on R-985, R-1340 and R-1830 series engines.
3. Airwolf Instructions for Continued Airworthiness, AFC-K000-ICA, revision IR, dated July 5, 2012 or later FAA accepted revision is required with this installation.
4. Engine compartment firewall for mounting oil filter shall be of .021 inch minimum thickness ASTM A527 galvanized steel or equivalent (Ref. CAR 3.624(b), 14CFR PART 23.1191(h)).
5. Compatibility of this design change with previously approved modifications must be determined by the installer.
6. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: September 01, 1999

Date reissued:

Date of issuance: January 23, 2001

Date amended: October 31, 2012

By direction of the Administrator

(Signature)

Timothy Smyth
Manager, Propulsion & Program Management Branch
Chicago Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA APPROVED MODEL LIST (AML) SA01282NY
AIRWOLF FILTER CORP
FOR INSTALLING
REMOTE MOUNT OIL FILTER KIT

Issue Date: January 23, 2001

ITEM	AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	INSTALLATION INSTRUCTIONS		AML AMENDMENT DATE
					NUMBER	REVISION NO. AND DATE	
30	DELONG (Boeing)	F484	2-555	CAR PART 4 and Amendments Listed in TCDS No. 2-555	AFC-K015	C 11/11/2010*	10/31/2012
31	PAUL V. SHIELDS (Douglas)	Army A-26B, A-26C	TCS L-3-4	LTC-3-4 as specified and CAR PART 9	AFC-K015	C 11/11/2010*	10/31/2012
32	DOUGLAS AIRCRAFT COMPANY	Dolphin 1 Special	2-366	Aero Bulletin 7A and as specified in TCDS No. 2-366	AFC-K015	C 11/11/2010*	10/31/2012
33	EDWARD BUDD MANUFACTURING COMPANY	RB-1	756	TC 756 as specified	AFC-K015	C 11/11/2010*	10/31/2012
34	FAIRCHILD INDUSTRIES	FC-2-W2	ATC 61	ATC 61 as specified	AFC-K015	C 11/11/2010*	10/31/2012
35	FAIRCHILD INDUSTRIES	71	ATC 89	ATC 89 as specified	AFC-K015	C 11/11/2010*	10/31/2012
36	FORD MOTOR COMPANY	S-AT-B	ATC 156	ATC 156 as specified	AFC-K015	C 11/11/2010*	10/31/2012
37	FORD MOTOR COMPANY	S-AT-C	ATC 165	ATC 165 as specified	AFC-K015	C 11/11/2010*	10/31/2012
38	FORD MOTOR COMPANY	S-AT-D	ATC 409	ATC 409 as specified	AFC-K015	C 11/11/2010*	10/31/2012
39	FRAKES AVIATION (Grumman)	G-73 (Mallard)	A-783	CAR PART 4a and Amendments Listed in TCDS No. A-783	AFC-K015	C 11/11/2010*	10/31/2012
40	CONSOLIDATED VULTEE (General Dynamics)	(Army) LB-30	L-6-3	L-6-3 as specified and CAR PART 9	AFC-K015	C 11/11/2010*	10/31/2012
41	GENERAL DYNAMICS	PBY-5 (Army OA-10) PBY-5A (Army OA-10A)	2-548	CAR PART 4a and Amendments Listed in TCDS No. 2-548	AFC-K015	C 11/11/2010*	10/31/2012
42	GENERAL DYNAMICS (Consolidated Vultee)	T8P-1	ATC 662	ATC 662 as specified	AFC-K015	C 11/11/2010*	10/31/2012
43	GENERAL DYNAMICS (Consolidated Vultee)	16 Commodore	ATC 258	ATC 258 as specified	AFC-K015	C 11/11/2010*	10/31/2012

US Department of Transportation
Federal Aviation Administration

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

Form Approved OMB No. 2120-0020 2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark: N7356	Serial No.: J56	
	Make: Grumman	Model: G-73	Series: Mallard
2. Owner	Name *(As shown on registration certificate)*: John Mayes	Address *(As shown on registration certificate)*: Address 2414 Exposition Blvd Suite 280; City Austin; State TX; Zip 78703; Country USA	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☑	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	
Name: Arnold Peterson	✓ U. S. Certificated Mechanic	☐ Manufacturer
Address: 218 Buena Vista Ct	☐ Foreign Certificated Mechanic	C. Certificate No.
City: Gardnerville; State: NV	☐ Certificated Repair Station	
Zip: 89460; Country: USA	☐ Certificated Maintenance Organization	A&P 2264277

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.

Extended range fuel per 14 CFR Part 43 App. B ☐

Signature/Date of Authorized Individual: 2-1-2014

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY								
	☐	FAA Flt. Standards Inspector	☐	Manufacturer	☐	Maintenance Organization	☐	Persons Approved by Canadian Department of Transport
	☐	FAA Designee	☐	Repair Station	✓	Inspection Authorization	☐	Other *(Specify)*

Certificate or Designation No.: A&P 2264277 IA

Signature/Date of Authorized Individual: 2-1-2014

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.)

N7356	2-1-2014
Nationality and Registration Mark	Date

Replaced wing tip navigation lights with AVEO Engineering Ultra Embedded Galactica LED navigation strobe light assemblies in accordance with AVEO Engineering Installation Manual. These aircraft lights are TSO and meet both TSO C30c and C96a design specifications and exceed the requirements of TSO C30c, C96a, SAE AS 8037 and AS8017A, plus DO-160.
Light assemblies weigh less than removed light assemblies, and use less power than removed assemblies, no weight and power changes are required. See 8130-3's dated 9-9-2013.
Equipment list revised.

----------End----------

☐ Additional Sheets Are Attached

US Department of Transportation Federal Aviation Administration

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

Form Approved OMB No. 2120-0020 11/30/2007

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark: N7356	Serial No.: J56	
	Make: Grumman	Model: G-73	Series:
2. Owner	Name *(As shown on registration certificate)*: John Mayes	Address *(As shown on registration certificate)*: Address 2414 Exposition BLVD STE 280; City Austin; State TX; Zip 78703-2261; Country	

3. For FAA Use Only

The DATA identified herein complies with the applicable airworthiness requirements and is approved for use only on the above described aircraft, subject to conformity inspection by a person authorized in FAR 43.7

FRANK J. VAVRA
RENO FSDO
OCT 28 2013

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☒	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address
Name: Aviation Classics, Ltd.
Address: Reno-Stead Airport
City: Reno State: NV
Zip: 89506 Country:

B. Kind of Agency
- ☐ U. S. Certificated Mechanic
- ☐ Foreign Certificated Mechanic
- ☒ Certificated Repair Station
- ☐ Certificated Maintenance Organization
- ☐ Manufacturer

C. Certificate No.: NA3R703L

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.

Extended range fuel per 14 CFR Part 43 App. B ☐

Signature/Date of Authorized Individual: 10-28-2013 Robb Steele

ACL 8 IN8P

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY								
		FAA Flt. Standards Inspector		Manufacturer		Maintenance Organization		Persons Approved by Canadian Department of Transport
		FAA Designee	X	Repair Station		Inspection Authorization		Other *(Specify)*

Certificate or Designation No.: NA3R703L

Signature/Date of Authorized Individual: 10-28-2013 Robb Steele

ACL 8 IN8P

FAA Form 337 (10-08)

FAA Pres Gp

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.)

N7356	
Nationality and Registration Mark	Date

Installed a new Garmin G500 Primary Flight and Multifuction Display System in accordance with Garmin G500 Installation Manual pn.190-01102, Rev. 8, dated January 2013, and consists of the following components:

Installed a new Garmin GDU 620 Display unit mounted in the instrument panel, weighing 7.04 lbs., in accordance with Garmin G500 Installation Manual pn.190-01102, Rev. 8, dated January 2013, and powered by a new 5 amp circuit breaker, located on the pilot's circuit breaker sub panel, labeled "GDU620."

Installed a new Garmin GRS 77 AHRS, weighing 3.46 lbs., in accordance with Garmin G500 Installation Manual pn.190-01102, Rev. 8, dated January 2013, and powered by a new 5 amp circuit breaker, located on the pilot's circuit breaker sub panel, labeled "GRS77."

Installed a new Garmin GDC 74A ADC, weighing 2.30 lbs., in accordance with Garmin G500 Installation Manual pn.190-01102, Rev. 8, dated January 2013, and powered by a new 5 amp circuit breaker, located on the pilot's circuit breaker sub panel, labeled "GDC75A."

Installed a new Garmin GTP59 GPS Temp Probe, weighing .16 lbs., in accordance with Garmin G500 Installation Manual pn.190-01102, Rev. 8, dated January 2013, and powered by a new 5 amp circuit breaker, located on the pilot's circuit breaker sub panel, labeled "GTP59."

The above listed components are interfaced to the following components: new Garmin GNS 430W GSP No.1, new Garmin GNS 430W No. 2, and new No. & No. 2 Garmin G-35W GPS antennas.

Owner supplied with Garmin G500 PFD / MFD "Instructions for Continued Airworthiness," pn.190-01102-00, Rev. 5, dated December 11, 2012. Owner supplied with Garmin G500 PFD / MFD FAA Approved Airplane Flight Manual Supplement pn.190-01102-01, Rev. 8, dated December 26, 2012.

All work performed IAW AC 43.13-1B, Chapter 11, Section 4, Paragraph 11-48, 11-49, 11-50 (A, B), 11-51 and Section 10, Paragraph 11-137. AC43.13-2B Chapter 1, paragraph 1, 9, 12; Chapter 2, Paragraph 21, 22, 23 (A, B, C, F), Paragraph 27: and Chapter 3, Paragraph 36 (A,B).

Bus load computed not to exceed 80% of total alternator output.

A ground evaluation of the aircraft systems has been accomplished, and no interference with the normal operation of other equipment by the Garmin G500 Primary Flight and Multifuction Display System installation was noted.

Revised Aircraft Weight & Balance Report & Equipment List.

----------Nothing Follows----------

☐ Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

Form Approved OMB No. 2120-0020 11/30/2007

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark: N7356	Serial No.: J56	
	Make: Grumman	Model: G-73	Series:
2. Owner	Name *(As shown on registration certificate)*: John Mayes	Address *(As shown on registration certificate)*: Address 2414 Exposition BLVD STE 280; City Austin; State TX; Zip 78703-2261; Country	

3. For FAA Use Only

The DATA identified herein complies with the applicable airworthiness requirements and is approved for use only on the above described aircraft, subject to conformity inspection by a person authorized in FAR 43.7

FRANK J. VAVRA
RENO FSDO
OCT 28 2013

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☒	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	
Name: Aviation Classics, Ltd.	☐ U. S. Certificated Mechanic	☐ Manufacturer
Address: Reno-Stead Airport	☐ Foreign Certificated Mechanic	C. Certificate No.
City: Reno State: NV	☒ Certificated Repair Station	NA3R703L
Zip: 89506 Country:	☐ Certificated Maintenance Organization	

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.

Extended range fuel per 14 CFR Part 43 App. B ☐

Signature/Date of Authorized Individual: 10-28-2013 Robb Steele

ACL 8 INSP

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☒ Approved ☐ Rejected

BY								
	☐	FAA Flt. Standards Inspector	☐	Manufacturer	☐	Maintenance Organization	☐	Persons Approved by Canadian Department of Transport
	☐	FAA Designee	X	Repair Station	☐	Inspection Authorization		Other *(Specify)*

Certificate or Designation No.: NA3R703L

Signature/Date of Authorized Individual: 10-28-2013 Robb Steele

ACL 8 INSP

FAA Form 337 (10-06)

FAA

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.)

N7356	
Nationality and Registration Mark	Date

Installed new Garmin GNS430WAAS mounted in the instrument panel, in the No.1 position, weighing 6.2 lbs., in accordance with Garmin 400W Series Installation Manual pn.190-00356-02, Rev. H, dated February 2013, and power by a new 5 amp circuit breaker, located on the pilot's circuit breaker sub panel, labeled "GNS430/1." Installed a new Garmin G-35W antenna, ustilizing the previously installed antenna's doubler, located on top of the aircraft, and interfaced to the following equipment: a new Garmin GDU620 Display unit, new Garmin GRS77 AHRS, new No.1 Garmin GA-35W GPS antenna, new Garmin GDC74A ADC, new GTP 59 GPS Temp Probe, and new No.2 Garmin 430W GPS.

Installed new Garmin GNS430WAAS mounted in the instrument panel, in the No.2 position, weighing 6.2 lbs., in accordance with Garmin 400W Series Installation Manual pn.190-00356-02, Rev. H, dated February 2013, and power by a new 5 amp circuit breaker, located on the pilot's circuit breaker sub panel, labeled "GNS430/2." Installed a new Garmin G-35W antenna, ustilizing the previously installed antenna's doubler, located on top of the aircraft, and interfaced to the following equipment: a new Garmin GDU620 Display unit, new Garmin GRS77 AHRS, new No. 2 Garmin GA-35W GPS antenna, new Garmin GDC74A ADC, new GTP 59 GPS Temp Probe, and new No.1 Garmin 430W GPS.

All work performed IAW AC 43.13-1B, Chapter 11, Section 4, Paragraph 11-48, 11-49, 11-50 (A, B), 11-51 and Section 10, Paragraph 11-137. AC43.13-2B Chapter 1, paragraph 1, 9, 12; Chapter 2, Paragraph 21, 22, 23 (A, B, C, F), Paragraph 27: and Chapter 3, Paragraph 36 (A,B). Also used as a reference in the installation of the IFR GPS Certified Unit was AC 20-138A, Paragraph 23.

Bus load computed not to exceed 80% of total alternator output.

A ground evaluation of the aircraft systems has been accomplished, and no interference with the normal operation of other equipment by the GPS installation was noted.

Owner supplied with Garmin 400W Series "Instructions for Continued Airworthiness," pn.190-00356, Rev. C, dated February 28, 2013. Owner supplied with Garmin GNS 400W Series FAA Approved Airplane Flight Manual Supplement pn.190-00356-03, Rev. C, dated March 28, 2013.

Aircraft Weight & Balance and Equipment list was updated to reflect this alteration.

----------Nothing Follows----------

☐ Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make GRUMMAN	Model G-73
	Serial No. J56	Nationality and Registration Mark N7356 (USA)
2. Owner	Name *(As shown on registration certificate)* MAYES JOHN	Address *(As shown on registration certificate)* 2414 EXPOSITION BLVD STE 280 AUSTIN TX 78703-2261

3. For FAA Use Only

The data identified herein complies with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by person authorized in FAR 43.7.

12-5-2012
Date

FAA Inspector - Michael P. Garvin

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.
CENTRAL TEXAS AVIONICS, INC. 217 CORSAIR DRIVE GEORGETOWN, TX 78628	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	C84R586N, Radio, Limited Airframe, Limited Instrument

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
11/20/2012	Robert Wampler

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 [X] APPROVED [ ] REJECTED

BY							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
12-12-12	C84R586N	Matt Gordon

FAA Form 337 (12-88)

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.)

Performed a functional test of the Garmin GTN 750 GPS/SBAS Navigation System and found all functions to be satisfactory. Performed a flight test of the Garmin GTN 750 GPS/SBAS Navigation System on 11/20/2012 and determined the system accuracy to be acceptable for IFR Operation Enroute, Terminal, Non-precision Approach operations ("GPS", "or GPS", "RNAV", "LNAV", and "LP" approaches), and Approach procedures with Vertical Guidance ("LNAV/VNAV" and "LPV") as per AC20-138C.

Removed the "GPS NOT APPROVED FOR IFR NAVIGATION" placard from the pilot's instrument panel.

The Garmin GTN 750 GPS/SBAS Navigation System FAA Approved Flight Manual Supplement dated 12-5-2012, is required for this approval and must be installed in the FAA Approved Airplane Flight Manual and must be available to the flight crew during all IFR operations.

Reference FAA Form 337 dated 10/5/2012 for further installation details and initial VFR navigation approval.

********** END **********

☐ Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make GRUMMAN	Model G-73
	Serial No. J56	Nationality and Registration Mark N7356 (USA)
2. Owner	Name *(As shown on registration certificate)* MAYES JOHN	Address *(As shown on registration certificate)* 2414 EXPOSITION BLVD STE 280 AUSTIN TX 78703-2261

3. For FAA Use Only

The data identified herein complies with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by person authorized in FAR 43.7.

12-05-2012
Date

FAA Inspector - Michael P. Garvin

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.
MATT GORDON 217 CORSAIR DRIVE GEORGETOWN, TX 78628	X	U.S. Certificated Mechanic	A & P - 2147850
		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
11-27-2012	Matt Gordon

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							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization	
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
12-17-2012	IA - 454319307	Scott Richter

FAA Form 337 (12-88)

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.)

AVIONICS MODIFICATION

Installed the following equipment:

PART NO.	PART NAME	STATION	MANUAL
EGT-701	Dual Engine Temp. Indicators	98.0	103, Rev. E, 1/20/09
M-111	Exhaust Gas Temp. Probes	175.0	103, Rev. E, 1/20/09
M-113	Spark Plug Gasket CHT Probes	174.25	103, Rev. E, 1/20/09

Installed dual J.P. Instruments EGT-701 Engine Temperature Indicators and Monitoring Systems in accordance with the current manufacturer's installation manual and specifications.

The original (factory) cylinder head temperature (CHT) indicator remains installed in the cockpit and the J.P. Instruments EGT-701 Engine Temperature Indicators and Monitoring Systems are utilized as supplemental data.

The J.P. Instruments EGT-701 Engine Temperature Indicators and Probes (EGT &CHT) are FAA TSO approved under TSO-C43B - Temperature Indicators.

The mechanical installation, wiring, cable bundling and routing, and connections to existing aircraft systems was accomplished in accordance with AC43.13-2A Chapter 2 and Chapter 11.

Aircraft hardware was installed in accordance with AC 43.13-1B, Chapter 7, Sections 1 through 7.

Circuit protection and wire was installed in accordance with AC 43.13-1B, Chapter 11, Sections 4 through 20.

An electrical load analysis was performed in accordance with AC43.13-1B, Chapter 11, Section 3.

The aircraft Weight and Balance Data and Equipment List were revised to reflect these changes and placed in the Pilot's Operating Handbook and FAA Approved Flight Manual.

The J.P. Instruments EGT-701 Engine Temperature Indicator Airplane Flight Manual Supplement with an FAA approved date of 12-05-2012 was placed in the FAA Approved Airplane Flight Manual and must be available to the flight crew during all flight operations.

Reference attached sheets for the Instructions for Continued Airworthiness (ICA) for the J.P. Instruments EGT-701 Engine Temperature Indicator, document number: J56CTAEGT701.

**********END**********

☐ Additional Sheets Are Attached

Matt Gordon
217 Corsair Drive
Georgetown, TX 78628

Document Number: J56CTAEGT701

Date: 11/20/2012

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
For:

Make: Grumman
Model: G-73
S/N: J56
Registration: N7356
With A: J.P. Instruments EGT-701 Engine Temperature Indicators and Monitoring Systems

ACCEPTED

Michael P. Garvin

Date: 12-05-12
Principal Airworthiness Inspector
SAT-FSDO

1. Introduction: This major alteration to this aircraft obligates the aircraft operator to include the following maintenance information provided by this documentation in the owner/operator's Aircraft Maintenance Manual and the owner/operator's aircraft Scheduled Maintenance Program.

2. Descriptions: The **J.P. Instruments EGT-701** temperature indicator displays temperature digitally and in analog format. The EGT as displayed is based on probes located near the exhaust outlet for each cylinder. The analog display is an electronic bar graph (vertical columns, one per cylinder) of EGT temperatures presented as a percentage of 1650° F. Below the vertical columns the specific value for EGT and CHT are displayed digitally. The dot over the column indicates which cylinder's digital information is presently displayed. The missing bars at the base of the columns indicate the hottest and coldest Cylinder Head temperature trend. During Lean Find mode the leanest cylinder is displayed along with the fuel flow (optional) at that time. Depressing the LF and STEP button simultaneously brings up the adjustable scan rate function, OAT in ° C or ° F. Depress the LF button will change the value of the rate or OAT in ° C or ° F. Exit by Depressing STEP. If the EGT-701 buttons are not depressed for 10 minutes the system will start scanning automatically. Depressing the STEP button will stop the automatic scan and index through all the functions available. During constant power cruise, if the LF button is depressed for five seconds the bar graph will level at mid scale. The leveled bars represent the peaks of each column. Each bar represents 10 ° F and now acts as an EGT & TIT trend monitor, quickly showing an increase or decrease in temperature. Depress again to return to normal; nothing else is affected. With the fuel flow option there is a three position toggle switch. The positions are: 1) **EGT**, digital and bar graph display of temperatures, 2) **FF**, digital display of GPH, REM and USED Fuel. Temperature bar graph remains. 3) **Both**, cycles through everything installed. The data port output sends RS232 serial data every 6-sec.

Options of Fuel Flow, OAT, IAT (induction air temp.), OIL, BAT (voltage) and are displayed digitally with headlines after the number, as "230 OIL" or "14 GPH". A large value (50 +) of "CLD" indicates shock cooling usually associated with rapid descents at low power. Optional functions not installed will not display. The same acronyms are incorporated in the TFT flat panel display

3. Control and Operation Information: Reference the J.P. Instruments EDM-700/711/800 Pilot's Guide (Revision W, Dated March 2009).

4. Servicing Information: The J.P. Instruments EGT-701 Engine Temperature Indicators and Monitoring Systems are on condition and there is no periodic, preventive, or scheduled maintenance required for continued operation of these systems.

5. Maintenance Instructions: The scheduled maintenance tasks required by this modification are to be added to the aircraft owner/operator appropriated airplane maintenance program as follows:

   Perform on at least an annual basis an inspection of the J.P. Instruments EGT-701 Engine Temperature Indicators and EGT/CHT Probes, their mounting, associated wiring and clamping, bonding and shielding, and related aircraft structure for integrity, security, wear, chaffing, and etc.. Special attention should be given to the aircraft primary structure with regards to fatigue and stress cracking, corrosion and etc...

6. Troubleshooting Information: Reference the J.P. Instruments EGT-701 Installation Manual (Manual Number 103, Revision E, Dated January 20, 2009) Section 29 – Troubleshooting.

7. Removal and Replacement Information: Reference the J.P. Instruments EGT-701 Installation Manual (Manual Number 103, Revision E, Dated January 20, 2009).

   Should it become necessary to remove the J.P. Instruments EGT-701 Engine Temperature Indicators, secure the associated connectors and wiring, collar the applicable circuit breaker, placard the aircraft that the unit(s) has (have) been removed, revise the Weight and Balance Data and the Equipment List and make a logbook entry that the unit(s) has (have) been removed for service (refer to 91.213 of title 14 of the code of Federal Regulations and/or the aircraft's MEL).

8. Diagrams: The J.P. Instruments EGT-701 Engine Temperature Indicators are located below the instrument panel at station 98.0. The J.P. Instruments M-111 Exhaust Gas Temperature (EGT) Probes are located at each engine exhaust pipe at station 175.0. The J.P. Instruments M-113Spark Plug Gasket Cylinder Head Temperature (CHT) Probes are located at each engine at station 174.25.

9. Special Inspection Requirements: Special Inspections Requirements are not applicable.

Matt Gordon
217 Corsair Drive
Georgetown, TX 78628

10. Application of Protective Treatment: Applications of protective treatments are not applicable.

11. Data: Installation requirements may be found within the accepted industry practices contained within AC43.13-1B Chapters 11 and 12 and AC43.13-2A Chapters 1 and 13.

12. List of Special Tools: Special tools are not required.

13. For Commuter Category Aircraft: Not applicable, this aircraft is not a commuter category aircraft.

14. Recommended Overhaul Periods: There are no additional overhaul time limitations.

15. Airworthiness Limitation Section: There are no additional airworthiness limitations.

16. Revision: The Instructions for Continued Airworthiness Checklist (ICA) may be revised by submitting a letter to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date ----) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (dated---)". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision date of the FAA Form 337.

17. Assistance: Not applicable.

18. Implementation and Record Keeping: For major alterations performed in accordance with FAA field approval policy, the owner/operator operating under Part 91 is responsible for ensuring that the ICA is made part of the applicable sections of the 91.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 11/27/2012) along with a statement that the ICA is now a part of the aircraft's inspection/maintenance requirement.

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make GRUMMAN	Model G-73
	Serial No. J56	Nationality and Registration Mark N7356 (USA)
2. Owner	Name *(As shown on registration certificate)* MAYES JOHN	Address *(As shown on registration certificate)* 2414 EXPOSITION BLVD STE 280 AUSTIN TX 78703-2261

3. For FAA Use Only

The data identified herein complies with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by person authorized in FAR 43.7.

12-05-2012
Date

FAA Inspector - Michael P. Garvin

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.
MATT GORDON 217 CORSAIR DRIVE GEORGETOWN, TX 78628	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	A & P - 2147850

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
11-27-2012	Matt Gordon

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							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization	
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
12-17-2012	IA - 454319307	Scott Richter

FAA Form 337 (12-88)

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.)

AVIONICS MODIFICATION

Installed the following equipment:

PART NO.	PART NAME	STATION	MANUAL
FS-450	Fuel Flow Indicator	98.0	400, Rev. A, 6/15/09
FT4-8AEXS-LEA-2069	Dual Fuel Flow Transducers	191.75	503, Rev. B, 3/14/97

Installed a J.P. Instruments FS-450 Fuel Flow Indicating System with dual Fuel Flow Transducers in accordance with the current manufacturer's installation manual and specifications.

The original (factory) fuel pressure indicator remains installed in the cockpit and the J.P. Instruments FS-450 Fuel Flow Indicating System is utilized as supplemental data.

The J.P. Instruments FS-450 Fuel Flow Indicator is FAA TSO approved under TSO-C44B - Fuel Flowmeters.

The mechanical installation, wiring, cable bundling and routing, and connections to existing aircraft systems was accomplished in accordance with AC43.13-1B Chapter 8 Section 2 and AC43.13-2A Chapter 2 and Chapter 11.

Aircraft hardware was installed in accordance with AC 43.13-1B, Chapter 7, Sections 1 through 7.

Circuit protection and wire was installed in accordance with AC 43.13-1B, Chapter 11, Sections 4 through 20.

An electrical load analysis was performed in accordance with AC43.13-1B, Chapter 11, Section 3.

The aircraft Weight and Balance Data and Equipment List were revised to reflect these changes and placed in the Pilot's Operating Handbook and FAA Approved Flight Manual.

The J.P. Instruments FS-450 Fuel Flow Indicator Airplane Flight Manual Supplement with an FAA approved date of 12/5/2012 was placed in the FAA Approved Airplane Flight Manual and must be available to the flight crew during all flight operations.

Reference attached sheets for the Instructions for Continued Airworthiness (ICA) for the J.P. Instruments FS-450 Fuel Flow Indicating System, document number: J56CTAFS450.

**********END**********

☐ Additional Sheets Are Attached

Matt Gordon
217 Corsair Drive
Georgetown, TX 78628

Document Number: J56CTAEGT701

Date: 11/20/2012

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
For:

Make: Grumman
Model: G-73
S/N: J56
Registration: N7356
With A: J.P. Instruments FS-450 Fuel Flow Indicating System

ACCEPTED

Michael P. Garvin

Date: 12-5-12
Principal Airworthiness Inspector
SAT-FSDO

1. Introduction: This major alteration to this aircraft obligates the aircraft operator to include the following maintenance information provided by this documentation in the owner/operator's Aircraft Maintenance Manual and the owner/operator's aircraft Scheduled Maintenance Program.

2. Description: The **J.P. Instruments FS-450** Fuel Scan uses a small turbine transducer that measures the fuel flowing into the engine. Higher fuel flow causes the transducer turbine to rotate faster which generates a faster pulse rate. Prior to engine start you inform the FS-450 Fuel Scan of the known quantity of fuel aboard, and it will keep track of all fuel used.

3. Control and Operation Information: Reference the J.P. Instruments Fuel Scan FS-450M Twin Pilot's Guide (Revision NC, Dated November 2003).

4. Servicing Information: The J.P. Instruments FS-450 Fuel Flow System is on condition and there is no periodic, preventive, or scheduled maintenance required for continued operation of this system.

5. Maintenance Instructions: The scheduled maintenance tasks required by this modification are to be added to the aircraft owner/operator appropriated airplane maintenance program as follows:

   Perform on at least an annual basis an inspection of the J.P. Instruments FS-450 Fuel Flow Indicator and Fuel Flow Transducers, their mounting, associated wiring and clamping, bonding and shielding, and related aircraft structure for integrity, security, wear, chaffing, and etc.. Special attention should be given to the aircraft primary structure with regards to fatigue and stress cracking, corrosion and etc...

6. Troubleshooting Information: Reference the J.P. Instruments FS-450 Fuel Flow Installation Manual (Manual Number 400, Revision A, Dated June 15, 2009).

7. Removal and Replacement Information: Reference the J.P. Instruments FS-450 Fuel Flow Installation Manual (Manual Number 400, Revision A, Dated June 15, 2009).

   Should it become necessary to remove the J.P. Instruments FS-450 Fuel Flow System, secure the associated connectors and wiring, collar the applicable circuit breaker, placard the aircraft that the unit(s) has (have) been removed, revise the Weight and Balance Data and the Equipment List and make a logbook entry that the unit(s) has (have) been removed for service (refer to 91.213 of title 14 of the code of Federal Regulations and/or the aircraft's MEL).

8. Diagrams: The J.P. Instruments FS-450 Fuel Flow Indicator is located below the instrument panel at station 98.0. The J.P. Instruments Fuel Flow Transducers are located at each engine at station 191.75.

9. Special Inspection Requirements: Special Inspections Requirements are not applicable.

10. Application of Protective Treatment: Applications of protective treatments are not applicable.

11. Data: Installation requirements may be found within the accepted industry practices contained within AC43.13-1B Chapters 11 and 12 and AC43.13-2A Chapters 1 and 13.

12. List of Special Tools: Special tools are not required.

13. For Commuter Category Aircraft: Not applicable, this aircraft is not a commuter category aircraft.

14. Recommended Overhaul Periods: There are no additional overhaul time limitations.

15. Airworthiness Limitation Section: There are no additional airworthiness limitations.

16. Revision: The Instructions for Continued Airworthiness Checklist (ICA) may be revised by submitting a letter to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date ----) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (dated---)". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision date of the FAA Form 337.

17. Assistance: Not applicable.

Matt Gordon
217 Corsair Drive
Georgetown, TX 78628

Document Number: J56CTAEGT701

Date: 11/20/2012

18. Implementation and Record Keeping: For major alterations performed in accordance with FAA field approval policy, the owner/operator operating under Part 91 is responsible for ensuring that the ICA is made part of the applicable sections of the 91.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 11/27/2012) along with a statement that the ICA is now a part of the aircraft's inspection/maintenance requirement.

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make GRUMMAN	Model G-73
	Serial No. J56	Nationality and Registration Mark N7356 (USA)
2. Owner	Name *(As shown on registration certificate)* MAYES JOHN	Address *(As shown on registration certificate)* 2414 EXPOSITION BLVD STE 280 AUSTIN TX 78703-2261

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.
CENTRAL TEXAS AVIONICS, INC. 217 CORSAIR DRIVE GEORGETOWN, TX 78628		U.S. Certificated Mechanic	C84R586N, Radio, Limited Airframe, Limited Instrument
		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	Signature of Authorized Individual
10/9/2012	Robert Wampler

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 [X] APPROVED ☐ REJECTED

BY							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
10/9/2012	C84R586N	Matt Gordon

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.)

AVIONICS MODIFICATION

Installed a Century Flight Systems Model AK976 Integrated Flight Control System (Century 2000 Autopilot) with Yaw Damper System in accordance with Century Flight Systems STC # SA3483SW-D.

The Century Flight Systems Model AK976 Integrated Flight Control System (Century 2000 Autopilot) FAA Approved Airplane Flight Manual Supplement (Part # 68S1045, Dated 11/9/89) was placed in the FAA Approved Airplane Flight Manual.

The Century Flight Systems Century 2000 Autopilot Flight System Pilot's Operating Manual (Part # 68S1035, Dated 4/9/99) was placed in the aircraft.

The Century Flight Systems Model AK976 Integrated Flight Control System (Century 2000 Autopilot), the Century Altitude Preselect (1D960), and the Century Attitude Indicator (52D67ME) Instructions for Continued Airworthiness (Part # 68S1140, Revision G, Dated 2/16/05) was placed with the aircraft maintenance records.

The cable bundling, routing, and connections to existing aircraft systems, where specific installation instructions are not provided in the STC data, was accomplished in accordance with AC43.13-2A Chapters 1 through 3 and 11.

Aircraft hardware, not supplied or specified by STC data, was installed in accordance with AC 43.13-1B, Chapter 7, Sections 1 through 7.

Ground checks for the Century 2000 Autopilot System, the Century Yaw Damper System, and the Century Altitude Preselect System were performed in accordance with the FAA/DAS Approved Century Flight Systems Century 2000 General Installation Bulletin (Bulletin # 2000, Revision 22, Dated 4/4/08) Sections III, IV, and VI respectively.

The aircraft Weight and Balance Data and Equipment List were revised to reflect these changes and placed in the FAA Approved Airplane Flight Manual.

**********END**********

☐ Additional Sheets Are Attached

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

CENTURY FLIGHT SYSTEMS, INC. STC ISSUED ONLY FOR THIS SPECIFIC AIRCRAFT	
MFR.	GRUMMAN
MODEL	G-73
ACFT.S/N	J56
REG. NO.	N7356
CFS S/N	2K-2188
ORD. NO.	78467
ONLY CORPORATE SEALED STC COPY IS VALID	

Number SA3483SW-D

This certificate, issued to Century Flight Systems Inc.
F.M. 1195
P.O. Box 610
Mineral Wells, Tx 76067

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 4a *of the* Civil Air *Regulations.*

Original Product — Type Certificate Number: A-783
Make: Gulfstream American
Model: G-73

Description of Type Design Change:
Installation of Century Automatic Flight System Model AK976 consisting of a Century 2000 Autopilot with 1C753 Yaw Damper System per Bulletin No. 2032 Revision (2) dated 10-2-89 and Master Drawing List No. 87A1186 Revision (B) dated 10-2-89 and/or later FAA/DAS Approved Revision.

Limitations and Conditions:
FAA/DAS Approved Airplane Flight Manual Supplement, P/N 68S1045 dated 11-9-89, also Century 2000 Autopilot Operator's Manual, P/N 68S1035 dated 7-15-86 and/or later FAA/DAS Approved Revision.
Compatibility of this modification with other previously approved modifications must be determined by the installer.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Administration.

Date of application: 10-2-89
Date of issuance: 11-10-89
Date reissued:
Date amended:

By direction of the Administrator

(Signature)

William J. Thomas
Staff Coordinator DAS 7SW

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

CENTURY®
Flight Systems, Inc.

MUNICIPAL AIRPORT • PO BOX 610
MINERAL WELLS, TEXAS 76068
940-325-2517 • FAX 940-325-2546
century@centuryflight.com

SEPTEMBER 14, 2012

CENTRAL TEXAS AVIONICS INC

217 CORSAIR DRIVE

GEORGETOWN, TX 78628

CENTRAL TEXAS AVIONICS INC MAY HEREBY USE STC NO. **SA3483SW-D** TO MODIFY **GRUMMAN G-73** SERIAL NO. **J56** TAIL NO. **N7356** AND KIT SERIAL NO. **2K-2188**

Jerry N. Bogle

JERRY N. BOGLE

THIS LETTER IS BEING FURNISHED WITH YOUR ORDER AND STC CERTIFICATE AS REQUIRED BY FAA NOTICE N8110.69 DATED 06-30-97 TO COMPLY WITH PUBLIC LAW 104-264, SECTION 403.

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make GRUMMAN	Model G-73
	Serial No. J56	Nationality and Registration Mark N7356 (USA)
2. Owner	Name *(As shown on registration certificate)* MAYES JOHN	Address *(As shown on registration certificate)* 2414 EXPOSITION BLVD STE 280 AUSTIN TX 78703-2261

3. For FAA Use Only

The data identified herein complies with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by person authorized in FAR 43.7.

10/31/2012
Date

FAA Inspector - Michael P. Garvin

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.
CENTRAL TEXAS AVIONICS, INC. 217 CORSAIR DRIVE GEORGETOWN, TX 78628	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	C84R586N, Radio, Limited Airframe, Limited Instrument

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
10/9/2012	Robert Wampler

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 [X] APPROVED [ ] REJECTED

BY							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
10-31-12	C84R586N	Matt Gordon

FAA Form 337 (12-88)

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.)

AVIONICS MODIFICATION

Removed the following equipment:

PART NO.	PART NAME	STATION
331A-3G	Dual Course Indicators	90.0
332E-4	Remote Directional Gyro	469.0
332E-4	Remote Directional Gyro	476.0
323A-2G	Dual Flux Detectors	498.0
328A-3G	Dual Slaving Accessories	42.0
510-8D	Attitude Indicator	91.0
MD-4A	Turn & Slip Indicator	92.0
9551	Turn & Slip Indicator	92.0
8-204	Dual Vertical Speed Indicators	92.0
339H-4	Radar Altimeter Indicator	93.0

Installed the following equipment:

PART NO.	PART NAME	STATION	MANUAL
910-00001-004	Primary Flight Display	92.0	900-00003-001, Rev. AG, 8/12
910-00001-001	Multi-Function Display	92.0	900-00003-001, Rev. AG, 8/12
910-00003-001	Remote Sensor Module	376.0	900-00003-001, Rev. AG, 8/12
910-00003-002	Remote Sensor Module	376.0	900-00003-001, Rev. AG, 8/12
910-00004-101	Analog Converter Unit	89.0	900-00003-001, Rev. AG, 8/12
910-00005-004	Dual Configuration Modules	81.5	900-00003-001, Rev. AG, 8/12

Installed an Aspen Avionics EFD 1000 C3 Pro Primary Flight Display (PFD) with Level B software and an EFD 1000 Multi-Function Display (MFD) Systems in accordance with the current manufacturer's installation manual and specifications and FAA Advisory Circular 25-11A - Electronic Flight Deck Displays.

The Aspen Avionics EFD 1000 C3 Pro Primary Flight Display (PFD) and EFD 1000 Multi-Function Display (MFD) Systems are interfaced to the Garmin GTN 750 GPS/SBAS Navigation System, to the Bendix/King KX 165 NAV/COM System to the Century 2000 Automatic Flight Control System, to the Garmin GTS 800 Traffic Advisory System, to the Collins ALT 50A Radar Altimeter, and to the Garmin GMA 35 Remote Audio Panel.

The existing pilot's attitude, altimeter, and airspeed indicators were repositioned in the pilot's instrument panel as standby indicators in accordance with the Aspen Avionics, Inc. EFD 1000 Installation Manual (Document # 900-00003-001, Revision AG, Dated August 2012) Sections 4.5.1 and 4.5.2.

The Aspen Avionics EFD 1000 C3 Pro Primary Flight Display and the EFD 1000 Multi-Function Display (MFD) Systems were configured, calibrated, and tested in accordance with the Aspen Avionics, Inc. EFD 1000 Installation Manual (Document # 900-00003-001, Revision AG, Dated August 2012) Chapter 10.

☑ Additional Sheets Are Attached

An Installation Final Check Sheet was performed and completed in accordance with the Aspen Avionics, Inc. EFD 1000 Installation Manual (Document # 900-00003-001, Revision AG, Dated August 2012) Appendix B.

A pitot/static system leak check was performed in accordance with the Aspen Avionics, Inc. EFD 1000 Installation Manual (Document # 900-00003-001, Revision AG, Dated August 2012) Chapter 6.8.8 and FAR Part 43 Appendix E.

The mechanical installation, wiring, cable bundling and routing, and connections to existing aircraft systems was accomplished in accordance with AC43.13-2A Chapters 1 through 3 and 11.

Aircraft hardware was installed in accordance with AC 43.13-1B, Chapter 7, Sections 1 through 7.

Circuit protection and wire, not specified by the manufacturer, was installed in accordance with AC 43.13-1B, Chapter 11, Sections 4 through 20.

An electrical load analysis was performed in accordance with AC43.13-1B, Chapter 11, Section 3.

The aircraft Weight and Balance Data and Equipment List were revised to reflect these changes and placed in the FAA Approved Airplane Flight Manual.

The Aspen Avionics, Inc. EFD 1000 C3 Pro Primary Flight Display System with the optional EFD 1000 Multi-Function Display Airplane Flight Manual Supplement with an FAA approved date of 10/31/2012 was placed in the FAA Approved Airplane Flight Manual and must be available to the flight crew during all flight operations.

Reference attached sheets for the Instructions for Continued Airworthiness (ICA) for the Aspen Avionics EFD 1000 C3 Pro Primary Flight Display (PFD) and EFD 1000 Multi-Function Display (MFD) Systems, document number: J56CTAEFD1000.

**********END**********

Central Texas Avionics, Inc.
217 Corsair Drive
Georgetown, TX 78628
FAA Repair Station # C84R586N

ICA Document #: J56CTAEFD1000

Date: 10/9/2012

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
For:

Make: Grumman
Model: G-73
S/N: J56
Registration: N7356
With A: Aspen Avionics EFD 1000 Primary Flight Display (PFD) and EFD 1000Multi-Function Display (MFD)

ACCEPTED

Michael P. Garvin

Date: 10/31/2012
Principal Airworthiness Inspector
SAT-FSDO

1. Introduction: This major alteration to this aircraft obligates the aircraft operator to include the following maintenance information provided by this documentation in the owner/operator's Aircraft Maintenance Manual and the owner/operator's aircraft Scheduled Maintenance Program.

2. Description: The **Aspen Avionics EFD 1000 Systems** are multi-purpose displays. The EFD 1000 contains an internal Air Data and Heading Reference System (ADAHRS) that is used to provide attitude, heading and air data for the display. The EFD 1000 comes standard with an internal battery to provide a nominal 30 minute operation in the event of power loss. These batteries are not designed to provide 30 minute operation under all foreseeable operating conditions, such as extreme cold temperatures where battery operation is not assured. An optional Emergency Backup Battery (EBB) is available that will provide at least 30 minutes of operation under all foreseeable operating conditions. Typical EBB endurance at 25 deg C will exceed two hours when the battery is fully charged. Additional equipment is normally installed in support of the displays, including the Remote Sensor Module (RSM), Configuration Module (CM), optional Emergency Backup Battery (as noted above) and optional Analog Converter Unit (ACU). Several external sensors can optionally be connected to the displays, including GPS systems, the Aspen EWR50 XM weather receiver, the Aspen CG100 Gateway, WX-500 Stormscope, GTX 330 and certain other ARINC 735A protocol TAS and TCAS I systems.

   The EFD 1000 system can be configured as a PFD or MFD. In the PFD configuration, the EFD 1000 provides display of attitude, airspeed, altitude, direction of flight, vertical speed, turn rate, and turn quality. The system can provide display of navigation information, pilot-selectable indices ("bugs"), and annunciations to increase situational awareness and enhance flight safety. The "Pro" configuration is available in software version 2.1 and later. The Pro System can display WX-500 data, XM datalink weather products and traffic information from ARINC 735 compatible traffic systems. The EFD 1000 can also be utilized in a multi-function display configuration with reversion capability to a Primary Flight Display. The MFD display can (if installed) present terrain, traffic, XM weather, and WX-500 Stormscope data to the flight crew.

When interfaced with a compatible autopilot, the EFD 1000 system provides heading and course datum information to the autopilot, which enables the autopilot to follow the Course and Heading values set by the pilot on the EFD 1000 PFD.

3. Control and Operation Information: The EFD 1000 PFD and MFD Systems are controlled by switches marked "PFD" and "MFD". The system is ready to be operated when the initialization screen disappears, and the EFD 1000 PFD attitude and heading display is shown.

   Reference the Aspen Avionics EFD 1000 C3 Pro PFD Pilot's Guide (Manual Number 091-00019-001, Revision B or later revision).

   Reference the Aspen Avionics EFD 1000 MFD Pilot's Guide (Manual Number 091-00006-001, Revision B or later revision).

4. Servicing Information: The PFD, MFD, Remote Sensor Modules, ACU2, and Configuration Modules have no field serviceable components. Return defective units to Aspen Avionics or an authorized dealer. No equipment is required for servicing.

5. Maintenance Instructions: The scheduled maintenance tasks required by this modification are to be added to the aircraft owner/operator appropriated airplane maintenance program as follows:

   All maintenance is considered "ON CONDITION" unless otherwise noted in this ICA. The EFD Internal battery must be replaced in the interval identified below. There are no other storage limitations.

   EFD Internal Battery
   The internal back-up battery in the EFD must be tested once every 12 months to ensure it operates properly. Each EFD with an internal battery must have the battery replaced every 3 years or 800 hours, or if it fails the following operational test:

   This test must be run at room temperature approximately 25° C.
   - Turn on the EFD1000 or EFD500
   - Press MENU Key
   - Select POWER SETTINGS page from the Main Menu
   - Press the BATTERY line select key

   BAT LEVEL IN --.-- will be displayed for a short period of time as battery capacity is being measured. This could take up to 10 minutes if the ambient temperature is below 0° C.

Once the capacity is measured ON BAT XX% REM will be displayed.

The "ON BAT" indication must read a minimum of 80% to continue. If the battery capacity is below 80% then the battery should be charged by returning the EFD to aircraft power. The battery will charge as long as the EFD is turned on and aircraft power is supplied. With the battery displaying greater than 80% charge set a timer for 30 minutes. After the 30 minute time has elapsed the EFD must still be operating on battery. If the internal battery will not supply the minimum 30 minutes operating time or fails to charge above 80%, replace the battery and return the failed battery to Aspen Avionics. Switch the EFD back to aircraft power and recharge the internal battery to 80% or greater prior to release to service. Contact customer service at Aspen Avionics or an authorized Aspen Avionics Dealer for a replacement battery.

EFD Display Backlight
The EFD display backlight has a median expected life of 50,000 operating hours. Replacement of the lamp is on-condition as it may last longer or shorter than 50,000 hours. It is up to the operator to determine whether the backlighting has become too dim for its intended use.

ACU2, RSM, CM
The ACU2, RSM's, and the Configuration Modules require no periodic maintenance or calibration.

Perform on at least an annual basis an inspection of the EFD 1000 PFD, MFD, and RSM units and mounting, associated connectors and wiring, pitot and static hoses, bonding and shielding, and related aircraft structure for integrity, security, wear, chaffing, and etc.. Special attention should be given to the aircraft primary structure with regards to fatigue and stress cracking, corrosion and etc...

EFD (PFD and MFD) Inspection
The EFD's should be inspected for damage and their operation should be verified. The EFD wiring, pneumatic tubing, and quick disconnects should be checked for integrity, damage, chafing, or excessive wear. The EFD braided bonding strap should be checked for proper termination at the EFD and aircraft grounding point to maintain HIRF and Lightning compliance. Verify ≤ 3 milliohms from EFD ground stud to airframe ground. The installation of the EFD should be inspected for corrosion on the EFD and the structure it is mounted on. The fasteners should be inspected for tightness and general condition.

ACU2 Inspection
The ACU2 should be inspected for damage and its operation should be verified. ACU2 wiring should be checked for damage, chafing, or excessive wear. Verify the ACU2 chassis bonding from the face of the unit (connector side) to airframe ground is ≤ 3 milliohms to maintain HIRF and Lightning compliance. The installation of the

ACU2 should be inspected for corrosion on the ACU and the structure it is mounted on. The fasteners should be inspected for tightness and general condition.

RSM Inspection
The RSM's should be visually inspected for damage and wear on the lightning strip. RSM wiring should be checked for damage, chafing, or excessive wear. Verify RSM doubler plate bonding is ≤ 3 milliohms to maintain HIRF and Lightning compliance. The RSM installation and doubler should be inspected for corrosion on the RSM, the fuselage skin, and the doubler. The installation should be inspected for cracks in the fuselage, and loose or damaged fasteners.

Configuration Module Inspection
The Configuration Modules should be checked for damage. The Configuration Module wiring should be checked for damage, chafing, or excessive wear.

6. Troubleshooting Information: Reference the Aspen Avionics EFD 1000 and EFD 500 Software Version 2.X Installation Manual (Manual Number 900-00003-001, Revision AG, Dated August 2012 or later revision) Appendix A – Troubleshooting.

7. Removal and Replacement Information: Reference the Aspen Avionics EFD 1000 and EFD 500 Software Version 2.X Installation Manual (Manual Number 900-00003-001, Revision AG, Dated August 2012 or later revision) Section 6 – Mechanical Installation.

EFD Removal
Verify power is off. Carefully insert a flat blade screwdriver into the locking mechanism on the top center of the EFD. While gently prying pull back the top of the EFD and extract from bracket. Remove nut securing braided ground strap to EFD. Remove pitot and static quick connectors by pulling back outer spring loaded locking sleeve while unplugging connectors. To remove 44 pin D-sub connector unscrew both jackscrews fully and pull connector straight back.

EFD Replacement
Verify power is off. Install 44 pin D-sub connector and tighten jackscrews until connector is fully seated. Install pitot and static lines to back of EFD by firmly pressing the fitting until fully seated (pitot and static quick connectors are keyed and cannot be crossed). Gently pull on connector to ensure proper connection. Connect braided bonding strap to EFD with nut. Insert bottom of EFD into bracket and pivot top forward until it locks into place on bracket.

Using Section 10.6 of the Aspen Avionics EFD 1000 and EFD 500 Software Version 2.X Installation Manual (Manual Number 900-00003-001, Revision AG, Dated August 2012 or later revision), verify all system interfaces are functional. Verify proper bonding per Section 10.1.2, perform a system leak test per Section10.6.3, and a sonalert test per Section 10.6.11 (PFD only).

ACU2 Removal
Verify power is off. Remove the ACU by unscrewing the jackscrews of all D-sub connectors. Gently remove the connectors by pulling straight out. Remove the six (6) 6-32 mounting screws securing the ACU to the aircraft and remove unit from aircraft.

ACU/ACU2 Replacement
Verify power is off. Install the ACU in mounting location and install six (6) 6-32 mounting screws through holes in ACU mounting tabs. Tighten to 12 in-lbs. Install all D-sub connectors securing each with the two jackscrews per connector.

Verify proper bonding per Section 10.1.2, then perform the post installation tests in Sections 10.6.6, 10.6.7, 10.6.9, 10.6.10 of the Aspen Avionics EFD 1000 and EFD 500 Software Version 2.X Installation Manual (Manual Number 900-00003-001, Revision AG, Dated August 2012 or later revision).

RSM Removal
Verify power is off. It will be necessary to gain access to the underside of the RSM mounting location in order to unplug the RSM connector. Unscrew RSM electrical connector from inside and undo shield ground wire from ground stud. Remove sealant from around base of the RSM. Remove four (4) 8-32 non-ferrous mounting screws from the RSM and remove the RSM from aircraft taking care to guide the 24 inch "pigtail" connector out through the aircraft skin.

RSM Replacement
Verify power is off. Replace the O-ring on the RSM. Contact Aspen Avionics for replacement O-ring (256-00001-001). Feed circular connector down through the aircraft skin and mount the RSM (vent hole faces aft) with four (4) 8-32 non-ferrous screws. Tighten to 12-15 in-lbs. It is critical that the screws be non-ferrous to prevent the introduction of compass errors. Connect the circular electrical connector and cable tie harness to prevent chaffing and interference. Connect the shield ground wire to ground stud. Seal the base of the RSM using a noncorrosive sealant .

Verify proper bonding per Section 10.1.2, perform RSM Calibration per Section 10.5, perform OAT operation per Section 10.6.4, and check RSM GPS operation per Section 10.6.6 of the Aspen Avionics EFD 1000 and EFD 500 Software Version 2.X Installation Manual (Manual Number 900-00003-001, Revision AG, Dated August 2012 or later revision).

CM Removal
Verify power is off. Cut the two (2) cable ties affixing the CM to the PFD and/or the MFD wiring harness. Unplug the Molex connector by pressing down on the locking tab and gently pulling the connector from the module.

CM Replacement
Verify power is off. Plug the Molex connector into the module until it clicks. Cable tie the module to the PFD and/or the MFD wiring harness.

Perform the Installation Menu Unit Configuration per section 10.4.5 and perform the RSM Calibration per Section 10.5 of the Aspen Avionics EFD 1000 and EFD 500 Software Version 2.X Installation Manual (Manual Number 900-00003-001, Revision AG, Dated August 2012 or later revision).

Should it become necessary to remove the Aspen Avionics EFD 1000 PFD, MFD, or any of the systems components, secure the associated connectors, wiring, and pitot/static hoses, placard the aircraft that the unit(s) has (have) been removed, revise the Weight and Balance Data and the Equipment List and make a logbook entry that the unit(s) has (have) been removed for service (refer to 91.213 of title 14 of the code of Federal Regulations and/or the aircraft's MEL).

8. Diagrams: The Aspen Avionics Configuration Modules are cable tied to the PFD and MFD harnesses directly behind the PFD and MFD units. The Aspen Avionics ACU2 is mounted to a shelf located at the top of the radio stack at fuselage station 89.0.

9. Special Inspection Requirements: Special Inspections Requirements are not applicable.

10. Application of Protective Treatment: Applications of protective treatments are not applicable.

11. Data: Installation requirements may be found within the accepted industry practices contained within AC43.13-1B Chapters 11 and 12 and AC43.13-2A Chapters 1 through 3, 11 and 13.

12. List of Special Tools: No special tools are required for the removal and replacement of any system LRUs. The RSM is very sensitive to local magnetic fields – **use a non-magnetic tipped screw driver when removing and replacing the RSM**. For bonding checks, use a milliohm meter such as an Extech 380460 Portable Precision Milliohm Meter or equivalent.

13. For Commuter Category Aircraft: Not applicable, this aircraft is not a commuter category aircraft.

14. Recommended Overhaul Periods: There are no additional overhaul time limitations.

15. Airworthiness Limitation Section: There are no additional airworthiness limitations.

16. Revision: The Instructions for Continued Airworthiness Checklist (ICA) may be revised by submitting a letter to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date ----) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (dated---)". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision of the FAA Form 337.

17. Assistance: Not applicable.

18. Implementation and Record Keeping: For major alterations performed in accordance with FAA field approval policy, the owner/operator operating under Part 91 is responsible for ensuring that the ICA is made part of the applicable sections of the 91.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 10/9/2012) along with a statement that the ICA is now a part of the aircraft's inspection/maintenance requirement.

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make GRUMMAN	Model G-73
	Serial No. J56	Nationality and Registration Mark N7356 (USA)
2. Owner	Name *(As shown on registration certificate)* MAYES JOHN	Address *(As shown on registration certificate)* 2414 EXPOSITION BLVD STE 280 AUSTIN TX 78703-2261

3. For FAA Use Only

The data identified herein complies with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by person authorized in FAR 43.7.

10/31/2012
Date

FAA Inspector - Michael P. Garvin

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.
CENTRAL TEXAS AVIONICS, INC. 217 CORSAIR DRIVE GEORGETOWN, TX 78628	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	C84R586N, Radio, Limited Airframe, Limited Instrument

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
10/9/2012	Robert Wampler

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 [X] APPROVED [ ] REJECTED

BY							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
10-31-12	C84R586N	Matt Gordon

FAA Form 337 (12-88)

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.)

AVIONICS MODIFICATION

Installed the following equipment:

PART NO.	PART NAME	STATION	MANUAL
GTS 800	Traffic Advisory System Processor	473.0	190-00993-00, Rev. 5, 6/12
GA 58	Traffic Advisory System Antenna	239.0	190-00993-00, Rev. 5, 6/12

Installed a Garmin Model GTS 800 Traffic Advisory System in accordance with the current manufacturer's installation manuals and specifications.

The Garmin GA 58 Traffic Advisory System Antenna was installed in accordance with AC 43.13-2A, Chapter 1 and Chapter 3.

The Garmin GTS 800 Traffic Advisory System (TAS) is interfaced to the Garmin GTN 750 GPS/SBAS Navigation System, the Aspen Avionics MFD 1000 Multi-Function Display (MFD), and to the Garmin GMA 35 Remote Audio Panel.

The mechanical installation, wiring, cable bundling and routing, and connections to existing aircraft systems was accomplished in accordance with AC43.13-2A Chapter 2 and Chapter 11.

Aircraft hardware was installed in accordance with AC 43.13-1B, Chapter 7, Sections 1 through 7.

Circuit protection and wire was installed in accordance with AC 43.13-1B, Chapter 11, Sections 4 through 20.

An electrical load analysis was performed in accordance with AC43.13-1B, Chapter 11, Section 3.

A post-installation checkout was performed in accordance with the Garmin GTS 8XX Installation Manual Part 4 (Manual Number 190-00993-03, Revision 5, Dated June 1, 2012) Section 3.

The aircraft Weight and Balance Data and Equipment List were revised to reflect these changes and placed in the FAA Approved Airplane Flight Manual.

Reference attached sheets for the Instructions for Continued Airworthiness (ICA) for the Garmin GTS 800 Traffic Advisory System, document number: J56CTAGTS800.

**********END**********

☐ Additional Sheets Are Attached

Central Texas Avionics, Inc.
217 Corsair Drive
Georgetown, TX 78628
FAA Repair Station # C84R586N

Document Number: J56CTAGTS800

Date: 10/9/2012

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
For:

Make: Grumman
Model: G-73
S/N: J56
Registration: N7356
With A: Garmin GTS 800 Traffic Advisory System

ACCEPTED

Michael P. Garvin

Date: 10/31/2012
Principal Airworthiness Inspector
SAT-FSDO

1. Introduction: This major alteration to this aircraft obligates the aircraft operator to include the following maintenance information provided by this documentation in the owner/operator's Aircraft Maintenance Manual and the owner/operator's aircraft Scheduled Maintenance Program.

2. Descriptions: The **Garmin GTS 800 Traffic Advisory System (TAS)** is a microprocessor-based Line Replaceable Unit (LRU) that uses active interrogations of Mode C transponders to provide Traffic Advisories to the pilot. When installed with a 1090 MHz ADS-B transmit class of equipment (e.g. GTX 330ES with Extended Squitter, GDL 90, etc.) the GTS 800 will utilize passive surveillance. Note that there is no GTS 800 interface to the ADS-B transmit equipment; however, the ADS-B transmit equipment must be installed in the aircraft in order to allow the GTS 800 to utilize passive surveillance.

   Traffic is displayed on an external MFD via ARINC 429. An aural alert is also provided to inform the crew of a traffic advisory (TA). A top-mounted directional antenna is used to derive bearing of the intruder aircraft, which is displayed with relative altitude to own aircraft. Top antenna transmitted interrogations are directional, reducing the number of transponders that receive the interrogation thus reducing potential garble on the 1090 MHz band.

3. Control and Operation Information: For system description and system limitations of the Garmin GTS 800 Traffic Advisory System see the GTS 8XX Installation Manual (Manual Number 190-00993-00) Part 1. The Garmin GTS 800 Traffic Advisory System does not have a direct pilot interface. Refer to the GTS 8XX Installation Manual (Manual Number 190-00993-05) Part 3, Appendix A for a list of display equipment that can be interfaced to the Garmin GTS 800 Traffic Advisory System. Pilot's Guide information published for those displays will provide operating information. For system checkout and system self-test information of the Garmin GTS 800 Traffic Advisory System see the GTS 8XX Installation Manual (Manual Number 190-00993-03) Part 4, Section 3.

4. Servicing Information: The Garmin GTS 800 Traffic Advisory System is on condition and there is no periodic, preventive, or scheduled maintenance required for continued operation of this system.

5. Maintenance Instructions: The scheduled maintenance tasks required by this modification are to be added to the aircraft owner/operator appropriated airplane maintenance program as follows:

   The Garmin GTS 800 Traffic Advisory System is designed to detect internal failures. A thorough self-test is executed automatically upon application of power to the units, and built-in tests (BIT) are continuously executed. Detected errors are indicated on the cockpit MFD used to display traffic information from the GTS 800. Detected errors are displayed as failure annunciations.

   Operation of the GTS 800 Traffic Advisory System is not permitted unless the inspections described in this section have been completed within the time intervals prescribed in Table 1 below. All antennas connected to the GTN 750 System should be maintained in accordance with the appropriate inspection data for the antenna installation.

Table 1 – Maintenance Intervals

Item	Description/Procedure	Interval
Equipment Removal & Replacement	Removal and replacement of: GTS 800 TAS Unit GA 58 Traffic Antenna (top-mounted) Removal and replacement instruction are contained in Section 7 of this document and in the GTS 8XX Installation Manual (Manual Number 190-00993-03) Part 4, Section 4.	**On Condition**
Equipment Visual Check	Conduct a visual inspection of the GTS 800 traffic unit and its wire harness to ensure continued installation integrity. 1. Inspect the GTS 800 unit for security of attachment. 2. Inspect condition of wiring, routing, and attachment/clamping.	**24 Calendar Months**

Antenna Visual Inspection	Conduct a visual inspection of the GA 58 antenna for proper sealing and attachment. In the event attachment is not secure, re-attach antenna and complete the Electrical Bonding Test *[see below for instructions].* In the event the antenna seal shows signs of damage or decomposition, complete the Electrical Bonding Test *[see below for instructions]* and re-seal antenna.	**24 Calendar Months**
Antenna Visual Inspection – Suspected lightning strike	In the event of a suspected or actual lightning strike to the aircraft, the GA 58 Antenna and its associated installation shall be inspected. If the GA 58 Antenna was struck by lightning then the antenna and the surrounding installation shall be inspected to ensure that there is no structural damage around the areas where lightning may have attached. At the antenna end ensure there is no damage to the connectors on the antenna and on the coaxial cable. Ensure that the coaxial cable connectors are securely attached to the antenna connectors. Execute the system checkout procedure identified in the GTS 8XX Installation Manual (Manual Number 190-00993-03) Part 4, Section 3, to ensure the system is operating correctly.	**Suspected or actual lightning strike**

Electrical Bonding Test	An electrical bonding check must be performed on the GA 58 Antenna: 1. Gain access to the antenna installation. 2. Disconnect all four coaxial cable antenna connectors (GA 58 antenna, connectors P1-P4). 3. Measure the resistance between the body of the connector on the antenna base and a nearby exposed portion of aircraft structure (example: an exposed rivet on a fuselage stringer). 4. Verify the resistance is equal to or less than 10 milliohms. 5. Reconnect all four antenna connectors ensuring each connector is secured. In the event of bonding test failure, remove antenna, clean and re-attach using unit replacement procedures in the GTS 8XX Installation Manual (Manual Number 190-00993-03) Part 4, Section 4. The fresh attachment should yield resistance less than or equal to 2.5 milliohms.	**Every 2000 flight hours or ten (10) years, whichever is first**

6. Troubleshooting Information: If error indications are displayed for the GTS 800 Traffic Advisory System, consult the Garmin GTS 8XX Installation Manual (Manual Number 190-00993-03) Part 4, Section 5 – Troubleshooting. Refer to the GTS 8XX System Configuration and Checkout Log retained in the aircraft permanent records for a list of the interfaced equipment and system configuration data.

7. Removal and Replacement Information: For the Garmin GTS 800 Traffic Advisory System removal and replacement instructions reference the Garmin GTS 8XX Installation Manual (Manual Number 190-00993-03) Part 4, Section 4 – Removal and Installation.

   If any Garmin GTS 8XX LRUs are removed and reinstalled, verify that the LRU unit power-up self-test sequence is successfully completed and no failure messages are annunciated for the GTS 800 Traffic Advisory System.

If any work has been done on the aircraft that could affect the system wiring, antenna cable, or any interconnected equipment, verify the GTS 800 Traffic Advisory System power-up self-test sequence is successfully completed and no failure messages are annunciated for the GTS 800 Traffic Advisory System.

In the event that an individual coaxial cable assembly requires rework, refer to the Garmin GTS 8XX Installation Manual (Manual Number 190-00993-03) Part 4, Section 6.1 for instructions.

Refer to the Garmin GTS 8XX Installation Manual (Manual Number 190-00993-03) Part 4, Section 4 for particular LRU and antenna removal/installation procedures and special handling precautions.

Should it become necessary to remove the Garmin GTS 800 Traffic Advisory System or any of its components, secure the associated cables, connectors, and wiring, collar the applicable circuit breaker, placard the aircraft that the unit(s) has (have) been removed, revise the Weight and Balance Data and the Equipment List and make a logbook entry that the unit(s) has (have) been removed for service (refer to 91.213 of title 14 of the code of Federal Regulations and/or the aircraft's MEL).

8. Diagrams: The GTS 800 Traffic Advisory System LRU is located in the aft fuselage at station 473.0. The GA 58 directional antenna is located on the top of the fuselage at station 239.0.

9. Special Inspection Requirements: In the event of a suspected or actual lightning strike to the aircraft, the checks outlined in Table 1 for Antenna Visual Inspection – Suspected lightning strike Test must be completed.

10. Application of Protective Treatment: Applications of protective treatments are not applicable.

11. Data: Installation requirements may be found within the accepted industry practices contained within AC43.13-1B Chapters 11 and 12 and AC43.13-2A Chapters 1 and 13.

12. List of Special Tools: Refer to the Garmin GTS 8XX Installation Manual (Manual Number 190-00993-05) Part 3, Section 2.1 for a list of electrical installation tools required.

    For electrical bonding testing, a milli-ohm meter is required.

    In addition to electrical tools the Garmin GTS 8XX Installation Manual (Manual Number 190-00993-00) Part 1, Section 2.4.3 identifies a ramp tester tool to aid system checkout and the Garmin GTS 8XX Installation Manual (Manual Number 190-00993-03) Part 4, Section 2.2 identifies the GTS 8XX Install Tool (a software tool) used to configure the system during installation.

13. For Commuter Category Aircraft: Not applicable, this aircraft is not a commuter category aircraft.

14. Recommended Overhaul Periods: There are no additional overhaul time limitations.

15. Airworthiness Limitation Section: There are no additional airworthiness limitations.

16. Revision: The Instructions for Continued Airworthiness Checklist (ICA) may be revised by submitting a letter to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date ----) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (dated---)". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision date of the FAA Form 337.

17. Assistance: Not applicable.

18. Implementation and Record Keeping: For major alterations performed in accordance with FAA field approval policy, the owner/operator operating under Part 91 is responsible for ensuring that the ICA is made part of the applicable sections of the 91.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 10/9/2012) along with a statement that the ICA is now a part of the aircraft's inspection/maintenance requirement.

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: GRUMMAN	Model: G-73
	Serial No.: J56	Nationality and Registration Mark: N7356 (USA)
2. Owner	Name *(As shown on registration certificate)*: MAYES JOHN	Address *(As shown on registration certificate)*: 2414 EXPOSITION BLVD STE 280 AUSTIN TX 78703-2261

3. For FAA Use Only

The data identified herein complies with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by person authorized in FAR 43.7.

10/31/2012
Date

FAA Inspector - Michael P. Garvin

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.
CENTRAL TEXAS AVIONICS, INC. 217 CORSAIR DRIVE GEORGETOWN, TX 78628	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	C84R586N, Radio, Limited Airframe, Limited Instrument

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
10/9/2012	Robert Wampler

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 [X] APPROVED [ ] REJECTED

BY							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
10-31-12	C84R586N	Matt Gordon

FAA Form 337 (12-88)

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.)

AVIONICS MODIFICATION

Installed the following equipment:

PART NO.	PART NAME	STATION	MANUAL
GDL 69A	XM Satellite Receiver	473.0	190-00355-02, Rev. K, 4/11
GA 55	XM Satellite Antenna	386.25	190-00355-02, Rev. K, 4/11
GRT 10	XM Wireless Transceiver	142.0	190-00355-02, Rev. K, 4/11

The Garmin GDL 69A XM Satellite Datalink Receiver was installed in accordance with the current manufacturer's installation manual and specifications.

The Garmin GA 55 XM Satellite Antenna was installed in accordance with AC43.13-2A Chapter 1 and Chapter 3.

The Garmin GDL 69A XM Satellite Receiver is interfaced with the Garmin GTN 750 GPS/SBAS Navigation System and the Garmin GMA 35 Remote Audio Panel.

The mechanical installation, wiring, cable bundling and routing, and connections to existing aircraft systems was accomplished in accordance with AC43.13-2A Chapter 2 and Chapter 11.

Aircraft hardware was installed in accordance with AC 43.13-1B, Chapter 7, Sections 1 through 7.

Circuit protection and wire was installed in accordance with AC 43.13-1B, Chapter 11, Sections 4 through 20.

An electrical load analysis was performed in accordance with AC43.13-1B, Chapter 11, Section 3.

A post-installation configuration and checkout was performed in accordance with the Garmin GDL 69/69A Installation Manual (Manual Number 190-00355-02, Revision K, Dated April 29, 2011) section 4.

The aircraft Weight and Balance Data and Equipment List were revised to reflect these changes and placed in the FAA Approved Airplane Flight Manual.

Reference attached sheets for the Instructions for Continued Airworthiness (ICA) for the Garmin GDL 69A XM Satellite Datalink Receiver, document number: J56CTAGDL69A.

**********END**********

☐ Additional Sheets Are Attached

Central Texas Avionics, Inc.
217 Corsair Drive
Georgetown, TX 78628
FAA Repair Station # C84R586N

Document Number: J56CTAGDL69A

Date: 10/9/2012

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
For:

Make: Grumman
Model: G-73
S/N: J56
Registration: N7356
With A: Garmin GDL 69A XM Satellite Receiver

ACCEPTED

Michael P. Garvin

Date: 10/31/2012
Principal Airworthiness Inspector
SAT-FSDO

1. Introduction: This major alteration to this aircraft obligates the aircraft operator to include the following maintenance information provided by this documentation in the owner/operator's Aircraft Maintenance Manual and the owner/operator's aircraft Scheduled Maintenance Program.

2. Descriptions: The **Garmin GDL 69A XM Satellite Receiver** is a weather datalink receiver with the addition of XM Satellite Radio audio entertainment. To display weather information and control the audio channel and volume, the GDL 69A is interfaced with the Garmin GTN 750 system via an Ethernet link. Audio volume and channel changes may also be controlled remotely using the GRC 10 wireless remote. The GDL 69A is also interfaced to the Garmin remote audio panel for amplification and distribution of the audio signal.

   The optional GRT 10/GRC 10 wireless remote system is for use by passengers in the aircraft to control the audio functions of the Garmin GDL 69A Datalink Receiver. The system consists of two components: (1) the GRT 10 Wireless Transceiver installed in the aircraft and connected to the GDL 69A serial port, and (2) the GRC 10 Wireless Remote with an LCD display.

3. Control and Operation Information: The Garmin GDL 69A does not have a direct pilot interface. The GDL 69A is controlled via separately installed device, such as the Garmin GTN 750 system. The GDL 69A audio features can be controlled by the optional GRC 10 Wireless Remote Controller. The GRT 10 Wireless Transceiver must be installed and connected to the GDL 69A, and the GRC 10 Wireless Remote must be configured to recognize the installed GRT 10 Transceiver for the GRC 10 Wireless Remote to function.

   To validate the operation of the GDL 69A, monitor the weather depiction page on the GTN 750 system and look for display of weather data. Depiction of weather data should begin within 10 minutes.

To validate the operation of the optional GRT 10/GRC 10 Remote System, use the GRC 10 to change XM Radio channel or volume and monitor the GRC 10 display or audio from the audio panel.

4. Servicing Information: The Garmin GDL 69A XM Satellite Receiver is on condition and there is no periodic, preventive, or scheduled maintenance required for continued operation of this system.

   GRC 10 Wireless Remote Control Battery Replacement

   If the unit does not turn on, or the battery level indicator on the display shows no bars, replace the batteries. To replace the batteries in the GRC 10 Remote Control, remove the back cover of the remote. Insert fresh (new or fully charged) batteries with the orientation as shown in the diagram in the battery compartment. Both batteries should be replaced with fresh batteries at the same time.

5. Maintenance Instructions: The scheduled maintenance tasks required by this modification are to be added to the aircraft owner/operator appropriated airplane maintenance program as follows:

   Operation of the GDL 69A XM Satellite Receiver and GRT 10/GRC 10 is not permitted unless the inspections described in this section have been completed within the preceding 12 calendar months. Conduct a visual inspection of the unit and its wire harness to ensure continued installation integrity:

   1) Inspect the unit for security of attachment.
   2) Inspect the condition of wiring, routing, and attachment/clamping.
   3) Verify the GDL 69A unit operation by viewing XM Satellite information on the control display unit, or by checking the XM information or XM Status page on the control display unit. Verify the GRT 10 and GRC 10 operation by viewing XM radio channel information on the GRC 10 display.

   In addition, verify each audio suppression input for proper operation by the following step.

   4) Verify the GDL 69A audio to the crew headphones is muted when each warning alarm is activated.

   An electrical bonding test of the GDL 69A system must be accomplished every 2000 flight hours or ten (10) years, whichever is first. If measured resistance is greater the Required Bonding in the following table, bonding must be improved to meet applicable requirements for a new installation in accordance with the GDL 69A Installation Manual Reference sections listed. LRUs must be disconnected from interfaced cables during the measurements as detailed below. Reconnect LRUs after measurements and any required bonding improvements are completed.

LRU	Required Bonding	Installation Manual Reference
GDL 69A	10 milliohm	2.4.2
XM Antenna	10 milliohm	2.6.2

The GDL 69A measurement is made with connectors disconnected from the GDL 69A. To accomplish this, the backplate assembly with attached connectors can be removed from the GDL 69A mounting rack. The bonding resistance is measured from the rack to airframe ground.

During XM Antenna measurement, any coax normally attached to the antenna must be disconnected. Antenna bonding is measured from the XM connector (TNC external ground) on the antenna to a nearby exposed portion of conductive aircraft structure (example: exposed rivet on a fuselage stringer) or to the ground plane for the antenna.

6. Troubleshooting Information: If XM satellite information is not available on the control display unit, consult the Garmin GDL 69/69A Installation Manual (Manual Number 190-00355-02) Section 5 – Troubleshooting.

7. Removal and Replacement Information: For the Garmin GDL 69A XM Satellite Receiver removal and replacement instructions reference the Garmin GDL 69/69A Installation Manual (Manual Number 190-00355-02) Section 2 – Installation.

   If the GDL 69A unit is removed and reinstalled, verify the GDL 69A unit operation by viewing XM Satellite information on the control display unit, or by checking the XM information or XM Status page on the control display unit. If the GDL 69A unit is removed for repair and reinstalled, or if the GDL 69A unit is removed and replaced with a different GDL 69A unit, the GDL 69A XM radio service may require re-activation.

   If the GRT 10 or GRC 10 is replaced, the GRC 10 Remote Control must be configured to recognize the GRT 10 Wireless Transceiver. Reference the Garmin GDL 69/69A Installation Manual (Manual Number 190-00355-02) Section 4 – System Configuration and Checkout.

   If any work has been done on the aircraft that could affect the system wiring, antenna cable, or any interconnected equipment, verify the GDL 69A unit operation by viewing XM Satellite information on the control display unit, or by checking the XM information or XM Status page on the control display unit. Verify the GRT 10 and GRC 10 unit operation by viewing XM radio channel information on the GRC 10 display.

   Should it become necessary to remove the Garmin GDL 69A XM Satellite Receiver or any of its components, secure the associated antenna cable, connectors, and wiring, collar the applicable circuit breaker, placard the aircraft that the unit(s) has (have) been removed, revise the Weight and Balance Data and the Equipment List and make a logbook entry that the unit(s) has (have) been removed for service (refer to 91.213 of title 14 of the code of Federal Regulations and/or the aircraft's MEL).

8. Diagrams: The GDL 69A XM Satellite Receiver LRU is located in the aft fuselage at station 473.0. The GA 55 XM Satellite Antenna is located on the top of the fuselage at station 386.25.

9. Special Inspection Requirements: Special Inspections Requirements are not applicable.

10. Application of Protective Treatment: Applications of protective treatments are not applicable.

11. Data: Installation requirements may be found within the accepted industry practices contained within AC43.13-1B Chapters 11 and 12 and AC43.13-2A Chapters 1 and 13.

12. List of Special Tools: For electrical bonding testing, a milli-ohm meter is required.

13. For Commuter Category Aircraft: Not applicable, this aircraft is not a commuter category aircraft.

14. Recommended Overhaul Periods: There are no additional overhaul time limitations.

15. Airworthiness Limitation Section: There are no additional airworthiness limitations.

16. Revision: The Instructions for Continued Airworthiness Checklist (ICA) may be revised by submitting a letter to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date ----) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (dated---)". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision date of the FAA Form 337.

17. Assistance: Not applicable.

18. Implementation and Record Keeping: For major alterations performed in accordance with FAA field approval policy, the owner/operator operating under Part 91 is responsible for ensuring that the ICA is made part of the applicable sections of the 91.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 10/9/2012) along with a statement that the ICA is now a part of the aircraft's inspection/maintenance requirement.

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: GRUMMAN	Model: G-73
	Serial No.: J56	Nationality and Registration Mark: N7356 (USA)
2. Owner	Name *(As shown on registration certificate)*: MAYES JOHN	Address *(As shown on registration certificate)*: 2414 EXPOSITION BLVD STE 280 AUSTIN TX 78703-2261

3. For FAA Use Only

The data identified herein complies with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by person authorized in FAR 43.7.

10/31/2012
Date

FAA Inspector - Michael P. Garvin

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.
CENTRAL TEXAS AVIONICS, INC. 217 CORSAIR DRIVE GEORGETOWN, TX 78628	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	C84R586N, Radio, Limited Airframe, Limited Instrument

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
10/9/2012	Robert Wampler

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 [X] APPROVED [ ] REJECTED

BY							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
10-31-12	C84R586N	Matt Gordon

FAA Form 337 (12-88)

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.)

AVIONICS MODIFICATION

Removed the following equipment:

PART NO.	PART NAME	STATION
ELT 10	ELT	471.0
	ELT Antenna	458.0

Installed the following equipment:

PART NO.	PART NAME	STATION	MANUAL
ME406	406MHz ELT	437.0	570-1600, Rev. L, 3/9/12
110-773	ELT Antenna	458.0	570-1600, Rev. L, 3/9/12
345-6196A	ELT Remote Switch	99.0	570-1600, Rev. L, 3/9/12
452-6505	ELT Buzzer	442.0	570-1600, Rev. L, 3/9/12

The Artex ME406 406MHz Emergency Locator Transmitter, mounted to an avionics shelf in the aft fuselage, is designed to meet or exceed the requirements of TSO C91a (Emergency Locator Transmitter (ELT) Equipment), TSO C126 (406MHz Emergency Locator Transmitter) and the mandatory automatic ELT requirements of FAR Part 91.

The equipment listed on this FAA Form 337 was removed and installed in accordance with the current manufacturer's installation manuals and specifications.

The Artex model 110-773 ELT Antenna was installed in the existing ELT Antenna location and all aircraft structural and metal work was accomplished in accordance with AC 43.13-2A, Chapter 1 and AC 43.13-1B, Chapter 4, Section 4. Aircraft hardware used is in accordance with AC 43.13-1B, Chapter 7, Sections 1 through 7.

Component and system installation of the equipment listed on this FAA Form 337 was accomplished in accordance with AC 43.13-2A, Chapters 1 through 3 and 13.

Wire and cable installation was accomplished in accordance with AC 43.13-1B, Chapter 11, Sections 5 through 17.

The aircraft Equipment List was revised to reflect these changes; the Weight and Balance Data was revised and placed in the aircraft records. The FAA Approved Airplane Flight Manual was updated as required.

A functional test of the installation described in this FAA Form 337 was performed in accordance with FAR 25.1301 and FAR 25.1431. Operation was satisfactory, and the installation did not adversely affect existing components and systems in the aircraft.

Reference attached sheets for the Instructions for Continued Airworthiness (ICA), document number: J56CTAME406ELT.

**********END**********

☐ Additional Sheets Are Attached

Central Texas Avionics, Inc.
217 Corsair Drive
Georgetown, TX 78628
FAA Repair Station # C84R586N

ICA Document #: J56CTAME406ELT

Date: 10/9/2012

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
For:

Make: Grumman
Model: G-73
S/N: J56
Registration: N7356
With A: Artex ME406
Emergency Locator
Transmitter

ACCEPTED

Michael P. Garvin

Date: 10/31/2012
Principal Airworthiness Inspector
SAT-FSDO

1. Introduction: This major alteration to this aircraft obligates the aircraft operator to include the following maintenance information provided by this documentation in the owner/operator's Aircraft Maintenance Manual and the owner/operator's aircraft Scheduled Maintenance Program.

2. Description: The **Artex ME406** is an Emergency Locator Transmitter (ELT). The ELT automatically activates during a crash and transmits the standard swept tone on 121.5 MHz lasting until battery power is gone. This 121.5 MHz signal is mainly used to pinpoint the beacon during search and rescue operations.

   In addition, for the first 24 hours of operation, a 406 MHz signal is transmitting at 50-second intervals. This transmission lasts 440 ms and contains identification data programmed into the beacon and is received by Cospas-Sarsat satellites. The transmitted data is referenced in a database (maintained by the national authority responsible for ELT registration) and used to identify the beacon and owner.

3. Control and Operation Information: Reference the Artex ME406 Series Emergency Locator Transmitter Description, Operation, Installation, and Maintenance Manual (Manual Number 570-1600, Revision L, Dated March 9, 2012 or later revision).

4. Servicing Information: In accordance with FAR 91.207(d) the Artex ME406 ELT system must be inspected within 12 calender months after the last inspection. The Artex ME406 ELT battery pack requires replacement when any of the following situations has occured:

   A. After use in an emergency;
   B. After an inadvertent activation of unknown duration;
   C. When the total of all known transmissions exceeds one hour; (7 flash error)
   D. On or before the battery replacement (expiration) date

5. Maintenance Instructions: The scheduled maintenance tasks required by this modification are to be added to the aircraft owner/operator appropriated airplane maintenance program as follows:

   Perform on at least an annual basis (In Accordance With FAR Parts 91.207, 91.409, and 43 Appendix D) an inspection of the ELT unit and mount, associated wiring and conduits, bonding and shielding, antenna, and related aircraft structure for integrity, security, wear, chaffing, and etc.. Special attention should be given to the aircraft primary structure with regards to fatigue and stress cracking, corrosion and etc...

6. Troubleshooting Information: Reference the Artex ME406 Series Emergency Locator Transmitter Description, Operation, Installation, and Maintenance Manual (Manual Number 570-1600, Revision L, Dated March 9, 2012 or later revision) Test and Fault Isolation Section.

7. Removal and Replacement Information: Reference the Artex ME406 Series Emergency Locator Transmitter Description, Operation, Installation, and Maintenance Manual (Manual Number 570-1600, Revision L, Dated March 9, 2012 or later revision) Removal and Installation Sections.

   Should it become necessary to remove the Artex ME406 ELT, secure the associated wiring and antenna cable, placard the aircraft that the unit has been removed, revise the Weight and Balance Data and the Equipment List and make a logbook entry that the unit has been removed for service (refer to 91.213 of title 14 of the code of Federal Regulations and/or the aircraft's MEL).

8. Diagrams: The Artex ME406 ELT and the Artex ELT Buzzer are mounted on an avionics shelf located in the aft fuselage at station 437.0 and 442.0 respectively.

9. Special Inspection Requirements: Special Inspections Requirements are not applicable.

10. Application of Protective Treatment: Applications of protective treatments are not applicable.

11. Data: Installation requirements may be found within the accepted industry practices contained within AC43.13-1B Chapters 11 and 12 and AC43.13-2A Chapters 1 through 3, 11 and 13.

12. List of Special Tools: Special tools are not required.

13. For Commuter Category Aircraft: Not applicable, this aircraft is not a commuter category aircraft.

14. Recommended Overhaul Periods: There are no additional overhaul time limitations.

15. Airworthiness Limitation Section: There are no additional airworthiness limitations.

16. Revision: The Instructions for Continued Airworthiness Checklist (ICA) may be revised by submitting a letter to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date ----) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (dated---)". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision of the FAA Form 337.

17. Assistance: Not applicable.

18. Implementation and Record Keeping: For major alterations performed in accordance with FAA field approval policy, the owner/operator operating under Part 91 is responsible for ensuring that the ICA is made part of the applicable sections of the 91.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 10/9/2012) along with a statement that the ICA is now a part of the aircraft's inspection/maintenance requirement.

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make GRUMMAN	Model G-73
	Serial No. J56	Nationality and Registration Mark N7356 (USA)
2. Owner	Name *(As shown on registration certificate)* MAYES JOHN	Address *(As shown on registration certificate)* 2414 EXPOSITION BLVD STE 280 AUSTIN TX 78703-2261

3. For FAA Use Only

The data identified herein complies with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by person authorized in FAR 43.7.

10/08/2012
Date

FAA Inspector - Michael P. Garvin

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.
CENTRAL TEXAS AVIONICS, INC. 217 CORSAIR DRIVE GEORGETOWN, TX 78628	[ ] U.S. Certificated Mechanic [ ] Foreign Certificated Mechanic [X] Certificated Repair Station [ ] Manufacturer	C84R586N, Radio, Limited Airframe, Limited Instrument

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
10/5/2012	Robert Wampler

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 [X] APPROVED [ ] REJECTED

BY							
		FAA Flt. Standards Inspector		Manufacturer		Inspection Authorization	Other *(Specify)*
		FAA Designee	X	Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
10-9-12	C84R586N	Matt Gordon

FAA Form 337 (12-88)

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.)

AVIONICS MODIFICATION

Removed the following equipment:

PART NO.	PART NAME	STATION
2101	GPS Receiver	96.0
81194	GPS Antenna	376.5
MD41-628	GPS Annunciator Control Unit	94.0
RNC-601A	Control Display Unit	90.0
IN602	DME Indicator	90.0
TX670	DME/TACAN Transceiver	41.0
DI681	Database/Interface Unit	37.0
KN 75	Glideslope Receiver	34.25
KA 120	DME/GS Converter	31.75
KA 120	DME/GS Converter	33.0
LR 651	LORAN Receiver	433.0
NY 154	LORAN Antenna	386.25
KX 165	NAV/COM System	89.0
331A-3G	Dual NAV Indicators	90.0
KR87	ADF Receiver	89.0
KR87	ADF Receiver	116.0
KA 44B	Dual ADF Antennas	239.0
KI228	Dual ADF Indicators	92.0
KA60	Dual DME Antennas	255.5
KT 79	Dual Transponders	89.0
KA60	Dual Transponder Antennas	255.5
KTR 953	HF Receiver/Exciter	433.0
KAC 952	HF Amplifier/Coupler	433.0
KCU 951	HF Controller	98.0
RTA-1003	Radar	21.5
DI-2008	Radar Indicator	89.0
WX-11	Stormscope Processor	49.5
WX-11	Stormscope Antenna	261.75
WX-11	Stormscope Display	90.0
RT-18D	Telephone Transceiver	23.0
C57-1	Radio Telephone Antenna	255.5
WH-10	Telephone Handset	140.0
WH-10	Telephone Handset	202.0
2504-206A-030	TAS Computer	29.0
2504-900	Transducer	35.0
2504-800	Cockpit Display	92.0
2504-0034	Digital Cabin Display	140.0
KMA 24H	Dual Audio Panels	108.0
KMR 675	Marker Beacon Receiver	28.0
KA 40	Dual Marker Beacon Lights	92.0

☑ Additional Sheets Are Attached

* U.S.G.P.O. 1990-761-753

Removed the following equipment (continued):

PART NO.	PART NAME	STATION
SPA-600	Intercom	142.0
H1-B1	Dual Headset Interface Units	126.0
811B	Dual Clocks	93.0
M301C	OAT Indicator	105.0
3000U	Altitude Serializer	30.0
PS-835D	Emergency Power Supply	42.0
PC-15	Inverter	39.5
PC-15	Inverter	46.0
LT100	Dual Light Dimmer Supply	87.0
AV 571	Triplexer	88.0
KA33	Avionics Cooling Fan	87.0
KA33	Avionics Cooling Fan	50.0

Installed the following equipment:

PART NO.	PART NAME	STATION	MANUAL
GTN 750	GPS/SBAS Navigation System	89.0	190-01007-A3, Rev. 3, 5/11
GA 35	GPS/WAAS Antenna	239.0	190-00848-00, Rev. D, 1/11
GMA 35	Remote Audio Panel	89.0	190-00858-11, Rev. D, 2/12
GTX 32	Remote Transponder	473.0	190-00303-60, Rev. F, 10/08

The Garmin GTN 750 GPS/SBAS Navigation System was installed I.A.W. the VFR provisions of A.C. 20-138C. The GTN 750 is not approved for IFR. The pilot's instrument panel has been placarded:

"GPS NOT APPROVED FOR IFR NAVIGATION"

The Garmin GA 35 GPS/WAAS Antenna was installed in accordance with AC43.13-2A Chapter 1 and Chapter 3.

The Garmin GTN 750 GPS/SBAS Navigation System is interfaced to the pilot's Aspen Avionics EFD 1000C3 Pro Primary Flight Display (PFD) and MFD 1000 Multi-Function Display (MFD), to the Century 2000 Automatic Flight Control System, to the Garmin GTS 800 Traffic Advisory System (for TAS system control & display), to the Garmin GTX 32 Remote Transponder (for XPDR control), to the Garmin GDL 69A XM Satellite Receiver (for XM receiver control & XM WX display), to the J.P. Instruments FS-450 Fuel Flow System (display fuel flow information), and to the Garmin GMA 35 Remote Audio Panel.

The Garmin GMA 35 Remote Audio Panel is interfaced to the Garmin GTN 750 GPS/SBAS Navigation System (#1 NAV / #1 COM), to the Bendix/King KX165 NAV/COM System (#2 NAV / #2 COM), to the Aspen Avionics EFD 1000C3 Pro Primary Flight Display (PFD) and MFD 1000 Multi-Function Display (MFD), to the Garmin GDL 69A XM Satellite Receiver (XM Satellite audio), and to the Garmin GTS 800 Traffic Advisory System.

The Garmin GTX 32 Remote Transponder is interfaced to the Garmin GTN 750 GPS/SBAS Navigation System.

(CONTINUED)

The Garmin GTN 750 GPS/SBAS Navigation System as installed in the instrument panel meets the field-of-view requirements in accordance with the Garmin GTN 6XX/7XX AML STC Installation Manual (Manual Number 190-01007-A3, Revision 3, Dated May 23, 2011) Section 2.10.1.1. All of the Garmin GTN 750 GPS/SBAS Navigation Systems Source Selection and GPS Navigation Annunciations are also displayed on the pilot's Aspen Avionics EFD 1000C3 Pro Primary Flight Display (PFD).

Components and systems (removals and installations) of the equipment listed on this FAA Form 337 were accomplished in accordance with the manufacturer's installation manuals and AC 43.13-2A, Chapters 1 through 3 and 11.

The mechanical installation, wiring, cable bundling and routing, and connections to existing aircraft systems, where specific instructions are not provided in the manufacturer's installation manuals, was accomplished in accordance with AC43.13-2A Chapter 2 and Chapter 11.

Aircraft hardware, not supplied or specified by the manufacturer, was installed in accordance with AC 43.13-1B, Chapter 7, Sections 1 through 7.

Circuit protection and wire, not specified by the manufacturer, was installed in accordance with AC 43.13-1B, Chapter 11, Sections 4 through 20.

An electrical load analysis was performed in accordance with AC43.13-1B, Chapter 11, Section 3.

A post-installation checkout for the Garmin GTN 750 GPS/SBAS Navigation System and the Garmin GMA 35 Remote Audio Panel was performed in accordance with the Garmin GTN 6XX/7XX AML STC Installation Manual (Manual Number 190-01007-A3, Revision 3, Dated May 23, 2011) Section 5 and a configuration and checkout log sheet was completed in accordance with Section 5.14.3.

A post-installation configuration and checkout for the Garmin GTX 32 Remote Transponder was performed in accordance with the Garmin GTX 32 Transponder Installation Manual (Manual Number 190-00303-60, Revision F, Dated October 7, 2008) section 3.7, and with 14 CFR Part 43 Appendix F and E (c).

The aircraft Weight and Balance Data and Equipment List were revised to reflect these changes and placed in the FAA Approved Airplane Flight Manual.

Reference attached sheets for the Instructions for Continued Airworthiness (ICA) for the Garmin GTN 750 GPS/SBAS Navigation System, the Garmin GMA 35 Remote Audio Panel, and the Garmin GTX 32 Remote Transponder, document number: J56CTAGTN750.

**********END**********

Central Texas Avionics, Inc.
217 Corsair Drive
Georgetown, TX 78628
FAA Repair Station # C84R586N

Document Number: J56CTAGTN750

Date: 10/5/2012

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS
For:

Make: Grumman
Model: G-73
S/N: J56
Registration: N7356
With A: Garmin GTN 750 GPS/SBAS Navigation System, a Garmin GMA 35 Remote Audio Panel, and a Garmin GTX32 Remote Transponder

ACCEPTED

Michael P. Garvin

Date: 10/08/2012
Principal Airworthiness Inspector
SAT-FSDO

1. Introduction: This major alteration to this aircraft obligates the aircraft operator to include the following maintenance information provided by this documentation in the owner/operator's Aircraft Maintenance Manual and the owner/operator's aircraft Scheduled Maintenance Program.

2. Descriptions: The **Garmin GTN 750 GPS/SBAS Navigation System** is a panel-mounted product that contains a GPS/SBAS receiver (that meets the requirements of Technical Standard Order (TSO) – C146c), an airborne VHF communications transceiver, and an airborne VOR/Localizer (LOC) and Glideslope (G/S) receivers. The Garmin GTN 750 system is an integrated unit with a moving map and color LCD touchscreen display 6.25 inches wide and 6.00 inches tall. The GTN 750 system features a menu-driven graphical interface which may also be used to depict optional weather, lightning, and traffic system inputs for overlay on the moving map. The GTN 750 system offers graphical flight planning and for added safety built-in terrain, mapping, and obstacles databases and geo-referenced SafeTaxi airport diagrams.

   The **Garmin GMA 35 Audio Panel** is an optional remote mounted unit that operates in conjunction with the Garmin GTN 750 GPS/SBAS Navigation System to provide full audio panel capability, for communication and navigation radios, headsets, microphones, and speakers. The Garmin GMA 35 unit is mounted in a notch behind the Garmin GTN 750 GPS/SBAS Navigation System to free up mounting space in the flight deck instrument panel.

   The **Garmin GTX 32** remote mounted transponder is a radio transmitter and receiver that operates on radar frequencies, receiving ground radar or TCAS interrogations at 1030 MHz and transmitting a coded response of pulses to ground-based radar on a frequency of 1090 MHz. The GTX 32 is equipped with IDENT capability that activates the Special Position Identification (SPI) pulse for 18 seconds.

The GTX 32 replies to Mode A and Mode C interrogation. Mode A replies consist of framing pulses and any one of 4,096 codes, which differ in the position and number of pulses transmitted. Mode C replies include framing pulses and encoded altitude. By replying to ground transmissions or TCAS interrogations, the GTX 32 enables ATC to display aircraft identification, altitude, and groundspeed on ATC radar screens or TCAS traffic indicators.

3. Control and Operation Information: For control and operation of the Garmin GTN 750 GPS/SBAS Navigation System, the Garmin GMA 35 Remote Audio Panel, and the Garmin GTX 32 Remote Transponder reference the Garmin GTN 725/750 Pilot's Guide (Manual Number 190-01007-03, Revision B, Dated March 2011 or later revision).

4. Servicing Information: The Garmin GTN 750 GPS/SBAS Navigation System, the Garmin GMA 35 Remote Audio Panel, and the Garmin GTX 32 Remote Transponder (other than for regulatory periodic functional checks – i.e. FAR 91.413) are on condition and there is no periodic, preventive, or scheduled maintenance required for continued operation of these units.

5. Maintenance Instructions: The scheduled maintenance tasks required by this modification are to be added to the aircraft owner/operator appropriated airplane maintenance program as follows:

   The Garmin GTN 750 GPS/SBAS Navigation System and the Garmin GMA 35 Audio Panel are designed to detect internal failures. A thorough self-test is executed automatically upon application of power to the units, and built-in tests (BIT) are continuously executed. Detected errors are indicated as failure annunciations, system messages, or a combination of the two.

   Operation of the GTN 750 GPS/SBAS Navigation System and the Garmin GMA 35 Audio Panel is not permitted unless the inspections described in this section have been completed within the time intervals prescribed in Table 1 below. All antennas connected to the GTN 750 System should be maintained in accordance with the appropriate inspection data for the antenna installation.

Table 1 – Maintenance Intervals

Item	Description/Procedure	Interval
Equipment Removal & Replacement	Removal and replacement of GTN or GMA units Removal and replacement instruction are contained in Section 7 of this document and in Section 3.4.1 of the GTN 6XX/7XX Installation Manual.	**On Condition**

Cleaning the Front Panel	The front bezel, keypad, and display can be cleaned with a soft cotton cloth dampened with clean water. DO NOT use any chemical-cleaning agents. Care should be taken to avoid scratching the surface of the display.	**On Condition**
Display Backlight	The display backlight LEDs are rated by the manufacturer as having a usable life of at least 36,000 hours. This life may be more or less than the rated time depending on the operating conditions of the GTN unit. Over time, the backlight lamp may dim and the display may not perform as well in direct sunlight conditions. The user must determine by observation when the display brightness is not suitable for its intended use. Contact the Garmin factory repair station when the backlight lamp requires service.	**On Condition**
Battery Replacement	The GTN unit has an internal keep-alive battery that will last about 10 years. The battery is used for GPS system information. Regular planned replacement is not necessary. The GTN unit will display a 'low battery' message when replacement is required. Once the low battery message is displayed, the battery should be replaced within 1 to 2 months. If the battery is not replaced and becomes totally discharged, the GTN unit unit will remain fully operational, but the GPS signal acquisition time may be increased. There is no loss of function or accuracy of the GTN unit with a dead battery. The battery must be replaced by the Garmin factory repair station or factory authorized repair station.	**On Condition**

Equipment Visual Check	Conduct a visual check of the GTN unit and its wire harness to ensure continued installation integrity. 1. Inspect the GTN unit for security of attachment, including visual inspection of the mounting rack and other supporting structure attaching the rack to the aircraft instrument panel. Verify the countersunk fastener heads are in full contact with the unit mounting rack holes. Re-torque to 8.5 – 9.5 in-lbs if required. 2. Inspect for signs of corrosion. 3. Inspect all knobs and buttons for legibility. 4. Inspect condition of wiring, shield terminations, routing, and attachment/clamping. 5. Check the fan intake slots on the sides and bottom of the GTN units bezel for dust, dirt, or obstructions. Clean as needed. 6. Conduct a visual check of the GPS/WAAS antenna cable in accordance with the GTN 6XX/7XX Installation Manual.	**12 Calendar Months**
Test – Lightning Protection	Conduct a visual check of the GPS/WAAS antenna cable in accordance with the GTN 6XX/7XX Installation Manual.	**After a suspected or actual lightning strike**

Test – Bonding Check (IFR certified aircraft)	Perform an electrical bonding check: 1. Perform electrical bond check between the GTN unit and nearby exposed portion of the aircraft metallic structure and verify that it is less than 10 milliohms. 2. Remove the GTN unit from its mounting rack. 3. Measure the resistance between the mounting rack and nearby exposed portion of the aircraft metallic structure and verify that it is less than 10 milliohms. 4. Reinstall the GTN unit in the mounting rack. In the event of bonding test failure, remove the GTN units rack and clean the attachment points at both the GTN rack and the aircraft structure per Section 2.5.4 of the GTN 6XX/7XX Installation Manual and reattach the rack to the rails in the panel. Re-verify the resistance between the mounting rack and nearby exposed portion of the aircraft metallic structure and ensure it is less than 2.5 milliohms.	**Every 2000 flight hours or ten (10) years, whichever is first**

The Garmin GTX 32 Mode S Transponder requires ATC transponder testing and inspection at least every two (2) years in accordance with FAR 91.413.

6. Troubleshooting Information: If error indications are displayed on the GTN 750 unit, consult the Garmin GTN 6XX/7XX Installation Manual (Manual Number 190-01007-A3, Revision 3, Dated May 23, 2011 or later revision) Section 6 – Troubleshooting.

7. Removal and Replacement Information: For Garmin GTN 750 removal and replacement instructions reference the Garmin GTN 6XX/7XX Installation Manual (Manual Number 190-01007-A3, Revision 3, Dated May 23, 2011 or later revision) Sections 3.4.1.1 and 3.4.1.2. For the Garmin GMA 35 Remote Audio Panel removal and replacement instructions reference the Garmin GTN 6XX/7XX Installation Manual (Manual Number 190-01007-A3, Revision 3, Dated May 23, 2011 or later revision) Sections 3.4.1.3 and 3.4.1.4. For the Garmin GTX 32 Remote Transponder removal and replacement reference the Garmin GTX 32 Installation Manual (Manual Number 190-00303-60, Revision F, Dated October 7, 2008 or later revision).

If the Garmin GTN 750 unit is removed and reinstalled, verify that the GTN 750 unit power-up self-test sequence is successfully completed and no failure messages are annunciated. If the Garmin GMA 35 unit is removed and reinstalled, verify that the GMA 35 unit power-up self-test sequence is successfully completed and that no failure messages are annunciated on the Garmin GTN 750 unit.

If any work has been done on the aircraft that could affect the system wiring, or any interconnected equipment, verify the GTN 750 unit power-up self-test sequence is successfully completed and no failure messages are annunciated.

If the GTN 750 unit is removed for repair and reinstalled, or if the GTN 750 unit is removed and replaced with a different GTN 750 unit, then follow the 'System Configuration / Checkout Procedures' contained in the Garmin GTN 6XX/7XX Installation Manual, Section 5 and verify the GTN 750 unit power-up self-test sequence is successfully completed and no failure messages are annunciated. If the GMA 35 unit is removed for repair and reinstalled, or if the GMA 35 unit is removed and replaced with a different GMA 35 unit, then follow the 'System Configuration / Checkout Procedures' contained in the Garmin GTN 6XX/7XX Installation Manual, Section 5 and verify the GMA 35 unit power-up self-test sequence is successfully completed and no failure messages are annunciated on the GTN 750 unit.

Should it become necessary to remove the Garmin GTN 750 GPS/SBAS Navigation System and/or the Garmin GMA 35 Remote Audio Panel and/or the Garmin GTX 32 Remote Transponder, secure the associated cables, connectors, and wiring, collar the applicable circuit breaker(s), placard the aircraft that the unit(s) has (have) been removed, revise the Weight and Balance Data and the Equipment List and make a logbook entry that the unit(s) has (have) been removed for service (refer to 91.213 of title 14 of the code of Federal Regulations and/or the aircraft's MEL).

8. Diagrams: Reference the Garmin GTN 6XX/7XX Installation Manual (Manual Number 190-01007-A3, Revision 3, Dated May 23, 2011 or later revision) Appendix B providing diagrams showing sample installation for LRU locations and Appendix E providing point-to-point wiring diagrams for the GTN 750 and interfaced equipment. Appendix F of the Garmin GTN 6XX/7XX Installation Manual provides point-to-point wiring diagrams for the Garmin GMA 35 Remote Audio Panel and interfaced equipment.

9. Special Inspection Requirements: In the event of a suspected or actual lightning strike to the aircraft, the checks outlined in Table 1 for Test – Lightning Protection must be completed.

10. Application of Protective Treatment: Applications of protective treatments are not applicable.

11. Data: Installation requirements may be found within the accepted industry practices contained within AC43.13-1B Chapters 11 and 12 and AC43.13-2A Chapters 1 and 13.

12. List of Special Tools: For electrical bonding testing, a milli-ohm meter is required.

13. For Commuter Category Aircraft: Not applicable, this aircraft is not a commuter category aircraft.

14. Recommended Overhaul Periods: There are no additional overhaul time limitations.

15. Airworthiness Limitation Section: There are no additional airworthiness limitations.

16. Revision: The Instructions for Continued Airworthiness Checklist (ICA) may be revised by submitting a letter to the local FSDO with a copy of the revised FAA Form 337 and revised ICA. The FAA inspector accepts the change by signing Block 3 and including the following statement: "The attached revised/new Instructions for Continued Airworthiness (date ----) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (dated---)". Once the revision has been accepted, a maintenance record entry will be made, identifying the revision date of the FAA Form 337.

17. Assistance: Not applicable.

18. Implementation and Record Keeping: For major alterations performed in accordance with FAA field approval policy, the owner/operator operating under Part 91 is responsible for ensuring that the ICA is made part of the applicable sections of the 91.409 inspection program for their aircraft. This is accomplished when a maintenance entry is made in the aircraft's maintenance record in accordance with section 43.9. This entry records the major alteration and identifies the original ICA location (e.g., Block 8 of FAA Form 337, dated 10/5/2012) along with a statement that the ICA is now a part of the aircraft's inspection/maintenance requirement.

US Department of Transportation
Federal Aviation Administration

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

Form Approved OMB No. 2120-0020 2/28/2011

Electronic Tracking Number

For FAA Use Only

INSTRUCTIONS: Print or type all entries. See Title 14 CFR §43.9, Part 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. §44701). Failure to report can result in a civil penalty for each such violation. (49 U.S.C. §46301(a))

1. Aircraft	Nationality and Registration Mark N7356	Serial No. J56	
	Make GRUMMAN	Model G-73	Series MALLARD
2. Owner	Name *(As shown on registration certificate)* MAYES JOHN	Address *(As shown on registration certificate)* Address 2414 EXPOSITION BLVD STE 280 City AUSTIN State TX Zip 78703 Country TRAVIS	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☑	☐	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type Manufacturer		

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		
Name BERTON BRUNDAGE	☑ U. S. Certificated Mechanic	☐ Manufacturer	
Address #2 AIRPORT ROAD	☐ Foreign Certificated Mechanic	C. Certificate No.	
City TAYLOR State TX	☐ Certificated Repair Station	2014826	
Zip 78764 Country WILLIAMSON	☐ Certificated Maintenance Organization		

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 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.

Extended range fuel per 14 CFR Part 43 App. B ☐	Signature/Date of Authorized Individual Berton Brundage 9-25-2012

7. Approval for Return to Service

Pursuant to the authority given persons specified below, the unit identified in item 5 was inspected in the manner prescribed by the Administrator of the Federal Aviation Administration and is ☑ Approved ☐ Rejected

BY								
	☐	FAA Flt. Standards Inspector	☐	Manufacturer	☐	Maintenance Organization	☐	Persons Approved by Canadian Department of Transport
	☐	FAA Designee	☐	Repair Station	✘	Inspection Authorization		Other *(Specify)*

Certificate or Designation No. 2014826	Signature/Date of Authorized Individual Berton Brundage 9-25-2012

FAA Form 337 (10-06)

Work completed for [N7356] on

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.

N7356	9-25-2012
Nationality and Registration Mark	Date

8. Description of Work Accomplished

BOTH ELEVATORS RECOVERED USING POLY-FIBER IN ACCORDANCE WITH STC SA1008WE AND 43.13

---------- END ----------

[ ] Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020
For FAA Use Only
Office Identification CMH OH

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman Aircraft Engineering	Model: G-73 (mallard)
	Serial No.: J-56	Nationality and Registration Mark: N65CC
2. Owner	Name *(As shown on registration certificate)*: Crown Co.	Address *(As shown on registration certificate)*: 40-44 S. Washington St. Box 97 New Bremen, Ohio 45869

3. For FAA Use Only

4. Unit Identification				**5. Type**	
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	*(As described in Item 1 above)*			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Michael A. Bloom 21402 St. Rt. 198 Wapakoneta, Ohio 45895	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	279564840

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
November 25, 1991	Michael A. Bloom

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	XX	Inspection Authorization
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group

Other *(Specify)*

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
November 25,1991	281581233	Gary E. Butler

FAA Form 337 (12-88)

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.)

Fabricated doubler using 2024 T3, .063, I/A/W Structural Repair Manual, 01-85V-3 Dated April 1, 1944, section VIII, figure 112, page 198, and 43.13-1A section 3 para 97a, 99, 100a,b,d, and e, figure 2:24 as a guide. Installed doubler using PR 1422 A½ sealant and MS20426AD-3-5 rivits. Installed cleat P/N 111411-1(Docking point) using MS24694-S54 screws, AN960-PD-10 washers, MS20365-1032 nuts and PR 1422A½ sealant. Doubler and cleat positioned aft of station 406 and forward of station 428.

----------END----------

O-1		M-1	S-1	APS	C-1			A-1
O-2								A-2
O-3		RECEIVED						A-3
O-4		DEC 0 6 1991						A-4
O-5								A-5
O-6		FSDO COLUMBUS, OH						A-6
O-7		O-9	C-2	C-3	C-4	C-5	A-9	A-7
O-8								A-8

☐ Additional Sheets Are Attached

N65CC 11/25/91

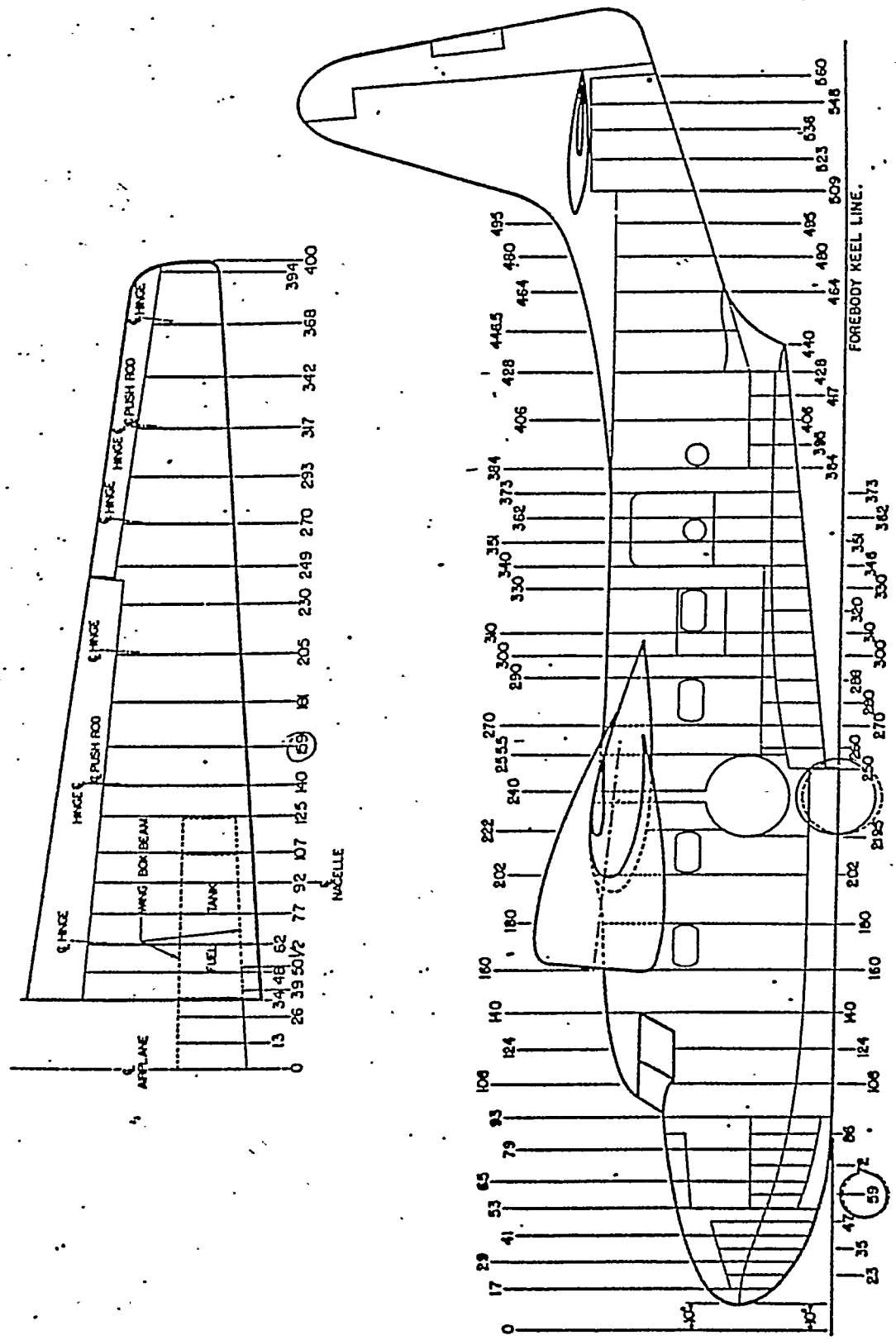
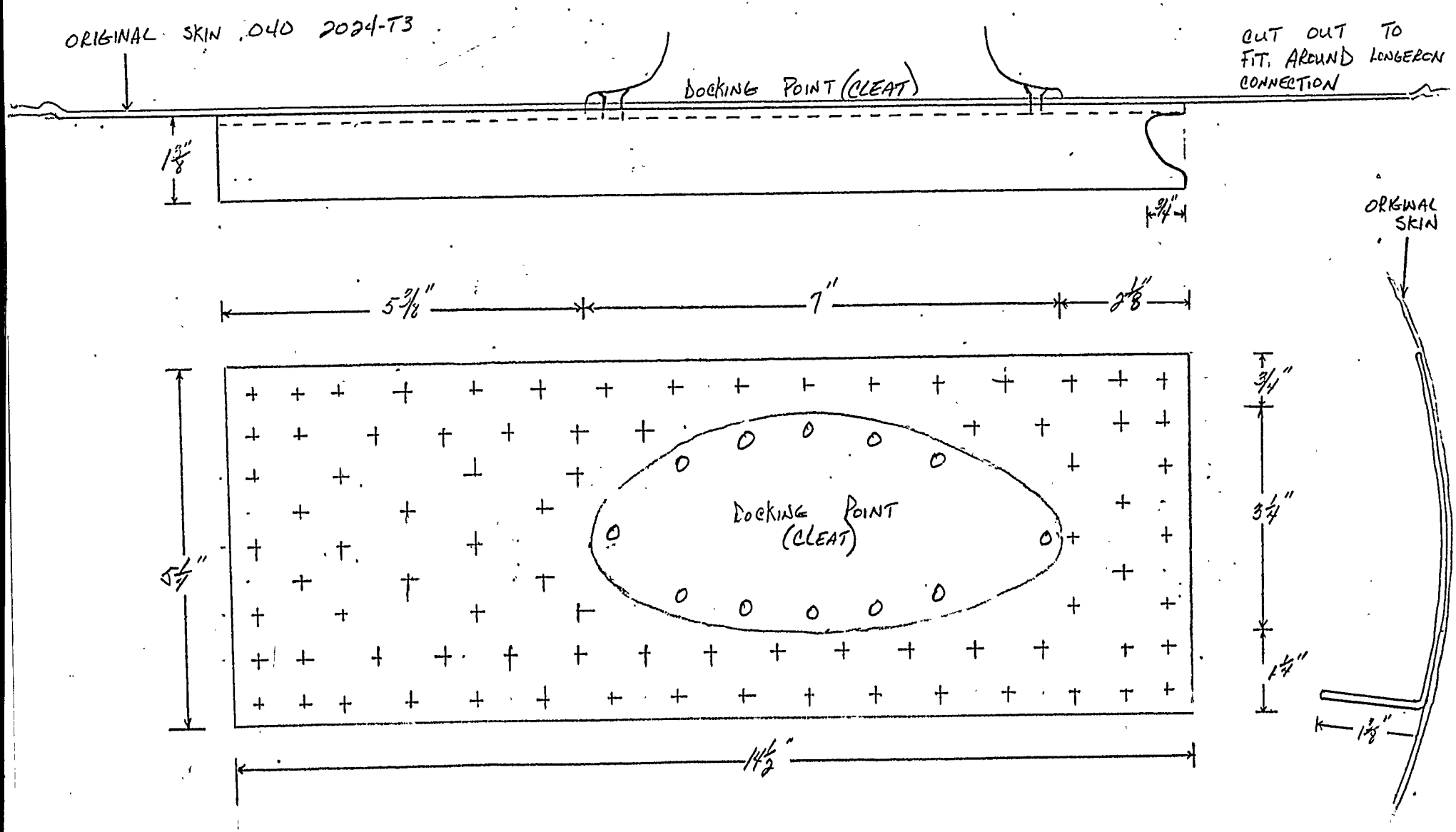


Figure 3—Wing and Fuselage Stations Diagram

2024-T3 ALUMINUM .065 THICK

DATE 1125 74
N65CC

83 EACH AN426-3-5 RIVITS
12 EACH MS24694-S54 SCREWS
12 EACH AN960-10 WASHERS
12 EACH MS20365-1032 NUTS
PR 1422 A-1/2 SEALANT



DATE F MAR 08 2002

MEMORANDUM TO THE FILE

REGISTRATION NUMBER:	N7356
MANUFACTURER/MODEL:	GRUMMAN G-73
SERIAL NUMBER	J-56

THIS MEMORANDUM TO THE FILE IS TO ACKNOWLEDGE A FILMOVER OF AIRWORTHINESS DOCUMENTS.

A5, FRAMES A2 THROUGH A5, CONTAINS FAA FORM 337, MAJOR REPAIR AND ALTERATION, DATED NOVEMBER 25, 1991, WITH ATTACHMENT, AND FAA FORM 337, MAJOR REPAIR AND ALTERATION, FEBRUARY 1, 1995.

FIGURE 3 OF THE ATTACHMENT TO THE FAA FORM 337, DATED NOVEMBER 25, 1991, WAS FILMED OVER BY THE REVERSE SIDE OF FAA FORM 337, DATED FEBRUARY 1, 1995.

FAA FORM 337, NOVEMBER 25, 1991, WILL BE REFILMED IN IT'S ENTIRETY, FOLLOWING THIS MEMORANDUM.

FAA FORM 337, DATED FEBRUARY 1, 1995, MAY BE VIEWED BY USE OF THE ELECTRONIC DOCUMENT RETRIEVAL SYSTEM.

THE AIRCRAFT RECORD HAS BEEN CONVERTED TO THE OPTICAL DISC IMAGING SYSTEM AND WILL NOT BE REFILMED, NOR WILL THE FRAMES BE VOIDED. INSTEAD, THE IMAGES WILL APPEAR TWICE IN THE AIRCRAFT FILE.

[redacted]JOR REPAIR AND ALTERATION
[redacted]e, Powerplant, Propeller, or Appliance)

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification
GL05

Adm[redacted]

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. This form is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman	Model: G-73
	Serial No.: J56	Nationality and Registration Mark: N465CC
2. Owner	Name *(As shown on registration certificate)*: Crown Credit Limited	Address *(As shown on registration certificate)*: State Route 219, New Knoxville, OH 45871

3. For FAA Use Only

The data identified herein complies with applicable airworthiness requirements and is approved only for the above described aircraft subject to conformity inspection by a person authorized in FAR 43.7

APPROVING INSPECTOR [signature]

DATE FEB 25 1999 CUG

4. Unit Identification **5. Type** SAO

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.
Pro-Tech Avionics Corporation 358 Wilmer Avenue Lunken Airport Cincinnati, OH 45226	U.S. Certificated Mechanic Foreign Certificated Mechanic X Certificated Repair Station Manufacturer	T3KR051N Radio Class 1,2,3 Lmtd Afrm,Lmtd Inst, Lmtd Special Srvce

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
2/25/99	Chuck M. Orsagos [signature]

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		Person Approved by Transport Canadian Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
Feb. 25 1999	T3KR051N	[signature]

FAA Form 337 (12-88)

NOTICE

Weight and balance or operating limitation changes shall be entered in the appropriate aircraft rec
compatible with all previous alterations to assure continued conformity with the applicable airworthir

8. Description of Work Accomplished
(If more space is required, attach additional sheets. Identify with aircraft nationality and registration mark and date work completed.)

N465CC TRIMBLE 2101 VFR GPS INSTALLATION

THE FOLLOWING ALTERATIONS WERE ACCOMPLISHED UNDER WORK ORDER A99-1418 by PRO-TECH AVIONICS CORP., CINCINNATI, OHIO. Ref. VFR 337 Dated Feb 25, 1999.

THIS IS A STAND ALONE VFR INSTALLATION WITH NO CONNECTIONS TO ANY AUTOPILOT.

Installed:

Trimble 2101	p/n	81438-00-0232	3.0 LB	at	F.S. 121.2
Icarus altitude serializer	p/n	3230015-3	.40 LB	at	F.S. 63.0
GPS antenna	p/n	81194	.40 LB	at	F.S. 92.0
Annunciator/Switch	p/n	MD41-328	.75 LB	at	F.S. 115.0

The Trimble GPS model TNL 2101 was installed as a VFR navigational system using Trimble installation manual p/n 81452, Rev F dated DEC 15, 1997, current aircraft diagrams, existing circuitry, wiring, connectors, and hardware supplied by or recommended by the manufacture, AN or MS materials as required, the methods, techniques and practices recommended by Advisory Circular 43.13-1A chapters 4, 5, 11, 13, 15 and AC 43.13-2A chapters 1, 2, 3, 4, 11, and 13 and AC 20-138..STC ST00131DE-D dated November 2, 1994 was referenced as a guide for this installation and requirements as stated in AC 20-138. The TNL 2101 is approved for VFR requirements of Class A1 equipment as specified in TSO-C129A.

The GPS is powered off the main avionics buss through its own 2amp circuit breaker and is mounted to existing Dzus structure within the center radio console. The 2101 has a deticated Annuciator/Switch Unit located in the center console. Serial altitude data is fed the 2101 GPS receiver from an ICARUS 3000 gray code-to-422 data converter mounted in the cockpit using MFG supplied hardware.

A ARINC 734 high speed GPS antenna p/n 81194 was mounted to the top of the cabin fuselage

Ground evaluation of the system installed was performed in accordance with the Post-Installation Checkout Procedures contained within the Trimble installation manual. System performance was normal. All other aircraft systems were tested and this modification meets the requirements of 25.1301 and the structural requirements of 25.561 with no adverse effects on other existing aircraft systems.

Installed the following placard " GPS NOT APPROVED FOR IFR ".

The TNL 2101 GPS was ground & flight evaluated IAW AC20-138 and the system is approved for VFR by:

Pilot: [signature] Cert. 281581233 Date: 2/25/99

Tech: [signature] Cert. 2956[illegible] Date: 2/25/99

The TNL 2101 Pilot's Guide (TPN 81451 with Rev G or later).

An electrical load check determined that the total electrical load does not exceed 80% of the electrical system rated capacity.

To assure continued airworthiness of the Trimble GPS installed under this 337, the owner/ operator is instructed to follow the inspections and checks recommended by the installation manual P/N 81452, Rev F dated DEC 15, 1997 or later revisions.

The aircraft weight and balance data, and equipment list, have been revised to include this installation.

——— END ——— 337465cc.DOC

---------- E N D ----------

☐ Additional Sheets Are Attached

U.S. GOVERNMENT PRINTING OFFICE: 1992-769-012/60157

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification
DA 6L07

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman Aircraft Engineering	Model: G-73 (Mallard)
	Serial No.: J-56	Nationality and Registration Mark: N465CC
2. Owner	Name *(As shown on registration certificate)*: Crown Credit Company	Address *(As shown on registration certificate)*: P.O. Box B, New Knoxville, OH 45871-0500

3. For FAA Use Only

4. Unit Identification				5. Type	
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	*(As described in Item 1 above)*			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Kevin F Brown 01965 Feeder Road St. Marys, OH 45885	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	276746486

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
3-23-98	Kevin F Brown *Kevin F Brown*

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 XX APPROVED ☐ REJECTED

BY						
		FAA Flt. Standards Inspector		Manufacturer	XX	Inspection Authorization
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group

Other *(Specify)*

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
3-23-98	IA276746486	Kevin F Brown *Kevin F Brown*

FAA Form 337 (12-88)

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. Replaced right wing flap trailing edges P/N's FA106267-1, -2, and -3 with new.

2. Replaced 4th rib from inboard side at flap station 26.754 P/N 106263-1R furnished by the owner/operator. Rib dimensionally same as one removed, fits correctly.

3. Replaced upper and lower flap skins provided by the owner/operator. Skins same as original, fit correctly. With skins removed inspected all exposed ribs and aft side of flap beam for corrosion, cracks, and general condition. Cleaned exposed structure and painted with epoxy primer.

4. Replacement skins, rib, and trailing edges were acid etched, alodined, and painted with epoxy primer. Flap was assembled with corrosion inhibitor sealant MC-665 using MS20470AD & MS20426AD rivets where applicable.

   a) All work done in accordance with AC43.13-1A, Chapter 2, Section 3; Chapter 6, paragraphs 248 to 252, dated 1988; Grumman Mallard Service Manual, Section IV, dated August 1, 1951.

----------END----------

0-1		M-1	M-2	SPM	C-1	C-2		A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	
0-5								A-5	
0-6								A-6	
0-7		0-9	C3	C4	C5	A-10	A-9	A-7	
0-8								A-8	

RECEIVED
MAR 30 1998
CMH FSDO COLUMBUS, OH

☐ Additional Sheets Are Attached

★U.S.GPO:1991-0-568-012/40035

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS	2 MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4 CATEGORY
N7356	GRUMMAN G-73	J-56	TRANSPORT

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	FAA REPRESENTATIVE	DESIGNATION NUMBER
R 12/23/68	LEE H. THIEL	GL07

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 8100-2 (8-82)

* U.S. G.P.O.:1998 669-038

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3 AIRCRAFT SERIAL NUMBER	4 CATEGORY
N465CC	GRUMMAN G-73	J-56	TRANSPORT

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	FAA REPRESENTATIVE	DESIGNATION NUMBER
R - 12/23/68	LEE H. THIEL	GL07

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 8100-2 (8-82)

☆ U.S.G.P.O.: 1994-568-762

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS	2 MANUFACTURER AND MODEL	3 AIRCRAFT SERIAL NUMBER	4 CATEGORY
N65CC	Grumman G-73	J56	Standard Transport

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	FAA REPRESENTATIVE	DESIGNATION NUMBER
(Replacement) 12-23-68	RICHARD A. PEMBERTON	AGL-FSDO-62

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1 NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3 AIRCRAFT SERIAL NUMBER	4 CATEGORY
N465CC	GRUMMAN G-73	J-56	TRANSPORT

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	FAA REPRESENTATIVE	DESIGNATION NUMBER
R - 12/23/68	LEE H. THIEL	GL07

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 8100-2 (8-82)

☆U.S.G.P.O.: 1994-568-762

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification GGL07

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman Aircraft Engineering	Model: G-73 (Mallard)
	Serial No.: J-56	Nationality and Registration Mark: N65CC
2. Owner	Name *(As shown on registration certificate)*: Crown Credit Company, Ltd.	Address *(As shown on registration certificate)*: Auglaize County Airport P.O. Box B New Knoxville, OH 45871

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.
Christopher L. Howe 110 E Main Street Rossburg, OH 45362	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	AP 294787826

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
5-12-97	Chris L Howe *Chris L. Howe*

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 X APPROVED ☐ REJECTED

BY							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization	
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
5-12-97	IA276746486	*Kevin F Brown* Kevin F Brown

FAA Form 337 (12-88)

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. Replaced left wing flap trailing edges P/N's FA106267-1, -2, -3.

2. Replaced upper and lower flap skins with new 2024-T3 alclad .032". With skins removed inspected all exposed ribs and aft side of flap beam for corrosion, cracks, and general condition. Cleaned exposed structure and painted with epoxy primer.

3. Replacement skins and trailing edges were acid etched, alodined, and painted with epoxy primer. Flap was assembled with corrosion inhibitor sealant MC-665 using MS20470AD & MS20426AD rivets where applicable.

   a) All work done in accordance with AC43.13-1A, Chapter 2, Section 3; Chapter 6, paragraghs 248 to 252, dated 1988; Grumman Mallard Service Manual, Section IV, dated August 1, 1951.

END

0-1		M-1	M-2	SPM	C-1	C-2		A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	
0-5									
0-6								A-6	
0-7		0-9	C3	C4	C5	A-10	A-9	A-7	
0-8								A-8	

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MAY 13 1997
CMH FSDO COLUMBUS, OH

☐ Additional Sheets Are Attached

★U.S.GPO:1991-0-568-012/40035

U.S. Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification PDT GL07

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman Aircraft Engineering	Model: G-73 (Mallard)
	Serial No.: J-56	Nationality and Registration Mark: N65CC
2. Owner	Name *(As shown on registration certificate)*: Crown Credit Company, Ltd.	Address *(As shown on registration certificate)*: Auglaize Count Airport, P.O. Box B, New Knoxville, OH 45871

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.
Tom Craft 2500 W. Quincy Broken Arrow, Ok 74012	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	A+P478700181

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
5/6/97	Thomas H. Craft

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							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization	
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
5/6/97	IA478700181	Thomas H. Craft

FAA Form 337 (12-88)

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.)

See ATTACHED 16 PAGES DATED 5-6-97

0-1		M-1	M-2	SPM	C-1	C-2		A-1	
0-2			X					A-2	
0-3								A-3	
0-4								A-4	
0-5								A-5	
0-6								A-6	
0-7		0-9	C3	C4	C5	A-10	A-9	A-7	
0-8								A-8	

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CMH FSDO COLUMBUS, OH

PD

X Additional Sheets Are Attached

★U.S.GPO:1990-0-568-012:40004

DATE 5-6-97

Aircraft Make:	Grumman Aircraft Engineering
Model:	G-73 (Mallard)
Serial No.	J-56
Reg. No.	N65CC
Owner:	Crown Credit Company, Ltd.
Address:	Auglaize County Airport P.O. Box B New Knoxville, OH 45871

The cover was removed from rudder for inspection of damage. The rudder was then disassembled as needed to perform repairs. Upon inspection the following parts were damaged beyond repair.

Parts list A

Fig. #	Index #	Part #	Description
50-B	16	106870	Gusset
50	36	106852-1	Rib
50	39	106853-1	Rib
50	60	106856-4	Rib
50	61	106841-7	Rib
50	63	106861-1	Strip Trailing edge
50	62	106840	Cap assy. upper

Since there are no longer replacement parts available, the above parts were sent out for metal analysis to determine material type. Test results proved to be 24 St.

The following parts were damaged but repairable.

Parts List B

Fig. #	Index #	Part #	Description
50	3	106707-8	Skin-upper nose
50	22	106850	Beam assy.
50	62	106840	Cap assy. (vertical Rib)

All parts referenced in parts list A were duplicated by building router blocks, and form blocks and pressing.

All parts referenced in parts list B were repaired by cutting off damaged portion at a point where a proper splice joint could be performed. The damaged portion was then duplicated in the manor described in the above paragraph.

Model G-73
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All replacement parts were made out of 2024-0 aluminum, then heat treated to 2024-T3 specification.

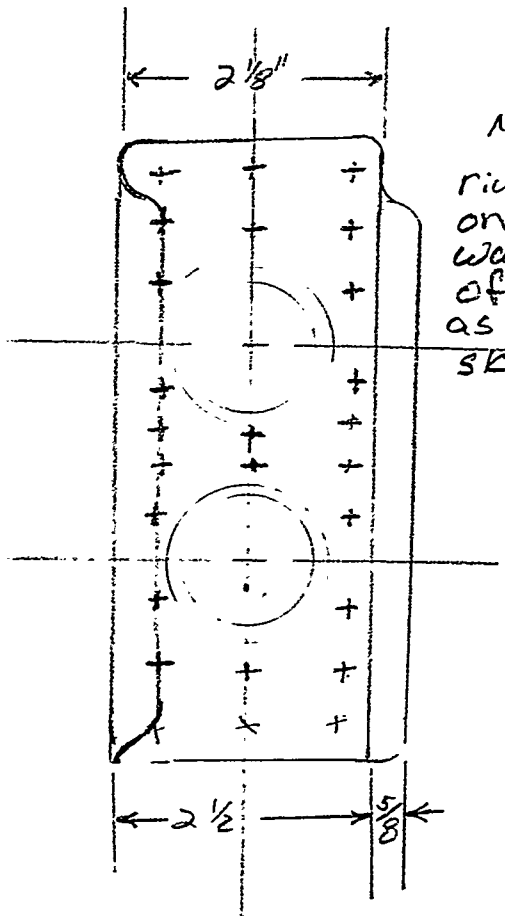
Figure No. 50, Index No. 22, P/N 106850 bean assy. (spar) was spliced midway between ribs Index No. 58 and 59, splice was made in accordance with Metal Repair Procedures 43.13 section 3, also in accordance with Grumman Structural Repair Instruction Manual No. AN 01-85 AB-3, Section III Tail group, Appendix I Repair Materials, Appendix II Typical Repair Illustrations and Appendix III Grumman Standard practice.

The rudder was place in a jig for reassembly to assure alignment of the spar, ribs, leading and trailing edges and hinge points. After completion of structural repair the rudder was covered with Ceconite and Randolph dope in compliance with Ceconite Procedure Manual #101.

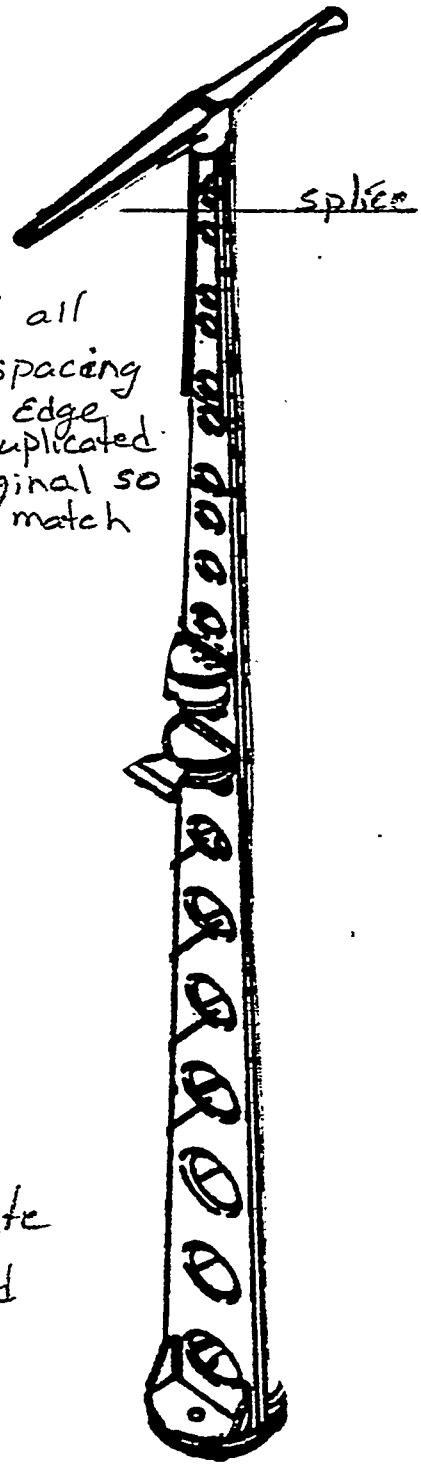
Please note: All items highlighted in red were reproduced. All items highlighted in green were repaired.

Model G-73
N 65CC
S/N J-56
5-6-97

SPARE SPLICE Sketch



Note: all rivet spacing on 5/8 Edge was duplicated of orginal so as to match SKIN.



Note: All rivet duplicate grumman standard

JRA

LEADING SKIN Splice Sketch.

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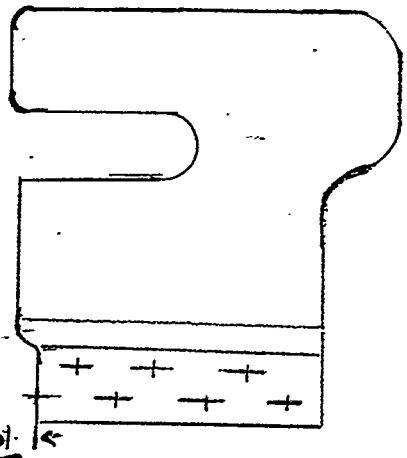
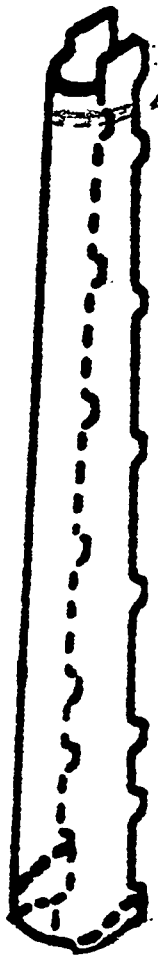


Side view of upper piece spliced to leading edge skin.

.040

STEP .040 To Fit inside Joining piece for riveting.



splice

Note: all rivets duplicate grumman standard.

JRA

Model G-73
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S/N J-56
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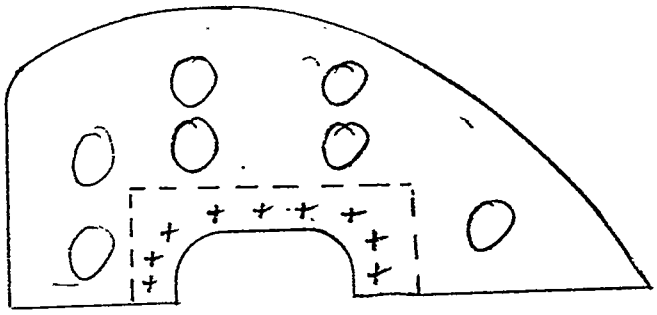
Cap Repair sketch.



Note: Piece cut on dotted line and replacemect Piece of 6061-T6 welded in and NEW holes drilled to duplicate orginals.

JEA.

Model G-73
N65CC
S/N J-56
5-6-97

Grumman Mallard

AMPHIBIAN

Model G-73

ILLUSTRATED PARTS CATALOG

GRUMMAN AIRCRAFT ENGINEERING CORP. BETHPAGE, L. I., NEW YORK

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Model G-73
N 65CC
S/N T-56

5/6/97

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Model G-73
-N 65CG
S/N J-56
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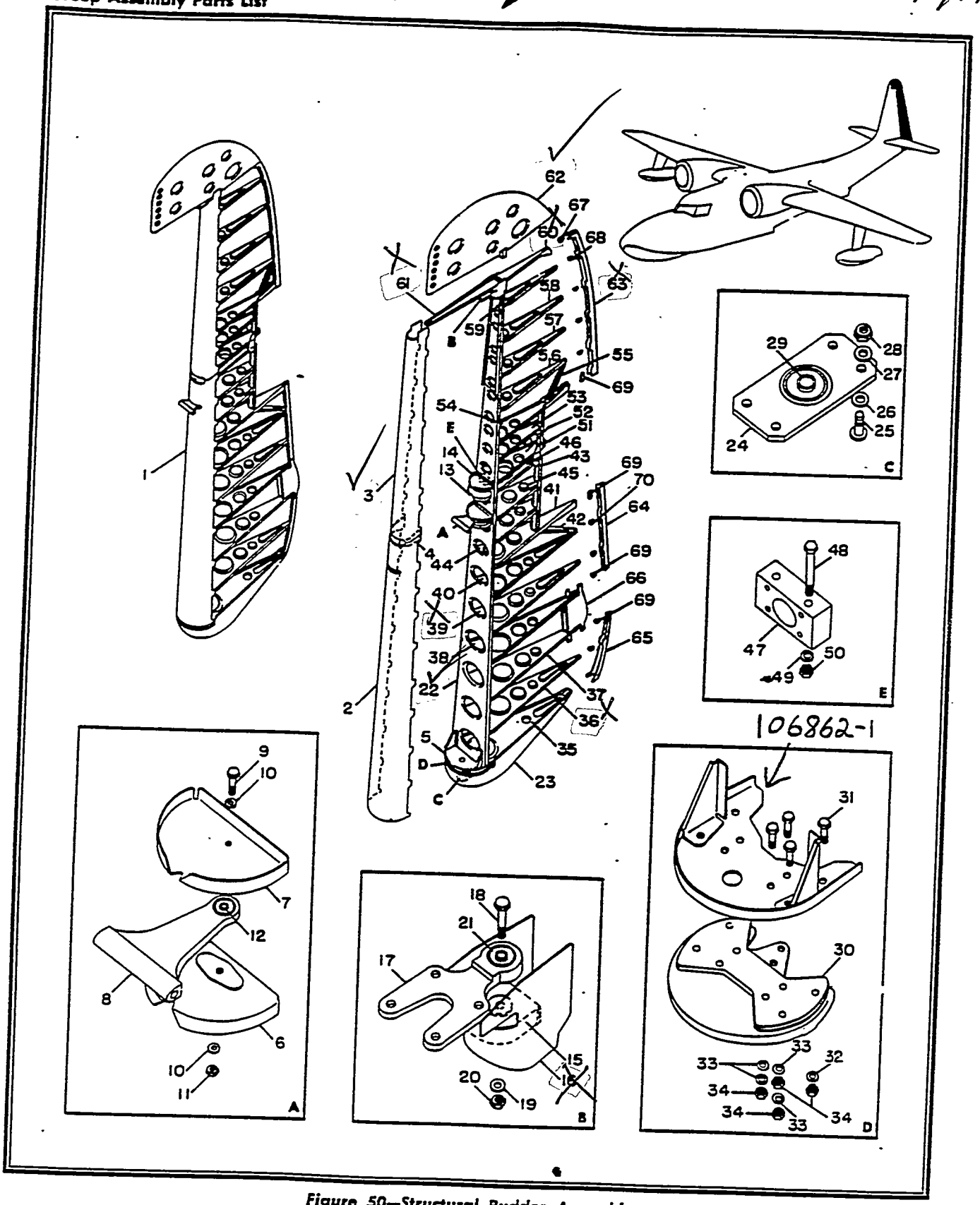

Figure 50—Structural Rudder Assembly

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Model G-73
N 65 CC
S/N J-56
5/6/97

Figure & Index No.	Part No.	Nomenclature 1 2 3 4 5 6 7	Units Per Assy	Usage Code
		TAIL (Cont)		
		Structural Rudder Assembly		
50-1	106707	. . Rudder Assembly - Structural	1	All
-2	106707-7	. . . Skin - Lower nose	1	All
-3	106707-8	. . . Skin - Upper nose	1	All
-4	106707-9	. . . Plate - Splice	2	All
-5	106851-1	. . . Rib - Sta. 90-1/2	1	All
-6	106851-2	. . . Rib Assembly - Sta. 155-3/4	1	All
-7	106851-3	. . . Rib Assembly - Sta. 156-3/8	1	All
-8	112204	. . . Fitting Assembly - Hinge (iap)	1	All
		ATTACHING PARTS		
-9	AN4-11A	. . . . Bolt	1	All
-10	AN960-416	. . . . Washer	2	All
-11	AN365-428	. . . . Nut	1	All
-12	AN200KP4	. . . . Bearing	1	All
-13	106851-8	. . . . Rib - Sta. 162-7/16	1	All
-14	106851-9	. . . Rib - Sta. 164-1/16	1	All
-15	106869-1	. . . Rib Assembly - Sta. 216-3/8	1	All
-16	106870	. . . Gusset	1	All
-17	112214	. . . Fitting Assembly - Hinge (iap)	1	All
		ATTACHING PARTS		
-18	AN4-13A	. . . . Bolt	1	All
-19	AN960-416	. . . . Washer	1	All
-20	AN365-428	. . . . Nut	1	All
-21	AN207DP4	. . . . Bearing	1	All
-22	106850	. . . Beam Assembly	1	All
-23	106721	. . . Cap Assembly - Lower	1	All
-24	112215	. . . Bearing Assembly - Hinge (iap)	1	All
		ATTACHING PARTS		
-25	AN24-10A	. . . . Bolt	4	All
-26	AN960-416L	. . . . Washer	4	All
-27	AN960-416	. . . . Washer	4	All
-28	AN364-428	. . . . Nut	4	All
-29	AN200KP6	. . . . Bearing	1	All
-30	112216	. . . Sector - Control (iap)	1	All
		ATTACHING PARTS		
-31	AN4-11A	. . . . Bolt	8	All
-32	AN960-416L	. . . . Washer	2	All
-33	AN960-416	. . . . Washer	8	All
-34	AN365-428	. . . . Nut	8	All
-35	106856-1	. . . Rib - Sta. 90-1/2	1	All
-36	106852-1	. . . Rib - Sta. 99-1/8	1	All
-37	106852-2	. . . Rib - Sta. 107-7/8	1	All
-38	106852-3	. . . Rib - Sta. 116-5/8	1	All
-39	106853-1	. . . Rib - Sta. 125-1/4	1	All
-40	106853-2	. . . Rib - Sta. 134	1	All
-41	106855-1	. . . Rib - Sta. 142-3/4	1	All
-42	106857-1	. . . Rib - Diagonal	1	All
-43	106860-1	. . . Beam Assembly	1	All
-44	106855-2	. . . Rib - Sta. 149-1/4	1	All
-45	106855-3	. . . Rib - Sta. 155-3/4	1	All
-46	106855-4	. . . Rib - Sta. 162-7/16	1	All
-47	57938	. . . Block - Tab control (iap)	1	All
		ATTACHING PARTS		
-48	AN4-22A	. . . . Bolt	2	All

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model G-73
N 65CC
S/N J-56

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Figure & Index No.	Part No.	Nomenclature 1 2 3 4 5 6 7	Units Per Assy	Usage Code
		TAIL (Cont)		
		Structural Rudder Assembly (Cont)		
50-49	AN960-416	. . . . Washer	2	All
-50	AN365-428	. . . . Nut	2	All
-51	70422	. . . Hinge - Tab	1	All
-52	106856-2	. . . Rib - Sta. 164-1/16	1	All
-53	106856-3	. . . Rib - Sta. 170	1	All
-54	106854-4	. . . Rib - Sta. 174-3/4	1	All
-55	106857-2	. . . Rib - Diagonal	1	All
-56	106853-3	. . . Rib - Sta. 183-3/4	1	All
-57	106854-1	. . . Rib - Sta. 192-3/4	1	All
-58	106854-2	. . . Rib - Sta. 201-3/4	1	All
-59	106854-3	. . . Rib - Sta. 211	1	All
X -60	106856-4	. . . Rib - Sta. 217 Aft	1	All
X -61	106841-7	. . . Rib Assembly - Sta. 217 Forward	1	All
✓ -62	106840	. . . Cap Assembly - Upper	1	All
X -63	106861-1	. . . Strip - Trailing edge	1	All
-64	106861-2	. . . Strip - Trailing edge	1	All
-65	106861-3	. . . Strip - Trailing edge	1	All
-66	106680	. . . Fairing Welded Assembly - Light	1	All
-67	69721-4	. . . Block - Trailing edge	1	All
-68	40909-2	. . . Block - Trailing edge	4	All
-69	40909-4	. . . Block - Trailing edge	4	All
-70	111809-1	. . . Block - Trailing edge	5	All

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N 65CC
S/N J-56
5/6/97

(USAF) T.O. 1U-16(H)A-3
Formerly (USAF) T.O. 1A-16(S)A-3
(NAVY) NAVWEPS AN 01-85AB-3

410

TECHNICAL MANUAL

STRUCTURAL REPAIR INSTRUCTIONS

USAF MODELS
HU-16A-GR
HU-16B-GR

NAVY MODELS
UF-1, -1G-1T

AIRCRAFT

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BY DIRECTION OF THE CHIEF OF THE BUREAU OF NAVAL WEAPONS

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Model G-73
N#65CC
S/N J-56
5/6/97

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*Title	11
*A	11
i	1
ii	8
iii thru iv	2
v	4
vi Blank	4
vii thru xiv	0
1 thru 2A	7
2B Blank	5
3	0
4	8
5 thru 11	0
12	9
13 thru 15	0
16 thru 16C	1
16D Blank	1
17 thru 37	0
38 thru 39	2
40 thru 110	0
110A thru 110D	1
111	1
112	0
112A thru 112D	1
113 thru 114	0
114A thru 114D	1
114E thru 114F	3
115 thru 120	0
120A thru 120F	1
121	1
122 thru 124	0
124A thru 124C	2
124D Blank	2
125 thru 136	0
136A thru 136D	1
137	1
138 thru 144	0
144A thru 144B	1
145 thru 154	0
154A thru 154B	1
155 thru 158	0
158A thru 158B	1
159 thru 161	0
162	1
163 thru 205	0
206 thru 207	1
208	[illegible]
209 thru 346	0
346A	2
346B	4
*347	11
348	6
348A Added	10
348B Blank	10
349 thru 352	0
352A	2
352B Blank	2
353 thru 357	0
358 thru 359	10
360 thru 368	0
368A thru 368C	1
368D Blank	1
369	1
370 thru 372	0
372A	1
372B Blank	1
373	1
374 thru 402	0

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USAF

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Model G-73
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S/N J-56
5/6/97

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N# 65CC
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5/6/97

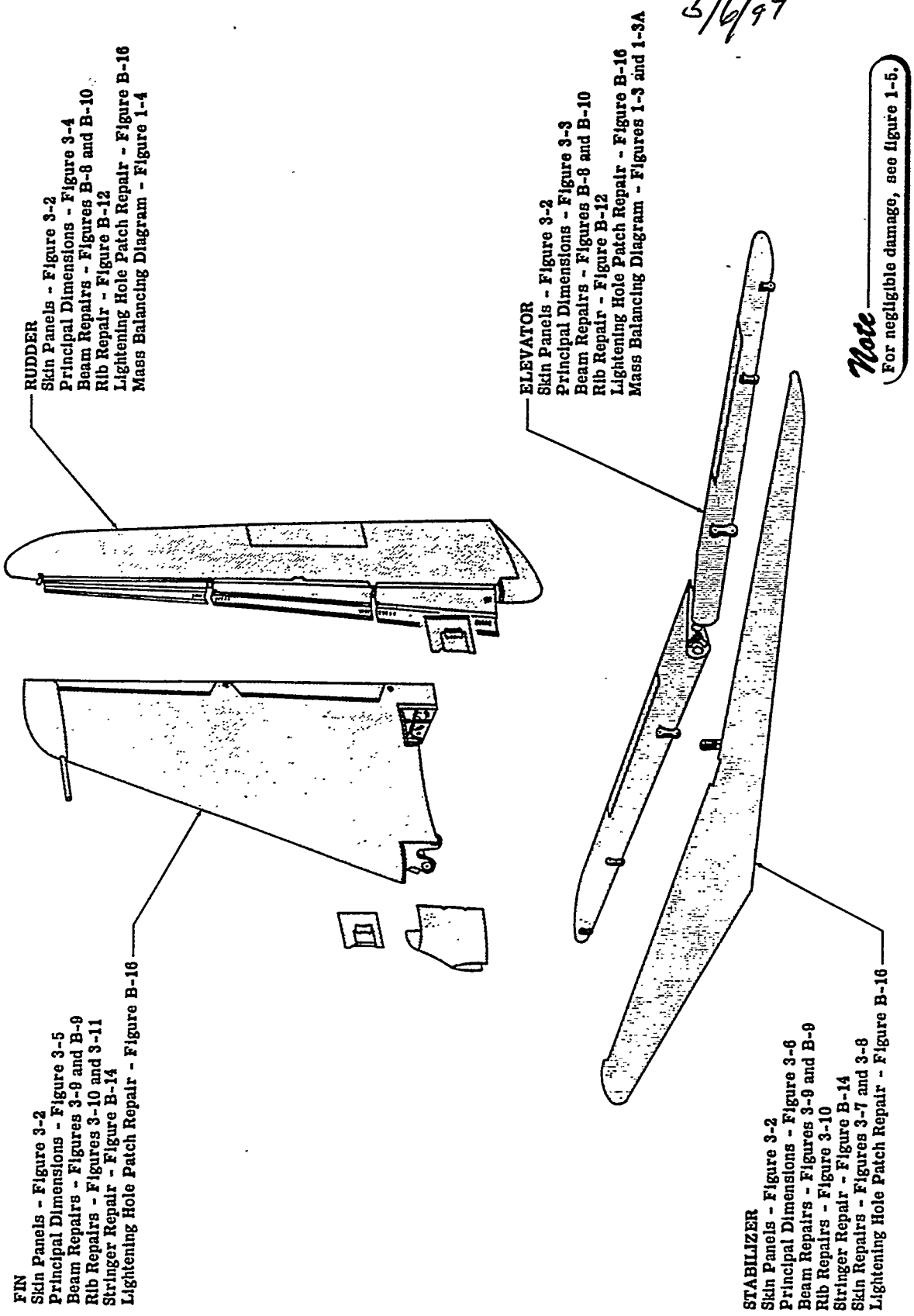

Figure 3-1. Tail Group—Exploded View—SA-16A-GR, UF-1, -1G, -1T

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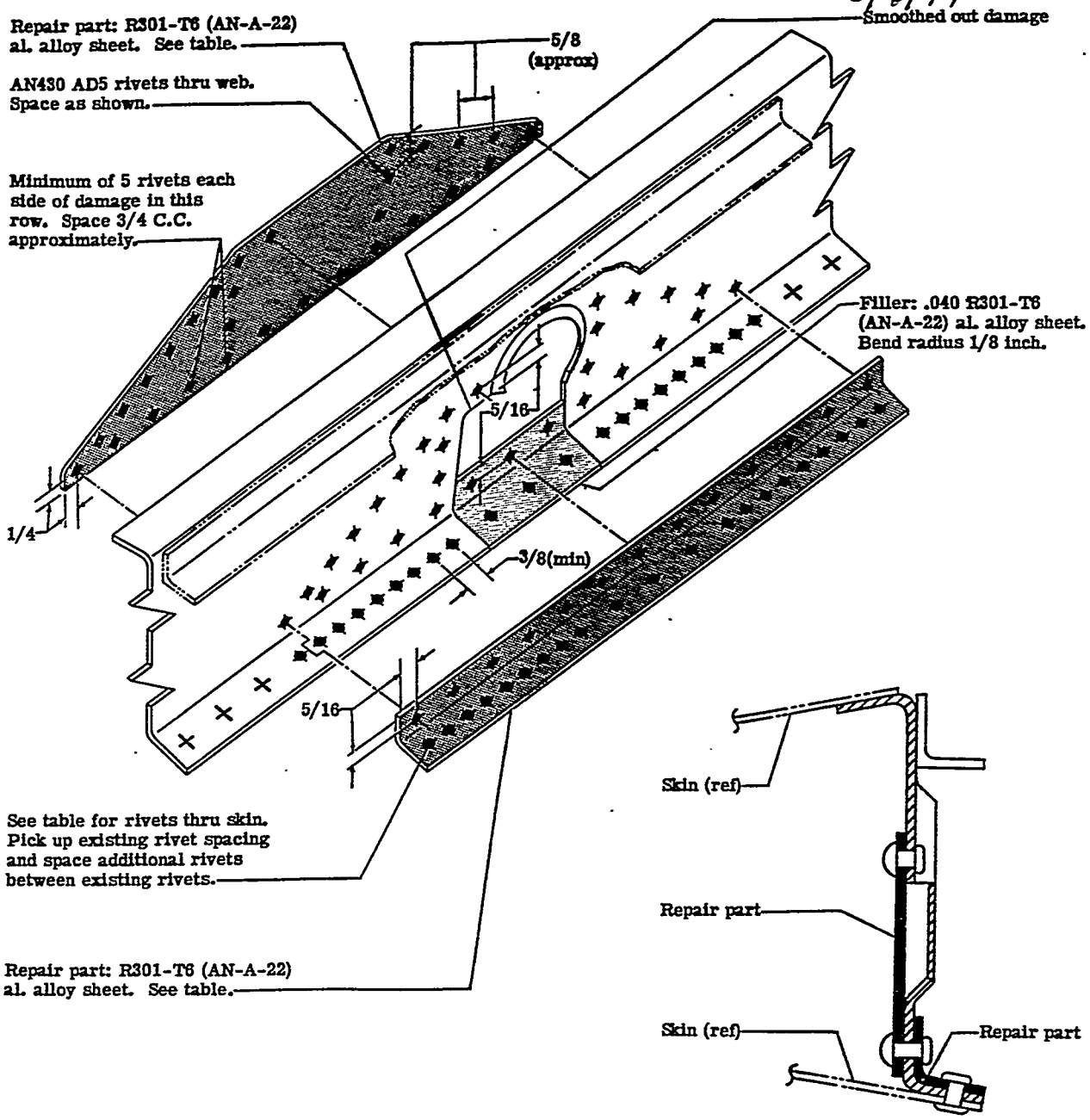
model G-73
N# 65CC
S/N J-56
5/6/97



Location of Beam	Gage of Damaged Beam	Gage of Repair Part	Rivets thru Skin	
			Type and Size	Number
Aileron	.040	.051	AN470 AD4	5
Elevator	.040	.051	AN426 AD4	5
Flap Rear Beam	.040	.051	AN470 AD3	9
Rudder Main Beam	.051	.064	AN426 AD4	5

SECTION THRU REPAIR

- original structure
- insertion
- repair part
- repair part in cross-section
- repair rivets

Figure B-10. Aileron, Elevator, Flap and Rudder Beam Patch Repair in Way of Lightening Hole

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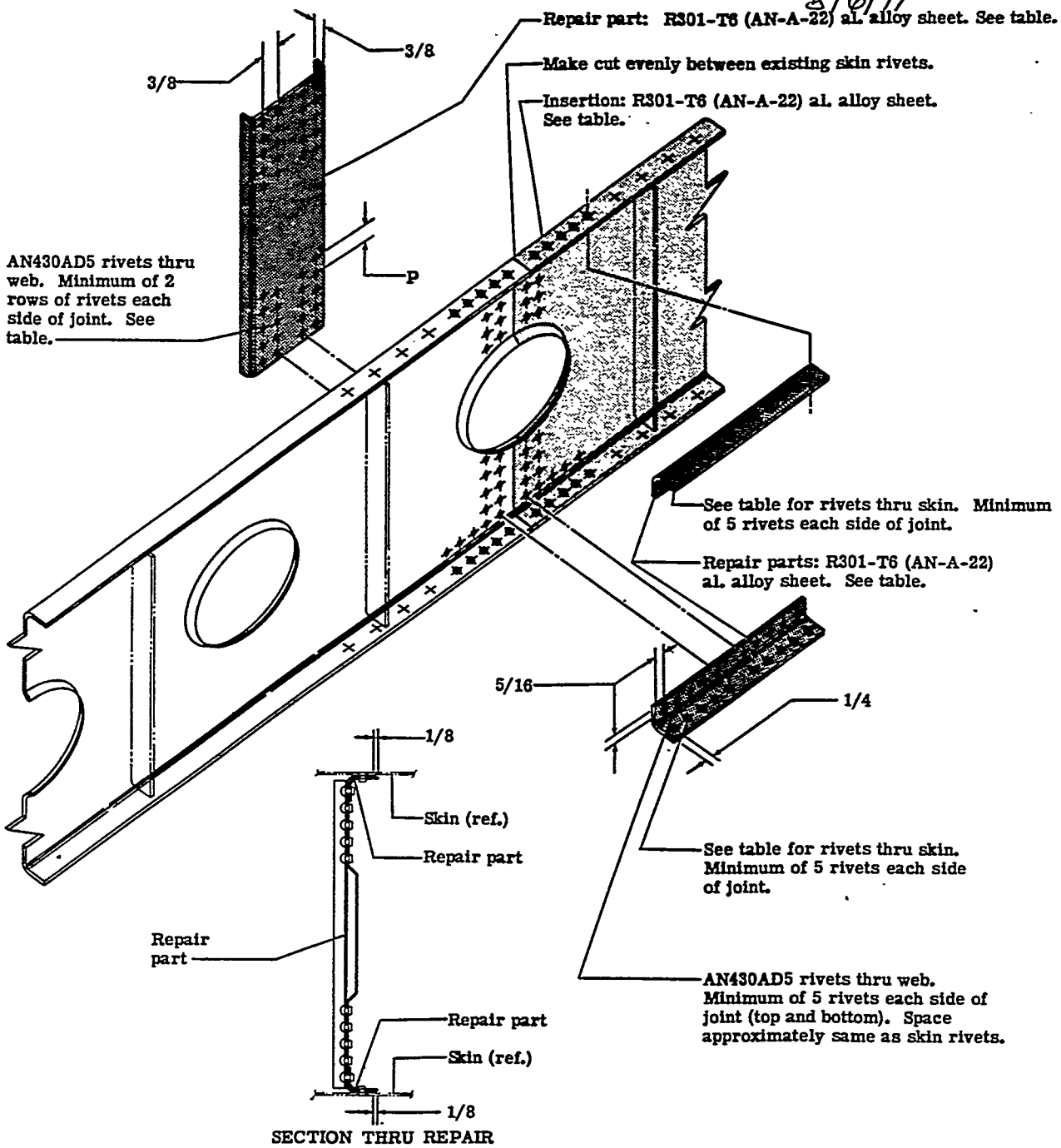
model G-73
N# 65CC
S/N J-56
5/6/97



Location of Beam	Gage of Damaged Beam	Insertion		Gage of Repair Part	Rivets Thru Skin	Rivet Spacing P
		Gage	Bend Radius			
Aileron	.040	.040	1/8	.051	AN470AD4	5/8 (approx.)
Elevator	.040	.040	1/8	.051	AN426AD4	5/8 (approx.)
Rudder Main Beam	.051	.051	5/32	.064	AN426AD4	1/2 (approx.)

original structure
insertion
repair part
repair part in cross-section
repair rivets

Figure B-8. Aileron, Elevator, and Rudder Beam Insertion

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U.S. 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 GL07

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Credit Company, Ltd.	ADDRESS (As shown on registration certificate): Auglaize County Airport P.O. Box B New Knoxville, OH 45871

3. FOR FAA USE ONLY

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Kevin F Brown 01965 Feeder Road St. Marys, OH 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	AP276746486

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
February 4, 1997	Kevin Brown Kevin Brown

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 [X] APPROVED [ ] REJECTED

BY							OTHER (Specify)
		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
February 4,1997	IA276746486	Kevin Brown Kevin Brown

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 corrosion on right side aft tail skin F.S. 556 too F.S. 564. Removed corroded portion of skin 3¼" X 4" where skin terminates aft on tail fuselage, see attached drawing. Identified original skin as .032" R301-W P/N 107225-13R per Grumman Aircraft Engineering blueprint drawing #107225 dated 7-15-46. Note per attached sheet R301-W old designation is same as 2014-T3.

Repaired damage with flush skin patch using double row rivet spacing and picking up existing rivet pattern on bulkhead and stiffner in accordance with Structural Repair Manual AN01-85AB-3 Appendix 2, figure B-1, page 378 dated December 17, 1960. Doubler .040" 2014-T6 alclad filler insert .032" 2014-T6 alclad. Etched, alodined, and primed all exposed aluminum with epoxy primer. Repair was installed with with corrosion inhibitor sealant MC-665 and MS20426AD rivets following procedures in AC43.13-1A, Chapter 2, Section 3, dated 1988.

----------END----------

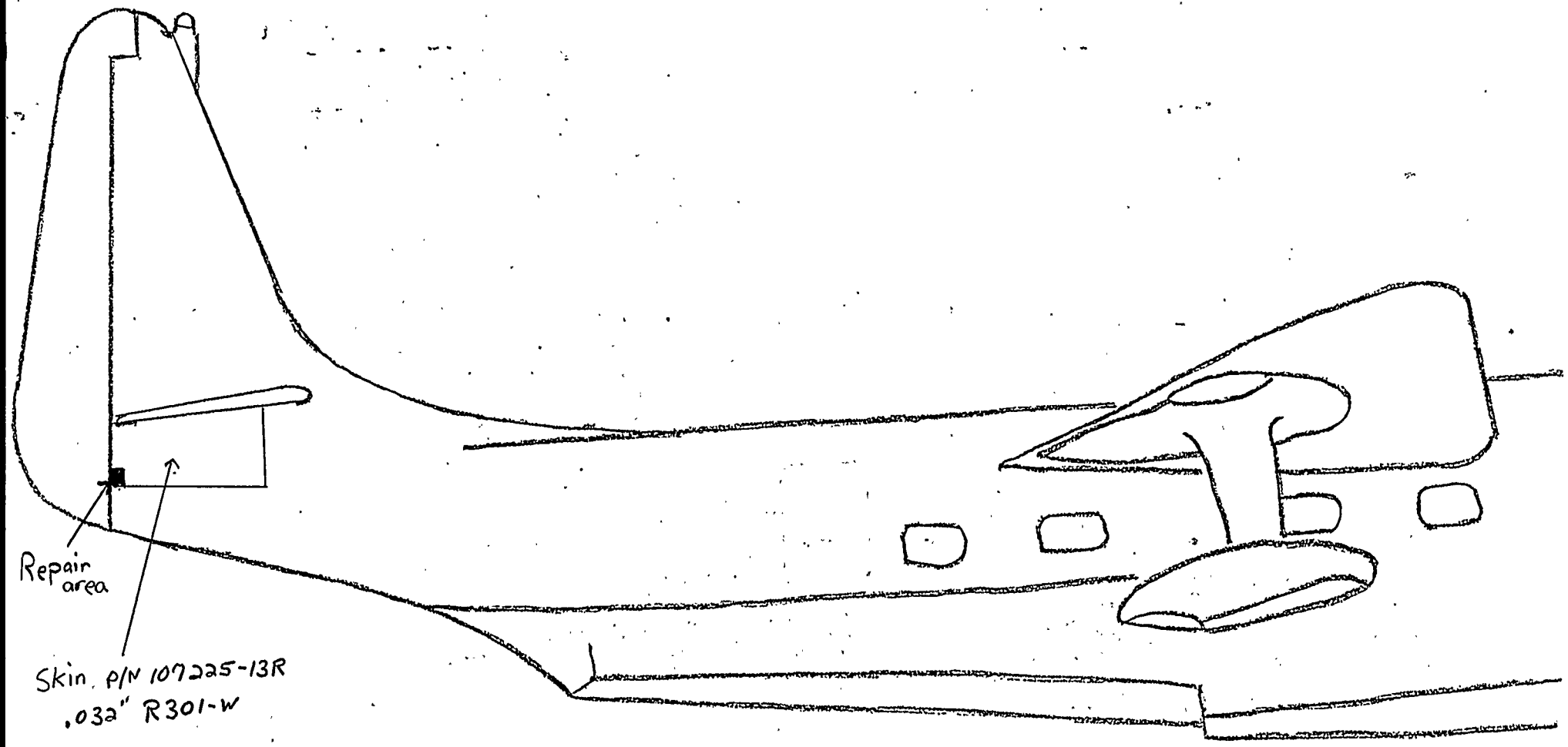
0-1		M-1	M-2	SPM	0-1			A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	
0-5									
0-6								A-6	
0-7		0-9	0-2	0-3	0-4	0-5	A-9	A-7	
0-8								A-8	

RECEIVED
FEB - 6 1997
FSDO COLUMBUS, OH

☒ ADDITIONAL SHEETS ARE ATTACHED

U.S. GPO 1981 - 775-332 47

N65CC Feb 4, 1997



N65CC Feb 4, 1997

ALUMINUM ALLOY TEMPER DESIGNATION TABLE

Alloy Designation		Heat Treat by Vendor			Heat Treat by Customer		
New	Old	Sheet	Plate	Extrusion	Sheet	Plate	Extrusion
2024	24S-T	2024-T3	2024-T4	2024-T4	2024-T4	2024-T4	2024-T42
2014	R301-W	2014-T3			2014-T4	2014-T4	
	R301-T	2014-T6			2014-T6	2014-T6	
2014	14S-W	2014-T3	2014-T4	2014-T4	2014-T4	2014-T4	2014-T42
	14S-T	2014-T6	2014-T6	2014-T6	2014-T6	2014-T6	2014-T62
7075	75S-T	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6
6061	61S-W	6061-T4	6061 T4	6061-T4	6061-T4	6061-T4	6061-T4
	61S-T	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6

Alloy Designation		Strain Hardened	Strain Hardened and Then Partially Annealed
New	Old		
1100	2S	H12	H22
and	and	H14	H24
3003	3S	H16	H26
		H18	H28

U.S. 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 GL07

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Credit Company, Ltd.	ADDRESS (As shown on registration certificate): Auglaize County Airport P.O. Box B New Knoxville, OH 45871

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.
Kevin F Brown 01965 Feeder Road St. Marys, OH 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	AP276746486

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
february 4, 1997	Kevin F Brown — Kevin F Brown

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	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
February 4,1997	IA276746486	Kevin F Brown — Kevin F Brown

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)Shored aircraft and removed rudder.

2)Removed right aft lower tail skin P/N 107225-26 1R from F.S. 509 too F.S. 564. See attached sheets. Cleaned all frames and stringers. Replaced stringer #19 F.S. 509 - 536 P/N 107010-168R and stringer #20 F.S. 536 - 560 P/N 107010-169R with new. Replaced rudder pulley support frame P/N107098-3 at F.S. 523 with new. Replaced right and left skin doublers P/N FA107356-5R and FA107356-5L at F.S. 564 with new. Used Grumman Aircraft Engineering Corporation blueprint drawings 107010 & 107225 to identify stringers & frames. Acid etched, alodined and painted all frames, stringers with epoxy primer. Replaced skin with new P/N 107225-26 1R using old skin as template. Assembled stringers, frame and skin with corrosion inhibitor sealant MC-665 I/A/W Maintenance Service Manual Section IV, paragragh 1,a), pg.225. Rivet size & spacing same as original and using procedures in Chapter 2, Section 3 of 43.13-1A dated 1988.

3)Replaced rudder curtain with new P/N FA106818-1. Installed rudder to aircraft using new hardware and new rudder control cables P/N FA109407-1-7 left and -2-11 right. Rigged rudder and trim tab I/A/W Maintenance Service Manual SectionIII, dated Aug. 1, 1951.

0-1		M-1	M-2	SPM	0-1			A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	
0-5								A-5	
0-6								A-6	
0-7		0-9	0-2	0-3	0-4	0-5	A-9	A-7	
0-8								A-8	

RECEIVED
FEB - 6 1997
FSDO COLUMBUS, OH

☒ ADDITIONAL SHEETS ARE ATTACHED

U.S. GPO 1981 - 775-332 47

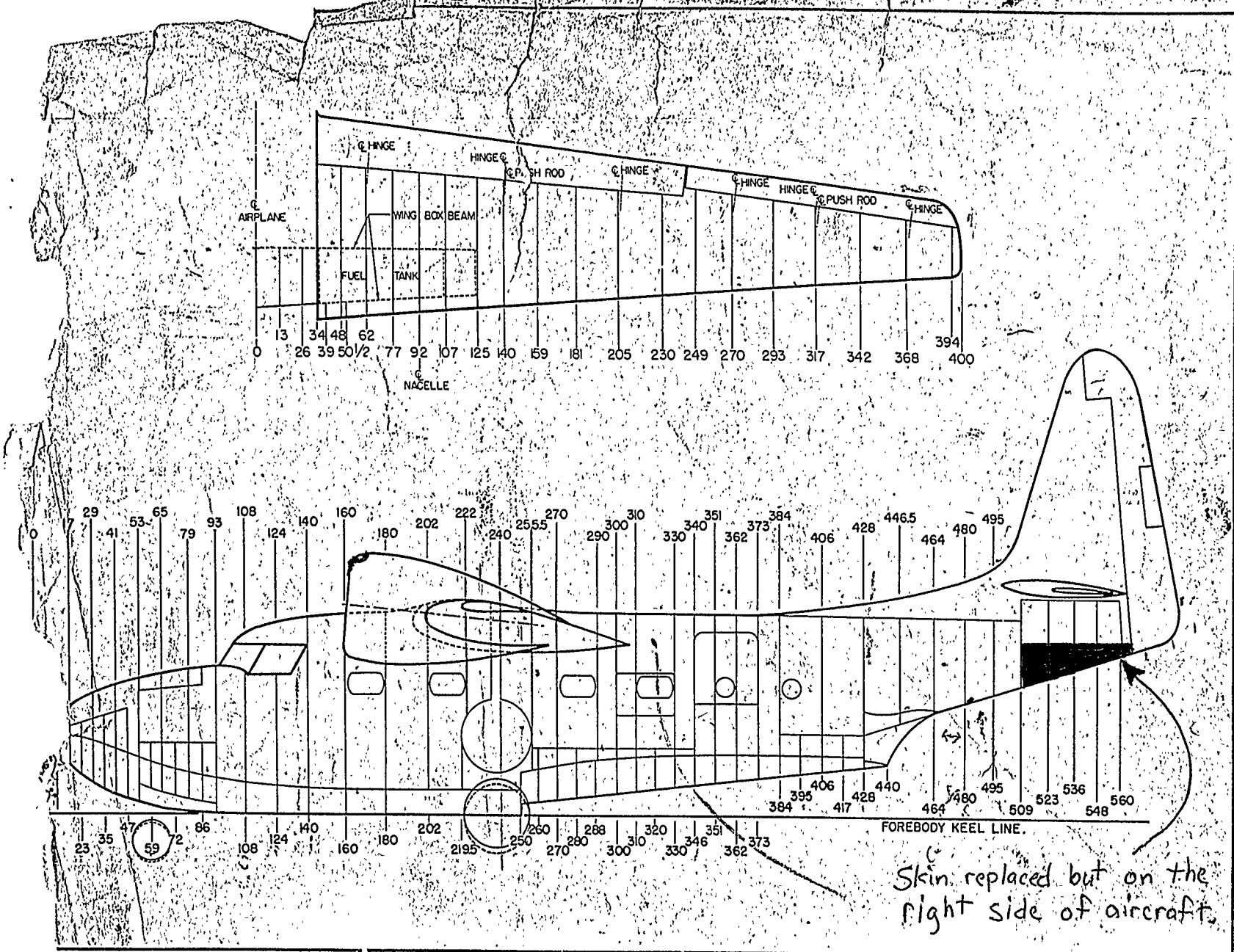


Figure 3—Wing and Fuselage Stations Diagram

N65CC Feb 4, 1997

N65CC Feb 4, 1997

Grumman Mallard

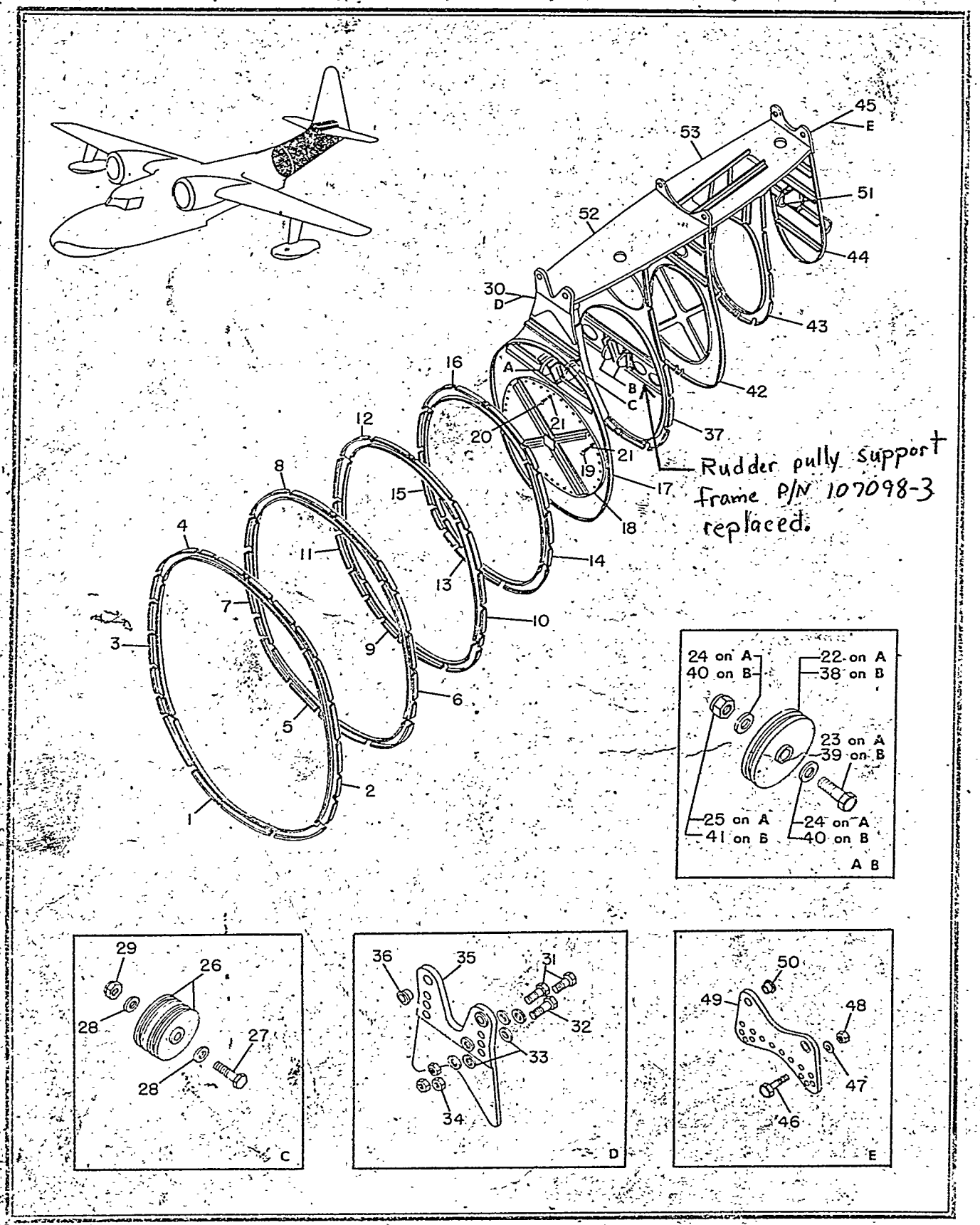


Figure 64—Sta. 428 to 560 Hull Structure

U.S. 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 GL07

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Credit Company, Ltd.	ADDRESS (As shown on registration certificate): Auglaize County Airport P.O. Box B New Knoxville, OH 45871

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.
Kevin F Brown 01965 Feeder Road St. Marys, OH 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&P 276746486

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
February 4, 1997	Kevin F Brown Kevin F Brown

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 [X] APPROVED [ ] REJECTED

BY							
		FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	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
February 4,1997	IA276746486	Kevin F Brown Kevin F Brown

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) The following Omega Navigation equipment was removed from the aircraft:
   a) 1 ea Marconi CMA-734A Omega RPU P/N 412-450-007 @ F.S. 45.0.

   b) 1 ea Marconi CMA-734A CDU P/N 601-005-000 @ F.S. 96.0.

   c) 1 ea Marconi CMA-734A Antenna P/N 462-743-00 @ F.S. 246.5.

2) Antenna hole repaired with flush skin patch using double row rivet spacing in accordance with Structural Repair Manual AN-01-85AB-3, figure B-3, page 380 dated December 17, 1960 and procedures in AC43.13-1A, Chapter 2, section 3, dated 1988. Original skin identified as .032" R301-T per Grumman Aircraft Engineering Corporation blueprint drawing #107225 dated 7-15-46.
   Note per the attach sheet the old designation for metal identification R301-T has been replaced by new designation 2014-T6. Repair doubler fabricated from .040" 2014-T6 alclad, insertion filler fabricated from .032" 2014-T6 alclad. Repair parts and skin were cleaned, acid etched, alodined, and painted with epoxy primer. Patch was installed with corrosion inhibitor sealant MC-665 and MS20426AD4 rivets.

3) Weight and Balance recalculated and recorded.

END

XXADDITIONAL SHEETS ARE ATTACHED

U.S. GPO 1981 - 775-332 47

N65CC Feb 4, 1997

ALUMINUM ALLOY TEMPER DESIGNATION TABLE

Alloy Designation		Heat Treat by Vendor			Heat Treat by Customer		
New	Old	Sheet	Plate	Extrusion	Sheet	Plate	Extrusion
2024	24S-T	2024-T3	2024-T4	2024-T4	2024-T4	2024-T4	2024-T42
2014	R301-W	2014-T3			2014-T4	2014-T4	
	R301-T	2014-T6			2014-T6	2014-T6	
2014	14S-W	2014-T3	2014-T4	2014-T4	2014-T4	2014-T4	2014-T42
	14S-T	2014-T6	2014-T6	2014-T6	2014-T6	2014-T6	2014-T62
7075	75S-T	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6
6061	61S-W	6061-T4	6061 T4	6061-T4	6061-T4	6061-T4	6061-T4
	61S-T	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6

Alloy Designation		Strain Hardened	Strain Hardened and Then Partially Annealed
New	Old	H12	H22
1100	2S	H14	H24
and	and	H16	H26
3003	3S	H18	H28

US Department of Transportation
Federal Aviation Administration

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

Form Approval
ONB No. 2120-0020

For FAA Use Only

Office Identification GL07

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make Grumman Aircraft Engineering	Model G-73 (Mallard)
	Serial No. J-56	Nationality and Registration Mark N465CC
2. Owner	Name *(As shown on registration certificate)* Mallard Acquisition, Ltd.	Address *(As shown on registration certificate)* c/o APEX Property Exchange, Inc. 2036 Washington Street Hanover, MA. 02339

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	*(As described in item 1 above)*			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	Type Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
Don J. Gerstner 17215 Sidney-Freyburg Botkins Ohio 45306	XX	U.S. Certificated Mechanic	AP300525019
		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
May 3, 2000	Don J. Gerstner

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							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization	
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No	Signature of Authorized Individual
May 3, 2000	IA300525019	Don J. Gerstner

Form 337

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 aircraft nationality and registration mark and date work completed.)

Removed left hand tail skin P/N 107225-26L, from F.S. 509 to F.S. 564, see attached sheets. Cleaned all frames and stringers. Acid etched and alodined all frames and stringers than coated with Epoxy Primer 9001/3001. Replaced Skin with new skin P/N FA107225-26L, Frakes Aviation WO# A99-918, using the old skin as a template. After drilling fastener holes and counter sinking all holes; skin was coated with one coat of clear anodize, than coated on both sides with U.S. Paint Epoxy Primer 9001/3001. Stringers, Frames and skin were than assembled using corrosion inhibiting sealant AC236-B2 on all faying surfaces. Using original size rivets and spacing, skin was fastened to the airframe in accordance with procedures found in chapter 4, paragraph 57 of 43.13-1B/2A dated September 1998.

After completing the installation of the new skin, any exterior paint affected by the removal of the old skin was repainted to match the existing paint with Jet-Glo polyurethane paints.

Additional Sheets Are Attached

N465CC 5/3/00 Pg 1 of 1

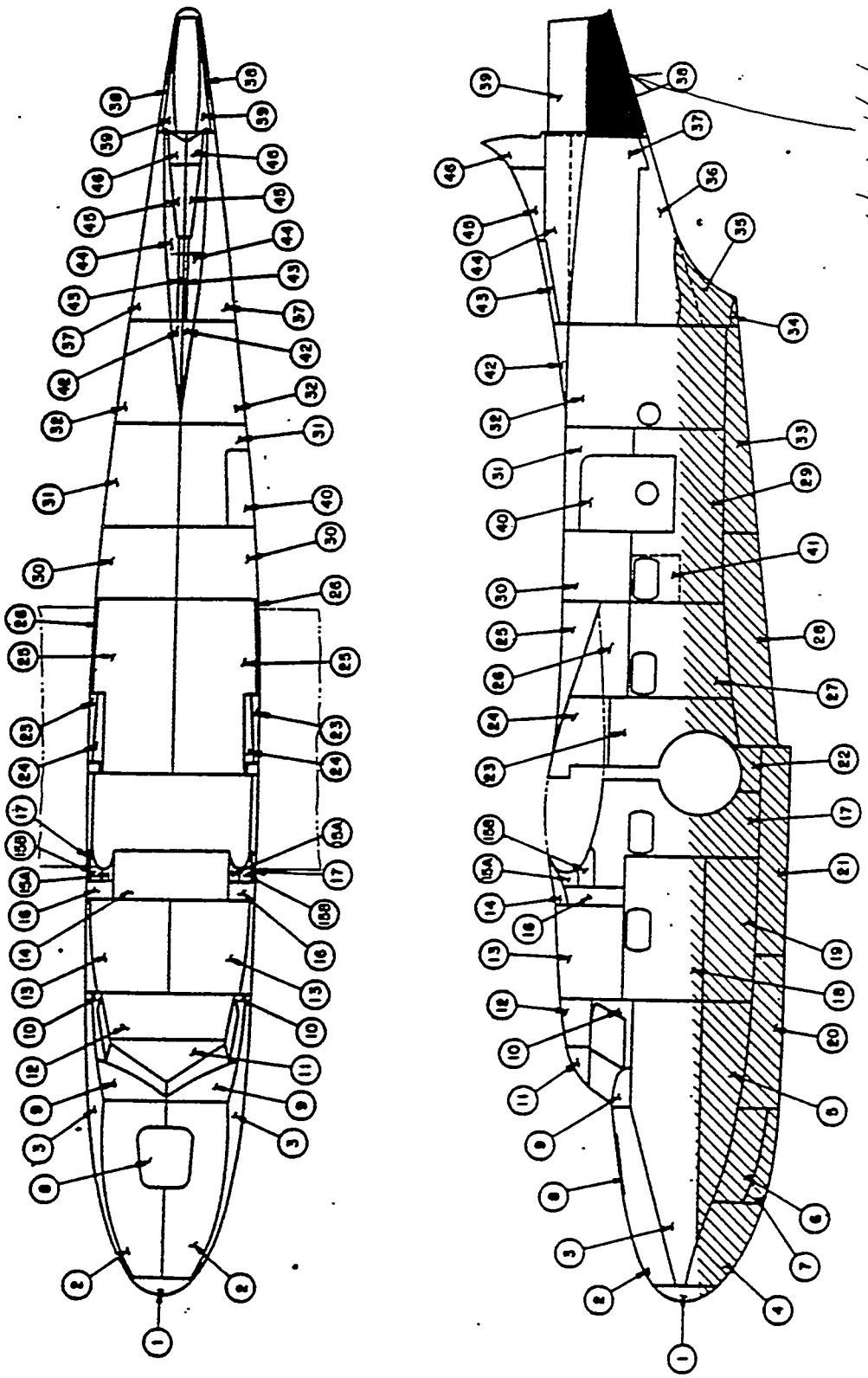


Figure 135—Hull Skin Plating Diagram

U.S Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification
GL07

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act 1958)

1. Aircraft	Make Grumman Aircraft Engineering	Model G-73 (Mallard)
	Serial No. J-56	Nationality and Registration Mark N465CC
2. Owner	Name *(As shown on registration certificate)* Mallard Acquisition, Ltd.	Address *(As shown on registration certificate)* c/o APEX Property Exchange, Inc. 2036 Washington Street Hanover, MA 02339

3. For FAA Use Only

4. Unit Identification				5. Type	
Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~~~~(*As described in item 1 above*)~~~~~~~~			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	Type Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Kevin F. Brown 01965 Feeder Road St. Marys, OH 45885	☒ U.S. Certified Mechanic ☐ Foreign Certified Mechanic ☐ Certified Repair Station ☐ Manufacturer	276746486

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 19, 2000	Signature of Authorized Individual Kevin F. Brown Kevin F Brown

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	☐ Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection April 19, 2000	Certificate or Designation No. IA276746486	Signature of Authorized Individual Kevin F. Brown Kevin F Brown

FAA Form 337 (12-88)

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.)

Trimmed out damaged area of keel extrusion at Flight Station #93, right side of keel, as shown on attached repair drawing. Fabricated repair filler from .100" thick 2024-T3 clad. Fabricated 2 each repair angles from .100" thick 2024-T3 clad QQ-A-250/5 and installed on the left and right side of keel. Left repair angle is for cosmetic purposes. Fabricated all parts per Steve Bowyer DER repair drawing number RD G73-1 dated 4-1-00.

Drilled repair angles picking up existing hole pattern in keel and added 4 additional horizontal holes for number #5 rivets and countersunk on both sides as per drawing RD G73-1. Deburred all holes and edges on repair parts. Cleaned, treated, acid etched and alodined repair parts and exposed area of keel repair. Painted all surfaces with epoxy primer paint.

Assembled repair using corrosion inhibitor sealant AC665-B2 between all faying surfaces. Fasteners included stainless steel structural screws MS24694C with AN960PD10 washers and MS21042 nuts in 8 locations and MS20426AD5 rivets installed horizontally thru the keel in 4 locations per drawing RD G73-1.

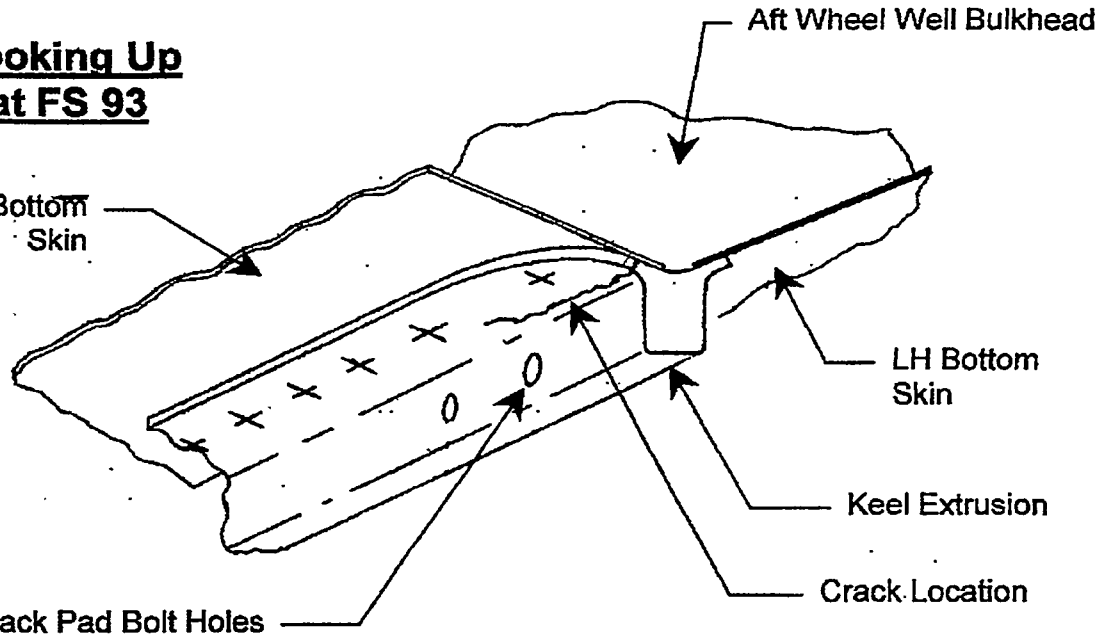
Approved Data: FAA Form 8110-3 dated April 1, 2000.
Grumman Structural Repair Manual T.O. 1A-16(S)A-3 dated Dec. 17, 1960.

0-1		1-1	M-2	S-A	S-0	C-1	C-2	A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	
0-5								A-5	
0-6								A-6	
0-7		C-3	C-4	C-5	A-11	A-10	A-9	A-7	
0-8								A-8	

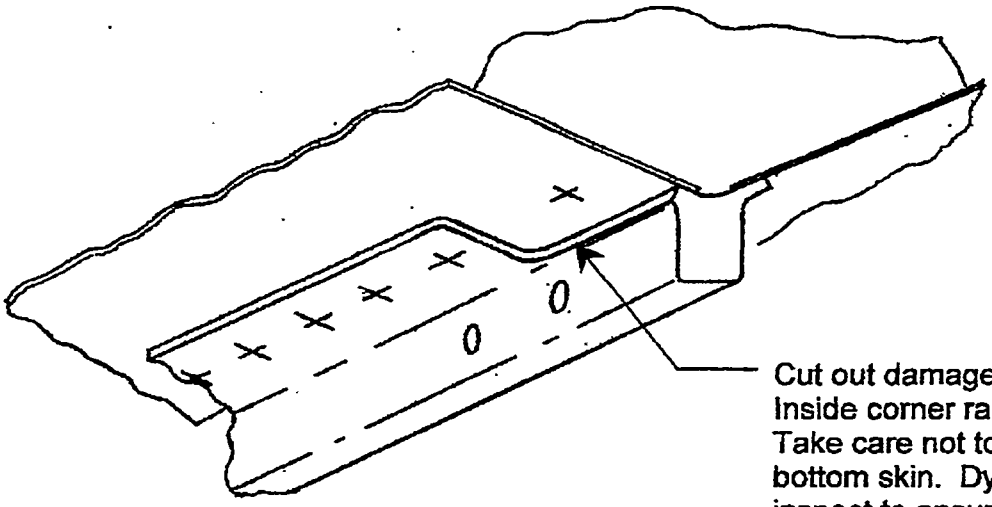
RECEIVED
APR 21 2000
CMH FSDO COLUMBUS, OH

☒ Additional Sheets Are Attached

View Looking Up & Aft at FS 93



View Showing Damage Removal



Cut out damaged area as shown. Inside corner radius .25" min. Take care not to damage existing bottom skin. Dye penetrant inspect to ensure all crack has been removed. Reprotect bare metal per pg 1.

0-1		M-1	M-2	S-A	S-0	C-1	C-2	A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	
0-5								A-5	
0-6								A-6	
0-7		C-3	C-4	C-5	A-11	A-10	A-9	A-7	
0-8								A-8	

APR 21 2000

CMH FSDO COLUMBUS, OH

US Department of Transportation
Federal Aviation Administration

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

Form Approval
ONB No. 2120-0020

For FAA Use Only

Office Identification GL07

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman Aircraft Engineering	Model: G-73 (Mallard)
	Serial No.: J-56	Nationality and Registration Mark: N465CC
2. Owner	Name *(As shown on registration certificate)*: Mallard Acquisition, Ltd.	Address *(As shown on registration certificate)*: c/o APEX Property Exchange, Inc. 2036 Washington Street Hanover, MA. 02339

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~~~~~~~~~~~~~~~~ *(As described in item 1 above)* ~~~~~~~~~~~~~~~~~~~~			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
Don J. Gerstner 17215 Sidney-Freyburg Botkins Ohio 45306	XX	U.S. Certificated Mechanic	AP300525019
		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
7-29-99	Don J. Gerstner

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 X APPROVED REJECTED

BY						
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group

Other *(Specify)*

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7-29-99	IA2226837	Bruce A. Campbell

Form 337

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 aircraft nationality and registration mark and date work completed.)

Left & Right hand wing repairs of rivet to rivet cracks.

Fabricated wing skin repairs for rivet to rivet, cracks found at various locations of the left and right wing. Areas of repairs are as follows: (also refer to station diagrams)

Left Wing – lower stations 126.5 – 129.25 repair dimension 2.5"x 2.75"
- lower stations 138.75 – 141.375 repair dimension 2.5"x 2.5"
- upper stations 268.75 – 271.25 repair dimension 2.5"x 6.375

Right Wing – lower stations 258.25 – 261.25 repair dimension 3"x 3"

Preparation of affected areas was by buffing off the paint around the cracks, removal of the fasteners and the stop drilling of the ends of the cracks with a #40 drill bit.

Repair fabrication was done with 2024-T3 .070" Alclad Aluminum, of the dimension stated above. Fastener spacing and repair fabrication was per AC43.13-1B/ chapter 4/ paragraph 4-58/ fig. 4.16 and Grumman Structural Repair Manual (AN01-85AB-3 revised Dec17, 1960) section 2/ page 110A/ fig. 2-10D.

Before installation of all repairs, and buffed wing surfaces, were treated with Acid Etch, Alumiprep 33, and Alodine, Mil-C- 5541. Then all bare metal surfaces were twice coated with U.S. Paint Epoxy Primer S9001 base/ S3001 converter. Upon installation of the repairs one coat of sealer, (Thiokol 665 B ½), was applied to all contacting surfaces.

Fasteners for installation of repairs were solid MS20426AD4. For inaccessible areas of the repairs blind rivets CR3212-4 were used per AC43.13-1B/ chapter 4/ paragraph 57/ subpart e and f (2), and the Grumman Structural Repair Manual (AN01-85AB-3 revised Dec17, 1960) section 1/ page 3/ paragraph 1-27A.

All fastener diameters did not change from original fastener diameters.

---------- END ----------

0-1		M-1	M-2	S-A	S-0	C-1	C-2	A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	
0-5								A-5	
0-6								A-6	
0-7		C-3	C-4	C-5	A-11	A-10	A-9	A-7	
0-8								A-8	

☒ Additional Sheets Are Attached

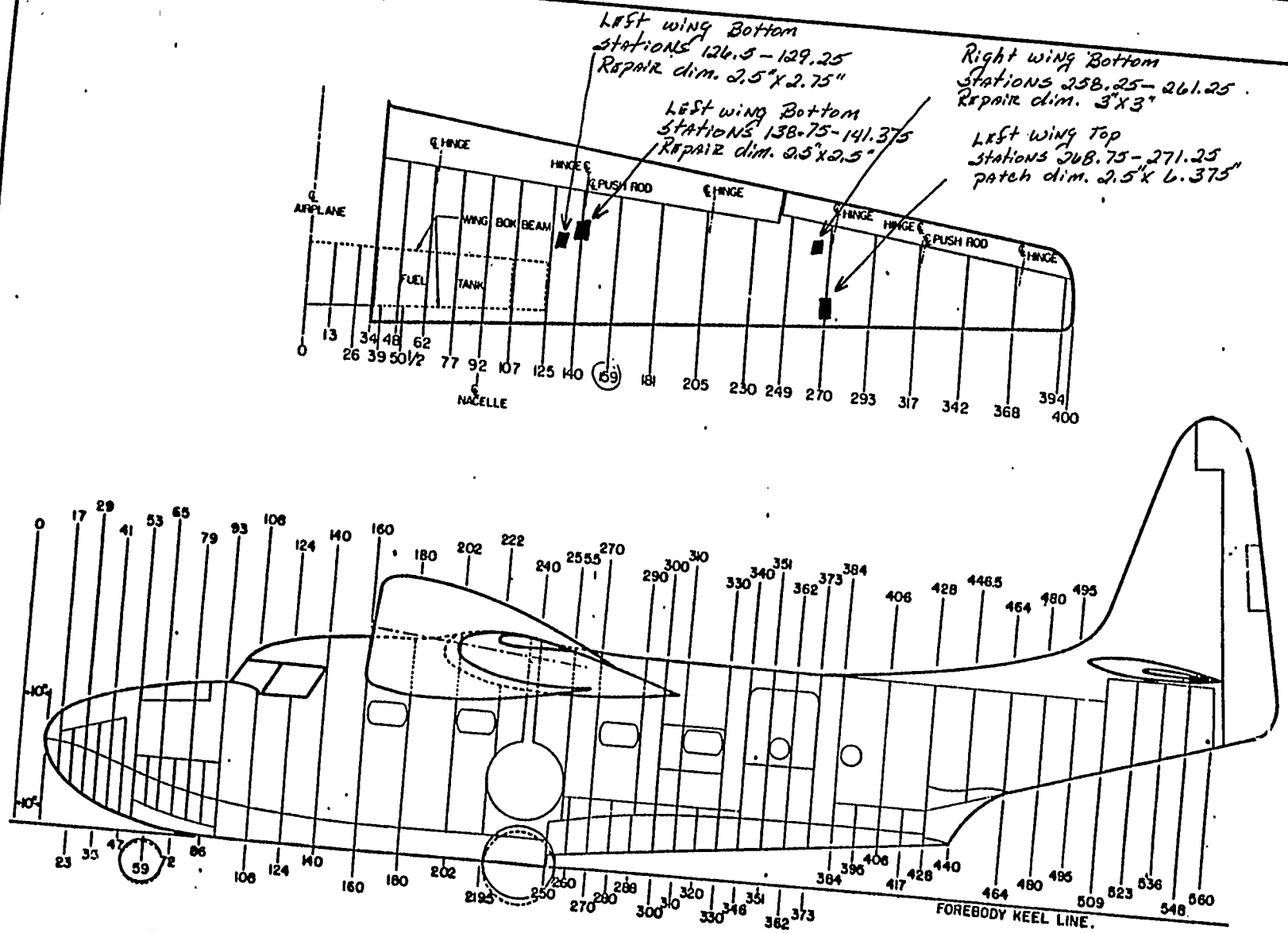
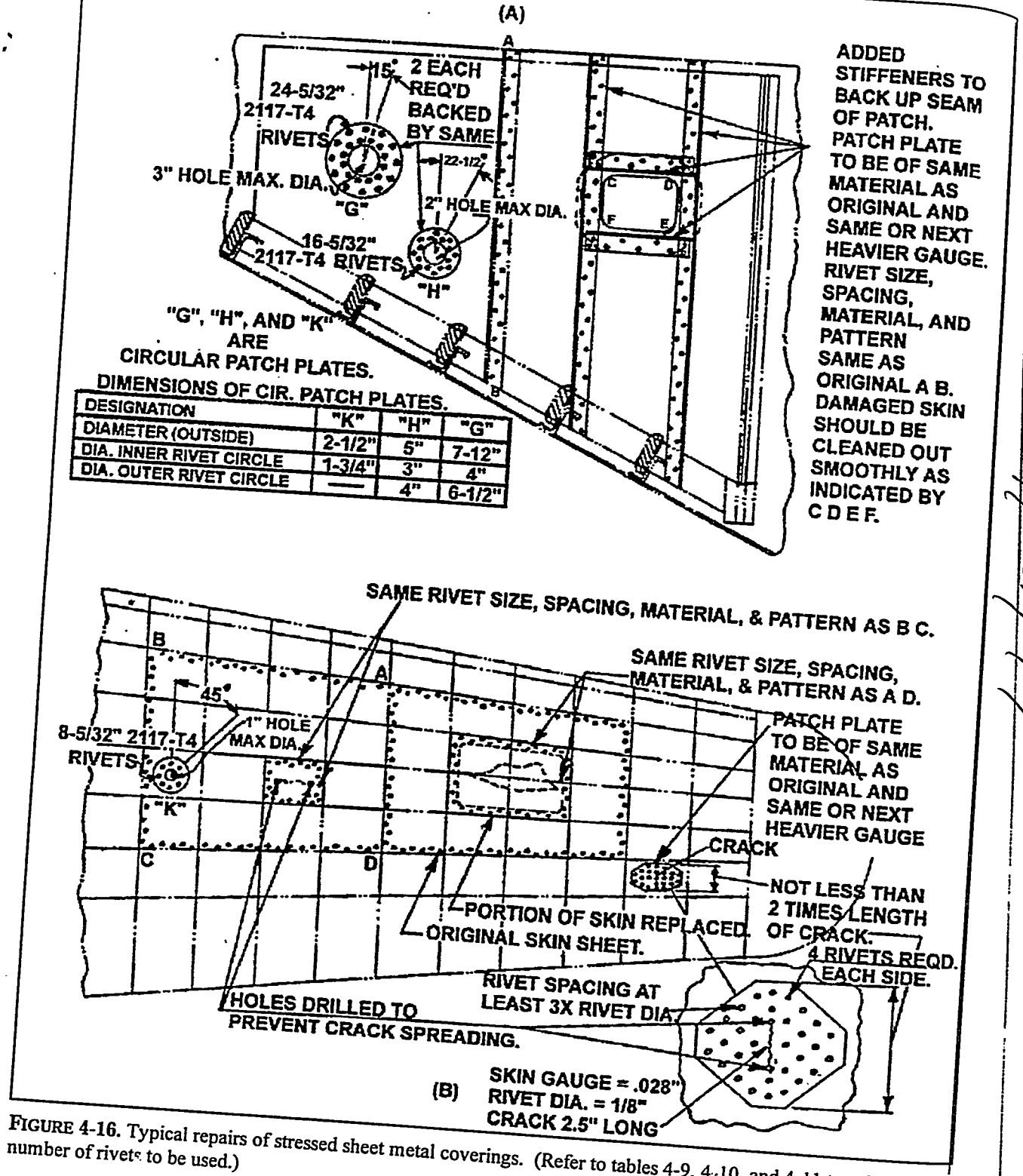


Figure 3—Wing and Fuselage Stations Diagram

N 465CC 7/29/97



DIMENSIONS OF CIR. PATCH PLATES.

DESIGNATION	"K"	"H"	"G"
DIAMETER (OUTSIDE)	2-1/2"	5"	7-12"
DIA. INNER RIVET CIRCLE	1-3/4"	3"	4"
DIA. OUTER RIVET CIRCLE	—	4"	6-1/2"

FIGURE 4-16. Typical repairs of stressed sheet metal coverings. (Refer to tables 4-9, 4-10, and 4-11 to calculate number of rivets to be used.)

N465CC 7/29/99

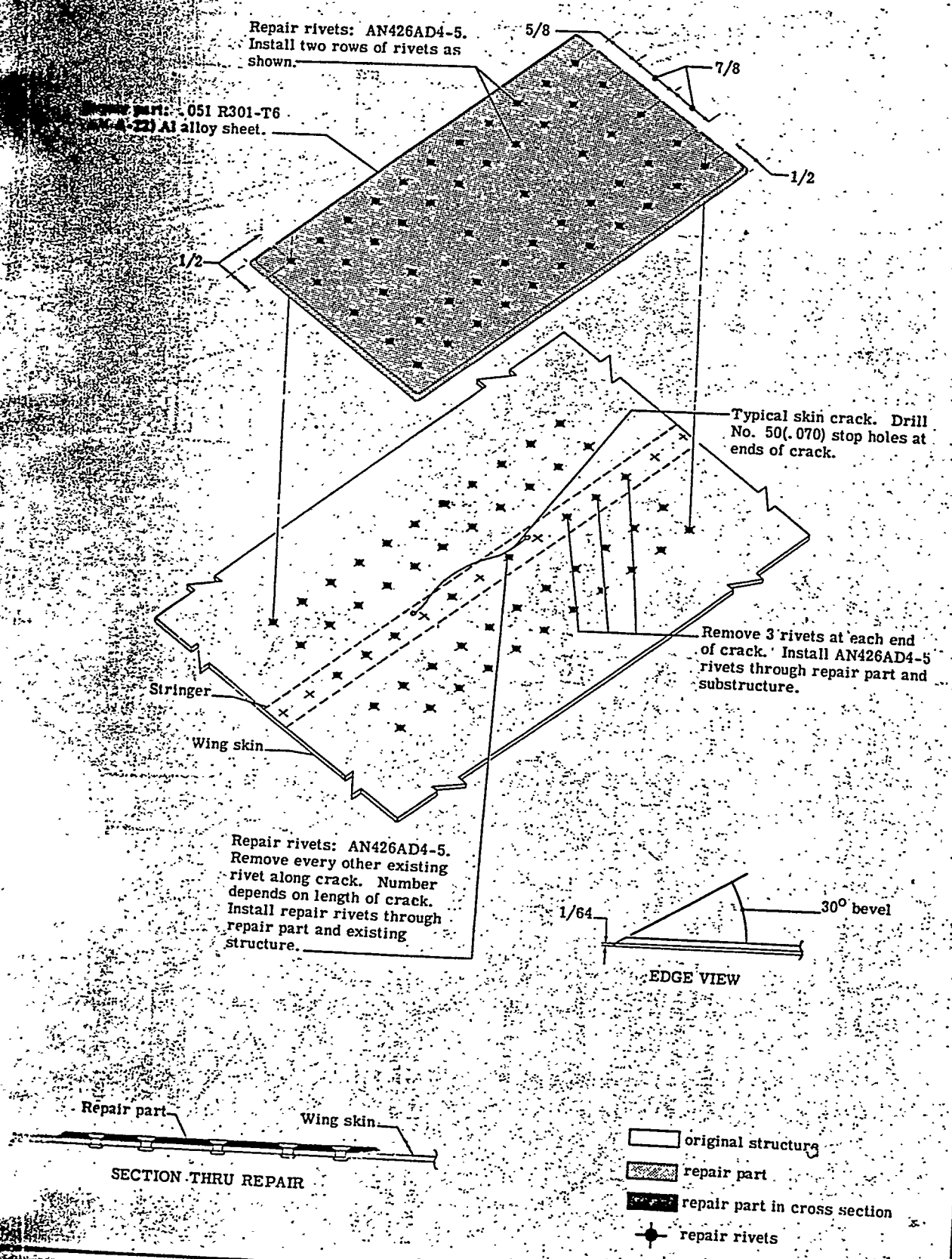


Figure 2-10D. Wing Skin Crack Repair Along Stringer

US Department of Transportation
Federal Aviation Administration

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

Form Approval
ONB No. 2120-0020

For FAA Use Only

Office Identification GL07

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman Aircraft Engineering	Model: G-73 (Mallard)
	Serial No.: J-56	Nationality and Registration Mark: N465CC
2. Owner	Name *(As shown on registration certificate)*: Mallard Acquisition, Ltd.	Address *(As shown on registration certificate)*: c/o APEX Property Exchange, Inc. 2036 Washington Street Hanover, MA. 02339

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~~~~~~~~~~~~~~~~ *(As described in item 1 above)* ~~~~~~~~~~~~~~~~~~~~			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
Don J. Gerstner 17215 Sidney-Freyburg Botkins Ohio 45306	XX	U.S. Certificated Mechanic	AP300525019
		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
7-29-99	Don J. Gerstner [signature]

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							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization	
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7-29-99	IA2226837	Bruce A Campbell

Form 337

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 aircraft nationality and registration mark and date work completed.)

Left & Right lower wing skin repair of crack from corner of wheel well outboard

Fabricated wing skin repairs for cracks emanating from corner of wing wheel well outboard. Station areas of repair are as follows:

Left wing – Bottom stations 70"-77" repair dimension 4.5"x 7"

Right wing – Bottom station 70"- 77" repair dimension 4.5"x 7"

Preparation of affected areas was by buffing off the paint around the cracks, removal of the fasteners and the stop drilling of the ends of the crack with a number 40 drill bit.

Repair fabrication was done with 2024-T3, .070" alclad aluminum, of the dimensions state above. Fastener spacing and repair fabrication was per AC43.13-1B / Chapter 4 / paragraph 4-58 / Figure 4.16 and the Grumman Structural Repair Manual (AN01-85AB-3 revised Dec17, 1960) Section 2 / page 110A / Figure 2-10D.

Before installation, all repairs and buffed wing surfaces were treated with acid etch, Alumiprep 33, and Alodine, Mil-C-5541. Then all bare metal surfaces were twice coated with U.S. Paint epoxy primer S9001 base / S3001 converter. Upon installation of repairs one thin coat of sealer, Mil-S-81733C / Thiokol 665-B1/2, was applied to all contacting surfaces.

Fasteners for installation of repairs were solid MS20426AD4. For inaccessible areas of the repairs blind rivets CR3212-4 were used per AC43.13-1B / chapter 4 / paragraph 57 subpart e and f (2), and the Grumman Structural Repair Manual (An01-85AB-3 revised Dec17,1960) Section 1 / page 3 / paragraph 1-27A.

All fastener diameters did not change from original fastener diameters.

---------- **END** ----------

0-1		M-1	M-2	S-A	S-0	C-1	C-2	A-1	
0-2									
0-3								A-3	
0-4								A-4	
0-5								A-5	
0-6								A-6	
0-7		C-3	C-4	C-5	A-11	A-10	A-9	A-7	
0-8								A-8	

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JUL 30 1999
CMH FSDO COLUMBUS, OH

☐ Additional Sheets Are Attached

 N465CC 7/29/99

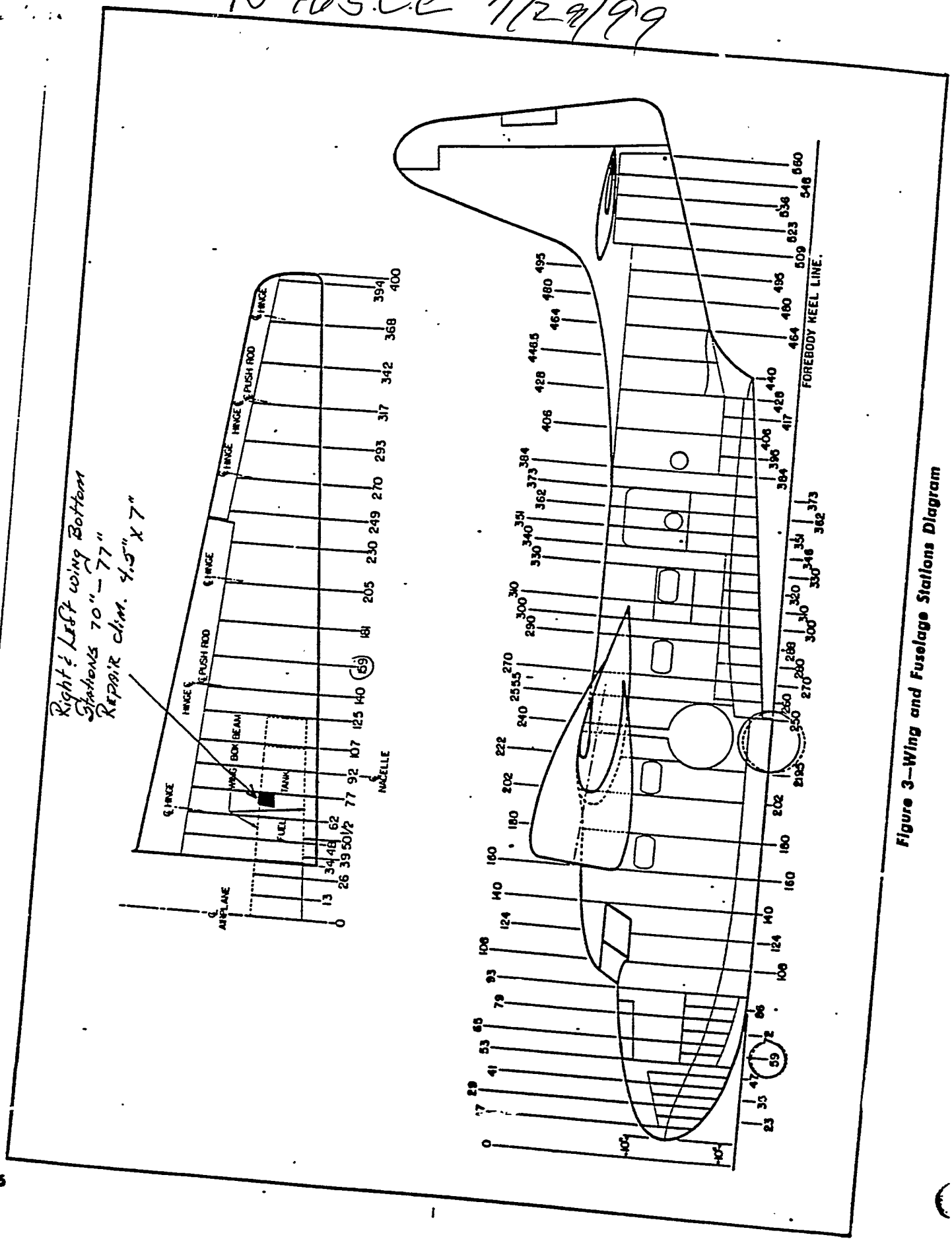


Figure 3—Wing and Fuselage Stations Diagram

N465CE 7/29/99

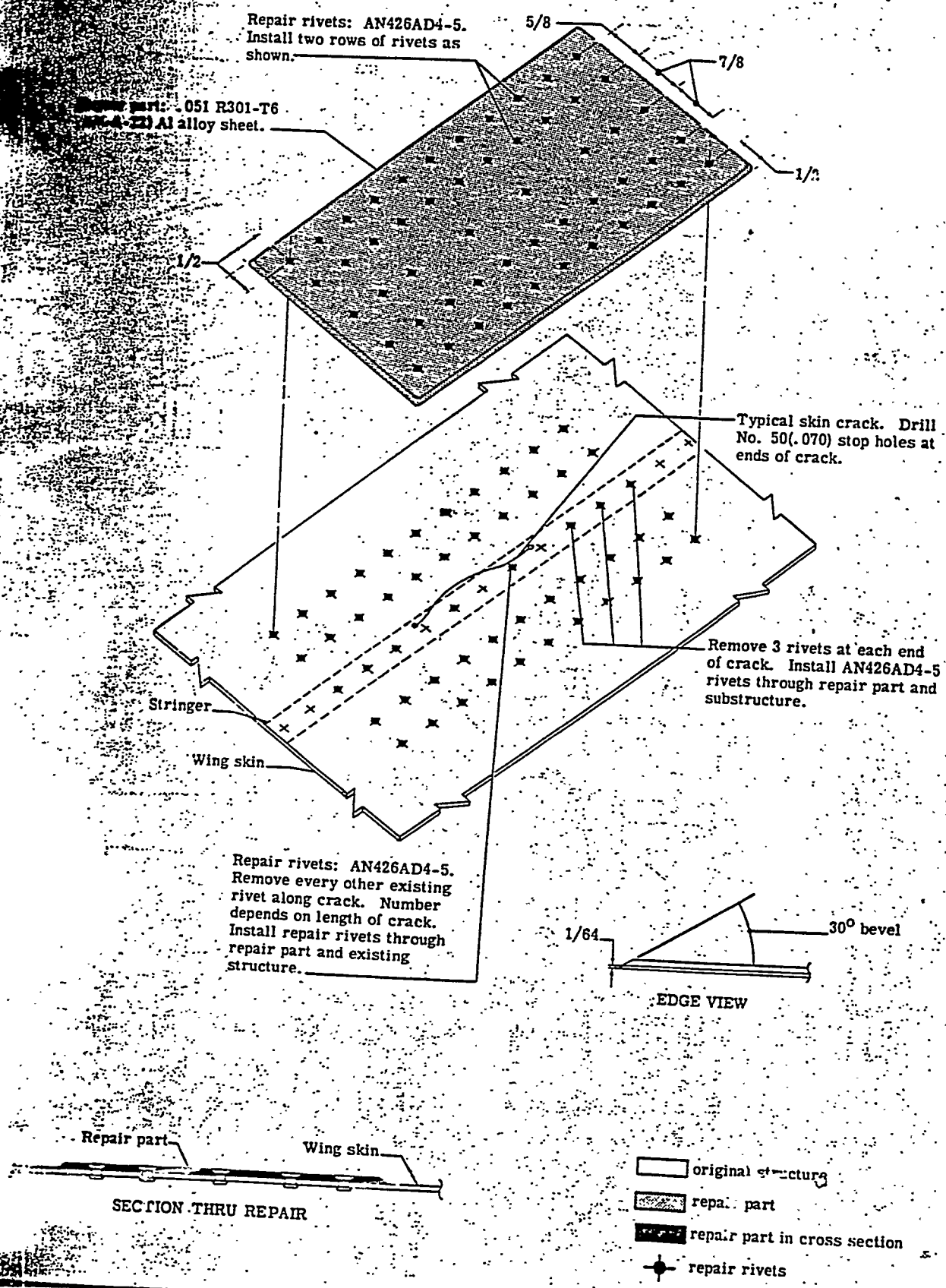
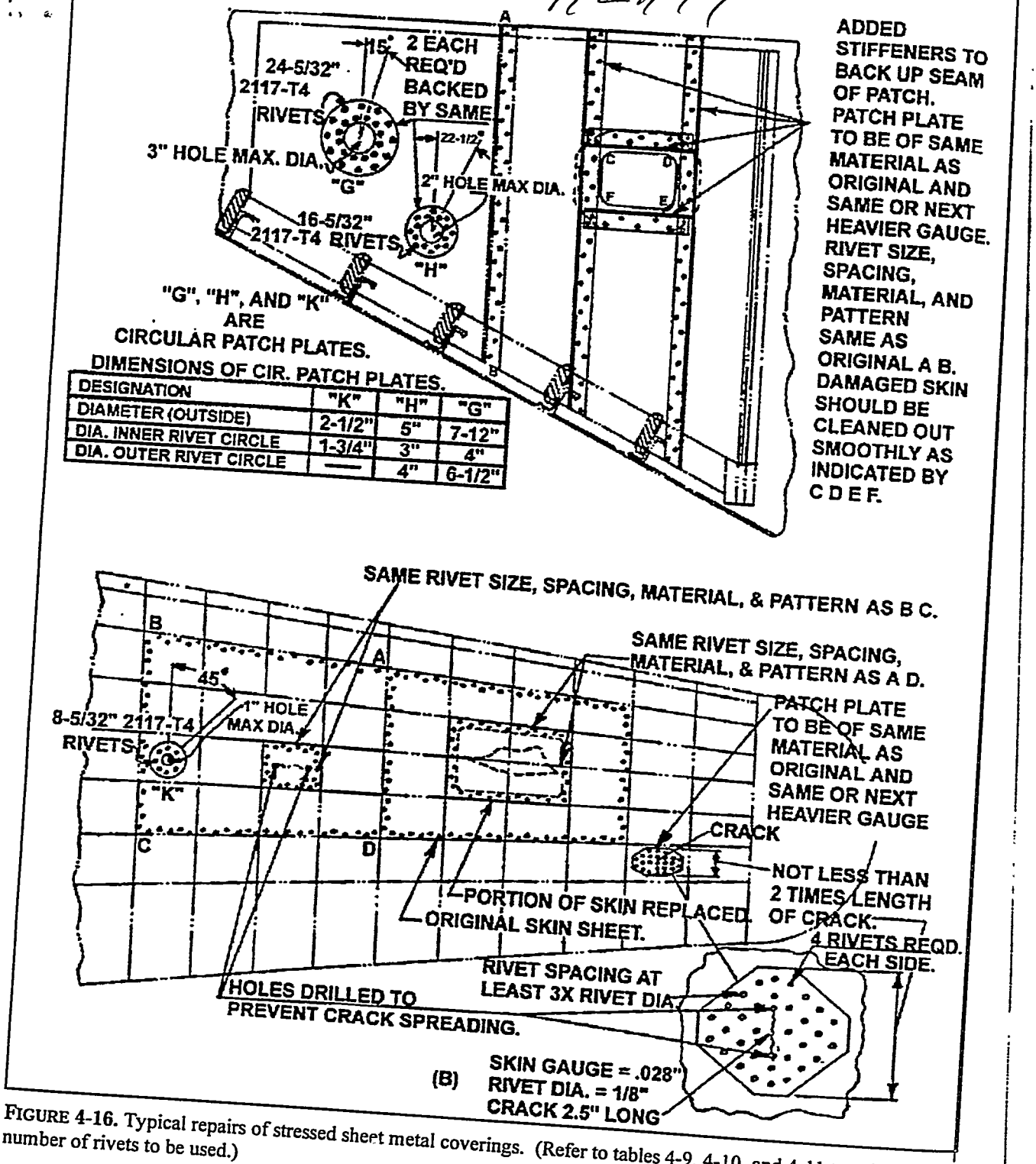


Figure 2-10D. Wing Skin Crack Repair Along Stringer

N465CC (A) 7/29/99



DIMENSIONS OF CIR. PATCH PLATES.

DESIGNATION	"K"	"H"	"G"
DIAMETER (OUTSIDE)	2-1/2"	5"	7-12"
DIA. INNER RIVET CIRCLE	1-3/4"	3"	4"
DIA. OUTER RIVET CIRCLE	—	4"	6-1/2"

FIGURE 4-16. Typical repairs of stressed sheet metal coverings. (Refer to tables 4-9, 4-10, and 4-11 to calculate number of rivets to be used.)

US Department of Transportation
Federal Aviation Administration

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

Form Approval
ONB No. 2120-0020

For FAA Use Only

Office Identification GL07

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman Aircraft Engineering	Model: G-73 (Mallard)
	Serial No.: J-56	Nationality and Registration Mark: N465CC
2. Owner	Name *(As shown on registration certificate)*: Mallard Acquisition, Ltd.	Address *(As shown on registration certificate)*: c/o APEX Property Exchange, Inc. 2036 Washington Street Hanover, MA. 02339

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	~~~~~~~~~~~~~~~~~~~~ *(As described in item 1 above)* ~~~~~~~~~~~~~~~~~~~~			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	Type / Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency		C. Certificate No.
Don J. Gerstner 17215 Sidney-Freyburg Botkins Ohio 45306	XX	U.S. Certificated Mechanic	AP300525019
		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
7-29-99	Don J. Gerstner [signature]

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							Other *(Specify)*
		FAA Flt. Standards Inspector		Manufacturer	X	Inspection Authorization	
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7-29-99	IA2226837	Bruce A. Campbell

Form 337

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 aircraft nationality and registration mark and date work completed.)

Left & Right Hand Wing Repair Stations 101"-107"

Fabricated wing skin repairs for under wing, left hand station 101"- 107" and right hand stations 102"-107", at engine mount box beam and rear spar. Due to thickness limitations, repairs were fabricated out of stainless steel sheet metal 301 ½ hard .025". (see attached scale drawings and data sheets) Conversion from original skin design to stainless was found in MIL-Handbook-5G, Table 2.7.1.0 (B) and 3.2.1.0 (C) subpart 1.

Rivet spacing for repair fabrication was retrieved from AC43.13-1B/ chapter 4/ paragraph 4-58/ fig. 4.16 and Grumman Structural Repair Manual (AN01-85AB-3 revised Dec17, 1960) section 2/page 110A/ fig. 2-10D. (see attached drawings)

Before installation both repairs were twice coated with U.S. Paint Epoxy Primer S9001 base/ S3001 converter, and wing surface existing primer coat was used. One coat of sealer (Thiokol 665 B ½) was applied to all contacting surfaces.

Fasteners for the installation of the repair were solid MS20470AD4 and MS204426AD3. For inaccessible areas of the repair, blind rivets CR3243-5 and CR3243-4 were used as per AC43.13-1B/ chapter 4/ paragraph 57/ subpart e and f, and Grumman Structural Repair Manual (AN01-85AB-3 revised Dec. 17, 1960) section 1/ page 3/ paragraph 1-27A. The engine box beam was reattached using NAS 1669-08 jobolts as blind fasteners.

All fastener diameters did not change from original fastener diameters.

---------- **END** ----------

0-1		M-1	M-2	S-A	S-0	C-1	C-2	A-1	
0-2								A-2	
0-3								A-3	
0-4								A-4	
0-5								A-5	
0-6								A-6	
0-7		C-3	C-4	C-5	A-11	A-10	A-9	A-7	
0-8								A-8	

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☒ Additional Sheets Are Attached

 N465CC 7/29/99

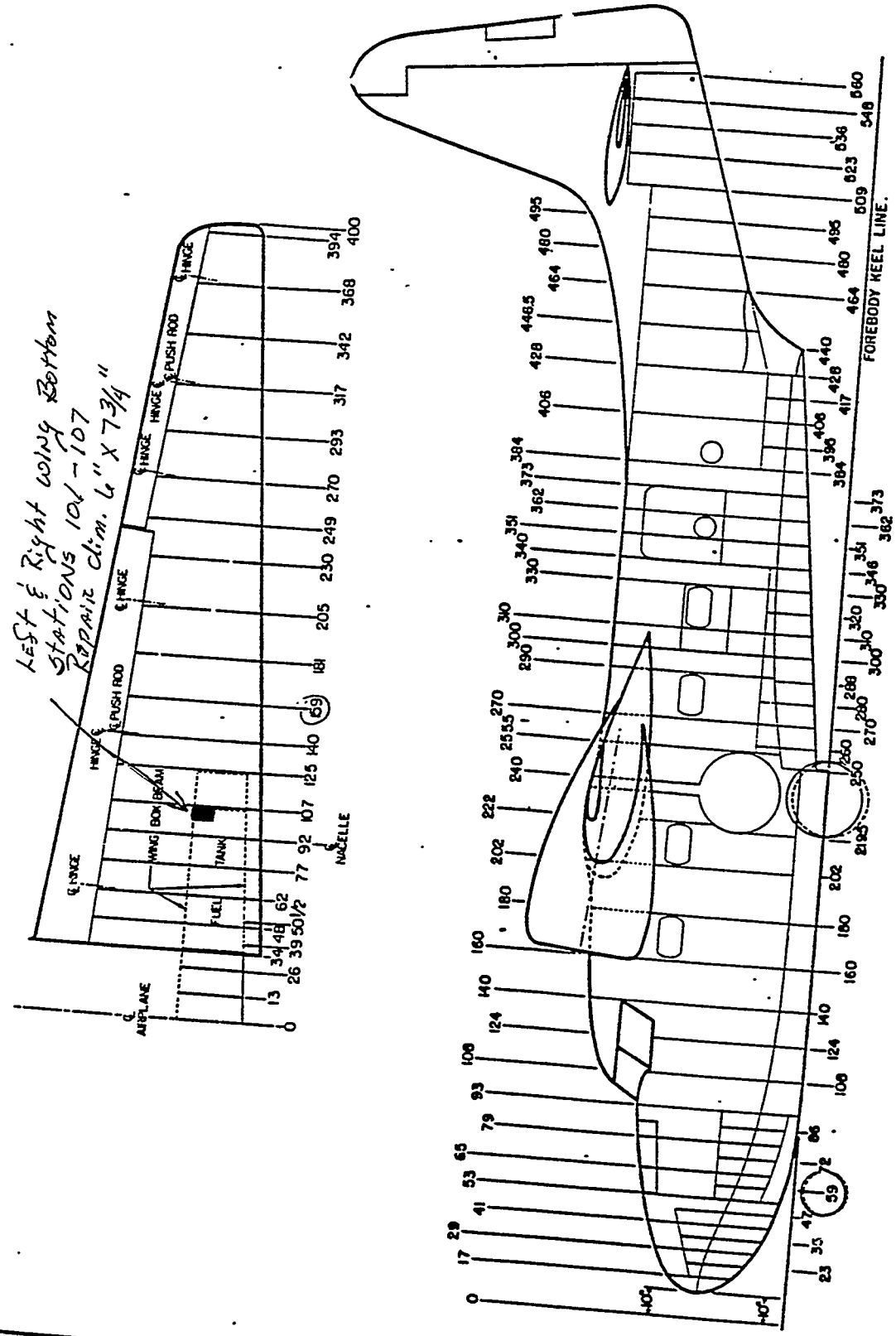
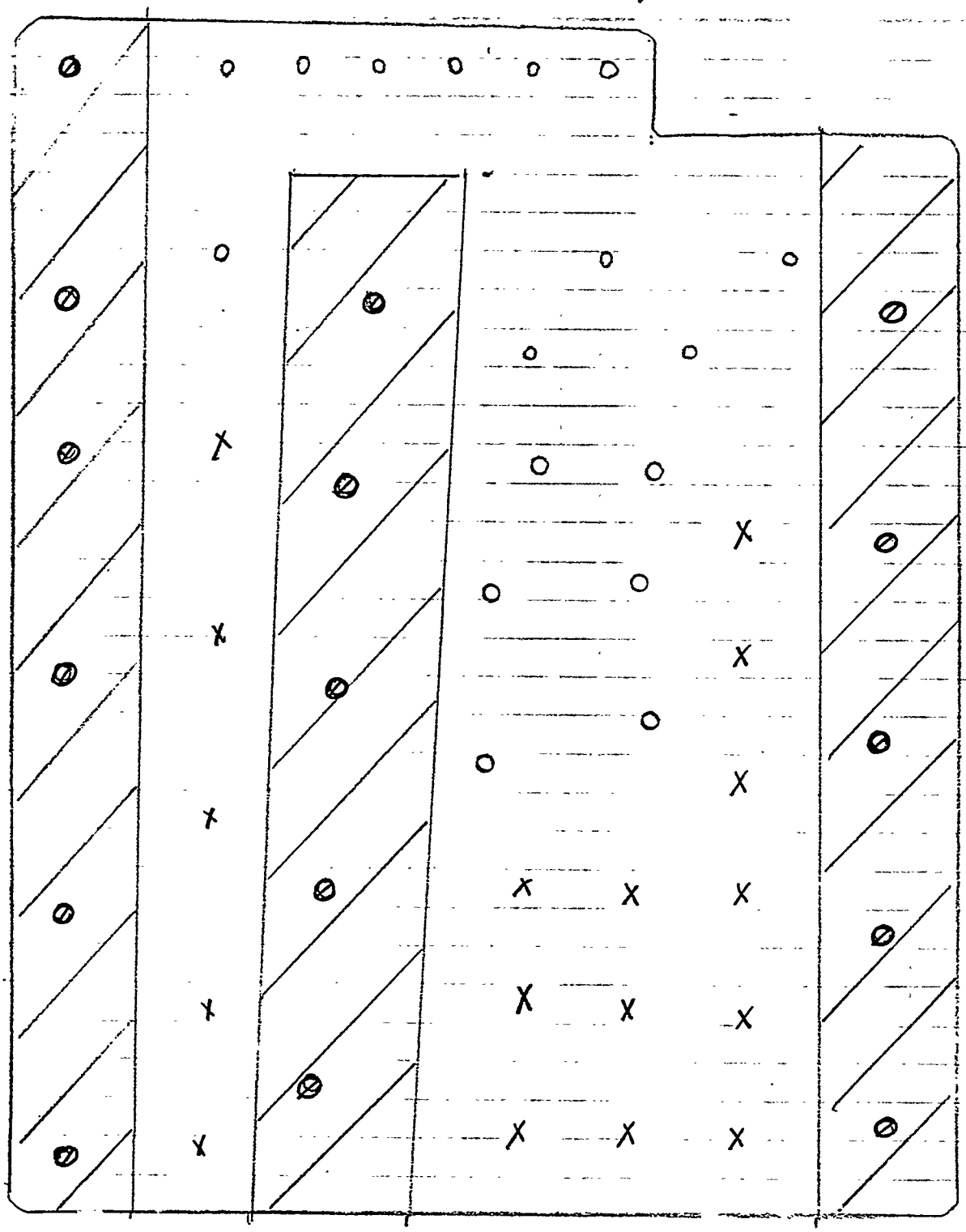


Figure 3—Wing and Fuselage Stations Diagram

N465CC 7/29/99

Date _____ By _____

Subject LH WING REPAIR STATION 102-107



O = Existings Rivits

X = Added Rivits

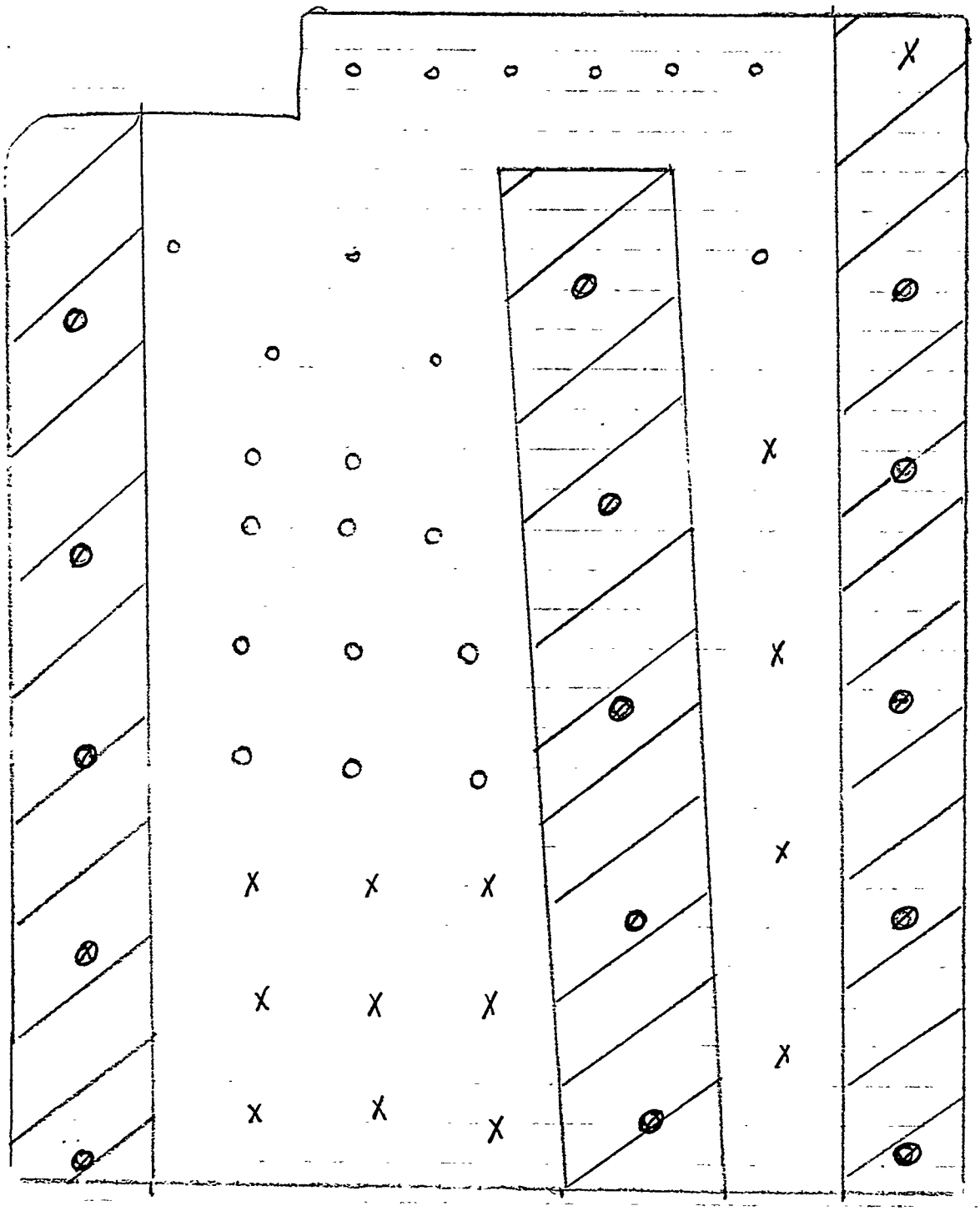
▨ = structure ⊘ = Jobolts

TO SCALE

N465CC 7/29/99

Date _____ By _____

Subject RH WING REPAIR STATION 102-107



O = Existing Rivits

X = Added Rivits

= structure

⊘ = Jobolts

TO SCALE

N465CC 7/29/99

TABLE 2.7.1.0(b). *Design Mechanical and Physical Properties of AISI 301 and Other[a] Annealed Stainless Steel*

Specification	MIL-S-5059	AMS 5517 & MIL-S-5059		AMS 5518 & MIL-S-5059		MIL-S-5059		AMS 5519 & MIL-S-5059	
Form	Sheet and strip								
Condition	Annealed[a]	¼ Hard		½ Hard		¾ Hard		Full Hard	
Thickness, in.	≤0.187	...		...		...		...	
Basis	S	A	B	A	B	A	B	A	B
Mechanical Properties:									
F_{tu}, ksi:									
L	73	124	129	141	151	157	168	174	185
LT	75	122	127	142	152	163	173	175	186
F_{ty}, ksi:									
L	26	69	83	93	110	118	135	137	153
LT	30	67	82	92	105	113	133	125	142
F_{cy}, ksi:									
L	23	44	54	61	69	75	88	83	94
LT	29	71	88	100	116	127	152	142	164
F_{su}, ksi	50	66	69	77	82	88	93	95	100
F_{bru}, ksi:									
(e/D = 1.5)	...	...	...	...	...	...	...	...	...
(e/D = 2.0)	162	262	273	292	310	327	342	346	361
F_{bry}, ksi:									
(e/D = 1.5)	...	...	...	...	...	...	...	...	...
(e/D = 2.0)	55	123	149	167	189	202	234	222	249
e, percent (S basis):									
LT	40	25	...	b	...	b	...	b	...
E, 10^3 ksi:									
L	29.0	27.0		26.0		26.0		26.0	
LT	29.0	28.0		28.0		28.0		28.0	
E_c, 10^3 ksi:									
L	28.0	26.0		26.0		26.0		26.0	
LT	28.0	27.0		27.0		27.0		27.0	
G, 10^3 ksi	11.2	10.6		10.5		10.5		10.5	
μ	0.27	0.27		0.27		0.27		0.27	
Physical Properties:									
ω, lb/in.^{3}	0.286								
C, K, and α	See Figure 2.7.1.0								

[a]Properties for annealed (solution heat treated) condition also applicable to AISI 301 plate and to AISI 302, 303, 304, 321, and 347 sheet, strip, and plate, supplied to industry specifications.
[b]See Table 2.7.1.0(c).

Note: Yield strength, particularly in compression, and modulus of elasticity in the longitudinal direction may be raised appreciably by thermal stress-relieving treatment in the range 500 to 800°F.

TABLE 3.2.1.0(c_1). *Design Mechanical and Physical Properties of Clad 2014 Aluminum Alloy Sheet and Plate*

Specification	QQ-A-250/3															
Form	Sheet				Plate											
Temper	T6				T651[a]											
Thickness, in.	0.020-0.039		0.040-0.249		0.250-0.499		0.500-1.000[b]		1.001-2.000[b]		2.001-2.500[b]		2.501-3.000[b]		3.001-4.000[b]	
Basis	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Mechanical Properties:																
F_{tu}, ksi:																
L	62	64	65	67	63	65	63	64	63	64	61	62	...	...	...	...
LT	61	63	64	66	64	66	64	65	64	65	62	63	60	61	56	57
ST	...	...	...	...	...	...	...	...	...	...	59	60	...	...	...	...
F_{ty}, ksi:																
L	54	56	57	59	58	60	57	58	57	59	56	58	...	...	...	...
LT	53	55	56	58	57	59	56	57	56	58	55	57	54	56	52	54
ST	...	...	...	...	...	...	...	...	...	...	54	56	...	...	...	...
F_{cy}, ksi:																
L	54	56	57	59	56	58	55	56	55	57	54	56	...	...	...	...
LT	55	57	58	60	59	61	58	59	58	60	57	59	...	...	...	...
ST	...	...	...	...	...	...	...	...	...	...	59	61	...	...	...	...
F_{su}, ksi	37	38	39	40	38	39	38	38	38	38	37	37	...	...	...	...
F_{bru}, ksi:																
(e/D = 1.5)	93	96	97	100	101	104	101	102	101	102	97	99	...	...	...	...
(e/D = 2.0)	117	121	123	127	128	132	128	130	128	130	124	126	...	...	...	...
F_{bry}, ksi:																
(e/D = 1.5)	76	78	80	83	87	90	85	87	85	88	84	87	...	...	...	...
(e/D = 2.0)	86	89	91	94	102	106	100	102	100	104	98	102	...	...	...	...
e, percent (S-basis):																
LT	7	...	8	...	8	...	6	...	4	...	2	...	2	...	1	...
E, 10^3 ksi	10.5				10.7											
E_c, 10^3 ksi	10.7				10.9											
G, 10^3 ksi	4.0				4.0											
μ	0.33				0.33											
Physical Properties:																
ω, lb/in.^{3}	0.101															
C, K, and α	...															

[a]Bearing values are "dry pin" values per Section 1.4.7.1. See Table 3.1.2.1.1.
[b]These values, except in the ST direction, have been adjusted to represent the average properties across the whole section, including the 2-½ percent per side nominal cladding thickness.

N65CC MAY 1, 1986

Appendix I

AN 01-85AB-3

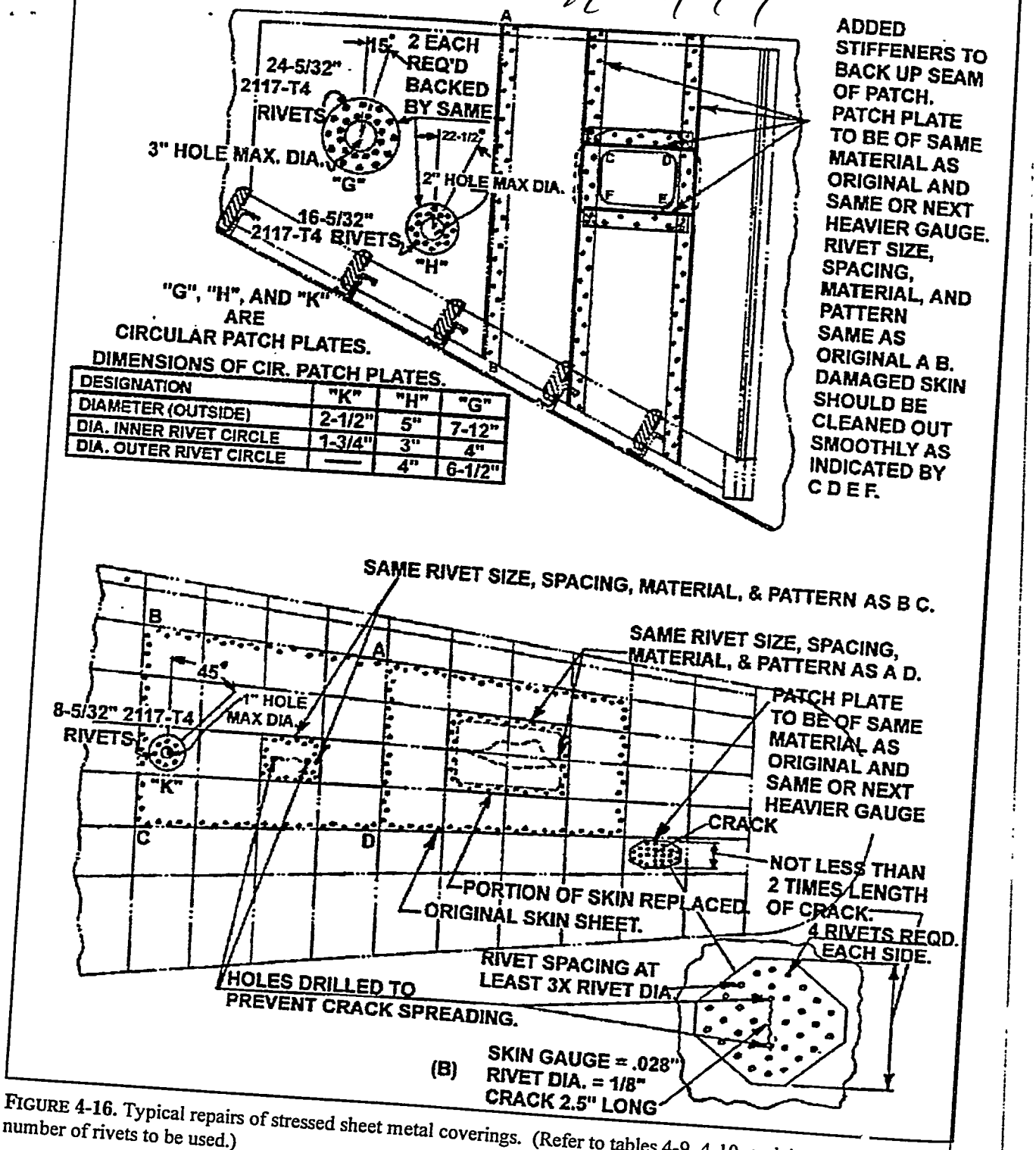
ALUMINUM ALLOY TEMPER DESIGNATION TABLE

Alloy Designation		Heat Treat by Vendor			Heat Treat by Customer		
New	Old	Sheet	Plate	Extrusion	Sheet	Plate	Extrusion
2024	24S-T	2024-T3	2024-T4	2024-T4	2024-T4	2024-T4	2024-T42
2014	R301-W	2014-T3			2014-T4	2014-T4	
	R301-T	2014-T6			2014-T6	2014-T6	
2014	14S-W	2014-T3	2014-T4	2014-T4	2014-T4	2014-T4	2014-T42
	14S-T	2014-T6	2014-T6	2014-T6	2014-T6	2014-T6	2014-T62
7075	75S-T	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6
6061	61S-W	6061-T4	6061-T4	6061-T4	6061-T4	6061-T4	6061-T4
	61S-T	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6

Alloy Designation		Strain Hardened	Strain Hardened and Then Partially Annealed
New	Old	H112	H22
1100	2S	H14	H24
and	and	H16	H26
3003	3S	H18	H28

N65CC 71296

N465CC(A) 7/29/99



DIMENSIONS OF CIR. PATCH PLATES.

DESIGNATION	"K"	"H"	"G"
DIAMETER (OUTSIDE)	2-1/2"	5"	7-12"
DIA. INNER RIVET CIRCLE	1-3/4"	3"	4"
DIA. OUTER RIVET CIRCLE	—	4"	6-1/2"

FIGURE 4-16. Typical repairs of stressed sheet metal coverings. (Refer to tables 4-9, 4-10, and 4-11 to calculate number of rivets to be used.)

N465CC 7/29/99

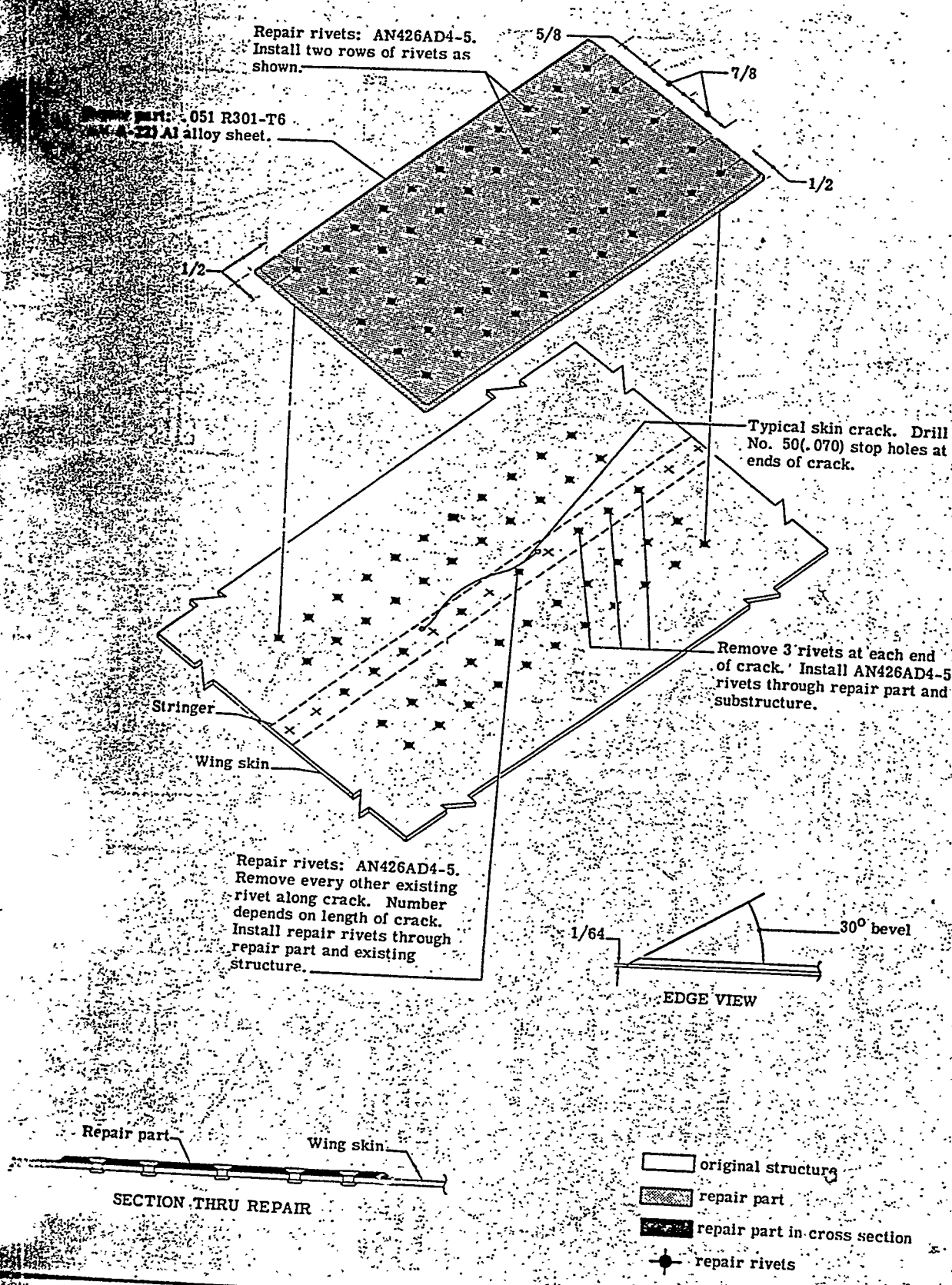


Figure 2-10D. Wing Skin Crack Repair Along Stringer

FAA AIRCRAFT REGISTRY
CAMERA NO. N 1 DATE: 6-26-95

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020
For FAA Use Only
Office Identification GL07

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman Aircraft Engineering	Model: G-73 (Mallard)
	Serial No.: J-56	Nationality and Registration Mark: N65CC
2. Owner	Name (As shown on registration certificate): Crown Company	Address (As shown on registration certificate): 4044 S Washington St. P.O. Box 97 New Bremen, Ohio 45869

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-1340-AN1	P-327938		X
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Covington Aircraft Engines, Inc. Highway 75 No. and Airport Road Okmulgee, OK 74447 (P.O. Box 1344)	U.S. Certificated Mechanic Foreign Certificated Mechanic X Certificated Repair Station Manufacturer	CP2R750K

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
March 6, 1995	T. Burnett

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
3-6-95	CP2R750K	T. Burnett

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. N 1 DATE: 6-26-95

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/cylinder altered by installing piston pin part no. 35486 or 35486 PAI in lieu of piston pin part no. 234220 or 29747 in accordance with F.A.A. form 8110-3 dated October 23, 1992. The person installing the engine/cylinder must complete block one and two of the supplied F.A.A. Form 337's, and forward a copy to the F.A.A. Flight Standards office in your area.----------

END

0-1		M-1	APS	0-1				A-1
0-2								A-2
0-3		RECEIVED						A-3
0-4		MAR 24 1995						A-4
0-5								A-5
0-6		FSDO COLUMBUS, OH						A-6
0-7		0-9	0-2	0-3	0-4	0-5	A-9	A-7
0-8								A-8

X Additional Sheets Are Attached

#U.S.GPO:1990-0-565-012/40004

FAA AIRCRAFT REGISTRY
CAMERA NO. N 1 DATE: 6-26-95

3/6/95 N 65CC

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: October 23, 1992

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
Pratt & Whitney	R-1340 Ser.	Engines	Covington Acft. Eng.

LIST OF DATA

IDENTIFICATION	TITLE
Report COV-1340-1 Dated 10/21/92	REPLACEMENT OF PISTON PINS

PURPOSE OF DATA

Approval of alteration data

APPLICABLE REQUIREMENTS (List specific sections)

~~§33 33~~ 9.9B

FAR 33.15 & 33.19, in lieu of eq. CAR 13 rules

CERTIFICATION - Under authority vested by direction of the Administrator and in accordance with conditions and limitations of appointment under Part 183 of the Federal Aviation Regulations, data listed above and on attached sheets numbered _____ have been examined in accordance with established procedures and found to comply with applicable requirements of the Federal Aviation Regulations.

I (We) Therefore [ ] Recommend approval of these data
[X] Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBERS(S)	CLASSIFICATION(S)
A.A. Backstrom	SW 511	Engines

FAA Form 8110-3 (11-70) SUPERSEDES PREVIOUS EDITION GPO 901-613

FAA AIRCRAFT REGISTRY
CAMERA NO. N 1 DATE: 6-26-95

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 5-11-95

U.S. 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 GL07

L Ho

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Company	ADDRESS (As shown on registration certificate): 4044 S Washington St. P.O. Box 97, New Bremen, Ohio 45869

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.
Kevin F Brown 01965 Feeder Road St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&P 276746486

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 22, 1995

SIGNATURE OF AUTHORIZED INDIVIDUAL: Kevin F Brown

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	X	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
March 22, 1995	2226837	Bruce A Cayle

(8320)

FAA Form 337 (7-67)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 5-11-95

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) Installed left and right wing float assemblies for summer operation. Connected float tank fuel line to wing fuel line located at float pedestal mating point. Removed placard from instrument panel labeled for "LAND OPERATION ONLY".

2) Weight and balance recalculated and recorded.

END

0-1		M-1	APS	C-1				A-1
0-2								A-2
0-3		RECEIVED						A-3
0-4		MAR 24 1995						A-4
0-5								A-5
0-6		FSDO COLUMBUS, OH						A-6
0-7		0-9	0-2	0-3	0-4	0-5	A-9	A-7
0-8								A-3

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 3-7-95

U.S. 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 GL07

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Company	ADDRESS (As shown on registration certificate): 4044 S Washington St. P.O. Box 97, New Bremen, Ohio 45869

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.
Kevin F Brown 01965 Feeder Road St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&P 276746486

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: February 1, 1995
SIGNATURE OF AUTHORIZED INDIVIDUAL: Kevin F Brown

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	X	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
February 1, 1995	2226837	Bruce A Campbell

(8320)

FAA Form 337 (7-67)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 3-7-95

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 right and left wing tip float assemblies for winter operations per ACA 337 dated 1-27-53 (by General Motors for this s/n aircraft). Installed AN2[illegible]-11A clevis bolts in wing at float attach points.

2) Placarded instrument panel for "LAND OPERATIONS ONLY".

3) Weight and Balance recalculated and recorded.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. GPO 1981 - 775-332 47

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 12-9-94

U.S. 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 GL07

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Company	ADDRESS (As shown on registration certificate): 4044 S Washington St. P.O. Box 97 New Bremen, Ohio 45869

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.
Kevin F Brown 01965 Feeder Road St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A & P 276746486

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
April 15, 1994	Kevin F Brown

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	X	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
April 15, 1994	2226837	Bruce A Campbell

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1N DATE: 12-9-94

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) Installed left and right wing tip float assemblies for summer operation using new hardware per Grumman Mallard Parts Manual. Connected float tank fuel line to wing fuel line located at float pedestal mating point. Removed placard from instrument panel labeled for "LAND OPERATION ONLY".

2) Weight and balance recalculated and recorded.

END

APR 19 1994

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. GPO 1981 775-332/47

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) Installed left and right wing tip float assemblies for summer operation using new hardware per Grumman Mallard Parts Manual. Connected float tank fuel line to wing fuel line located at float pedestal mating point. Removed placard from instrument panel labeled for "LAND OPERATION ONLY".

2) Weight and balance recalculated and recorded.

END

APR 19 1994

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AC 43-9

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 6-10-94

U.S. 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 ~~DA~~ GL07

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Company	ADDRESS (As shown on registration certificate): 4044 S Washington St. P.O. Box 97, New Bremen, Ohio 45869

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.
Kevin F Brown 01965 Feeder Road St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A & P 276746486

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 15, 1994

SIGNATURE OF AUTHORIZED INDIVIDUAL: Kevin F Brown

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	X	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
April 15, 1994	2226837	Bruce A Campbell

(8320)

FAA Form 337 (7-67)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 6-10-94

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) Installed left and right wing tip float assemblies for summer operation using new hardware per Grumman Mallard Parts Manual. Connected float tank fuel line to wing fuel line located at float pedestal mating point. Removed placard from instrument panel labeled for "LAND OPERATION ONLY".

2) Weight and balance recalculated and recorded.

END

0-1	M-1	APS	0-1				A-1	
0-2							A-2	
0-3				DOCKETED			A-3	
0-4							A-4	
0-5		APR 19 1994						
0-6							A-8	
0-7		FOLD		COLUMNS			A-9	A-7
0-8		0-9	0-2	0-3	0-4	0-5		A-6

☐ ADDITIONAL SHEETS ARE ATTACHED

U S GPO 1991 - 775-332 47

FAA AIRCRAFT REGISTRY
CAMERA NO. / DATE: 3-4-94

U.S. 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 LA GL07

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Company	ADDRESS (As shown on registration certificate): 4044 S Washington St P.O. Box 97, New Bremen, Ohio 45869

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.
Kevin F Brown 01965 Feeder Road St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&P276746486

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
February 7, 1994	Kevin F. Brown

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	X	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
February 7, 1994	2226837	Bruce A. Campbell

(8320)

FAA Form 337 (7-67)

FAA AIRCRAFT REGISTRY
CAMERA NO. DATE: 3-4-94

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 right and left wing tip float assemblies for winter operations per ACA 337 dated 1-27-53 (by General Motors for this s/n acft.). Installed AN24-11A clevis bolts in wing at float attach points. Mating area painted Jetglow white to match wing. Placarded instrument panel for "LAND OPERATIONS ONLY".

2) Removed right and left fuel transfer pump assemblies P/N A4949, mounting brackets, pressure switches, and associated lines located under each engine's aft lower nacelle cowling. All lines capped and secured. All work done in accordance with Grumman Aircraft Maintenance Manual.

3) Weight and balance recalculated and recorded.

END

0-1		M-J	APS	C-1			A-1
0-2							A-2
0-3							
0-4							
0-5							
0-6							
0-7							
0-8							

FEB 8 1994

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. GPO 1981 775-332/47

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-11-94

U.S. 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
WP 15

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 Aircraft Engr.	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N650C
2. OWNER	NAME (As shown on registration certificate): Crown Co.	ADDRESS (As shown on registration certificate): 40-44 S. Washington St. Box 97 New Bremen, OH 45869

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.
Robert L. Perry Serv-Aero Engineering, Inc. 37 Mortensen Ave. Salinas, CA 93905	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	563809396

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: 9/16/93

SIGNATURE OF AUTHORIZED INDIVIDUAL: [signature]

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	X	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
9/16/93	563809396	[signature]

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-11-94

NOTICE

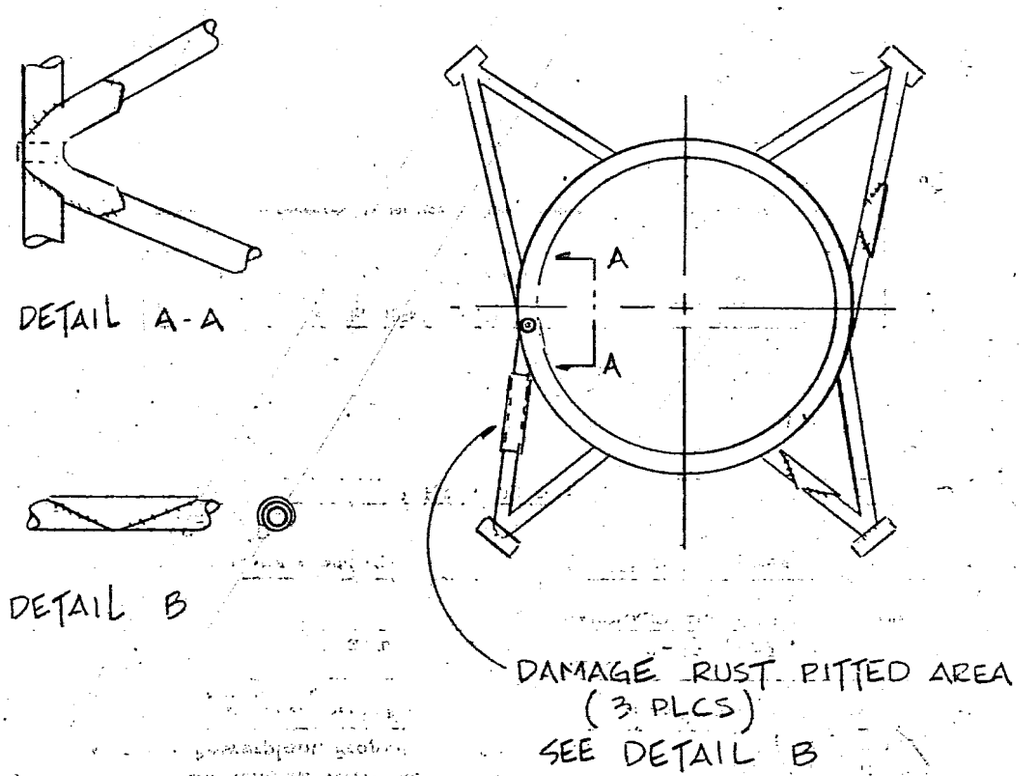
Weight and balance or operating limitation changes shall be entered in the appropriate aircraft record. An alteration must be compatible with all previous alterations to assure continued conformity with the applicable airworthiness requirements.

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

Repaired engine mount tubes as denoted below due to rust pitting. Material identification was made by referring to Grumman Aircraft Engineering Drawing No. 108300 as provided by the aircraft owner.

Repaired the engine mount tubes as denoted below using the welded patch repair shown in AC 43.13-1A Section 2, Para. 73, Fig. 2.6 as a guide. Material used was same as original-.065 4130 Cond. N. Equipment used was metal inert gas (MIG).

Repaired wrap plate as shown below by using the welded patch method as described in AC 43.13-1A Section 2, Para. 70, Fig. 2.4 as a guide. Material used was same as original-.065 4130 Cond. N. Equipment used was tungsten inert gas (TIG).



---------- END ----------

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1986-659-121/40260

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-13-92

U.S. Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020
For FAA Use Only
Office Identification: CMH OH

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. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman Aircraft Engineering	Model: G-73 (mallard)
	Serial No.: J-56	Nationality and Registration Mark: N65CC
2. Owner	Name (As shown on registration certificate): Crown Co.	Address (As shown on registration certificate): 40-44 S. Washington St. Box 97 New Bremen, Ohio 45869

3. For FAA Use Only

4. Unit Identification / **5. Type**

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in Item 1 above)			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Michael A. Bloom 21402 St. Rt. 198 Wapakoneta, Ohio 45895	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	279564840

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

Date: November 25, 1991
Signature of Authorized Individual: Michael A. Bloom

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	XX	Inspection Authorization
		FAA Designee		Repair Station		Person Approved by Transport Canada Airworthiness Group

Other (Specify):

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
November 25, 1991	281581233	Gary E. Butler

FAA Form 337 (12-88)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-13-92

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.)

Fabricated doubler using 2024 T3, .063, I/A/W Structural Repair Manual, 01-85V-3 Dated April 1, 1944, section VIII, figure 112, page 198, and 43.13-1A section 3 para 97a, 99, 100a,b,d, and e, figure 2.24 as a guide. Installed doubler using PR 1422 A½ sealant and MS20426AD-3-5 rivits. Installed cleat P/N 111411-1(Docking point) using MS24694-S54 screws, AN960-PD-10 washers, MS20365-1032 nuts and PR 1422A½ sealant. Doubler and cleat positioned aft of station 406 and forward of station 428.

----------END----------

O-1		M-1	S-1	APS	C-1			A-1	
O-2								A-2	
O-3		RECEIVED						A-3	
O-4		DEC 0 6 1991						A-4	
O-5								A-5	
O-6		FSDO COLUMBUS, OH.						A-6	
O-7		O-9	C-2	C-3	C-4	C-5	A-9	A-7	
O-8								A-8	

☐ Additional Sheets Are Attached

★U.S.GPO:1989-0-663-171

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 right and left wing tip float assemblies for winter operations per ACA 337 dated 1-27-53 (by General Motors for this s/n aircraft). Installed AN24-14A clevis bolts in wing at float attach points.

2) Placarded instrument panel for "LAND OPERATIONS ONLY".

3) Weight and Balance recalculated and recorded.

END

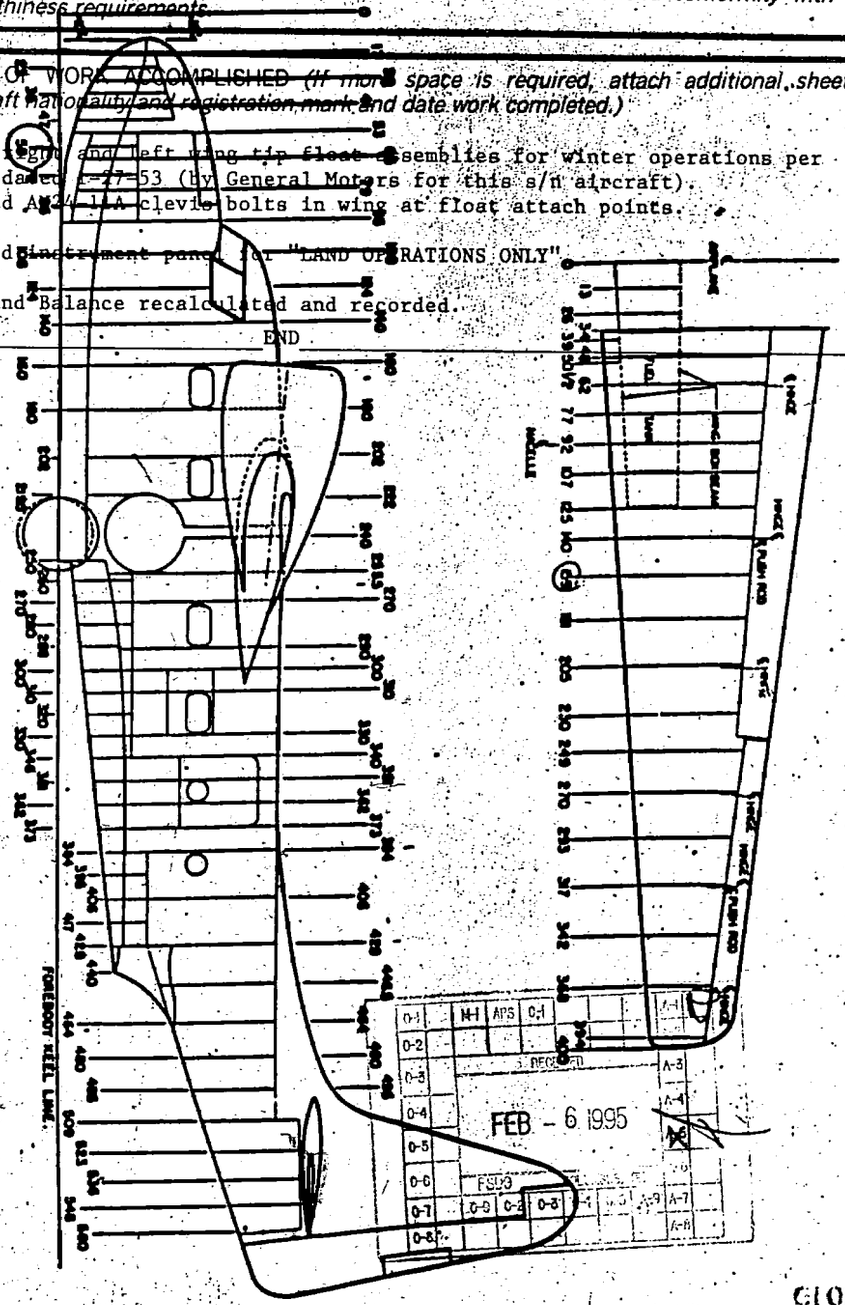


Figure 3—Wing and Fuselage Station Diagram

☐ ADDITIONAL SHEETS ARE ATTACHED

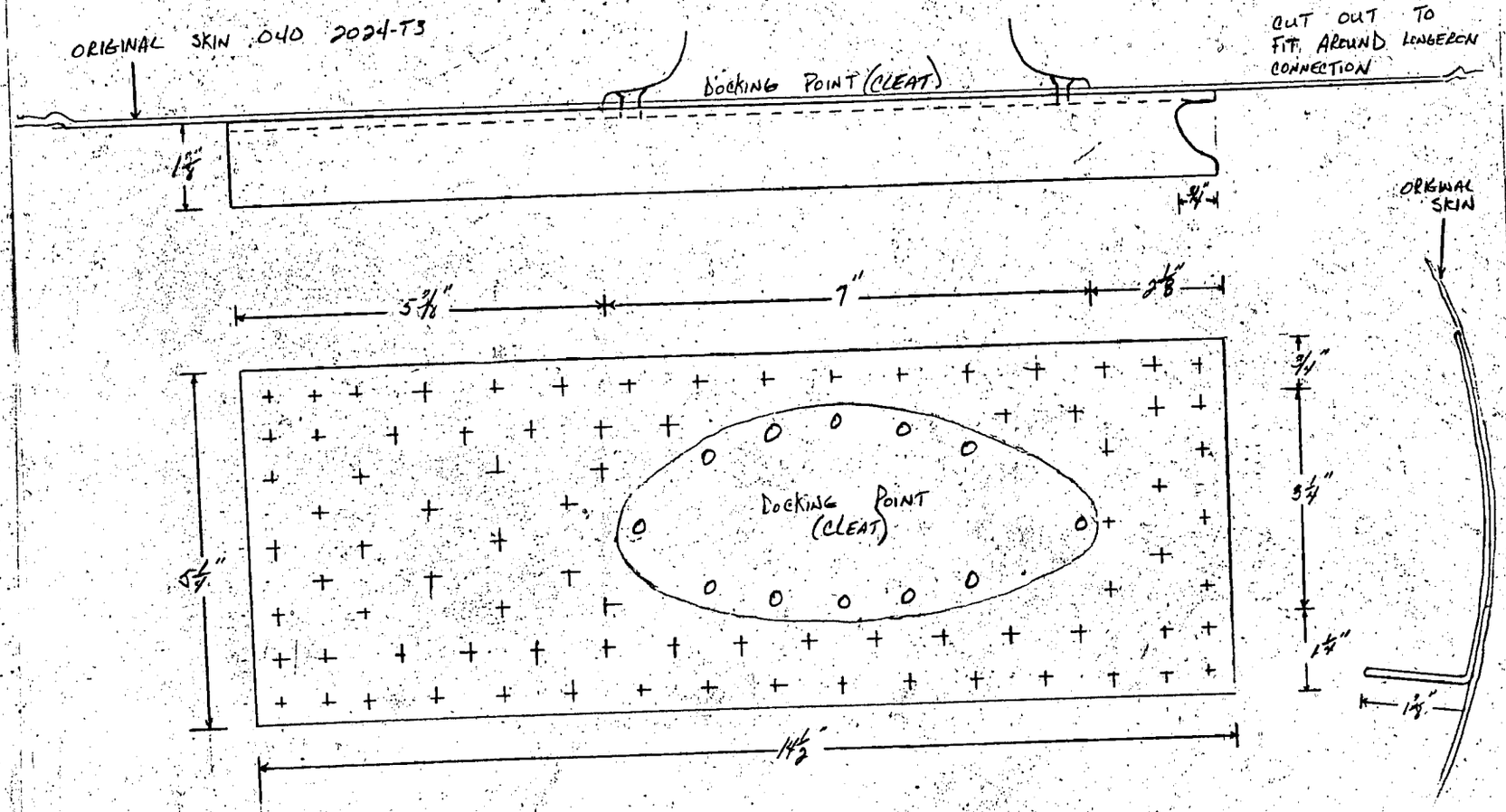
11/25/91

U.S. GPO 1981-775-332/47

2024-T3 ALUMINUM .063 thick

DATE 11/25/91
N65CC

83 EACH AN426-3-5 RIVITS
12 EACH MS24694-S54 SCREWS
12 EACH AN960-10 WASHERS
12 EACH MS20365-1032 NUTS
PR 1422 A-1/2 SEALANT



FAA AIRCRAFT REGISTRY
CAMERA NO. 1
DATE: 1-13-92

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-16-91

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 GL07 CMH OH

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 40-44 S. Washington Street Box 97 New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / **5. TYPE**

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 N. Front Street St Marys, Ohio 45885	XX U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
October 31, 1990	Gary L. Butler

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	XX	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
October 31, 1990	281581233	Gary L. Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-16-91

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 rudder and vertical fin from A/C. Stop drilled crack at horizontal stabilizer Sta. 5 3/4, 5 inches from fwd. spar. Fabricated patch from 2014-T6, .050 I/A/W Repair Manual AN 01-85AB-3, sect. II, page 110A figure 2-10D dated rev. Dec.17, 1960. Installed patch using corrossion preventative sealant 1431 G type III and MS20426AD4 and MS20470AD4 rivets where applicable. Reinstalled vertical stabilizer and rudder using new bolts and nuts and rigged rudder, elevator and trim tabs per Maintenance Manual sect. III, dated rev. Aug. 1, 1951.
Installed flush cabin air exhaust louvres at original location from F.S. 412 to 428. on R.H. side between stringers #2 and #3 from center of top fuselage. Louvres made from 2024-T3 alclad .o4o. Interior doubler fabricated from 2014-T6, .050 alclad. Installed using MS20426AD4 rivets with double row spacing on both pieces and Corrossion priventative sealant 1431 G, type III between all surfaces. All work done I/A/W Repair Manual AN 01-85AB-3 App. II, pg 378 , chapt. I, para. 1-23 thru 1-39, pgs. 2-4 dated rev Dec. 17, 1960.

----------END----------

O-1		M-1	S-1	APS	C-1			
O-2								
O-3		RECEIVED						
O-4		NOV 02 1990						
O-5		FSDO COLUMBUS, OH.						
O-6								
O-7		O-9	C-2	C-3				
O-8								

☒ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE 1977

N65CC 10-31-90

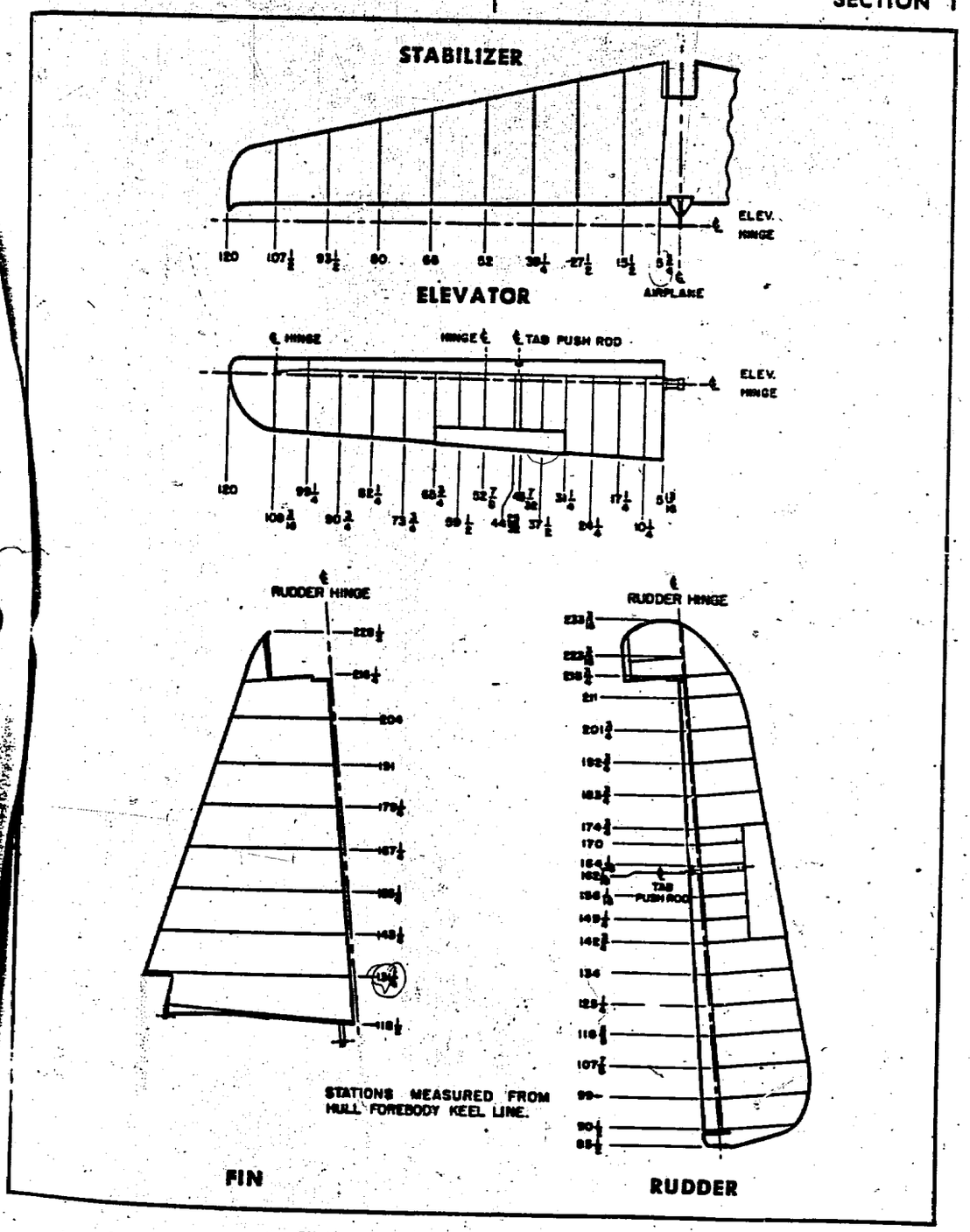


Figure 4—Tail Surface Stations Diagram

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-16-91

N65CC 10-31-90

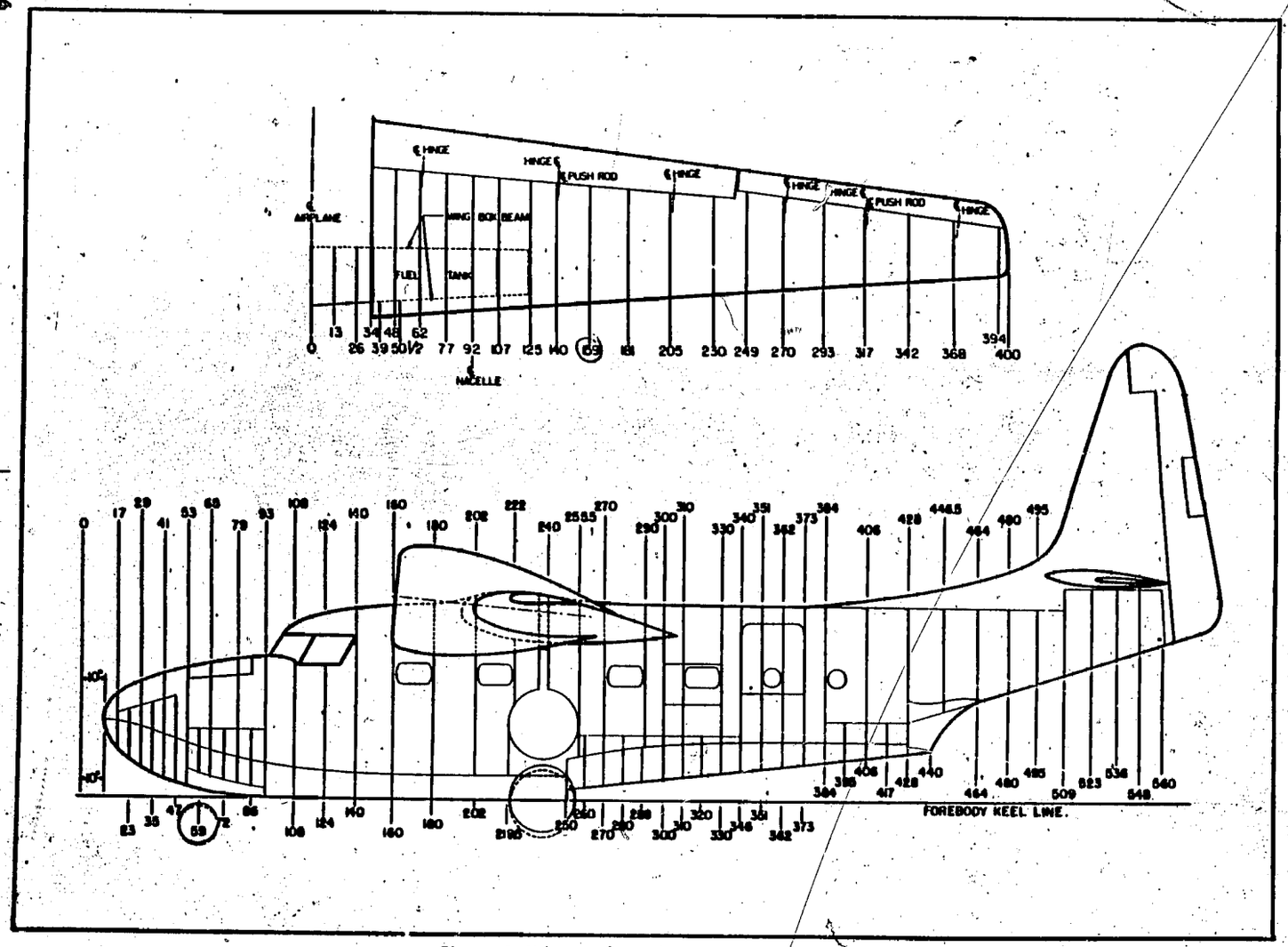
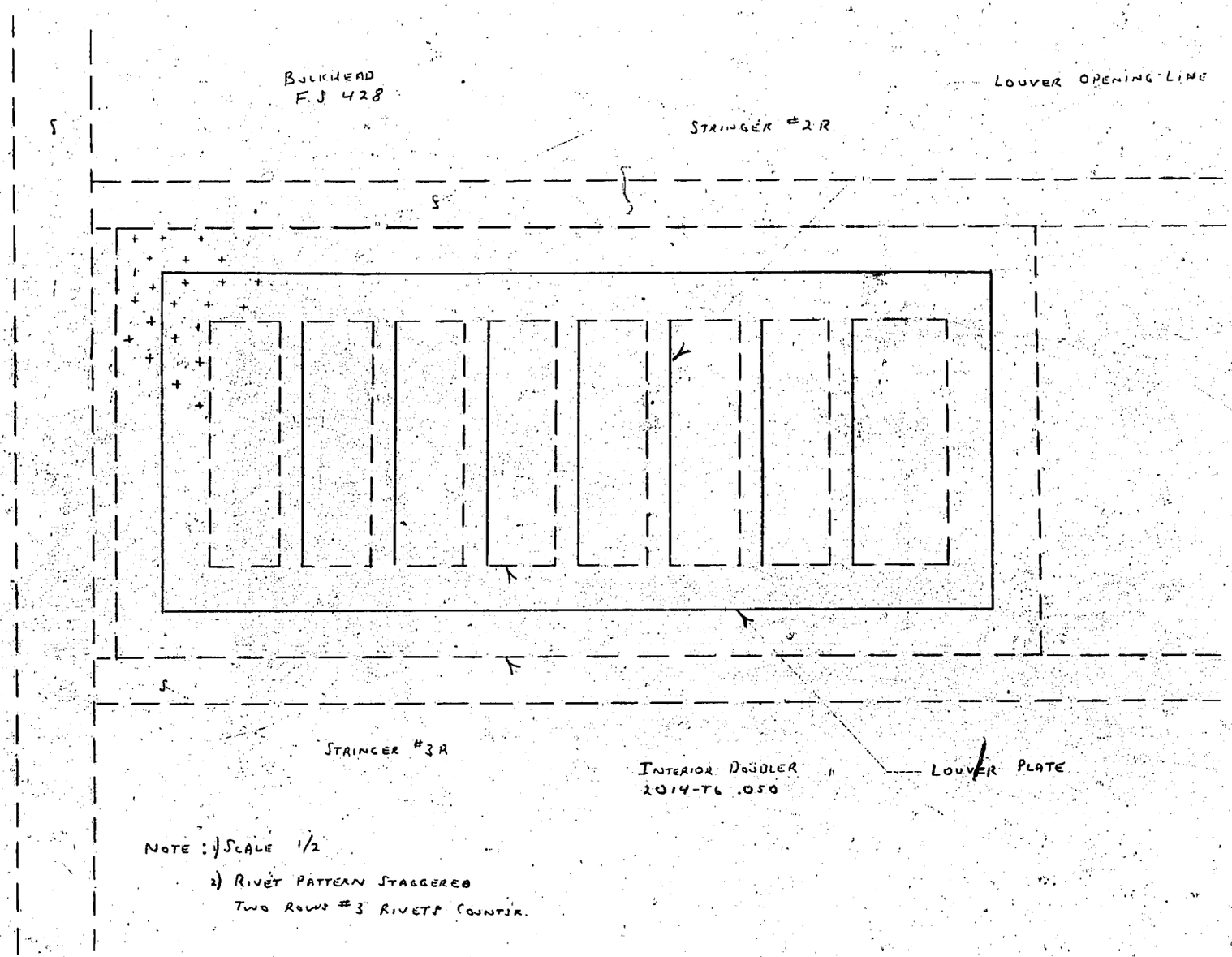


Figure 3—Wing and Fuselage Stations Diagram

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-16-91

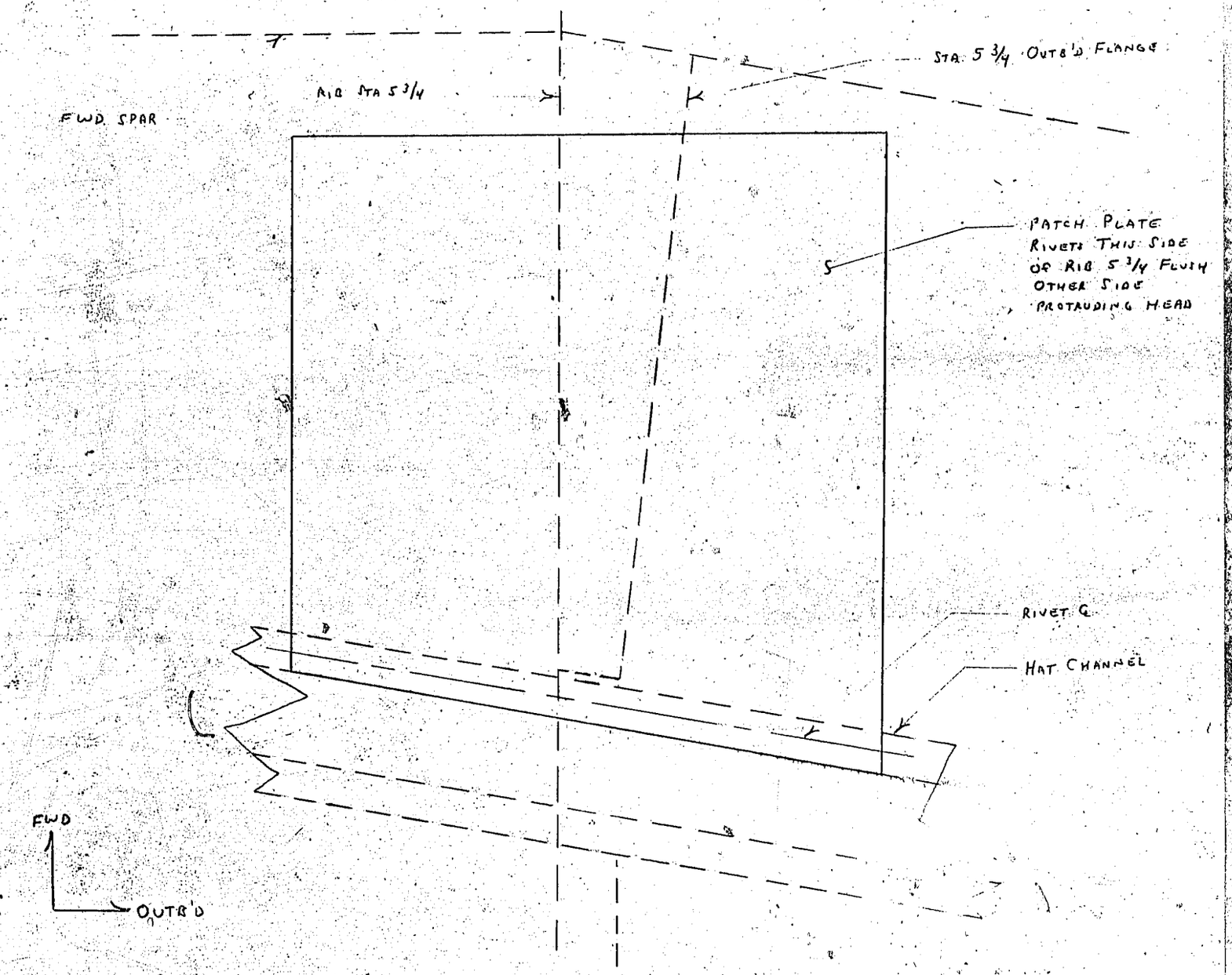


NOTE: 1) SCALE 1/2

2) RIVET PATTERN STAGGERED
TWO ROWS #3 RIVETS COUNTER.

N65CC 10-31-90

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-16-91



NGSCC 10-31-90

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-16-91

N65CC 10-31-90

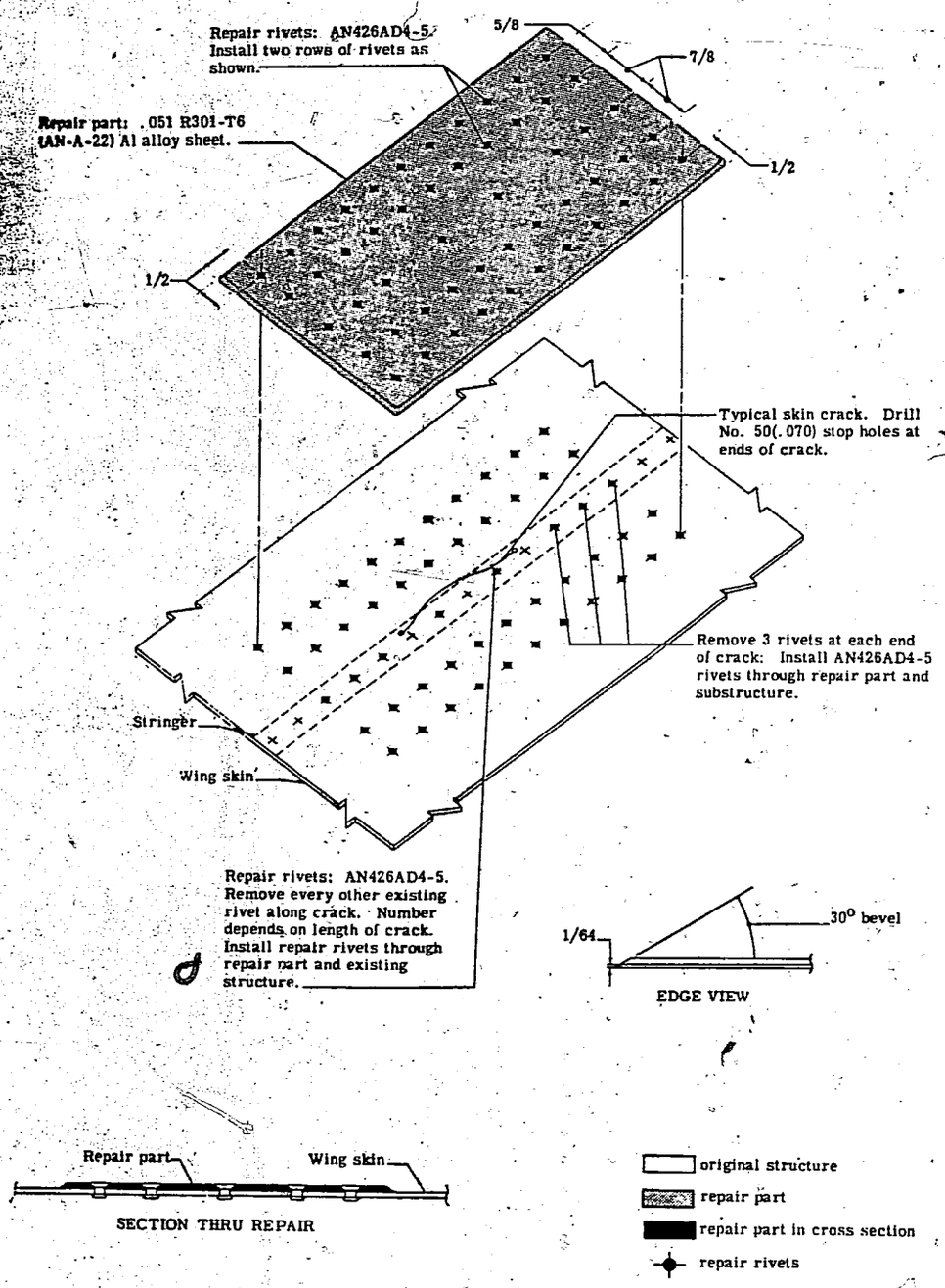


Figure 2-10D. Wing Skin Crack Repair Along Stringer

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 1-16-91

CAMERA NO. 3N DATE: 9-27-90

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 GL07

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 North Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Donald J. Gerstner Route 2, Box 244A Wapakoneta, Ohio 45895	XX U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A 300525019

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
November 20, 1989	Don J. Gerstner

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	XX	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
November 20, 1989	281581233	Gary T. Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 9-27-90

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 nose wheel shimmy dampener p/n A10368 in accordance with Gander Aircraft Corporation STC #SA614SO and drawings GA-2055 and GA-2056 both change A.

G-1		M-1	S-1	APS	C-1			A-1
G-2								A-2
G-3		RECEIVED						A-3
G-4								A-4
G-5		NOV 24 1989						A-5
G-6		FSDO COLUMBUS, OH						A-6
G-7		G-1	G-2	G-				A-7
G-8								A-8

☒ ADDITIONAL SHEETS ARE ATTACHED

★U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

11-20-89 N65CC

Federal Aviation Agency

Supplemental Type Certificate

Number SA6148O

This certificate issued to Gander Aircraft Corporation
3923 N. W. 24th Street
Miami, Florida 33142

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part * *of the Federal Aviation Regulations.* *CAR 4a

Original Product — Type Certificate Number: 783
Make: Grumman
Model: G-73

Description of Type Design Change:

Installation of nose wheel shimmy damper in accordance with Gander Aircraft Corporation Drawings GA-2055 Change A and GA-2056 Change A.

Limitations and Conditions:

Airworthiness compatibility of this STC with all other major changes to the standard original model(s) shown above should be ascertained prior to installation of this STC.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked, or a termination date is otherwise established by the Administrator of the Federal Aviation Agency.

Date of application: January 10, 1967 *Date reissued:*

Date of issuance: May 9, 1967 *Date amended:*

By direction of the Administrator

H. C. Faller (Signature)

Supervisor, MIA EMDO, Miami, Florida
(Title)

Any alteration of this certificate is punishable by a fine of not exceeding $1,000, or imprisonment not exceeding 3 years, or both.

This certificate may be transferred in accordance with FAR 21.47.

FAA FORM 8110-2 (1-66) 0052-657-6000

CAMERA NO. 3N DATE: 9-27-90

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 9-27-90

Coord with ACO-210 prior approval 179

OKC.

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

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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N73556
2. OWNER	NAME (As shown on registration certificate): CHALK'S INTERNATIONAL AIRLINE, INC.	ADDRESS (As shown on registration certificate): WATSON ISLAND, MAC ARTHUR CSWY. MIAMI, FLORIDA 33132

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.
JEROME C. ROSENBLATT	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&P 1506850

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

DATE: SEPTEMBER 27, 1979

SIGNATURE OF AUTHORIZED INDIVIDUAL: Jerome C. Rosenblatt

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
Sept. 27 1979	323525	R.N. Jackson

FAA Form 337 (7-67) (8320)

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 Vickers hydraulic pump P/N PF9-2713-10-ME on each engine with adapter and drive as shown on attached drawings.

Installed two Bendix accumulators P/N 548650-1 piston type of 50.0 cubic inch displacement to replace AA-14007 ball type accumulator of 54.7 cubic inch displacement.

Installed accumulators in left nacelle behind wing spare bulkhead utilizing existing angles and "U" bolts of ¼". Installed in system in parallel.

All work accomplished I/A/W AC 43.13.2.

Reference FAA Form 337 dated September 24, 1979 (copy attached).

END

☒ ADDITIONAL SHEETS ARE ATTACHED

★1975-G.P.O.-1703-M/673-200/175

FAA AIRCRAFT REGISTRY
CAMERA NO. 3N DATE: 9-27-90

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
7-3-05

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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N 73556
2. OWNER	NAME (As shown on registration certificate): Chalk's Int'l. Airline, Inc.	ADDRESS (As shown on registration certificate): Watson Island, MacArthur Causeway, Miami, Fla. 33132

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.
Chalk's International Airline, Inc. Watson Island MacArthur Causeway Miami, Fla. 33132	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	705-135

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
30 January 1979	Ken Wilks

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 [X] 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	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
30 January 1979	705-135	[illegible]

(8320)

FAA Form 337 (7-67)

GPO : 1971 O - 410-878

CAMERA NO. 31V DATE: 9-27-90

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.)*

N 73556
Accomplished repairs to bulkheads Sta 219.5 and 255.5 with .090-6061-T6. Replaced three broken stringers, made repairs to three stringers by staggered splices. Installed keel splice from Sta 170 to Sta 255.5. Installed new left main landing gear drag strut bushing fore and aft and installed new aft bushing block. Replaced bottom skin right and left Sta 180 to 255.5 with .063-2024-T3.

All repairs in accordance to FAR 43.13.1. End.

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY

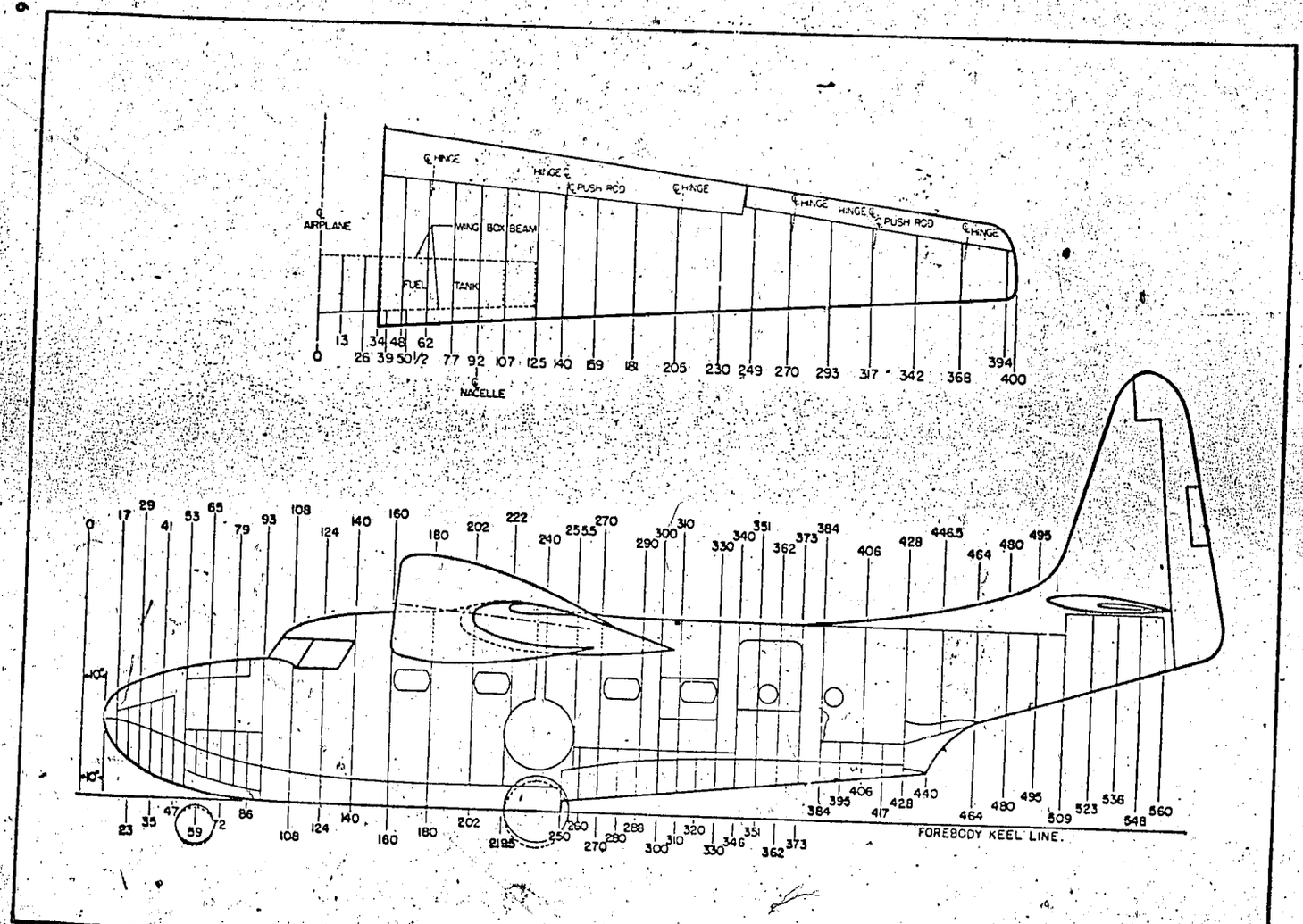
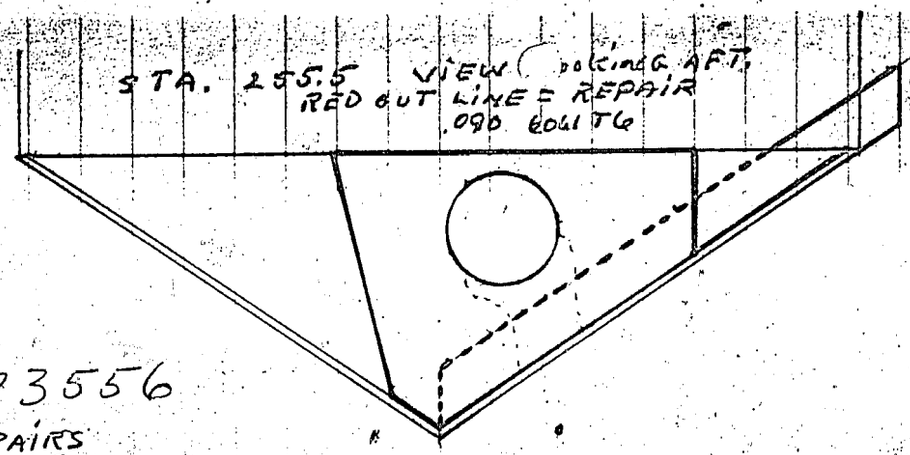


Figure 3—Wing and Fuselage Stations Diagram

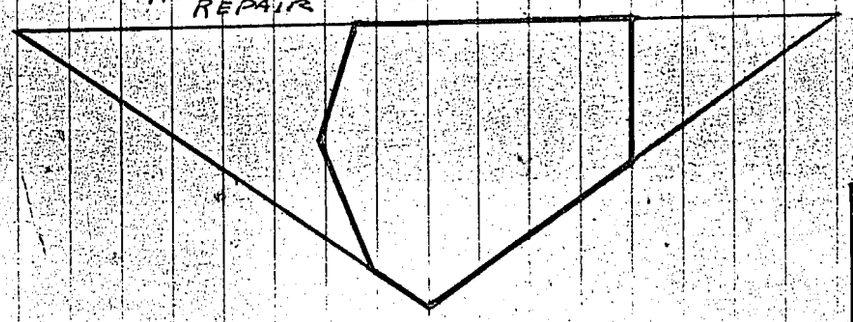
STA. 255.5 VIEW LOOKING AFT.
RED OUT LINE = REPAIR
.090 6061 T6

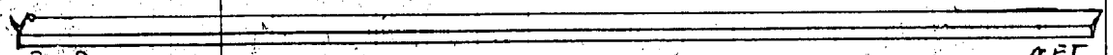


A/C 73556

HULL REPAIRS
TO BULKHEADS
JAN. 1979
Ken Willis

STA 219.5 VIEW LOOKING AFT.
RED OUT LINE = REPAIR .090 6061 T6





KEEL SPLICE FROM
STA. 170 TO STA. 255.5

STA. 170

STA. 255 1/2

FAA AIRCRAFT REGISTRY
CAMPA NO. 3N DATE: 9-27-90

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 AGL-FSDO-62
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 North Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 North Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
June 10, 1988	Gary L Butler

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 [X] APPROVED [ ] REJECTED

BY							OTHER (Specify)
		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
June 10, 1988	281581233	Gary L. Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 old interior mount brackets and floorboards.
2) Cut and sealed edges of Gill Floor P/N 5007A and installed using AN #10 screws into nutplates. Headliner panels of 2024-T3 .032 Alclad Al. and installed into "T" shaped channels which are installed with #8 screws into nutplates attached tp "L" shaped brackets riveted to each bulkhead. See attached drawing. Forward cabin, from Sta. 140-222, armrests made from 2024-T3 .032 Alclad sheetmetal and 7075-T6 .025 90° angle and riveted together. Armrests attached by #10 screws to "L" shaped brackets riveted to each bulkhead. Armrests supported on inboard side by 7075-T6 90° angle attached to the armrestsby rivets (MS20246-4) and to the floorboard by #8 screws. Lower side panels made from 2024-T3 .032 sheetmetal are installed in a "U" shaped channel in armrest on top and are attached to angles on floorboard by #8 screws. Upper side panels made from 2024-T3 .032 are fit into "T" shaped channels on top and screw to brackets where armrests attach. See attached drawing. Aft cabin has no armrests, so upper side panels fit into "T" shaped channels on top and bottom. Lower side panels fit into "T" shaped channels on top and screw to angle attached to floorboard.
3) L.H. and R.H. center cabinets made from ½inch Al. honeycomb sheets Sheets attached with screws and countersunk nutplates. All exposed honeycomb sealed with resin. Cabinets incorporate three drawers, one hot/cold beverage compartment, a storage bin and a compartment with three shelves. Both cabinets wrap around the wheel well structure, and are attached to the seat track hat channels with AN 4 bolts at 5 locations. See attached drawings.
4) L.H. and R.H. rear couch end cabinets made from 3/8" plywood. Plywood sections attached with screws, nuts and glue. Cabinets incorporate two drawers and one louver for heater air outlet. Cabinets attached to the seat track hat channel with AN 4 bolts at two locations and one AN 4 bolt at bulkhead on aft side. See attached drawings.
5) Lavatory vanity made from Al. 90° angles (7075-T6 .125), sheetmetal of 2024 T3 .032, and from 3/8" plywood. Riveted angle framework used on large section ot attach to bulkhead at Sta. 384. Attached with AN 4 bolts at six locations. Plywood used on smaller section and attached to toilet mount with AN 4 bolts at two locations and fuselage frames at two locations. Carry thru structure is plywood bolted to 90° angles with AN 3 bilts at two locations. See attached drawings. Toilet structure is from 90° angle framework (7075-T6 .125) riveted together with MS20470-4 rivets and attached on forward side to bulkhead with AN 3 bolts at four locations and on bottom to bulkheads below floorboard with AN 3 bolts thru floorboard at four locations. The forward bulkhead is from ½" Al. honeycomb and is attached on top and sides by AN 3 bolts (2 at each location) at 4 locations to bulkhead at station 340 and to two 90° Al. angles (7075-T6 .032) on bottom. Angles attached to bulkhead below floorboard also at station 340 with two AN 3 bolts at each angle. All exposed honeycomb edges sealed with resin.
6) Forward cabin chairs, mfd. by Hardman tool & Engineering Co., conform to TSO-C39, installed in seat tracks as follows:

Location	Model	S/N	P/N	Date Mfd.
L.H. forward facing	6000-AS	8286-361	8645-55	12-65
" aft "	6000	9770-447	8645-91	8-66
R.H. forward facing	"	585	8645-149	8-68
" aft "	"	584	8645-145	8-68

☒ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

N65CC 6/10/88

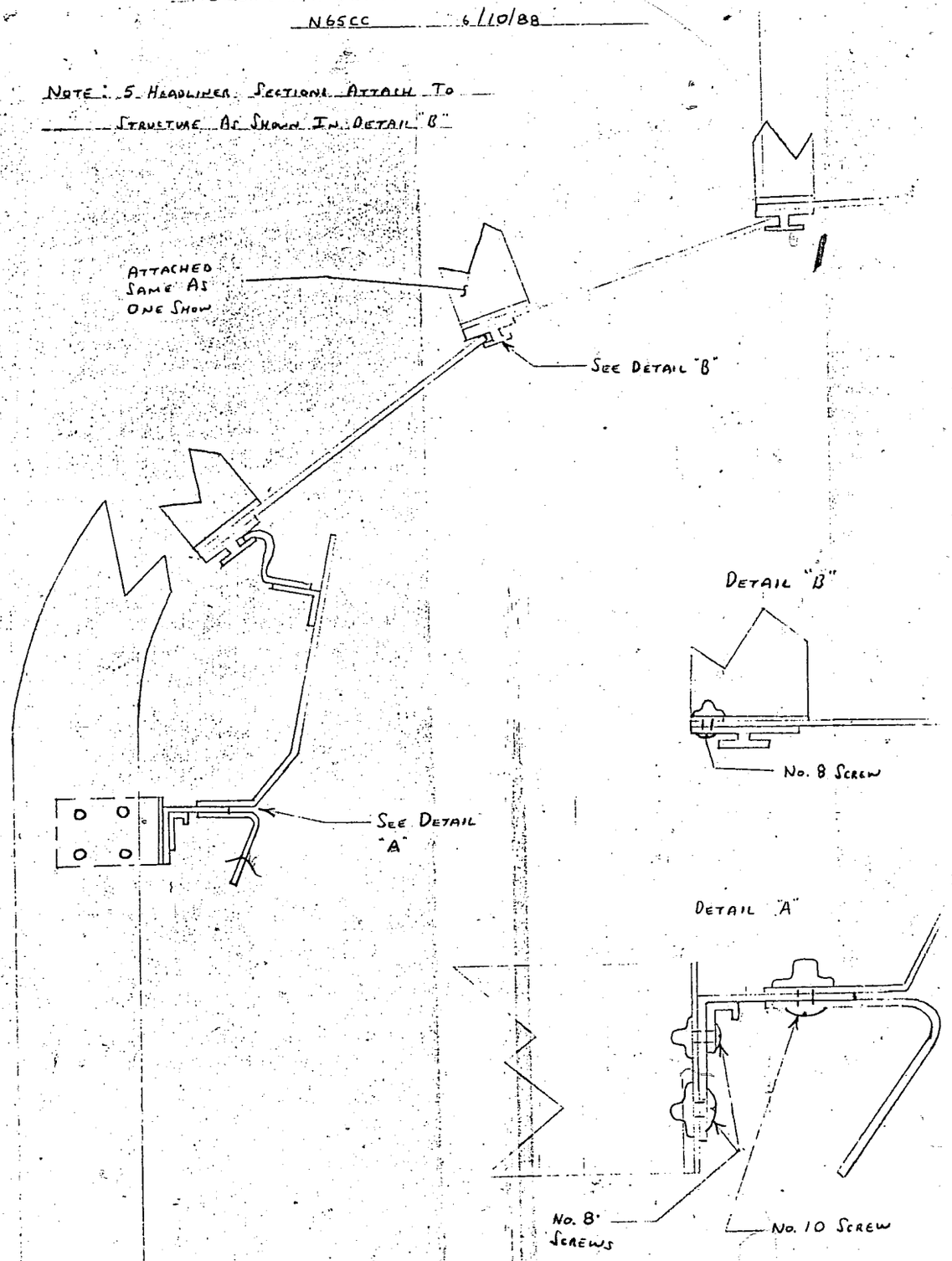
7) R.H. aft cabin 4 place couch, mfd by Tosington Enterprises, Inc., conforms to TSO- C39a type I, Side facing, installed in seat tracks. Couch model no. T-455-99, S/N 2442 and loads are: fwd 9.0, up 9.7, down 9.8, side 3.0.
L.H. aft cabin 2 place couch, mfg. by Tosington Enterprises, Inc., conforms to TSO- C39a Type I, side facing, installed in seat tracks. Couch model no. T-250-14, S/N 2456 and loads are: fwd. 9.0, up 7.0, down 9.0, side 3.0.
8) Cockpit side panels installed the same as aft cabin side panels. See para. 2. Headliner is from 2024-T3 .032 Al. and is attached to frame members with no. 8 screws with cutouts for controls levers. Original cockpit seats installed according to maintenance manual.
9) Material used to cover interior panels and passenger seats are as follows:
fwd and aft cabin side panels: lower - pig skin (suede)
upper - headliner material (white)
Lavatory : headliner and side panels - off white leather
aft baggage compt. : side panels and overhead panels - grey gross point
cockpit : upper and lower side panels - light grey leather
overhead panels - off white leather
cabin chairs and couchs : off white leather
cockpit chairs : sides and backs - light grey leather
remaining area - lambs wool (light grey)

All materials comply with the requirements of FAR 25.853 (B), vertical burn tests.

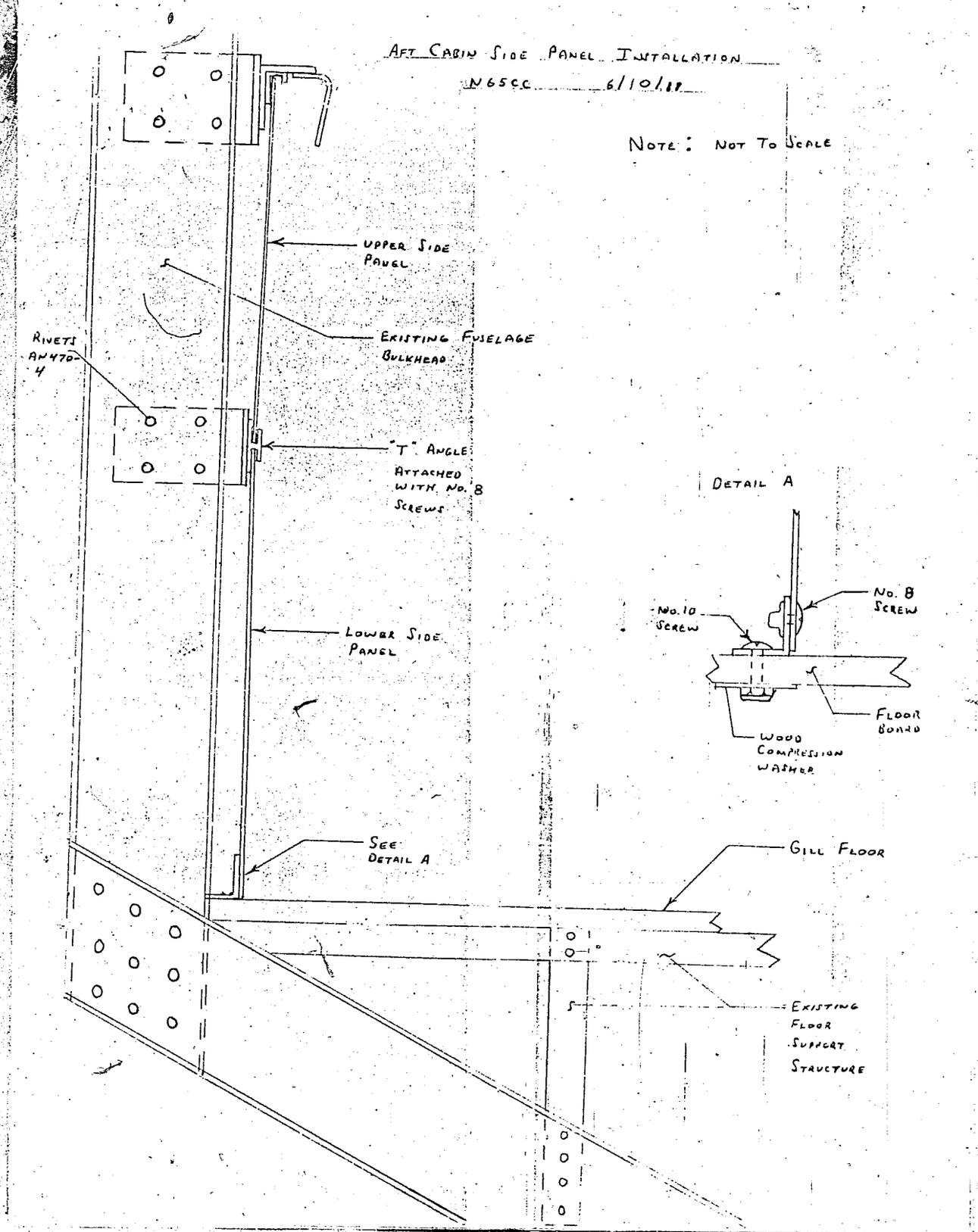
HEADLINER AND CORNIC PANEL INSTALLATION

N65CC 6/10/88

NOTE: 5 HEADLINER SECTIONS ATTACH TO STRUCTURE AS SHOWN IN DETAIL "B"



FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

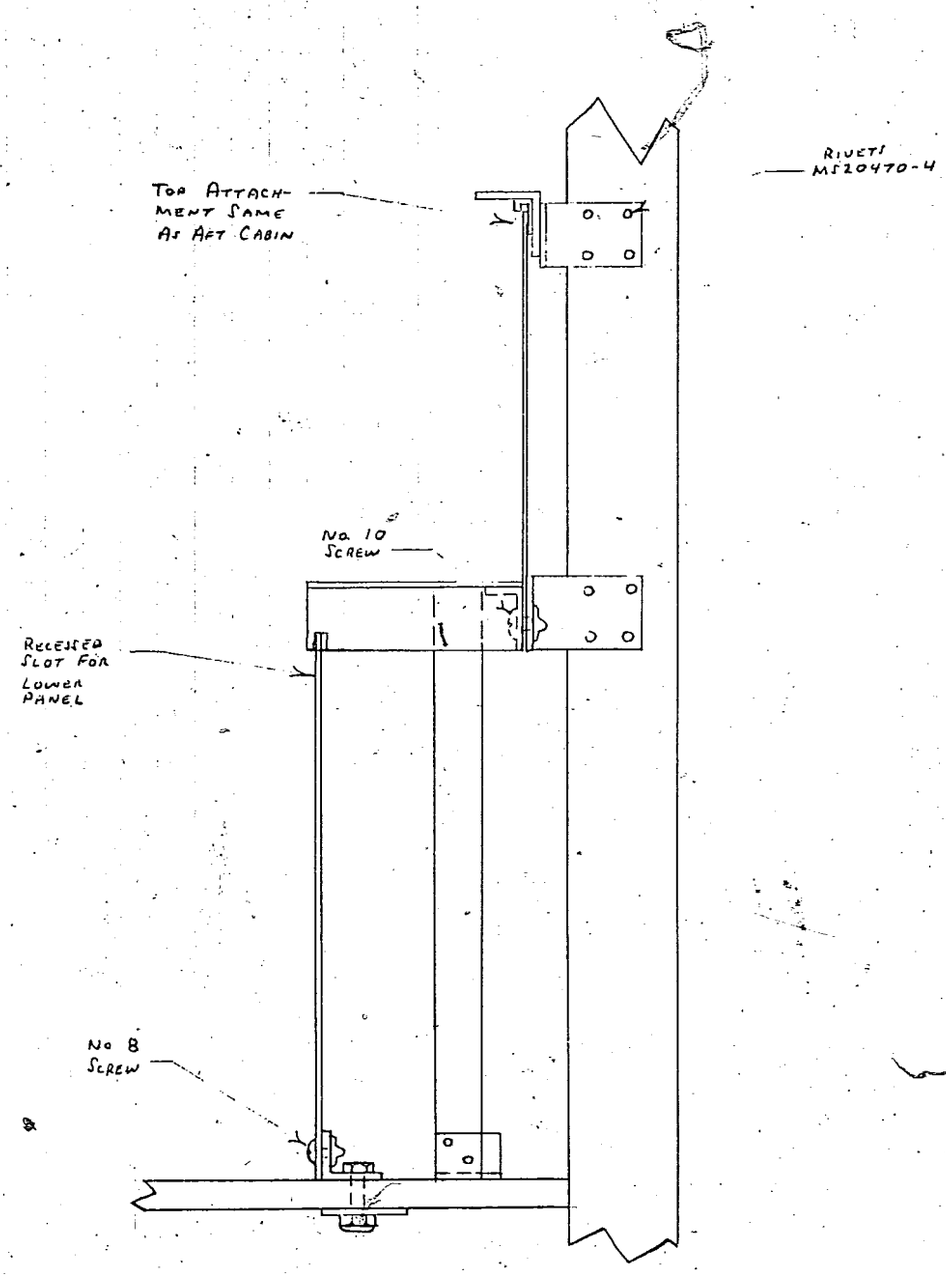


CROWN

N65CC

Date 6-10-88 By

Subject FWD CABIN ARMREST AND SIDE PANEL



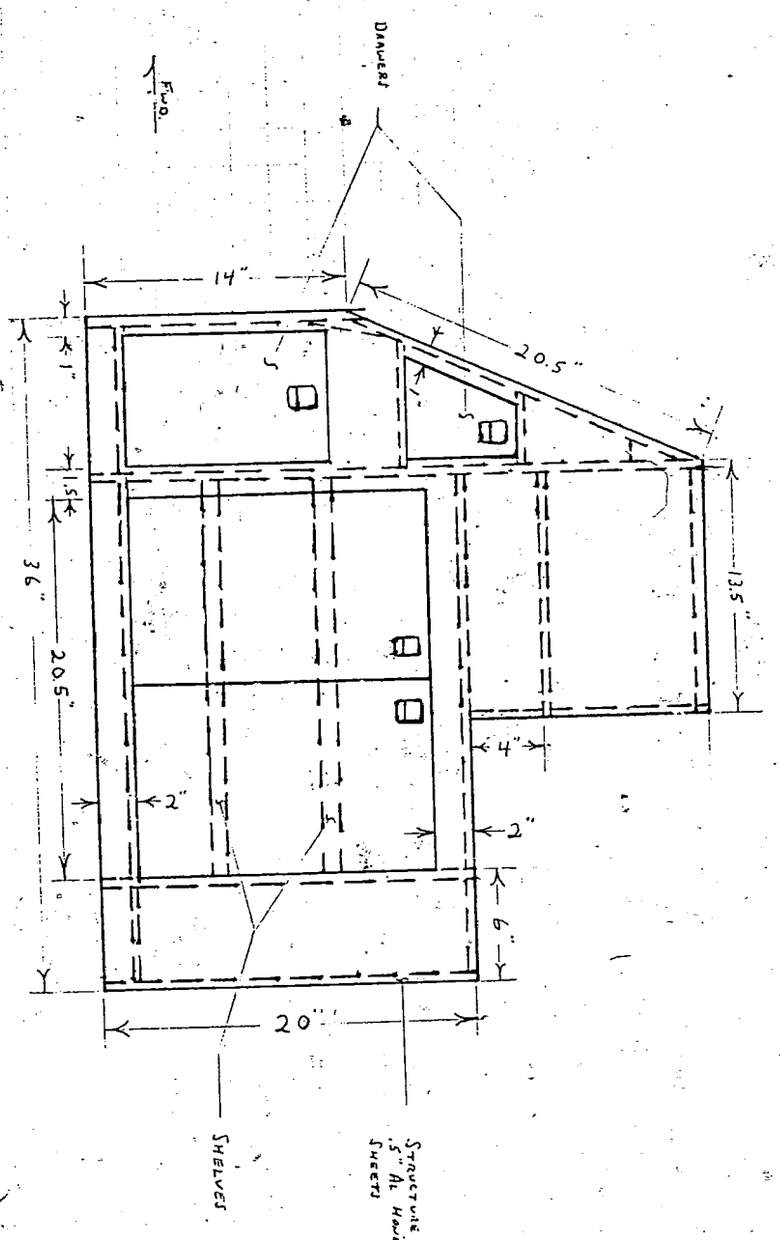
FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

CROWN

N65CC

Date 6-10-88 By

Subject R.H SIDE CABINET (CENTER) PAGE 1



FRONT VIEW

NOTE: 1) ALL DRAWER AND DOOR LATCHES ARE THE PADDLE LATCH TYPE

2) L.H SIDE CABINET IDENTICAL EXCEPT IT IS OPPOSITE R.H SIDE

Printed In U.S.A.

OF 1414 Rev 4/75

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

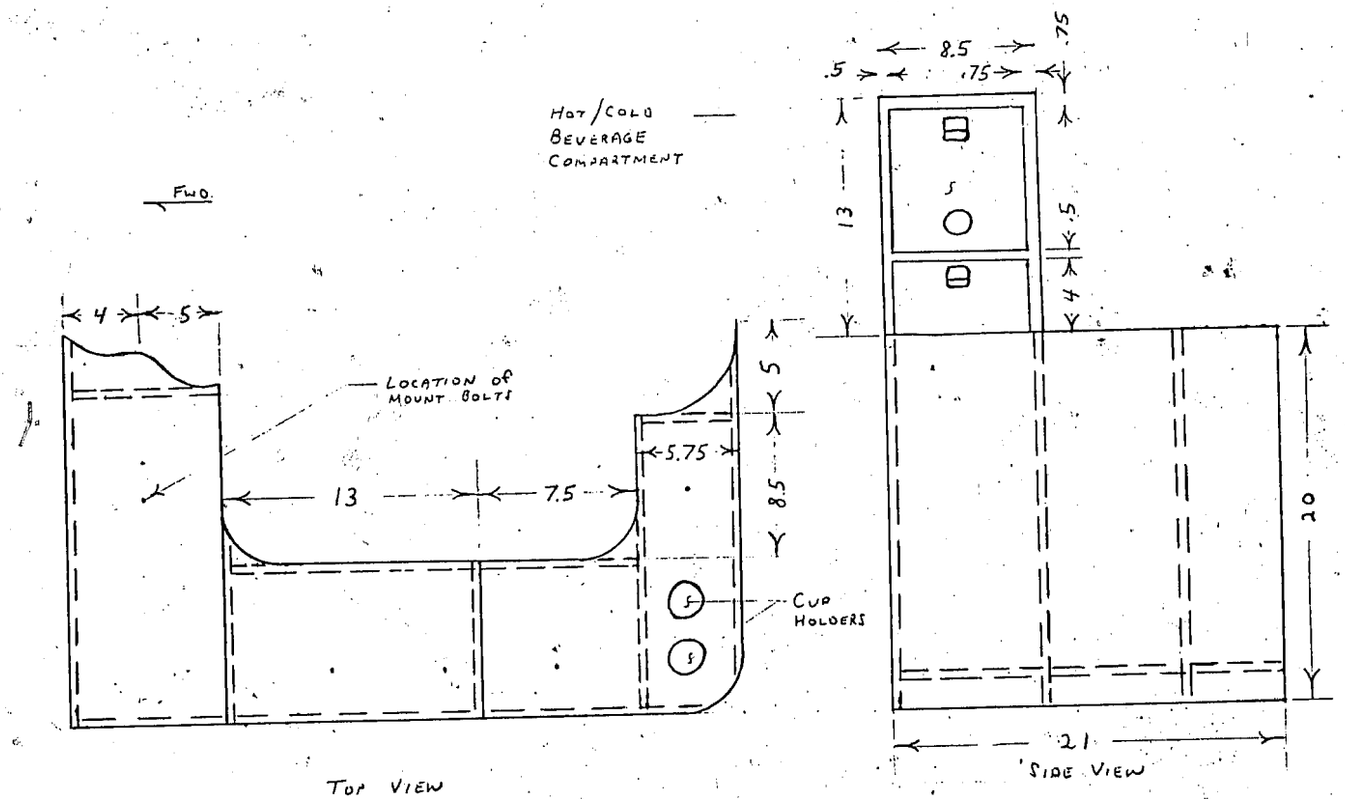
crown

N65CC

Date 6-10-88 By

Subject R.H. Side Cabinet (Center) Page 2

NOTE: 1) Beverage And Drawer Latches Are The Paddle Latch Type
2) Top View Shows How Cabinet Fits Around Wheel Well
3) Cabinet Is Covered With Wood Veneer
4) Mounted To Seat Track Hat Channel With AN4 Bolts At Five Locations



Printed in U.S.A.

OE-1434 Rev. 4/75

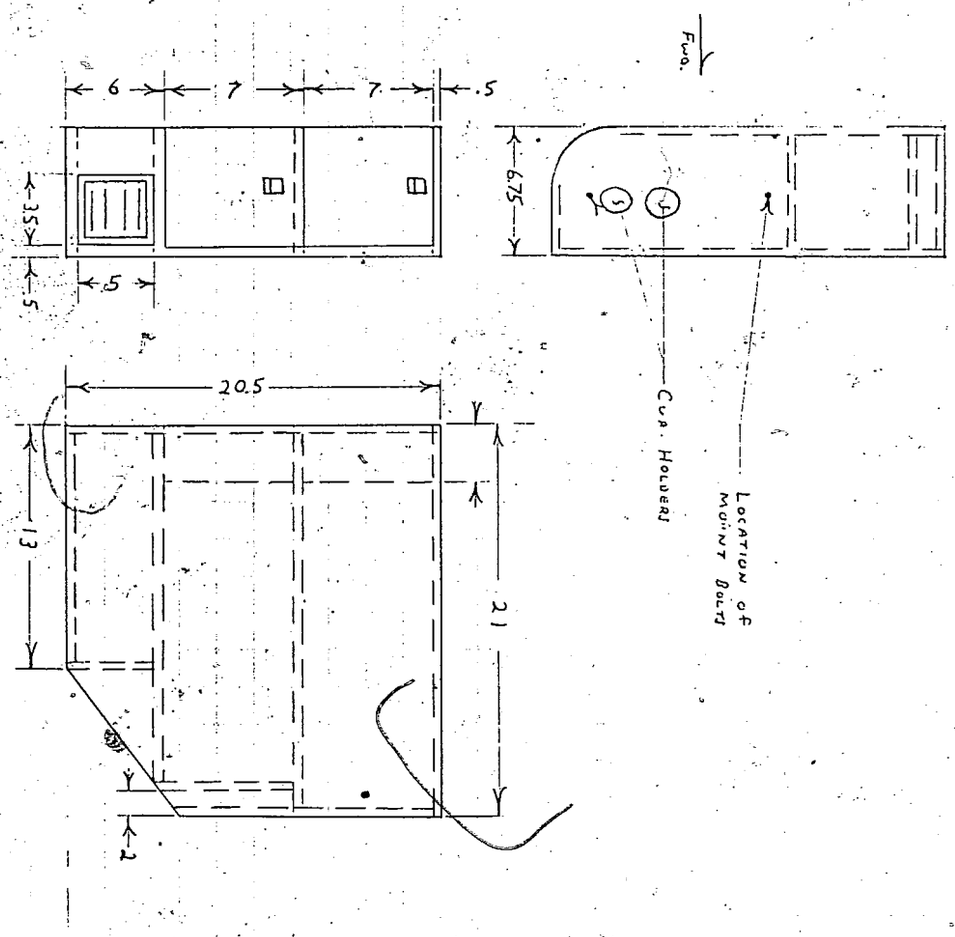
FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

CROWN

NGSCC

Date 6-10-88 By

Subject L.H. AFT, REAR CABIN, END CABINET



NOTE: 1) ALL STRUCTURE, MOUNTING, DRAWERS AND LOUVERS ARE THE SAME AS RH AFT END CABINET

Printed in U.S.A.

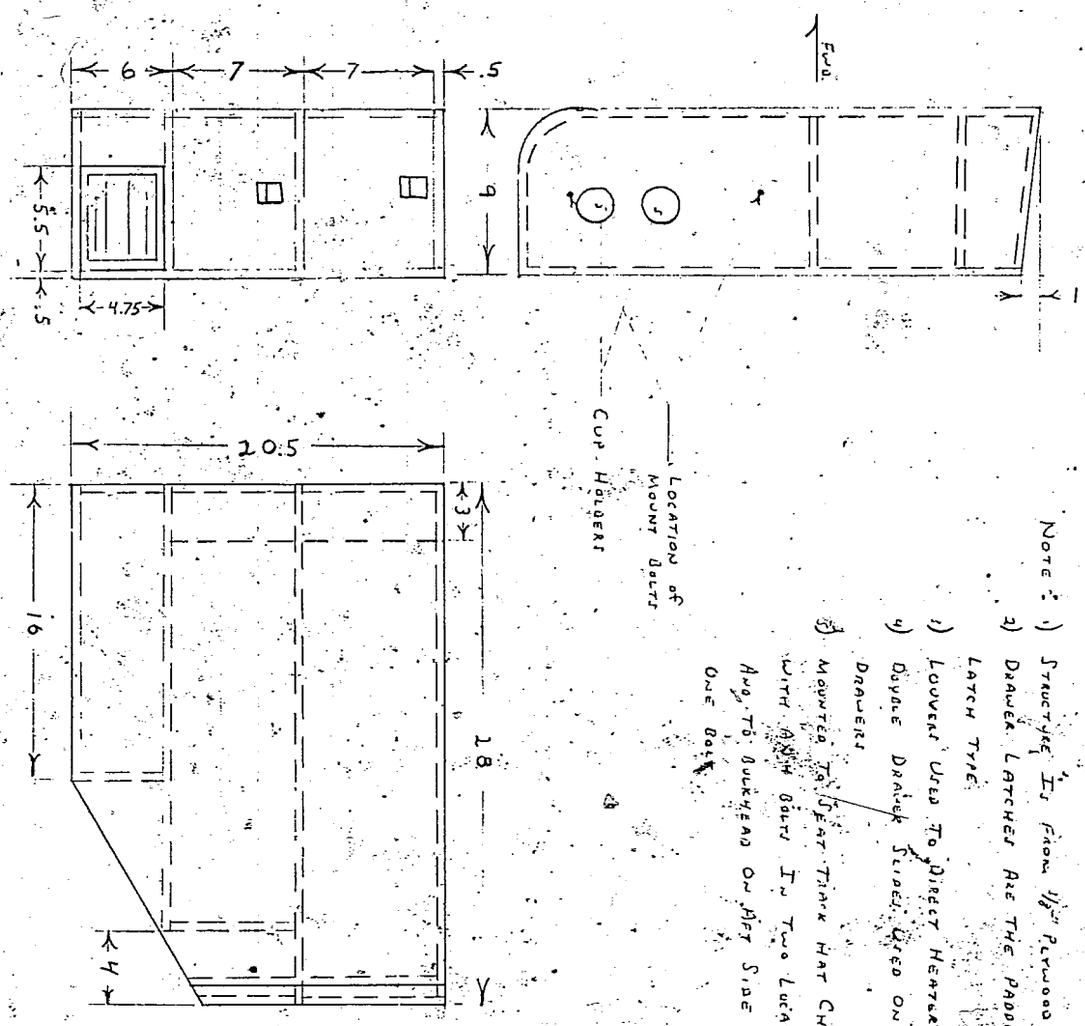
FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

CROWN

N65CC

Date 6-10-88 By

Subject R.H. AFT, REAR CABIN, END CABINET



NOTE: 1) STRUCTURE IS FROM 1/8" PLYWOOD
2) DRAWER LATCHES ARE THE PADDLE LATCH TYPE
3) LOUVERS USED TO DIRECT HEATER AIR
4) DOUBLE DRAWER SLIDES USED ON BOTH DRAWERS
5) MOUNTED TO SEAT TRACK HAT CHANNEL WITH ANN BOLTS IN TWO LOCATIONS AND TO BULKHEAD ON AFT SIDE WITH ONE BOLT

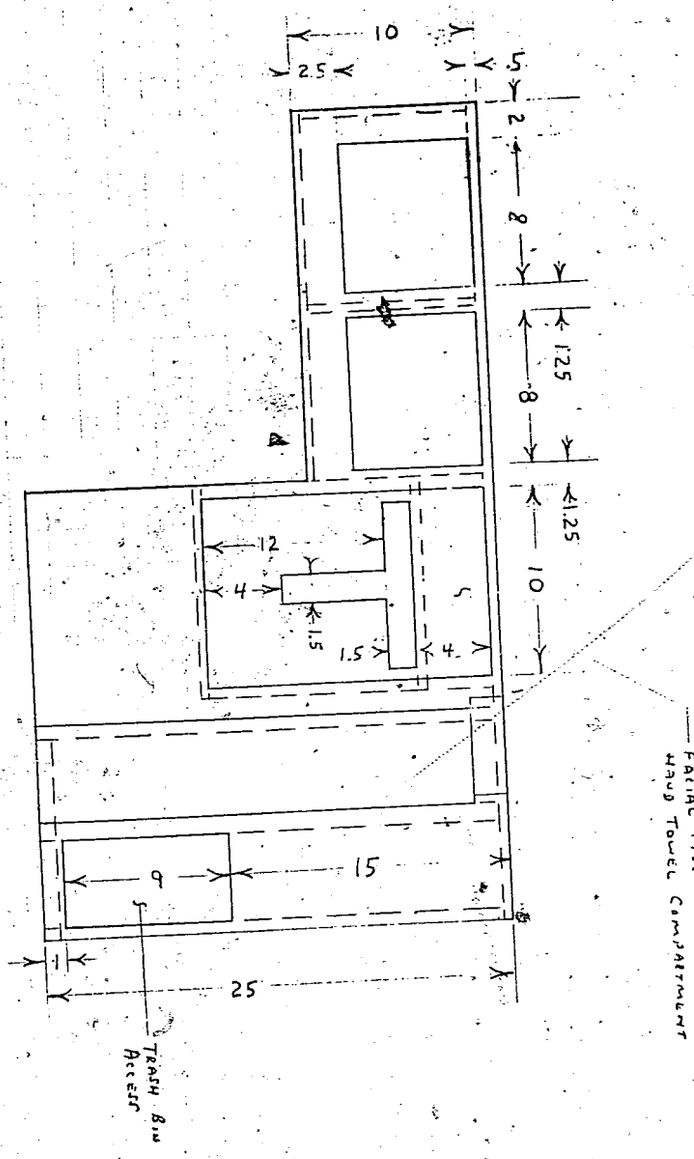
FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

CROWN

N65CC

Date 6-10-88 By

Subject LAVATORY VANITY INSTALLATION PAGE 1



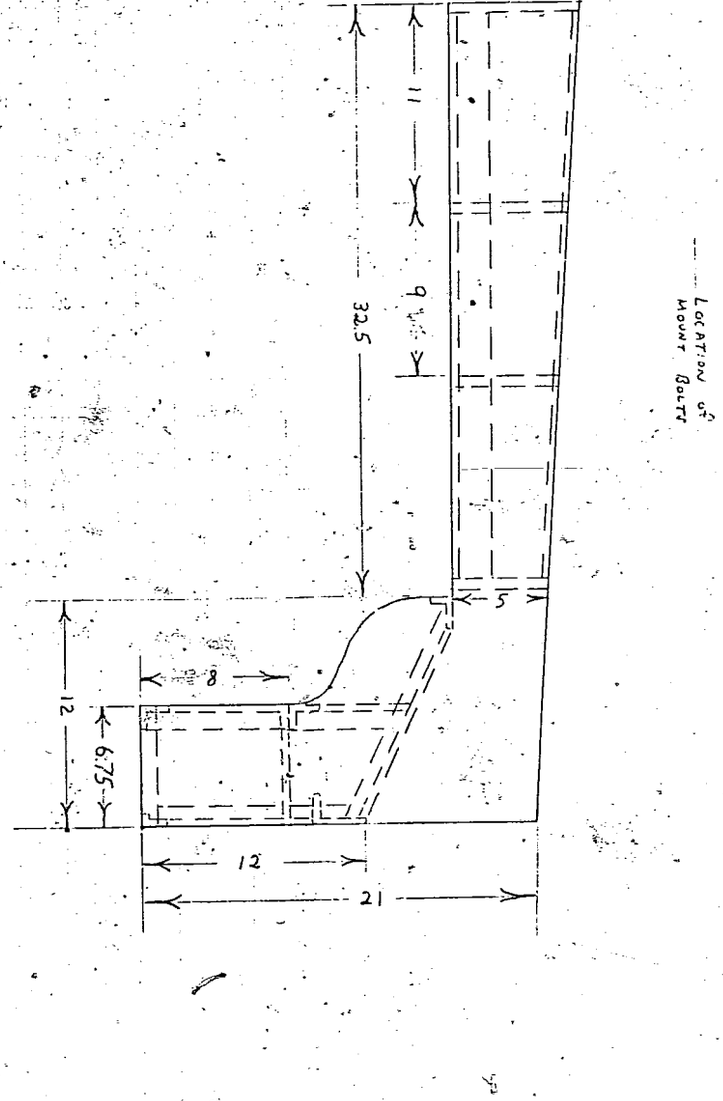
Printed in U.S.A

CROWN

N65CC

Date 6-10-88 By

Subject LAVATORY VANITY INSTALLATION PAGE 2



NOTE: 1) VANITY HAS A SINK AND SOAP DISPENSER AND AN OPENING FOR FACIAL TISSUES

CROWN

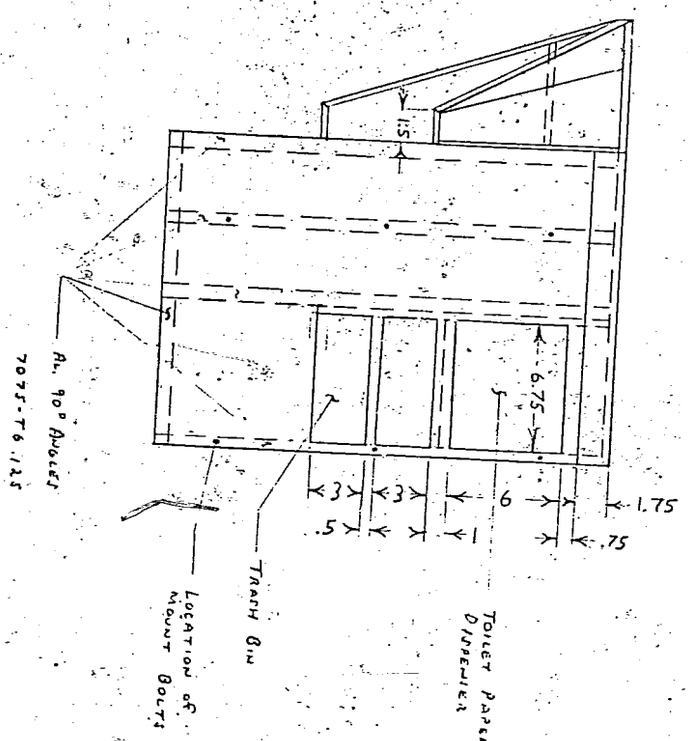
N65CC

Date 6-10-88 By

Subject LAVATORY VANITY INSTALLATION PAGE 3

NOTE: 1) VANITIES LARGE SECTION HAS STRUCTURE FROM 7075-T6-.125 90° ANGLE AND SHEETMETAL COVERED WITH WOOD VENEER. DOORS AND SIDES DIVIDERS FROM 3/8" PLYWOOD. CARRY THRU STRUCTURE IS PLYWOOD BOLTED TO 90° ANGLE STRUCTURE.

2) MOUNTED TO BULKHEAD STA 324 WITH AN4 BOLTS AND NUTS AT 6 LOCATIONS.



N65CC 6-10-88

SECTION 1

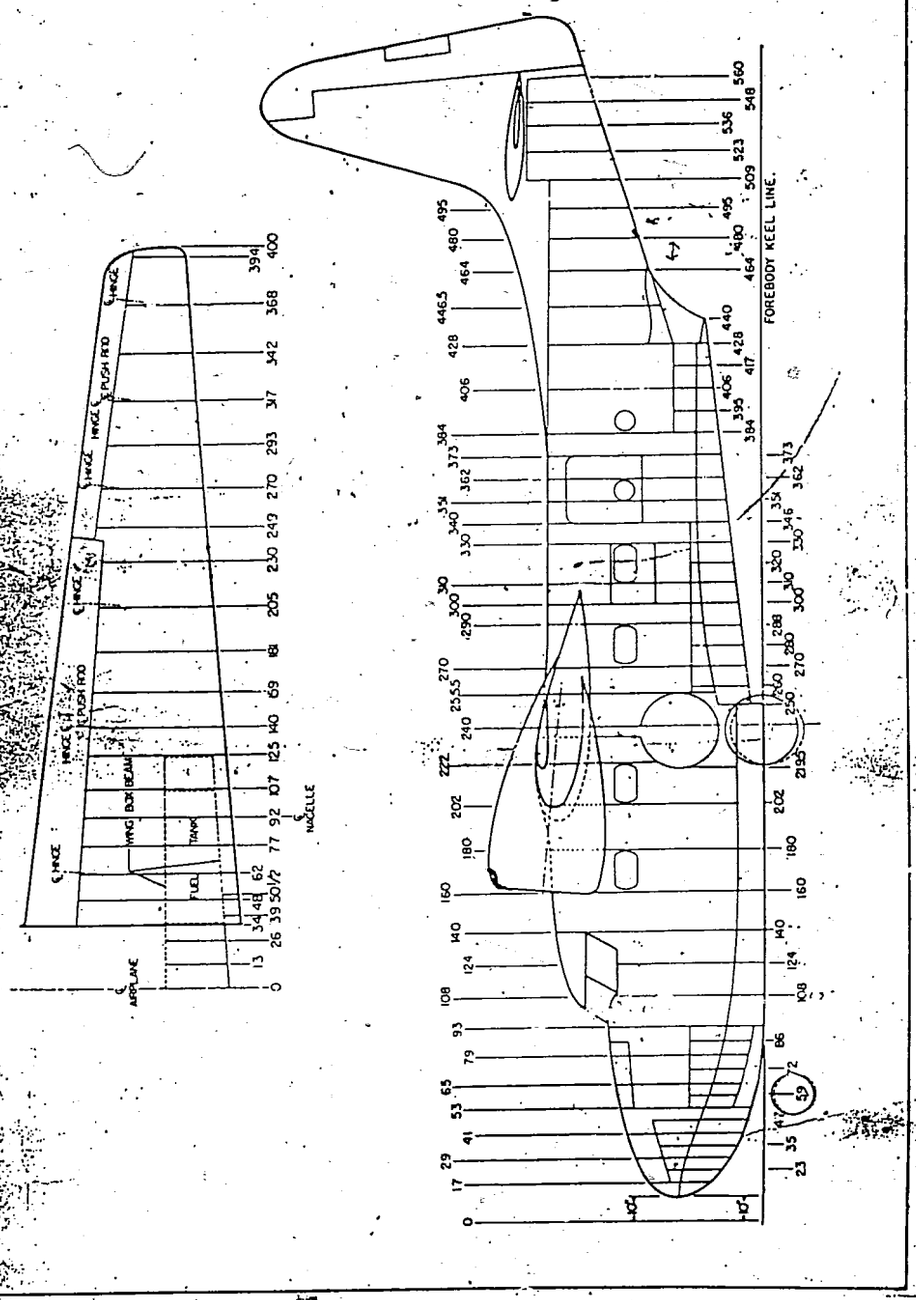


Figure 3—Wing and Fuselage Stations Diagram

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 ACE-5DO-62
~~Columbus, Ohio~~

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 North Herman, New Bremen, Ohio 45869

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.
Gary Lee Butler 412 North Front Street St. Marys, Ohio 45885	X U.S CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
March 14, 1988	Gary L Butler

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 XX APPROVED ☐ REJECTED

BY							
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	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
3-14-1988	281581233	Gary L Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 original glass cockpit windshield's and side windows from aircraft. Removed all cabin windows from aircraft.

2) Fabricated new cabin windows from .250 inche thick General Electric Lexan MR5 sheet. Used original windows as a template. Installed windows using new extruded rubber window seal and four extruded aluminum plates, one at each corner, to secure the windows in the frame and against the window seal.

3) Installed new cockpit windshields made from .250 inch thick General Electric Lexan MR5 Sheet. Used original mounting plates and new hardware and PRC 1431G type III sealant. GE Lexan MR5 meets ASTM-D635, D1929 for flame spread test and ignition temperature test. It's tensile strength is 9500 psi. Light transmission is 85 %. Lexan MR5 passes ANSI-Z261 for chemical resistance. Lexan MR5 Impact strength is greater than 200ft/lbs. at 73 F, 32 F, and 0 F.

4) Installed General Electric Lexan MR5 in cockpit window mounts.

Windshiels and side window installations are flat sheets with no curves or bends.

----------END----------

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

U.S. 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 ACE-SDO-62
Cincinnati, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co.	ADDRESS (As shown on registration certificate): 108 N. Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	5. TYPE: 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.
Gary L. Butler 412 North Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
3-10-88	Gary L. Butler

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 [X] APPROVED [ ] REJECTED

BY						
	FAA F.T. STANDARDS INSPECTOR	MANUFACTURER	X	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
3-10-88	281581233	Gary L. Butler

FAA Form 337 (7-67)

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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.)* 2/5/88

Grumman G-73
N65CC

Installed:

Global/Wulfsberg Flitefone-6, Consisting of:

1ea RT-18D Transceiver (& Mount), P/N 400-0125-000 F.S. 23.0
2ea WH-10 Control Unit, P/N 400-0123-111 F.S. 140.0 / 202.0
1ea AT-461 Blade Antenna, P/N 121-0011-000 F.S. 255.5

King KHF-950 HF Comm, consisting of:

1ea KTR-953 Transceiver/Exciter (& Mount) P/N 064-1015-00 F.S. 384.0
1ea KAC-952 Power Amp/Ant. Coupler (& Mount) P/N 064-1017-00 F.S. 384.0
1ea KCN-951 Controller, P/N 064-1016-00 F.S. 98.0

Equipment is TSO'd and is installed in equipment mfgr's mounts according to mfgr's manuals, and using A.C. 43.13 -1A, & -2A as a guidline.
AN hardware & 22759/16-( ) type wire is used throughout. Circuit protection is by "Trip Free" circuit breakers.
Aircraft weighed after this and other installations and new Empty Weight and C.G. established.
Aircraft Electrical Load Analysis charts and Equipment List revised.

The following installation and instruction manuals used as approved data:

Global/Wulfsberg	Installation manual	P/N	150-0119-000
King KHF-950	" "	"	006-0190-03
FAA AC43.13-1A, 2, 2A			

----------END----------

M-1 S-1 APS C-1 A-1 A-2 A-3 A-4 A-5 O-2 O-3 O-4 O-5 O-6 O-7 O-8 O-9 C-2 C-3 C-4 C-5 A-6
RECEIVED
APR 20 1988
FSDO
COLUMBUS, OH.

☐ ADDITIONAL SHEETS ARE ATTACHED

☆ U.S. GOVERNMENT PRINTING OFFICE: 1986-659-121/40146

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 AGC-ND0-62
Columbus, Ohio

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 Aircraft Engineering	MODEL G-73 (Mallard)
	SERIAL NO. J-56	NATIONALITY AND REGISTRATION MARK N656C
2. OWNER	NAME (As shown on registration certificate) Crown Co	ADDRESS (As shown on registration certificate) 108 North Herman New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE REPAIR	5. TYPE ALTERATION
AIRFRAME	(As described in item 1 above)				
POWERPLANT	Pratt & Whitney	R-1340-S1H1	18291	X	
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary L. Butler 412 North Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
3-10-88	Gary L. Butler

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	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
#_ 3-10-88	281581233	Gary L. Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 engine from R.H. position of N65CC. Dissassembled and cleaned and inspected all engine parts.
2) Reassembled with the following new and reworked parts:

1)	1ea.	326197	Thrust Bearing	S/N D57
2)	4ea.	35558	Tappets	
3)	5ea.	35560	"	
4)	2ea.	288936	Gen. drive bearing	
5)	1ea.	288943	Blower bearing	
6)	1ea.	288944	" " "	
7)	1ea.	30604	Blower shaft nut	
8)	1ea.	35081	" " " pin	
9)	1ea.	39968	Blower nut lock washer	
10)	1ea.	14831	Scavange sump pipe	
11)	1ea.	2659	" " "	
12)	9ea.	8051	Intake pipe flange	
13)	9ea.	803	" " nut	
14)	9ea.	12961	" "	
15)	1ea.	37970	Thrust cover	
16)	1ea.	35169	vacuum pump drive gear	
17)	1ea.	37820	Fuel pump drive gear	
18)	1ea.	137449	#1 Cyl. Assy. Standard	S/N DR57043
19)	1ea.	"	#2 " " "	" DS99166
20)	1ea.	"	#3 " " "	" LM4342
21)	1ea.	137446	#4 " " "	" DS39655
22)	1ea.	137447	#5 " " "	" LL7994
23)	1ea.	137448	#6 " " "	" L0430
24)	1ea.	137446	#7 " " "	" D6X4515
25)	1ea.	137449	#8 " " "	" LS1760
26)	1ea.	"	#9 " " "	" LL428

3) Installed the following parts:
   1) Ignition harness rewired by Aero-Engines, Inc. CRS #3865
   2) New intercylinder baffles modified to Grumman drawings by Dean Franklin Aviation CRS765030
4) Assembled the engine using new nuts, washers, lock nuts, gaskets and O-rings where applicable. All work done I/A/W Pratt & Whitney Aircraft overhaul manual P/N 48616 dated Nov. 1942 and Pratt & Whitney Aircraft Maintenance manual P/N 118611 dated june, 1956. Engine installed in R.H. position on aircraft and run up and leak check ok. Engine static rpm. 2250 and oil pressure set I/A/W P & W Maintenance manual.

---------- END ----------

RECEIVED
APR 20 1988
FSDO
COLUMBUS, OH.

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/244

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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: AGL-PSDO-62 Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 North Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	5. TYPE: ALTERATION
AIRFRAME	(As described in item 1 above)				
POWERPLANT	Pratt & Whitney	R-1340-AN-1	P327938	X	
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary L. Butler 412 North Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
3-10-88	Gary L Butler

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	X	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
3-10-88	281581233	Gary L Butler

FAA Form 337 (7-67)

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 engine from L.H. position of N65CC. Dissassembled and cleaned and inspected all engine parts.

2) Reassembled with the following new and reworked parts:

1)	1ea.	326197	Thrust bearing	S/N D130
2)	1ea.	11768	Cam	S/N BA058
3)	18ea.	5999	Cam rollers	
4)	4ea.	35558	Tappets	
5)	5ea.	35560	"	
6)	2ea.	288936	Gen. drive bearings	
7)	1ea.	288934	Blower bearing	
8)	1ea.	288944	" "	
9)	1ea.	30604	Blower bearing nut	
10)	1ea.	35081	" " " pin	
11)	1ea.	14831	Scavange sump pipe	
12)	1ea.	2659	" " "	
13)	1ea.	12719	Thrust nut	
14)	9ea.	8051	Intake pipe flange	
15)	9ea.	12961	" " ~~nut~~	
16)	9ea.	803	" " nut	
17)	1ea.	1187	Blower to rear case gasket	
18)	18ea.	9265	Push rod nuts	
19)	1ea.	39968	Blower lock washer	
20)	1ea.	35169	Vacuum pump drive gear	
21)	1ea.	37820	Fuel pump drive gear	
22)	1ea.	137449	#1 Cyl. Assy. Standard	S/N X497
23)	"	"	#2 " " "	" LM76362
24)	"	"	#3 " " "	" LM53153
25)	"	137446	#4 " " "	" LS54914
26)	"	137447	#5 " " "	" LR24733
27)	"	137448	#6 " " "	"
28)	"	137446	#7 " " "	" LN50881
29)	"	137449	#8 " " "	" DS29027
30)	"	"	#9 " " "	" LL97413

3) Installed the following parts repaired by Genair Corp.:
   1) Master rod and crankshaft Assy.
   2) Front half main case

   Installed rewired ignition harness, rewired by Aero-Engines, Inc. CRS #3865.
   Installed new intercylinders baffles modified to B Grumman drawing by Dean Franklin Aviation CRS #765-30.

4) Assembled engine with new uts, washers, and lock nuts and gaskets and O-rings where applicable. All work done I/A/W Pratt & Whitney Aircraft overhaual manual P/N 48616 dated Nov. 1942 and Pratt & Whitney Aircraft Maintenance manual P/N 118611 dated June, 1956. Engine installed on L.H. side of N65CC and run up and leak check ok. Engine static rpm. 2250 and oil pressure set I/A/W P & W maintenance manual.

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 FSDO-62
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 North Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Dennis L. Hawkey 868 Townview Terrace Dr. St. Marys, OH 45885	XX U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	272769307

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
February 25, 1988	Dennis L. Hawkey Dennis L. Hawkey

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 [X] APPROVED [ ] REJECTED

BY							
		FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	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
2-25-88	281581233	Gary L. Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 both flaps from aircraft.

2. Removed both leading edge skins from both flaps.

3. Removed and replaced following items from L.H. flap:

Name	P/N	Sta. #
Rib Assy.	106257-4	0
Nose rib	106255-1L	104
Nose rib	106254-4L	108
Hinge bracket	106266-1	27
Hinge bracket	106266-2	105
Hinge bracket	106266-3	170
Reinforcement block	112055	105
Horn Assy.	112053	107
Hinge reinforcement	106266-5	27
Hinge reinforcement	106266-4	105
Hinge reinforcement	106266-6	170
Reinforcement skin	106250-2L	100-114
Splice strip	106250-4	128
New Inbd. L.E. skin	106250-3L	0-128
Original Otbd. L.E. skin	106250-1L	128-207

4. Removed and replaced following items from R.H. flap:

Name	P/N	Sta. #
Nose rib	106257-5R	0
T.E. rib	106263-4R	0
Nose rib	106257-1R	26
Nose rib	106256-5R	27
Nose rib	106255-5R	75
Nose rib	106253-2R	170
Nose rib	106253-1R	171
Nose rib	106254-4R	114
Nose rib	106254-5R	107
Nose rib	106254-6R	105
Hinge bracket	106266-1	26
Hinge bracket	106266-2	104
Hinge bracket	106266-3	170
Actuator horn assy.	112053	107
Splice strip	106250-4	128
Reinforcement skin	106250-2R	100-114
Inbd. L.E. skin (new)	106250-3R	0-128
Otbd. L.E. skin (orig.)	106250-1R	128-207

☒ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE. 1977—771-021/344

Various corroded areas cleaned and reprimed as per AC 43.13-1A, Chap. 6, Para. 248-251.
All items were installed with original rivet pattern and size. All work was accomplished in accordance with Grumman Service Manual, Sect. 4, Page 225-233 and AC 43.13-1A, Chap. 2, Sect. 3, Para. 95-104.

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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: ACE-SDO-62
~~Columbus, Ohio~~

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 North Herman, New Bremen, Ohio 45869

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.
Gary Lee Butler 412 North Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233 *281581233

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: February 25, 1988
SIGNATURE OF AUTHORIZED INDIVIDUAL: Gary L Butler

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 [X] APPROVED [ ] REJECTED

BY					
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	X	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
2-25-88	281581233	Gary L Butler

(8320)

FAA Form 337 (7-67)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 existing spot fire detection system.

2) Installed Edison continuous loop fire detection system per AD 80-13-02, manufactured by Armtec Industries under STC # SA36NE. Used Armtec drawing No. 910907 to install loops around L.H. & R.H. engine mounts and firewalls and aircraft heater. Installed all control boxes at fuselage station 252 on L.H. side for salt water corrosion protection. Systems tested and operation normal.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE 1977-771-021/344

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 ACO-55DO-62
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 North Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	5. TYPE: 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.
Gary Lee Butler 412 North Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
February 25, 1988	Gary L. Butler

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	X	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
2-25-88	281581233	Gary L. Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 original copper and aluminum hydraulic lines. Removed existing flexible hydraulic lines to landing gear actuators and brakes.

2) Using original copper and aluminum lines as templates, fabricated new lines from corrosion resistant seamless stainless steel MIL-T-8808B, Type 321 tubing to match original sizes. A list of the ultimate and yield strengths in P.S.I. are as follows:

Size(O.D. x wall)	Ultimate	Yield
1/4 x .035	101,800	48,900
3/8 x .035	89,000	49,000
1/2 x .035	100,200	54,000

All work done I/A/W Aircraft Service Manual, Sect. III, Par. 2,(b), (c), (d), (e), page 164,167, and AC43.13-1A, Chap. 10, page 365, par. 392(a)&(b). All flares made by power flaring tool to 37°.

3) Installed hydraulic mule quick disconnect fittings in L.H. nacelle bay opening at fuselage station 238 and wing station 84 and station 100. These fittings are plumbed into the R.H. engine driven hydraulic pump supply and pressure lines. All systems operate normal with the hydraulic mule powering the aircraft hydraulic system.

4) Hydraulic system was bled and pressure tested to 1650 P.S.I.(maximum operating pressure) and all components (including landing gear actuators, flaps, and cowl flaps) and all lines operate normal and no leaks noted.

5) Replaced existing medium pressure flexible lines with high pressure (3,000 PSI) Teflon stainless steel braided Aeroquip flex lines. All lines installed I/A/W Service Manual Sect. III, Par. 3, page 167,168 and AC43.13-1A, Chap. 10, pages 166,167,169,170, Par. 393(d).

END

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

US 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 AGC15D0-62
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 N. Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 N. Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
August 18, 1987	Gary L. Butler Gary L. Butler

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 [X] APPROVED [ ] REJECTED

BY							
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	XX	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
August 18, 1987	281581233	Gary L. Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 the forward wing tip skin P/N 106003-4 from wing station 317 to 394 on L.H. & R.H. sides. Removed wing ribs P/N106310R and 106310L at wing station 368 and P/N 106311-1L and 106311-1R at wing station 394. Removed slot airfoils assy. 106081R and 106081L and slot skins P/N 106003-32 from R.H. & L.H. sides at wing station 317 to 368.
2) Removed all corrossion and primed interior structural members.
3) Installed new ribs P/N 106310L and 106310R at wing station 368 and P/N 106311-1L and 106311-1R at wing station 394. Fitted and drilled new skins P/N 106003-4 from wing station 317 to 394. Installed new ribs and skins using original rivet size and spacing and MS20426 rivets as per AC43.13-1A chapter 5, ~~section~~ para. 232 e,f, page 121 dated 1985. All work done I/A/W Service manual section 4, para. 1a, page 225 dated Aug 1, 1951 and procedures in AC 43.13-1A chapter2 section 3 dated 1985 and using as a guide Grumman Aircraft Engineering drawing no. 106003 titled Wing Outer Panel (Assem).
4) Installed new slot skins P/N 106003-32 from wing station 317 to 368 and dissassembled slot airfoils. Removed all corrosion and reassembled. Installed slot skins and slot airfoils using data listed in paragraph 3.

----------END----------

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. GPO 1981 [illegible]

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

N65CC Aug 18, 1987

SECTION I

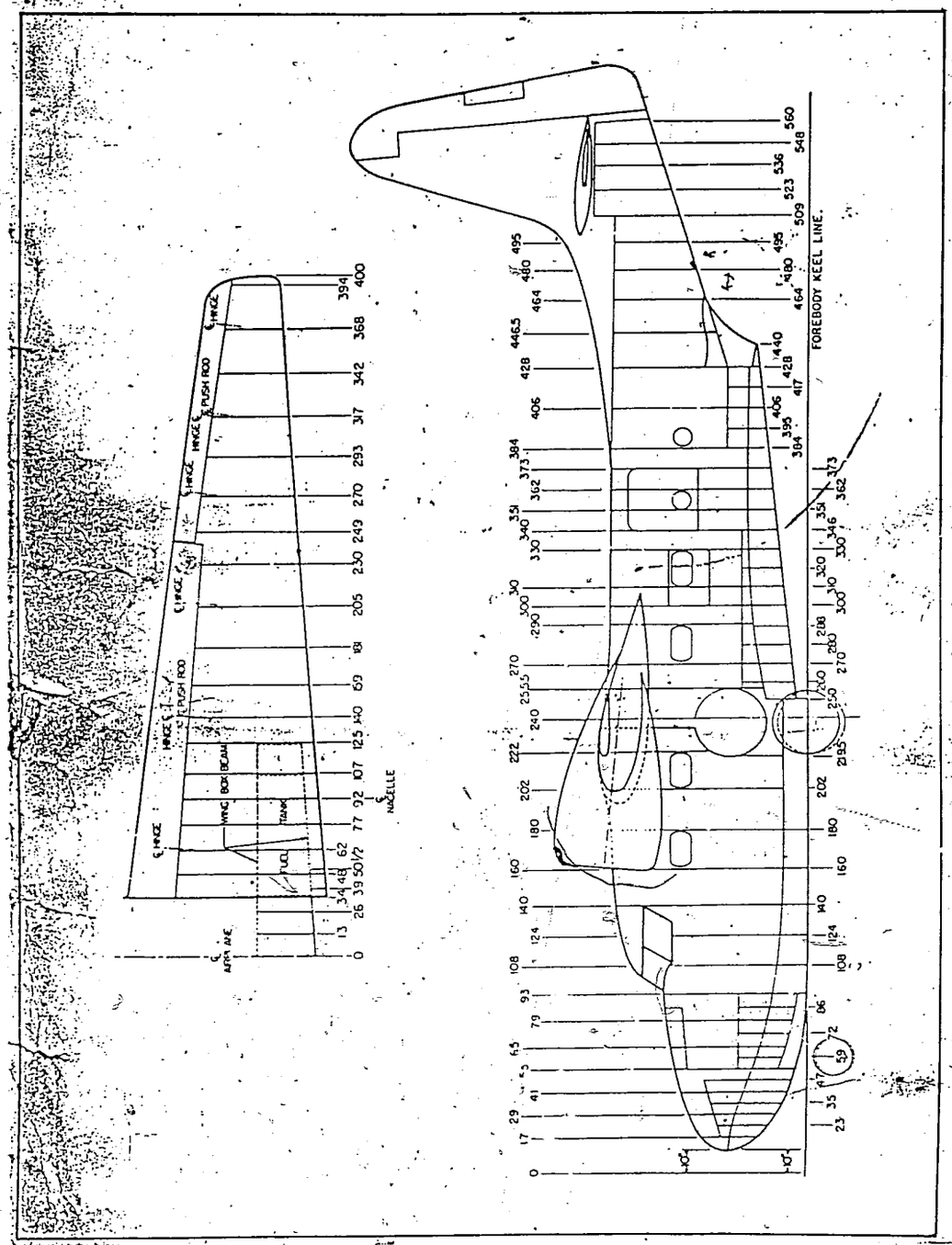


Figure 3—Wing and Fuselage Stations Diagram

N 65CC AUG. 18, 1977

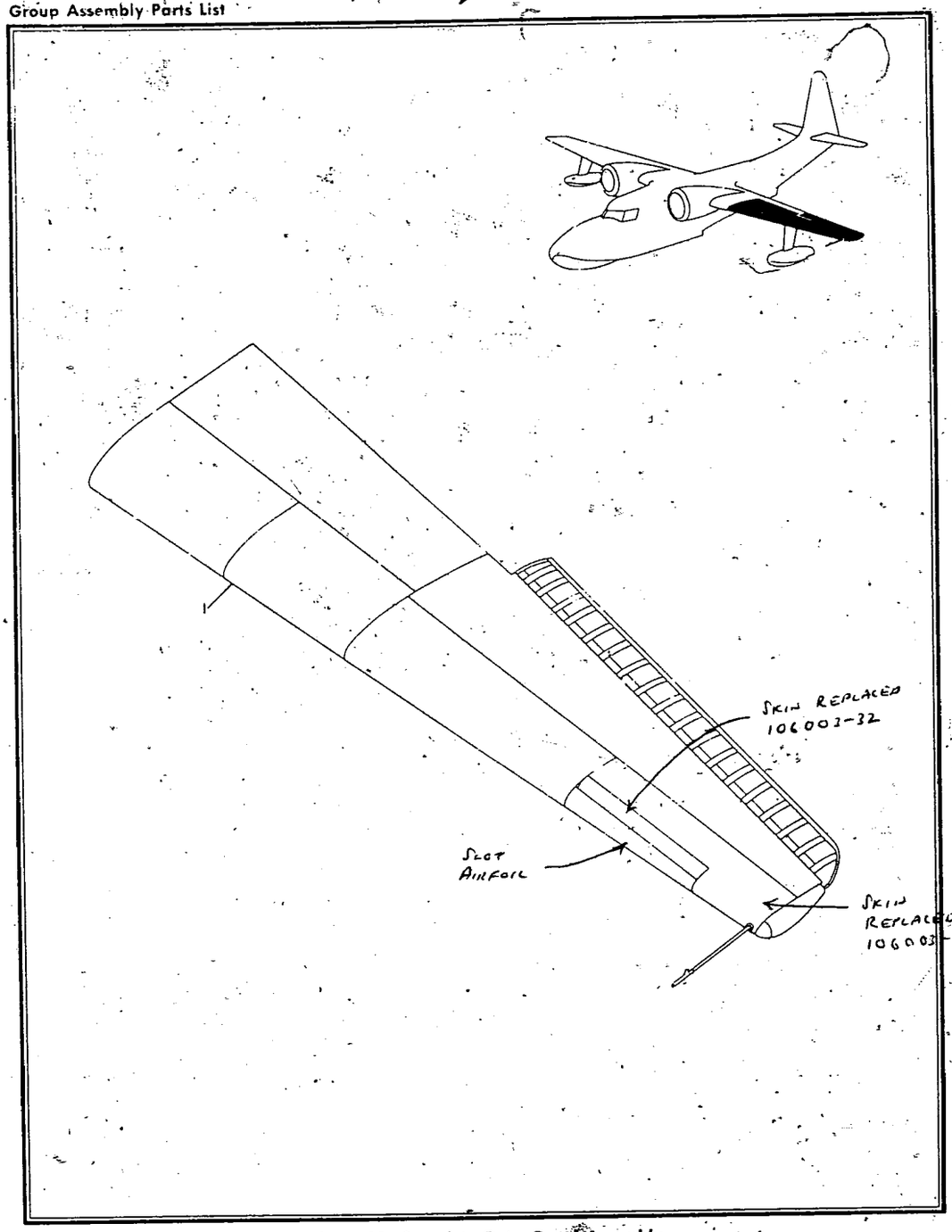


Figure 31—Complete Outer Panel Assembly

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

U.S. 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 ACO-FSDO-52
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown, Co	ADDRESS (As shown on registration certificate): 108 N. Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 N. Front St. St. Marys, Ohio 45885	XX U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
Aug. 18, 1987	Gary L. Butler

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 [X] APPROVED [ ] REJECTED

BY						OTHER (Specify)
	FAA FLT STANDARDS INSPECTOR		MANUFACTURER	XX	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
Aug. 18, 1987	281581233	Gary L. Butler

(8320)

FAA Form 337 (7-67)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 wing from aircraft and removed corroded skin on lower wing skin between wing station 28.0 and sta. 41.75 and fuselage station 221.5 and sta. 233.0 on L.H. and R.H. side.
2) Installed an insertion patch and an insertion patch doubler in accordance with Structural Repair Manual AN-01-85AB-3, Fig. B-6, page 383, dated Dec. 17,1960 and Service Manual Section 4, para. 1a, page 225, dated Aug. 1, 1951 and procedures in AC43.13-1A Chap. 2, Section 3, dated 1985. Placed the overlapping doubler over insertion patch due to the area being subject to salt water spray. Doubler is of the same material as insertion patch.
3) Original lower wing skin is R301T-.051 was replaced with 2014-T6-.050. 2014-T6 is the new designation for R301T. (See attached sheets). All parts were anodized and primed and installed with sealant mfd. by Products Research Company No. PR-1431-G Type III (Salt water resistant and corrosion preventative), using original rivet size and spacing for frame areas and rivet size and spacing from Structural Repair Manual for all other areas. Used MS20426 and MS20470 rivetsas per AC43.13-1A, Chap. 5 para. 232e,f page 121, dated 1985.

END

☒ ADDITIONAL SHEETS ARE ATTACHED

N65CC Aug. 18, 1987

ALUMINUM ALLOY TEMPER DESIGNATION TABLE

Alloy Designation		Heat Treat by Vendor			Heat Treat by Customer		
New	Old	Sheet	Plate	Extrusion	Sheet	Plate	Extrusion
2024	24S-T	2024-T3	2024-T4	2024-T4	2024-T4	2024-T4	2024-T42
2014	R301-W	2014-T3			2014-T4	2014-T4	
	R301-T	2014-T6			2014-T6	2014-T6	
2014	14S-W	2014-T3	2014-T4	2014-T4	2014-T4	2014-T4	2014-T42
	14S-T	2014-T6	2014-T6	2014-T6	2014-T6	2014-T6	2014-T62
7075	75S-T	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6
6061	61S-W	6061-T4	6061-T4	6061-T4	6061-T4	6061-T4	6061-T4
	61S-T	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6

Alloy Designation		Strain Hardened	Strain Hardened and Then Partially Annealed
New	Old	H12	H22
1100	2S	H14	H24
and	and	H16	H26
3003	3S	H18	H28

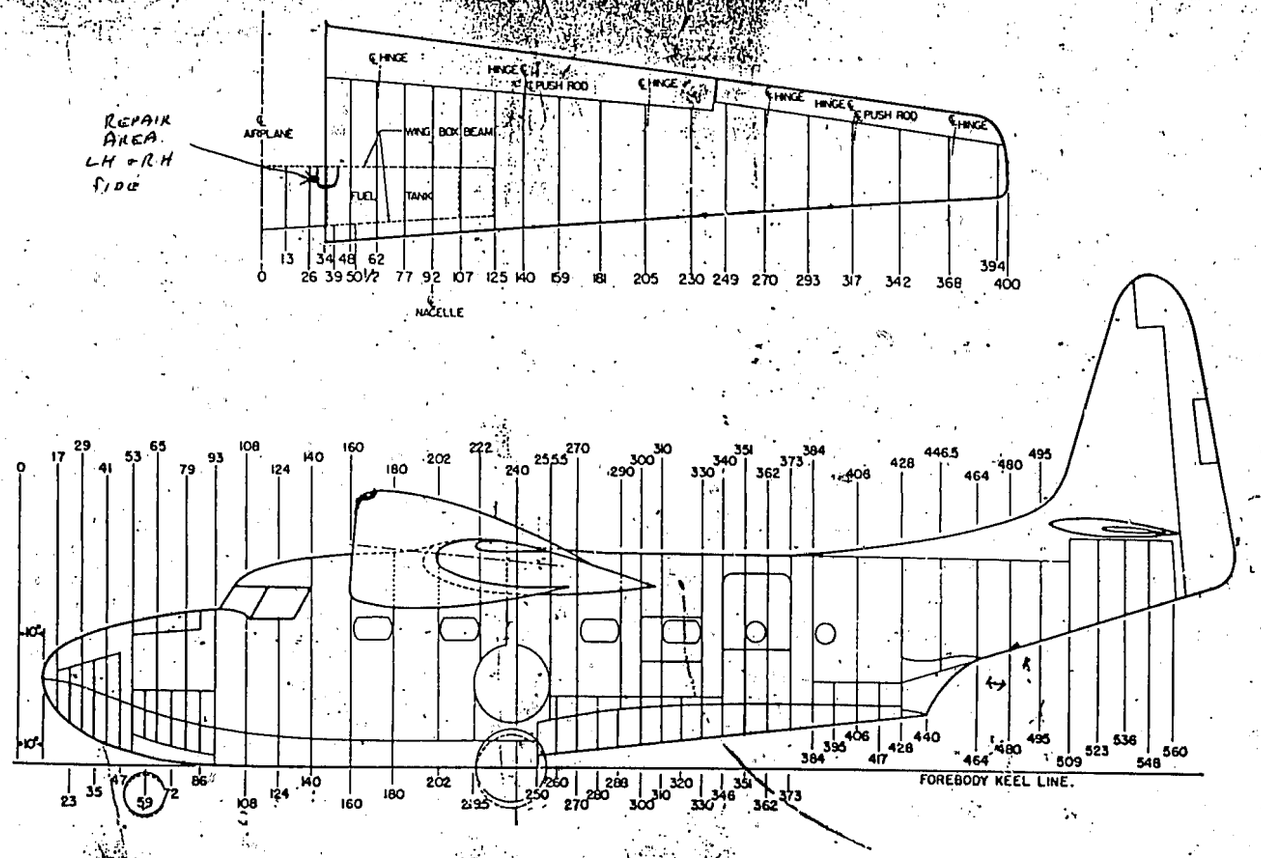
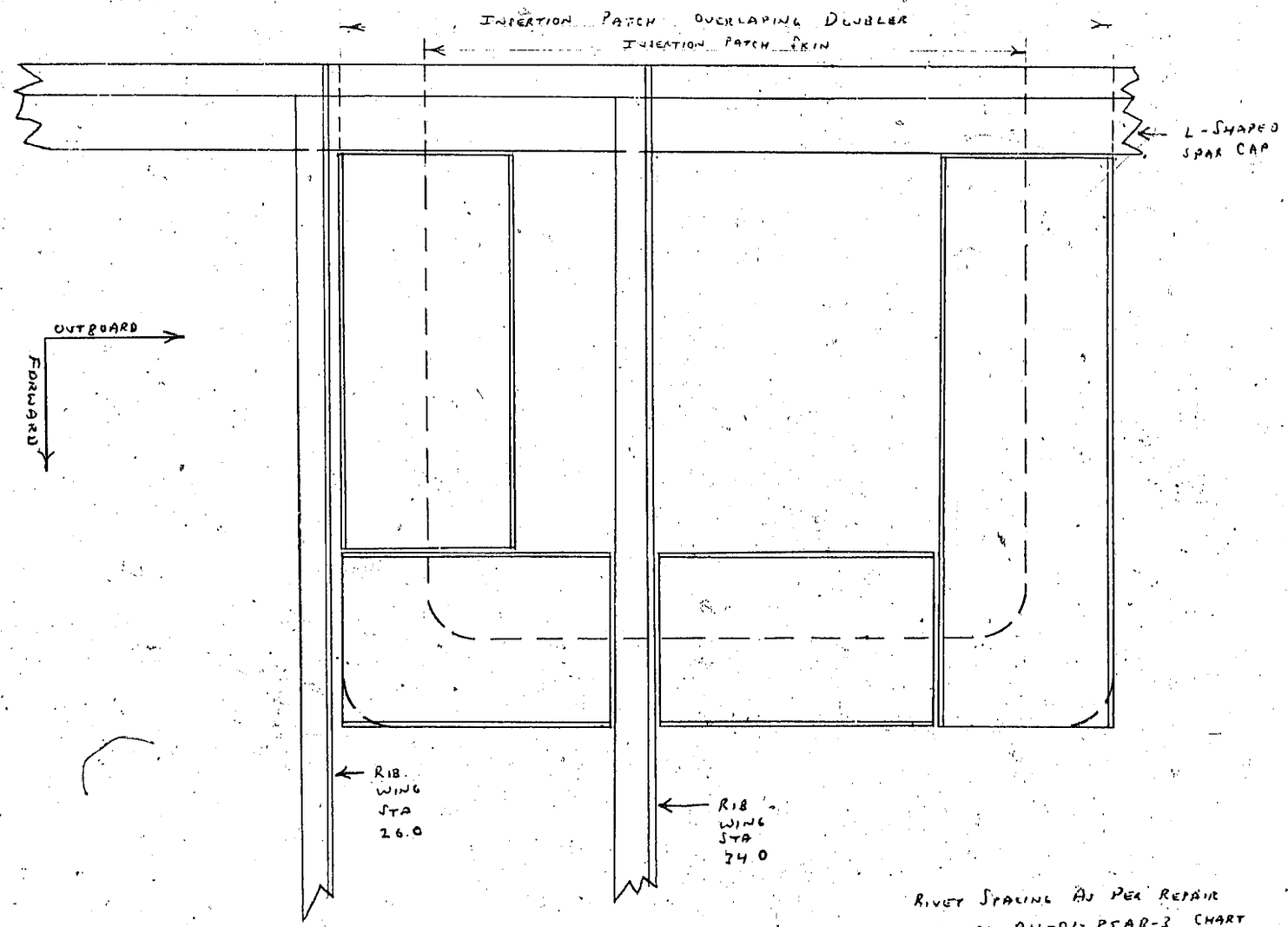


Figure 3—Wing and Fuselage Stations Diagram

SECTION I

W65CC Aug. 16, 1989

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

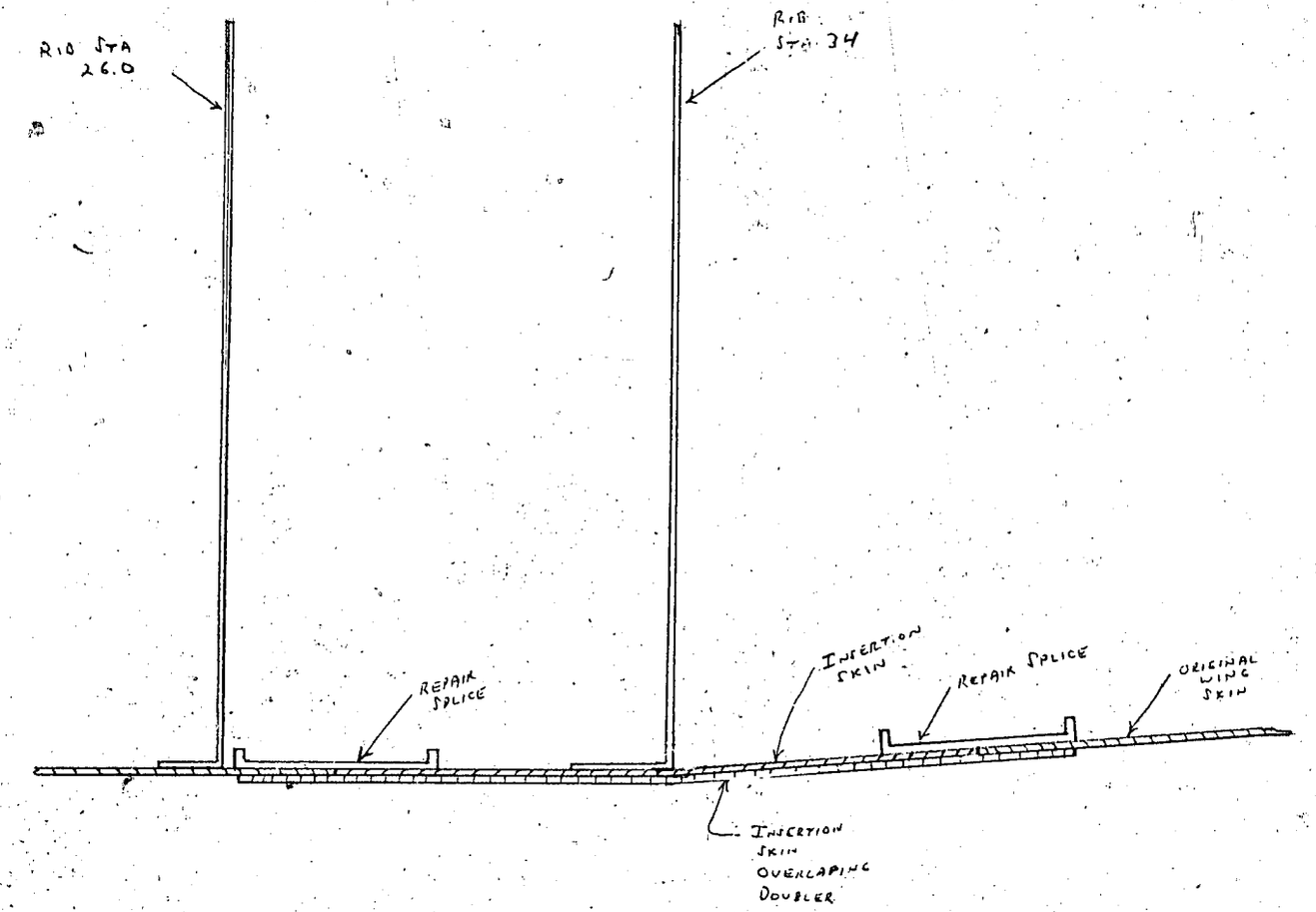


RIVET SPACING AS PER REPAIR MANUAL AN-01-85AB-3 CHART PAGE 383

TOP VIEW LH WING PATCH REPAIR
(R.H. OPPOSITE)

NGSCC AUG. 18, 1977

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90



L.H. WING PATCH REPAIR (LOOKING AFT, SPAR CAP NOT SHOWN)

NGSCC AUG 11, 1987

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION ACO-520-62
Columbus, Ohio

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

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 N. Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 North Front Street St. Marys, Ohio 45885	XX U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
August 18, 1987	Gary L. Butler

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 [X] APPROVED [ ] REJECTED

BY					
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	XX	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
August 18, 1987	281581233	Gary L. Butler

(8320)

FAA Form 337 (7-67)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 sheetmetal around fwd. inspection hole on top of wing center section on R.H. side between wing station 23.5 and sta. 35.0 and fuselage station 202.0 and sta 208.75. Also added doubler between wing station 27.25 and sta. 33.0, and fuselage station 202.0 and sta. 207.25 on L.H. side.

Installed on R.H. side insertion patch and insertion patch doubler in accordance with Structural Repair Manual AN-01-85AB-3, Figure B-6, page 383, dated Dec. 17, 1960 and Service Manual Section 4, Para. 1a, page 225, dated Aug. 1,1951, and procedures in AC 43.13-1A, Chapter 2, section 3, dated 1985.

Installed doubler over original skin on L.H. side. Original skin was R301T .063 and was replaced with 2014-T6-.063 as per Structural Repair Manual AN-01-85AB-3, Appendix 1, page 376. 2014T6 is the new designation for R301T. Doublers are of same material as insert.

All parts were anodized and primed and installed with original rivet size and spacing in frame area and with rivet size and spacing from Structural Repair Manual in other areas and using MS20426 and MS20470 rivets as per AC43.13-1A, Chap. 5, para. 232 e,f, page 121, dated 1985.

END

RECEIVED
OCT 13 1987
FAA GL-FSDO
CMT BRANCH

☒ ADDITIONAL SHEETS ARE ATTACHED

NGECC Aug 18, 1977

ALUMINUM ALLOY TEMPER DESIGNATION TABLE

Alloy Designation		Heat Treat by Vendor			Heat Treat by Customer		
New	Old	Sheet	Plate	Extrusion	Sheet	Plate	Extrusion
2024	24S-T	2024-T3	2024-T4	2024-T4	2024-T4	2024-T4	2024-T42
2014	R301-W	2014-T3			2014-T4	2014-T4	
	R301-T	2014-T6			2014-T6	2014-T6	
2014	14S-W	2014-T3	2014-T4	2014-T4	2014-T4	2014-T4	2014-T42
	14S-T	2014-T6	2014-T6	2014-T6	2014-T6	2014-T6	2014-T62
7075	75S-T	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6
6061	61S-W	6061-T4	6061-T4	6061-T4	6061-T4	6061-T4	6061-T4
	61S-T	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6

Alloy Designation		Strain Hardened	Strain Hardened and Then Partially Annealed
New	Old	H12	H22
1100	2S	H14	H24
and	and	H16	H26
3003	3S	H18	H28

N65CC Aug 17, 1987

SECTION I

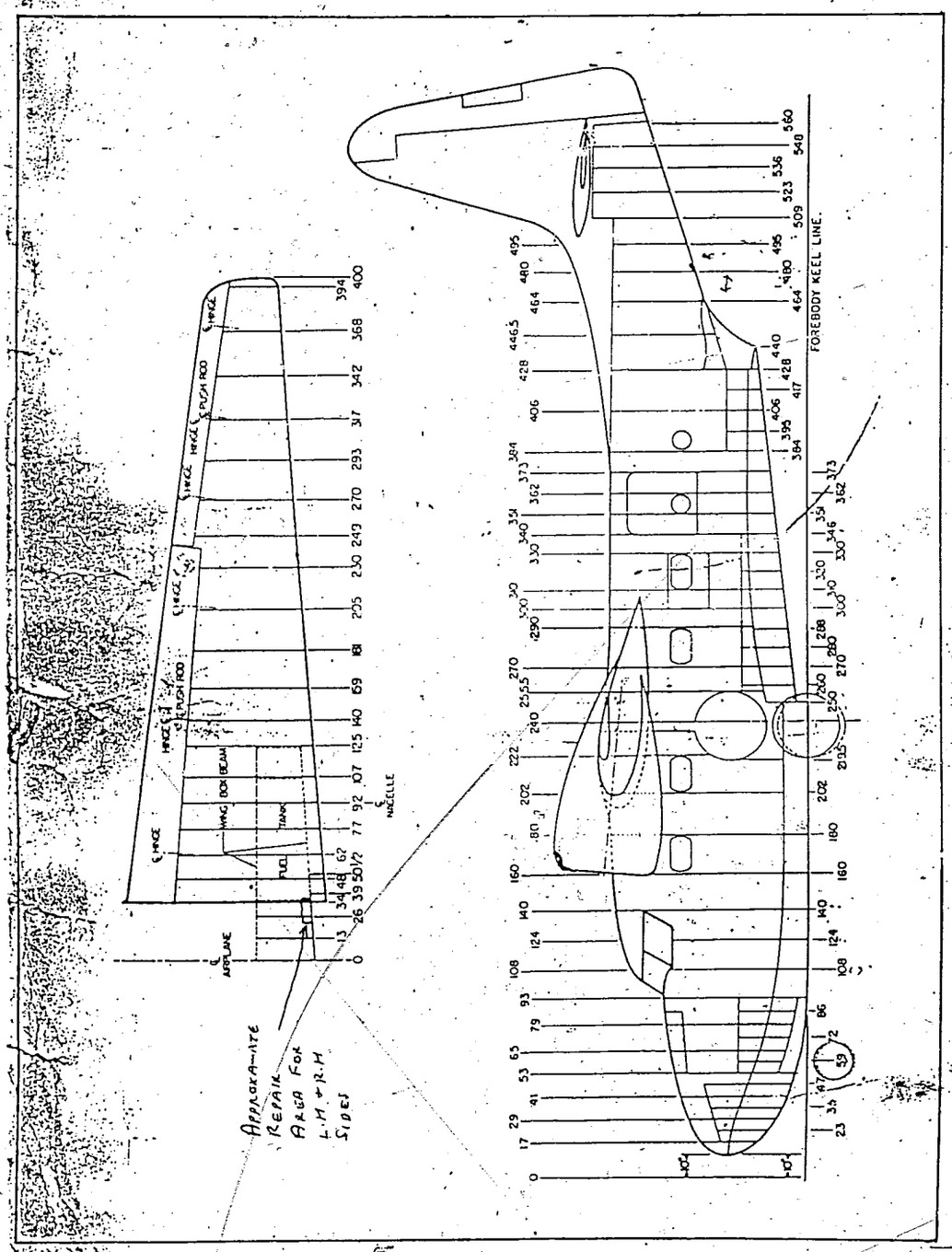
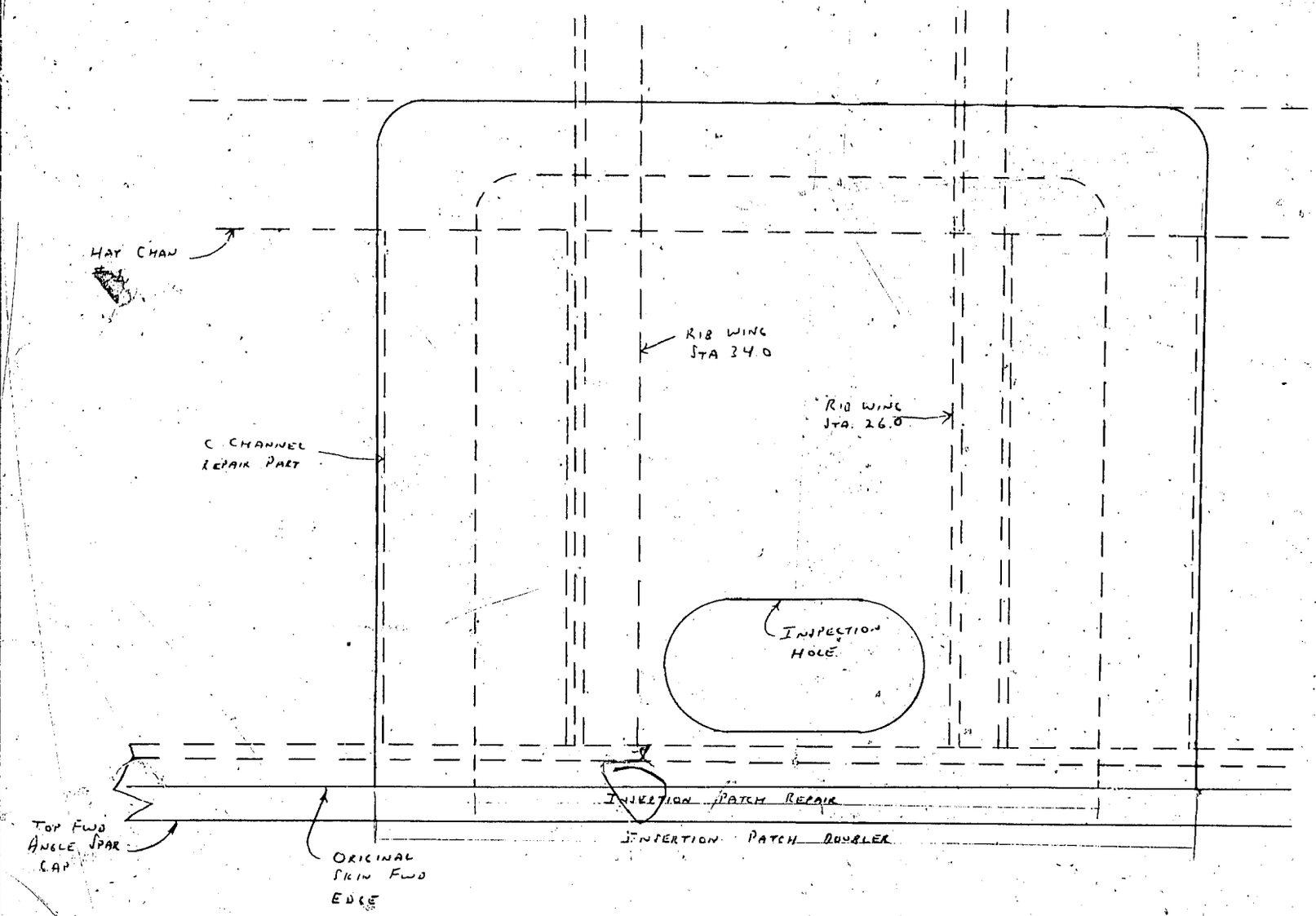
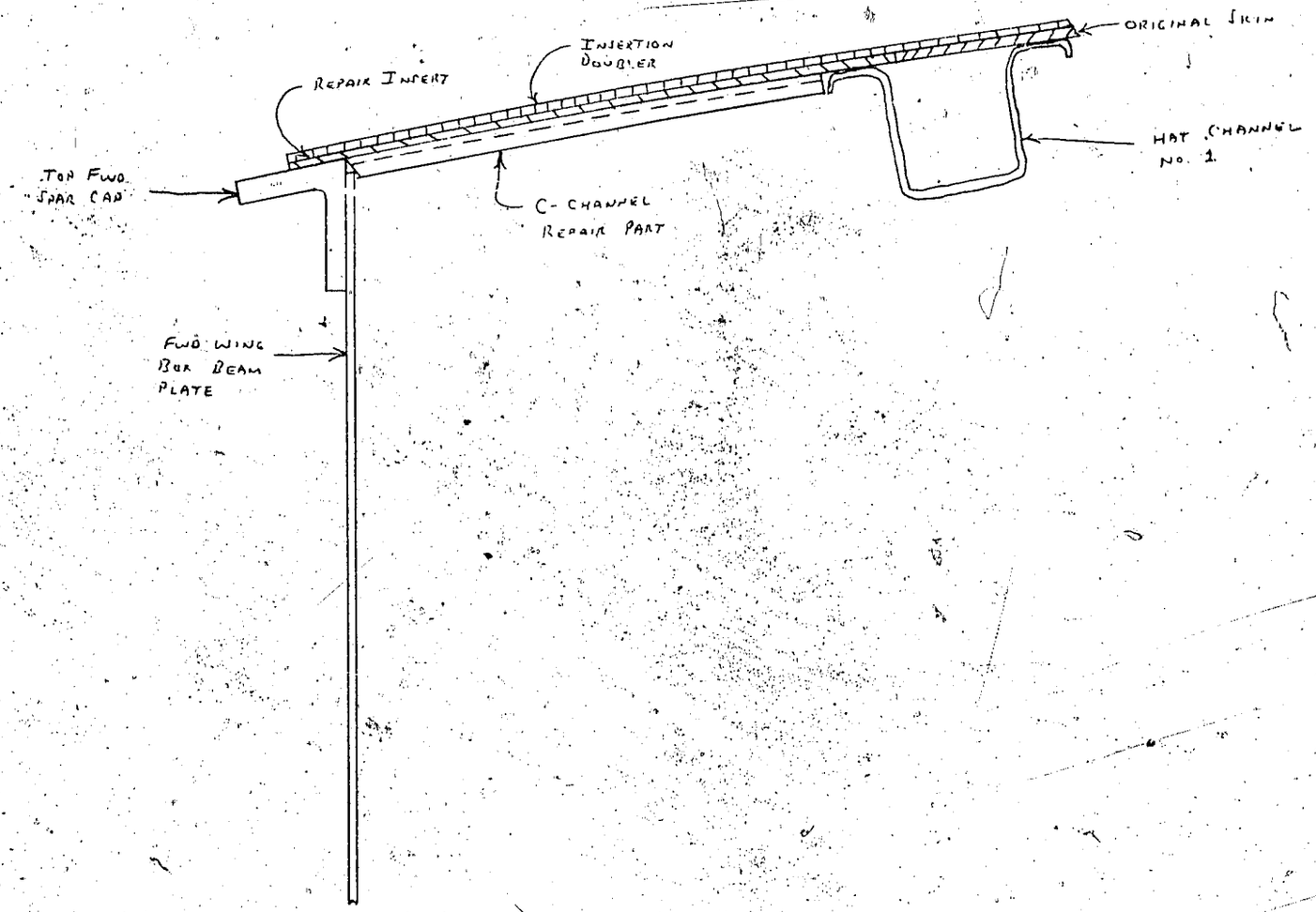


Figure 3—Wing and Fuselage Stations Diagram



R.H SIDE FWD INSPECTION HOLE REPAIR
(LOOKING DOWN)

NGSCC AUG 18, 1977



R.H. SIDE INSPECTION HOLE REPAIR N65CC AUG 11, 1997

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

U.S. 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 ACO-SDO-62
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 N Herman, New Bremen OH 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Jonathan D Piper 5156 St Rt 47 Ansonia OH 45303	XX U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	279787192

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
5/28/87	Jonathan D Piper Jonathan D Piper

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 [X] APPROVED [ ] REJECTED

BY							
		FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	XX	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
5/28/87	281581233	Gary L Butler Gary L. Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 L.H. & R.H. Goodyear Brake Assy. P/N 9540045 and L.H. & R.H. Wheel Assy. P/N 295 and discarded.

2. Installed on L.H. & R.H. maingear Cleveland Brake Assy. P/N 030-14800. Installed on L.H. & R.H. gear Cleveland Wheel Assy. P/N 040-17400. All work done in compliance with STC No. SA651GL.

END

O-1	SUPR		MGR		M-1
O-2	RECEIVED				M-2
O-3					M-3
O-4	OCT 1 3 1987				M-4
O-5	FAA GL-FSDO CMH BRANCH				A-1
O-6	C-1	C-2	C-3	APS	

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. GPO 1981-775-032/47

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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: Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 N. Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 N. Front St. St. Marys, Ohio 45885	XX U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
January 6, 1987	Gary L. Butler

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	XX	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
1/6/87	281581233	Gary L. Butler

FAA Form 337 (7-67)

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 various interior frames, channels and angles between fuselage station 140 to station 384.
Installed the following parts:

1)	107216-1L	L.H. fwd. wing attach vertical channel
2)	107216-1R	R.H. fwd. wing attach vertical channel
3)	107315-1L	Inboard vertical aft wing attach angle L.H. side
4)	107315-1R	Inboard vertical aft wing attach angle R.H. side
5)	107315-2L	Outboard vertical aft wing attach angle L.H. side
6)	107315-2R	Outboard vertical aft wing attach angle R.H. side
7)	107311-L	Lower wing skin to fuselage attach bracket L.H. side
8)	107311-R	Lower wing skin to fuselage attach bracket R.H. side
9)	106179-L	Lower trailing edge aft wing skin to fuselage attach bracket L.H.
10)	106179-R	Lower trailing edge aft wing skin to fuselage attach bracket R.H.
11)	107368-1	Emergency exit frame vertical channel station 300
12)	107213-15	Emergency exit frame vertical channel station 330
13)	107433-1	Emergency exit frame horizontal bottom channel between stations 300 & 330
14)	107433-2	Emergency exit frame horizontal bottom channel between stations 300 & 330
15)	107433-3	Emergency exit frame horizontal bottom channel between stations 300 & 330
16)	107433-4	Emergency exit frame horizontal top channel between stations 300 & 330
17)	107433-5	Emergency exit frame horizontal top channel between stations 300 & 330
18)	107433-6	Emergency exit frame horizontal top channel between stations 300 & 330
19)	107374-4	4 Gussetts, one in each frame corner
20)	107255-52L	Gussett for P/N 107216-1L vertical channel L.H.
21)	107255-52R	Gussett for P/N 107216-1R vertical channel R.H.
22)	107405-1	Plate at station 202
23)	107369-3	Entrance door frame lower door sill stations 330 to 384
24)	107369-1	Entrance door frame fwd. door frame station 330
25)	107369-2	Entrance door frame aft door frame station 384
26)	107156-14	Entrance door frame top door frame station 330 to 384
27)	107352	Entrance door frame top aft corner frame station 373
28)	107343-1	Entrance door upper and lower door hinge mount plates station 340
29)	107343-2	Entrance door upper and lower door hinge mount plates station 340
30)	107102-2	Top bulkhead frame at station 188 - forms top of fuselage
31)	107273-2	Top bulkhead frame at station 170 - forms top of fuselage
32)	107213-7L	Vertical frame member at station 290 L.H.
33)	107082	Bottom hull V-shaped bulkhead at station 320
34)	107083	Bottom hull V-shaped bulkhead at station 330
35)	107089	Bottom hull V-shaped bulkhead at station 395
36)	107091	Bottom hull V-shaped bulkhead at station 406
37)	107095	Bottom hull V-shaped bulkhead at station 417

(Continued on attached sheets)

☒ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—77: 021/290

Primed all parts listed above with Epoxy Primer and installed using original rivet sizes and hole patterns. Used MS20426AD and MS20470AD rivets where applicable as per AC43.13-1A Chapter 5, para 232 para e,f; page 21 dated 1985 and procedures in AC43.13-1A Chapter 2, Section 3 dated 1985 and procedures in service manual, Section 4, para 1a, page 225 dated August 1, 1951. Used sealant between all mated parts manufactured by Products Research & Chemical Corp., No. PR-1431-G type III (corrosion preventative, salt water resistant).

2) Removed various fuselage skins and installed the following fuselage skins in their place:
   1) 107225-15L Hull skin station 140 to 202 From fwd. chin up 23" L.H.
   2) 107225-15R Hull skin station 140 to 202 From fwd. chin up 23" R.H.
   3) 107225-10A Hull skin station 270 to 310 From aft chin up 42" L.H.
   4) 107225-10B Hull skin station 270 to 310 From aft chin up 42" L.H.
   5) 107225-8L Hull skin top fuselage station 234 to 310 aft of wing center section L.H.
   6) 107255-8R Hull skin top fuselage station 234 to 310 aft of wing center section R.H.
   7) 107255-18L Belly skin fuselage station 160 to 250 L.H.
   8) 107255-18R Belly skin fuselage station 160 to 250 R.H.
   9) 107255-19L Belly skin fuselage station 250 to 340 L.H.
   10) 107255-19R Belly skin fuselage station 250 to 340 R.H.
   11) 107255-20L Belly skin fuselage station 340 to 428 L.H.
   12) 107255-20R Belly skin fuselage station 340 to 428 R.H.
   13) 107255-25L Hull skin station 428 to 509 L.H.
   14) 107585 Rear step fairing skin L.H.

   The original side skin plating was R301T and R301W .032, was replaced with 2024T3 .040 as per Grumman structural repair manual AN-01-85AB-3 Section 1, para 1-30a, page 3 dated June 1, 1957 and table, appendix 1 page 376. Side skin P/N 107255-10A,-10B,-15L, -15R were replaced with 2024-T3-.040. The original belly skin plating was R301T-.051 For skin P/N 107255-18L & R and was replaced with 2024-T3-.063 as per the above information. All skin were anodized and primed and installed with sealant manufactured by Products Research & Chemical Corp., No. PR-1431-G type III (corrosion preventative, salt water resistant) between the skin and aircraft structure. Installed used original rivet sizes and hole patterns. All work done I/A/W service manual, Section 4, para 1a, page 225, dated August 1, 1951 and procedures in AC43.13-1A, Chapter 2, Section 3 dated 1985.

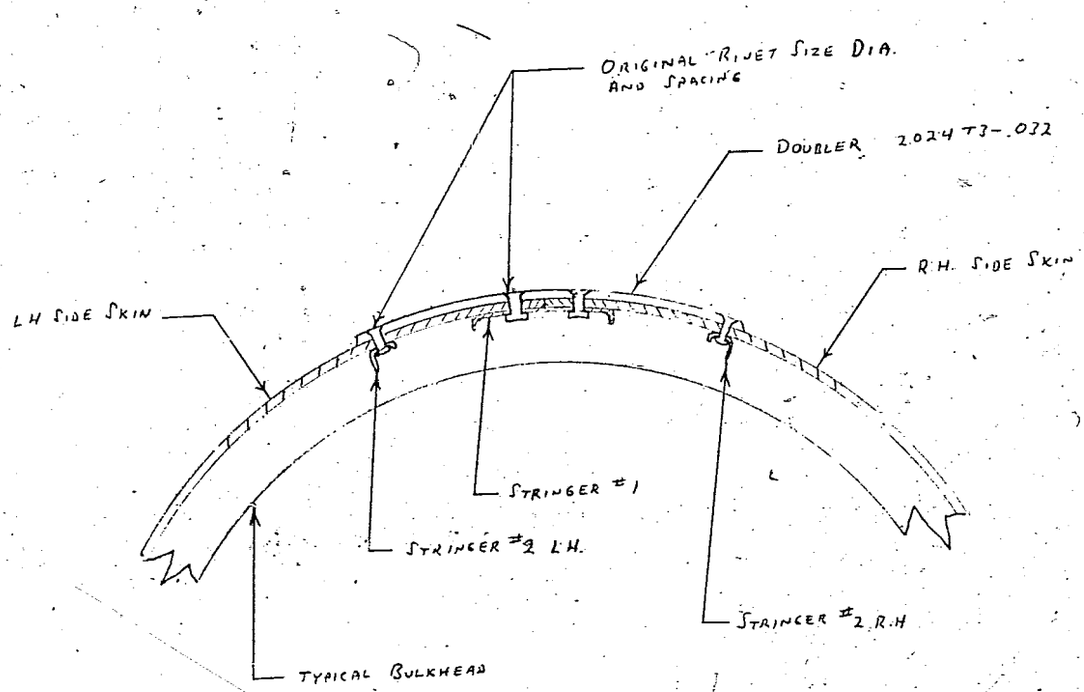
3) Removed rivets from station 140 to 180 and from station 310 to 384 at top of fuselage center skin butt joint and cleaned up corrosion from skin and from aircraft structure. Cleaned corrosion off of skin and structure from center butt joint down to stringer No. 4 on each side. Installed a doubler over center butt joint down to stringer No.1 on each side. See drawing for detail of doubler. Doubler skins from 2024-T3 .032 and were anodized. Reinstalled all skins using original rivet sizes and spacing. Sealed with sealant manufactured by Products Research & Chemical Corp. P/N PR-1431-G type III (corrosion preventative, salt water resistant) between doubler and fuselage skin and between skin and aircraft structure. All work done I/A/W service manual, Section 4, para 1a, page 225 dated August 1, 1951 and procedures in AC43.13-1A, Chapter 2, Section 3 dated 1985.

END

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

N65CC JAN. 6, 1987

FUSELAGE DOUBLER (INSTALLATION



NOTE: DRAWING NOT TO SCALE

N65CC JAN. 6, 1987

ALUMINUM ALLOY TEMPER DESIGNATION TABLE

Alloy Designation		Heat Treat by Vendor			Heat Treat by Customer		
New	Old	Sheet	Plate	Extrusion	Sheet	Plate	Extrusion
2024	24S-T	2024-T3	2024-T4	2024-T4	2024-T4	2024-T4	2024-T42
2014	R301-W	2014-T3			2014-T4	2014-T4	
	R301-T	2014-T6			2014-T6	2014-T6	
2014	14S-W	2014-T3	2014-T4	2014-T4	2014-T4	2014-T4	2014-T42
	14S-T	2014-T6	2014-T6	2014-T6	2014-T6	2014-T6	2014-T62
7075	75S-T	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6
6061	61S-W	6061-T4	6061-T4	6061-T4	6061-T4	6061-T4	6061-T4
	61S-T	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6

Alloy Designation		Strain Hardened	Strain Hardened and Then Partially Annealed
New	Old	H12	H22
1100	2S	H14	H24
and	and	H16	H26
3003	3S	H18	H28

head bolts of the same diameter (see figure C-3). Holes drilled for replacement bolts must be drilled for a drive fit (see figure C-2).

1–27A. BLIND RIVETS. The following blind rivets may be used interchangeably, size for size:

Flush Head (100) Type (MS20601AD)	*Brazier Head Type (MS200600AD)*
Huck 100V	Huck P
Huck 9SP-100-A	Huck 9SP-B-A
Rocket SC-A	Rocket SB-A
Cherry CR162	Cherry CR163

1–27B. Huck 9SP, Rocket and Cherry rivets should be installed so that the pin is capable of withstanding at least a 15 pound push-out load 24 hours after driving. Where necessary, Huck 9SP, Rocket or Cherry rivets may be degreased to increase the resistance of the pin to push-out.

1–27C. OVERSIZE RIVETS. When necessary in field work to substitute an oversize rivet for a flush rivet in dimpled sheet, observe the following precautions:

a. Do not use oversize rivets where a spacing between rivets of less than three rivet diameters will result. This does not apply to one or two isolated rivets in a row.

b. An oversized brazier head rivet is an acceptable substitute for a flush rivet provided it is driven with a flat set in order to assure the proper filling of the remaining portion of the dimple by the rivet head, and in order to prevent a concentration of pressure around the edge of the rivet head, with a consequent local scoring of the dimpled sheet.

1–27D. REPAIR FASTENERS IN STEEL. When steel is used in combination with aluminum alloy, as for instance, a steel splice repair part joining two aluminum alloy members, the fasteners should be of steel only, in ream size holes.

1—28. REPAIR MATERIALS.

1—29. GENERAL. Aluminum alloys, chrome molybdenum steel and corrosion resistant steel have been employed in the original construction of the airplane and may also be used for repair as specified on the appropriate repair diagrams. All steel repair parts should be cadmium plated, after drilling, if possible. This is especially important for external parts subject to salt spray. Cadmium plating and subsequent baking should be done in accordance with Grumman Aircraft Quality Control Manual No. 7.000. Dissimilar metals coming into contact, such as tool steel against aluminum alloy, must be insulated from each other in order to prevent corrosion. See the General Manual for Structural Repair, AN 01-1A-1, Section XIV for corrosion prevention and Section V for heat treatment.

1–30. ALUMINUM ALLOYS.

a. FORMED PARTS. The majority of airframe members have been fabricated from R301 or 14S (QQ-A-255) clad aluminum alloy sheet. Some have been made from 24S (QQ-A-362) clad aluminum alloy sheet or 61S (QQ-A-327) aluminum alloy sheet. For repair purposes, it is preferable to use materia. equal to the original alloy. When doubt exists as to the original alloy, 75S-T6 bare (QQ-A-283) or clad (QQ-A-287) aluminum alloy sheet should be used for replacement. 24S aluminum alloy may be substituted for R301 or 14S only when the next heavier gage is used. Also, R301 or 14S may be substituted for 75S only when the next heavier gage material is used.

b. EXTRUSIONS. Extrusions used in the airplane are made from 75S (QQ-A-277), 14S (QQ-A-261) and 24S (QQ-A-267) aluminum alloy. When an extrusion is not available, sheet material may be used for building up an equivalent provided the material is the same, the cross sectional area is equal to or greater than that of the extrusion and the shape is similar to that of the extrusion. (See Section VIII for extrusions and equivalent sections.)

WARNING

Under no cirmumstances should any of the high strength aluminum alloys (75S, R301, 14S or 24S) be installed in the airplane without heat treatment to the highest temper.

1–31. HEAT TREATMENT. 24S aluminum alloy should be heat treated in accordance with the General Manual for Structural Repair, AN 01-1A-1, Section V. Because 75S-T requires an involved heat treatment, this procedure should not be done in the field. Replacement should be made from stock or spares properly heat treated as in the original construction.

1–32. R301-0 is heat treated to R301-W by heating to 940°F±10° and quenching in water. This same procedure is also used for requenching R301-W or R301-T. Requenched R301-T becomes R301-W.

Note

The equipment and procedure for R301 is the same as used for 24S but the furnace must be set 20° higher.

R301-W is artificially aged to R301-T by heating in an air furnace at 340°F±5° for eight to ten hours. R301-0 cannot be artificially aged to "T" temper without first being heat treated to R301-W.

1–33. FORMING AND DIMPLING. 75S-T sheet has low ductility and extreme spring-back, and cannot be dimpled or formed in this temper. This material is used for a few special parts which are cut and drilled only. 75S-T extrusions also have extreme springback and cannot be joggled, and are used in this airplane for parts requiring only machining or very slight bending. R301-0 has better formability than 24S-0. It distorts when heat treated to R301-W. R301-W has formability about equal to 24S-W unless it is freshly quenched; then it has formability about equal to 24S-0. It retains this formability about one and one-half hours, then rapidly

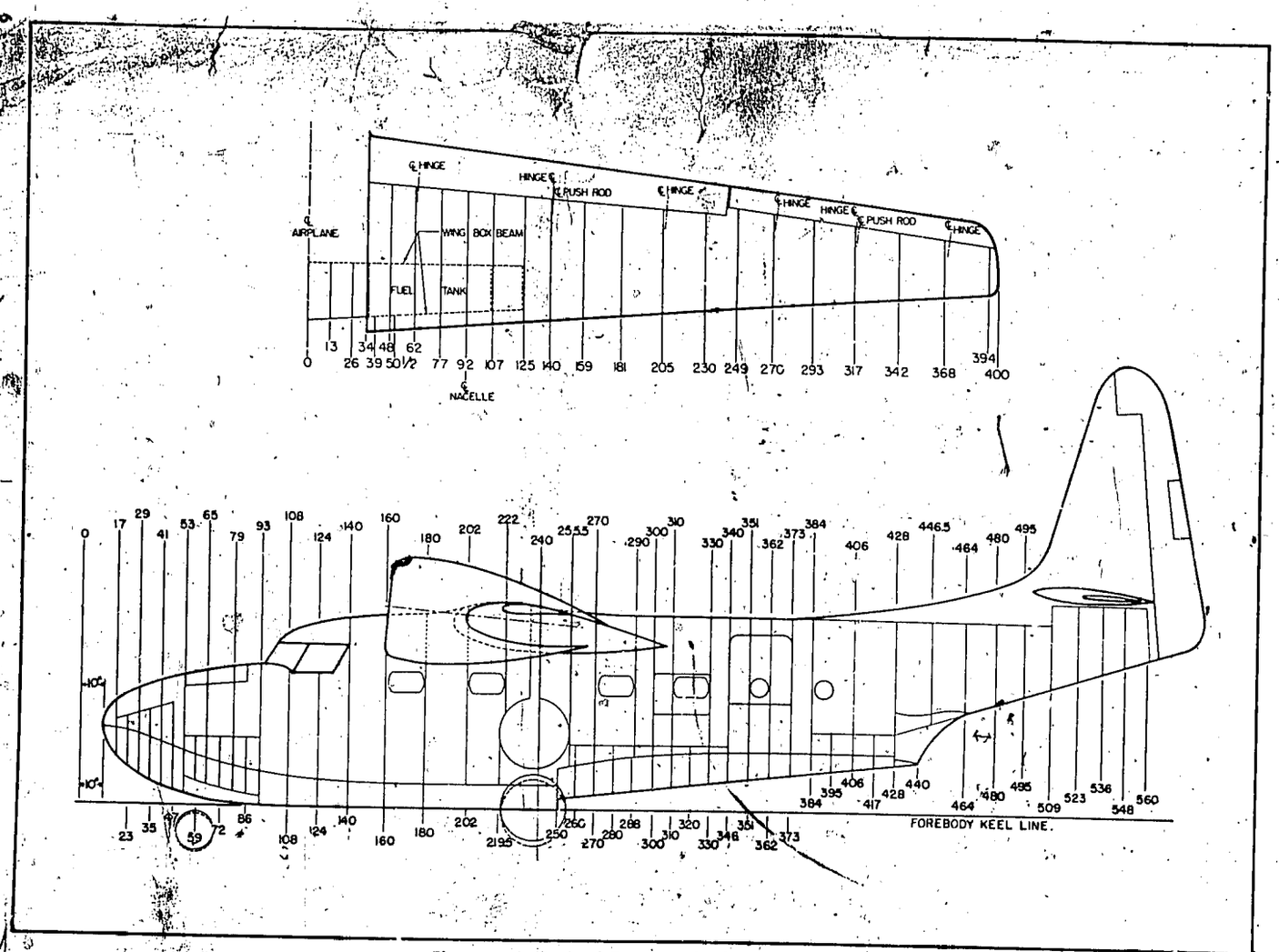


Figure 3—Wing and Fuselage Stations Diagram

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

U.S. 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 ACN-SDO-52
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 N. Herman, New Bremen, OH 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 N. Front St. St. Marys, OH 45885	XX U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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
June 16, 1987	Gary R. Butler Gary Lee Butler

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 [XX] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	XX	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
June 16, 1987	281581233	Gary R. Butler Gary Lee Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 both engine mount structures to repair wing center section. Reinstalled the following new parts on both sides:

1. 106159-4 Engine mount lower middle wing spar cap attach channel.
2. 106159-5 Engine mount lower middle wing spar cap attach channel.
3. 106159-6 Engine mount lower inboard wing spar cap attach channel.
4. 106159-7 Engine mount upper wing spar cap attach channel.
5. 106155-4 Engine mount front wing spar web vertical attach channel.
6. 106147-11 Engine mount outboard upper C-channel stiffener R.H. only.
7. 106159-12 Engine mount upper fwd. plate.
8. 112602 R.H. Engine mount blocks on upper R,H. and lower L.H. positions 4 ea.
9. 112602 L.H. Engine mount blocks on upper L.H. and lower R.H. positions 4 ea.
10. 106159-1 Engine mount upper oil tank bracket mount support channel R.H. only.
11. Various corner angles replaced due to corrosion.
12. 106153-7 Engine mount structure to wing attach angle 1 ea.

All parts primed and installed using original rivet size and pattern and MS20470AD rivets as per AC43.13-1A chapter 5, para. 232, para. e,f; page 21, dated 1985. Also procedures in AC43.13-1A, chapter 2, sect. 3, dated 1985. Also Service Manual sect. 4, para. 1a, page 225, dated Aug. 1, 1951. And also Grumman Aircraft Engineering Drawing #106015B titled "Support-Engine Mount Structure.

2) Installed the following new parts on the L.H. & R.H. firewall as noted:

1. 108425-7 Lower control bellcrank support angle L.H. side.
2. 108425-8 Middle control bellcrank support angle L.H. side.
3. 108425-9 Upper control bellcrank support angle L.H. side.
4. 108425-11 Lower inboard carb heat bellcrank support angle L.H. side.
5. 108425-10 Fwd. turtle back cowling Dzus fastner channel L.H. & R.H. sides.

☒ ADDITIONAL SHEETS ARE ATTACHED

N65CC JUNE 16, 1987

6. 108425-2 Engine cowling gap seal channel on fwd. side of firewall L.H. & R.H. side.
7. 106409 Cowl flap actuator hinge bracket L.H. & R.H. side.
8. 108410 Cowl flap bellcrank hinge and mount fitting L.H. & R.H. side.
9. 108325-1 Aft cowling mount brackets at upper engine mt. blocks L.H. & R.H. side.
10. 108325-2 Aft cowling mount brackets at upper mount blocks L.H. & R.H. side 2 ea.
11. 108425-5 Oil tank lines access panel cover L.H. & R.H.
12. 109180-4 R.H. engine inboard lower carb heat bellcrank mount.
13. 109180-2 R.H. engine outboard lower carb heat bellcrank mount.

Installed L.H. & R.H. firewalls onto L.H. & R.H. engine mount structure using MS20427F and MS20613C rivets (Stainless Steel) using original rivet size and pattern. Installed using Grumman Aircraft Engineering Drawing #108425B titled "Bulkhead (Assy. & Installation), Nacelle Engine Station Firewall" and procedures in AC43.13-1A, chapter 2, sect. 3, dated 1985.

END

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 AGL-FSDO-52
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 N Herman, New Bremen OH 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Jonathan D Piper 5156 St Rt 47 Ansonia OH 45303	XX U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	279787192

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: 9/18/86
SIGNATURE OF AUTHORIZED INDIVIDUAL: Jonathan Piper

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 XX APPROVED ☐ REJECTED

BY					
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	XX	INSPECTION AUTHORIZATION	OTHER (Specify)
	FAA DESIGNEE	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION: 9/18/86
CERTIFICATE OR DESIGNATION NO.: 281581233
SIGNATURE OF AUTHORIZED INDIVIDUAL: Gary L Butler

(8320)

FAA Form 337 (7-67)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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.)*

NOSE WHEEL CHANGE.

1) Removed old nose wheel and discarded.

2) Installed new tire and wheel assembly from Frakes Aviation with optional water seal onto original axle per service manual Sect. III, Para b(2), page 59, dated August 1, 1951.

3) All work done in accordance with data listed above and per STC No. SA1862SW.

END

SUPR. APS
SEP 2 3 1986
FAA GL-FSDO-65
CMH BRANCH

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE 1977—771-021/290

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 AGL-FSDO-62
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC (Mallard)
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 N. Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 N. Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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 15, 1986

SIGNATURE OF AUTHORIZED INDIVIDUAL: Gary L. Butler
Gary L. Butler

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 [X] 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
August 8, 1986	281581233	Gary Lee Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 wing assembly from aircraft. Removed firewall and engine mount structure from wing. Removed both left and right outer wing panels from station 125 to station 396, which come off as one complete assembly. Removed top and bottom forward spar cap angles and box beam web skin, from station 0 to station 140 on the left and right sides. Removed all (6) Z angles sections from the lower wing skin.

2) Installed new Z angles, Grumman P/N G-254-17 (extrusion No. 23402) made per Grumman Aircraft Engineering Structural Repair Manual AN-01-85AB-3, page titled Formed and Rolled Sections and Stress and Load Analysis report No. 2507, page II-2 bottom paragraph. Z angle extrusions made by Tierney Metals per Alcoa Spec. No. 23402. Metal tested and certified to meet physical properties by Tierney Metals, (see attached sheets). Z angles were anodized and primed and were installed using a small amount of PRC 1422 between Z angles and the wing structure. Original rivet size and spacing was used and MS20-470AD and MS20426AD rivets used where aplicable per AC43.13-1A, chap.5, para 232e,f, page 121, dated 1985. All work done I/A/W Service Manual section 4 para 1a,page 225 dated Aug 1, 1951 and procedures in AC43.13-1A chap.2, section 3, dated 1985.

3) Installed new top and bottom spar cap angles made per Alcoa Die No. 33757, per Structural Repair Manual AN-01-85AB-3 page 364, fig. 8-1; and sectionVIII para 8-2 and Table on page 376, dated Dec.17, 1960 and Stress and Load Analysis report No.2507, page II-2 last paragraph, dated April 5, 1946; (see attached sheets). Angles were made and tested by American Metals, Inc. Spar cap angles were anodized and primed and installed along with the front box beam web skins P/N 106545-1L and 1R using original rivet size and spacing and MS20470AD and MS20426AD rivets where aplicable as per AC43.13-1A chap. 5, para 232e,f, page 121, dated 1985 and using procedures in chap. 2, section 3, dated 1985.

4) Removed top and bottom aft wing center section skins from left and right sides. Removed right wheel well skin and left and right aft main gear support angles.

Installed new wheel well skin P/N 106145-1 and new aft main gear support angles P/N's 106123-1L and -1R. All parts were installed after priming, using original rivet size and spacing and MS20470AD and MS20426AD rivets where aplicable as per AC43.13-1A chap.5 para 232e,f, page121 dated 1985 and all work done I/A/W Service Manual section 4 para 1a, page225 dated Aug.1, 1951 and procedures in AC43-.13-1A chap. 2, section 3 dated 1985.

All skins were primed with epoxy primer, and installed top and bottom aft wing center section skins P/N's 106033-1L and -1R (top wing skins), 106032-1L and -1R (bottom wing skins), using PRC 1422 between skin and wing structure using original rivet size and spacing. All work done I/A/W data listed in above paragraph.

5) Reinstalled wing center section onto fuselage using new bolts and rivets per Grumman Wing Erection Drawing No. 106004, dated June 28, 1946. See attached sheet for completion.

☒ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE 1977-771-021/290

5) Wing was installed using original rivet size and spacing and original bolt sizes. All mating parts were primed and no PRC 1422 was used. Bolts were torqued to standard torque.

6) Reinstalled wing outer panels onto wing center section. Prior to installation, replaced left and right forward flap actuator support channel in each outer wing panel. Installed panels with new front web skins between stations 125 and station 140 P/N's 106521-1R and -1L. All work done I/A/W data listed in paragraph 4) second paragraph. Flap channel P/N's 106331-1R and -1L.

END

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

Aluminum Extrusions for the Aerospace Industry/Worldwide Distribution

Tiernay Metals

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SHIP TO (SAME — UNLESS OTHERWISE SPECIFIED.)

Date of Order	Date Required	Sales	VIA	Your Order Number
9-26-85	OBL1-5-85	AP/ak	FLYING TIGER	Verbal-Bob Hanley (1 of 1)
	Date Shipped		F.O.B. ☐ Dest. ☐ Our Dock ☐ PP & B	Buyer
	11-	AOG UNK		Bob Hanley

QUANTITY ORDERED	QUANTITY SHIPPED	DESCRIPTION		WEIGHT	NO. PKGS.
210 ft		TMS 60-21778	7075-T6511		
14 x 180"		ALC 23402	QQ-A-200/11K		
		AOG			

CENTER SECTION Z ANGLES

66

CERTIFIED REPORT OF PHYSICAL TEST

ACTUAL PHYSICAL PROPERTIES

MILL	LOT NO.	TENSILE K.S.I.	YIELD K.S.I.	ELONG	Signed By:
ALCOA	351581	89.3	80.9	12.0%	Asst. Lab. Supervisor TIERNAY METALS

PARTIAL ☐ COMPLETE ☒	O.P.P.O.	DRAW STK.	PACKED BY	RECEIVED BY	UNOILED

CERTIFICATION — We hereby certify that the material covered by this certification has been tested in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination.

3d C.O.D.

FAIR LABOR STANDARDS ACT - "WE HEREBY CERTIFY THAT THESE GOODS WERE PRODUCED IN COMPLIANCE WITH ALL APPLICABLE REQUIREMENTS OF SECTIONS 6, 7, AND 12 OF THE FAIR LABOR STANDARDS ACT, AS AMENDED, AND OF REGULATIONS AND ORDERS OF THE UNITED STATES DEPARTMENT OF LABOR ISSUED UNDER SECTION 14 THEREOF."

ALL CLAIMS FOR ERRORS AND DEFICIENCIES MUST BE MADE WITHIN TEN (10) DAYS AFTER RECEIPT OF GOODS.

FORM TMS 302-308 (12/84) EEO Employer

IIA. BENDING ANALYSIS

Discussion

Member loads due to bending and the corresponding margins are determined in this section. Loads are calculated for the critical conditions III_2 (+L.A.A.) and IV_2 (-L.A.A.), at Stations 317, 270, 230, 181, 140, 107 and 34. The method of calculation is explained in the ensuing paragraphs and the results are presented in condensed tables, listing section properties, stresses and loads.

Critical margins are calculated for the compression members basing the allowables on test data. Since these margins are the most critical of all the bending material, the spanwise curve of allowable beam bending moment on p.II-[illegible] is drawn from these margins.

Margins of critical splices are also determined for those at Sta. 125 and 0, on pp.II-21 thru -23.

Description of Wing Structure:

The structure of the G-73 wing is shown on p.II-5. The Outer Panel (Sta. 125 to 394) is a single-cell box stiffened by ribs located at the stations shown in the sketch. The bending material consists of G-256 type hat stringers (R301T). The skin cover is made from R301T sheets and is designed to carry shear and bending.

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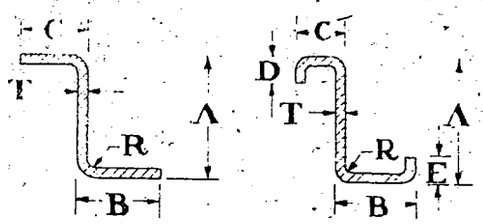
FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90



TYPE I TYPE II

PART NO.	TYPE	A	B	C	D	E	T	R	AREA SQ. IN.	WEIGHT LBS./100'	DEVELOPED WIDTH
~~G254-12~~	~~I~~	~~5/8~~	~~5/8~~	~~5/8~~	—	—	~~.051~~	~~1/8~~	~~.084~~	OBSOLETE	
SP591-3	II	3/4	5/8	1/4	—	3/16	.025	1/16	.041	.418	1.64
~~G254-8~~	~~II~~	~~3/4~~	~~5/8~~	~~1/4~~	—	~~3/16~~	~~.032~~	~~3/32~~	~~.050~~	OBSOLETE	
G254-9	II	3/4	5/8	1/4	—	3/16	.040	3/32	.061	.616	1.54
SP591-4	II	1	5/8	7/16	5/16	5/16	.032	1/16	.076	.775	2.37
SP591-2	II	1	5/8	5/8	5/16	5/16	.032	1/16	.084	.857	2.62
~~G254-13~~	~~I~~	~~1~~	~~5/8~~	~~5/8~~	—	—	~~.051~~	~~1/8~~	~~.103~~	OBSOLETE	SEE AND 10138-1001
~~G254-18~~	~~I~~	~~1 1/8~~	~~3/4~~	~~5/8~~	—	—	~~.064~~	~~5/32~~	~~.141~~	OBSOLETE	
~~G254-1~~	~~II~~	~~15/16~~	~~5/8~~	~~5/8~~	~~5/16~~	~~5/16~~	~~.025~~	~~3/32~~	~~.073~~	OBSOLETE	
SP591-1	II	15/16	5/8	5/8	5/16	5/16	.032	1/16	.094	.959	2.94
~~G254-2~~	~~II~~	~~15/16~~	~~5/8~~	~~5/8~~	~~5/16~~	~~5/16~~	~~.040~~	~~3/32~~	~~.113~~	OBSOLETE	~~SEE EXTR. 12867~~ (5)
~~G254-15~~	~~II~~	~~15/16~~	~~11/16~~	~~11/16~~	~~7/32~~	~~7/32~~	~~.064~~	~~1/16~~	~~.173~~	OBSOLETE	
~~G254-16~~	~~I~~	~~15/16~~	~~11/16~~	~~11/16~~	—	—	~~.064~~	~~1/16~~	~~.158~~	OBSOLETE	SEE EXTR. 23401 *
~~G254-17~~	~~I~~	~~15/16~~	~~3/4~~	~~3/4~~			~~.091~~	~~3/32~~	~~.228~~	OBSOLETE	SEE EXTR. 23402 *
G254-14	I	1 1/2	3/4	3/4	—	—	.051	1/8	.141	1.424	2.77
~~G254-3~~	~~II~~	~~13/4~~	~~7/8~~	~~7/8~~	~~7/16~~	~~7/16~~	~~.040~~	~~3/16~~	~~.155~~	OBSOLETE	
G254-4	II	13/4	7/8	7/8	7/16	7/16	.051	3/16	.195	1.969	3.85
~~G254-5~~	~~II~~	~~13/4~~	~~7/8~~	~~7/8~~	~~7/16~~	~~7/16~~	~~.064~~	~~3/16~~	~~.239~~	OBSOLETE	
~~G254-6~~	~~II~~	~~13/4~~	~~7/8~~	~~7/8~~	~~7/16~~	~~7/16~~	~~.081~~	~~3/16~~	~~.296~~	OBSOLETE	
G254-19	II	15/16	5/8	5/8	5/16	—	.051	3/32	.130	1.31	2.56
G254-20	II	15/16	5/8	5/8	5/16	5/16	.051	3/32	.141	1.424	2.78
~~G254-7~~	~~I~~	~~2 1/8~~	~~7/8~~	~~3/4~~	—	—	~~.064~~	~~3/16~~	~~.219~~	OBSOLETE	SEE EXTR. 33154

* EXTRUSIONS 23401 & 23402 ARE PURCHASED IN 75ST ONLY.

(3) (2) (1) REVISED 12-29-44 (4) REVISED 6-12-46 (5)

REDRAWN 3-11-43

(1) REVISED 12-[illegible]-43
(2) REVISED 5-5-43
(3) REVISED 4-15-43

MATERIAL: 24ST AL. ALLOY. NAVY SPEC 47A10

NOTES: RADII SMALLER THAN SHOWN MAY BE FURNISHED AT VENDORS OPTION. SECTIONS MAY BE FORMED OR ROLLED IN 24SW, OR IN 24SO AND HEAT TREATED AND STRAIGHTENED.

APPROVED	GRUMMAN AIRCRAFT ENGINEERING CORP., BETHPAGE, N. Y.	STANDARD PART NO.
W.D.C. 6-6-42 C.M.J.	ZEE FORMED OR ROLLED SECTION (24ST)	G 254

IIA. BENDING ANALYSIS

Discussion

Member loads due to bending and the corresponding margins are determined in this section. Loads are calculated for the critical conditions III_2 (+L.A.A.) and IV_2 (-L.A.A.), at Stations 317, 270, 230, 181, 140, 107 and 34. The method of calculation is explained in the ensuing paragraphs and the results are presented in condensed tables, listing section properties, stresses and loads.

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american metals service, inc.

P. O. Box 250 • Miami, Florida 33152
Miami 592-7550 • Broward 527-4442
TWX 810-848-9061 • TELEX 152325
TOLL FREE 1-800-327-9611

PAGE 1

WORK ORDER # 233657-00
DATE ORDERED 06/05/84
REQUIRED BY 09/11/84
DATE SHIPPED
REPTS TR ☐ C of C ☑

CUSTOMER # 112019

SOLD TO
FRANKLIN AVIATION
4041 NW 25 ST
MIAMI FL 33142

SHIP TO
FRANKLIN AVIATION
4041 NW 25 ST
MIAMI FL 33142

CUSTOMER ORDER NO.	SALES TAX YES	SALES TAX NO	VIA	FOB	PPD	COL	TERMS
VERBAL		X	OUR TRUCK	DEL	X		1/2 10 N30

ITEM #	QUANTITY ORDERED	DESCRIPTION	BACK ORDER	QUANTITY SHIPPED	UNIT
1	341	7075T6 OBLIQUE ANGLE 1.687 X 1.125 X .188 X 24 FT SPAR CAP MATERIAL		341	LB

MATERIALS CERTIFICATIO

- ALUMINUM
- STAINLESS STEEL
- ALLOY STEEL
- TITANIUM
- MAGNESIUM
- HI-TEMP. METALS
- NICKEL ALUMINUM BRONZE

To: QUALITY CONTROL DEPARTMENT

We hereby certify that this material has been inspected and tested in accordance with, and has been found to meet, the applicable requirements for the material, including any specifications which meet latest revisions forming a part of the description.

By: _____
AUTHORIZED SIGNATURE

VICE-PRESIDENT
DOMESTIC SALES

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

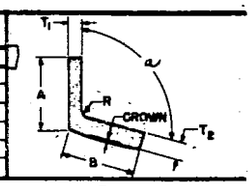
ALUMINUM ALLOY TEMPER DESIGNATION TABLE

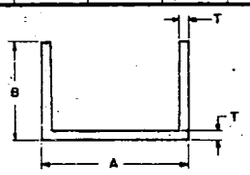
Alloy Designation		Heat Treat by Vendor			Heat Treat by Customer		
New	Old	Sheet	Plate	Extrusion	Sheet	Plate	Extrusion
2024	24S-T	2024-T3	2024-T4	2024-T4	2024-T4	2024-T4	2024-T42
2014	R301-W	2014-T3			2014-T4	2014-T4	
	R301-T	2014-T6			2014-T6	2014-T6	
2014	14S-W	2014-T3	2014-T4	2014-T4	2014-T4	2014-T4	2014-T42
	14S-T	2014-T6	2014-T6	2014-T6	2014-T6	2014-T6	2014-T62
7075	75S-T	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6
6061	61S-W	6061-T4	6061 T4	6061-T4	6061-T4	6061-T4	6061-T4
	61S-T	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6

Alloy Designation		Strain Hardened	Strain Hardened and Then Partially Annealed
New	Old	H12	H22
1100	2S	H14	H24
and	and	H16	H26
3003	3S	H18	H28

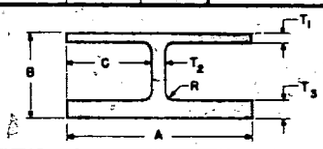
ALCOA #33757

ALCOA DIE NO.	A	B	T_1	T_2	R	CROWN	a	M	AREA
33757	1-1/8	1-11/16	.188	.188	1/8	.015	70°45'	75S-T6	.486
37136	4-1/2	2-1/4	.500	.312	1/8	.006	105°30'	75S-T6	2.842
37148	1-3/4	1-5/8	.125	.125	1/8	.006	104°15'	75S-T6	.422
38482	2-1/4	2-1/2	.562	.375	1/8	.006	76°15'	75S-T6	1.940
38487	2-5/16	1-11/16	.375	.375	1/8	.006	102°	75S-T6	1.387

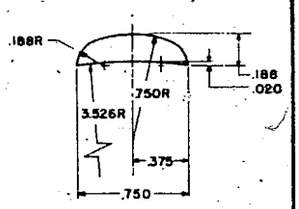




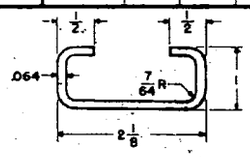
ALCOA DIE NO.	A	B	T	M	AREA
2388	2	1/2	.125	24S-T4	.344
3547	3/4	3/4	.125	24S-T4	.250



ALCOA DIE NO.	A	B	C	T_1	T_2	T_3	R	M	AREA
39891	3-17/32	2-1/2	1.194	.125	.102	.091	1/8	75S-W*	.890
40489	2.676	2.341	1-19/64	.156	.084	.091	1/8	75S-W*	.807
40490	2-1/2	1-21/32	1.208	.125	.084	.091	1/8	75S-T6	.674
45984	2-1/2	1-21/32	1-3/16	.200	.125	.172	1/8	75S-T6	1.104

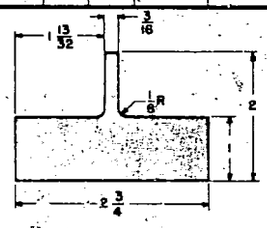


ALCOA DIE NO. 74B
24S-T4 AREA=.107

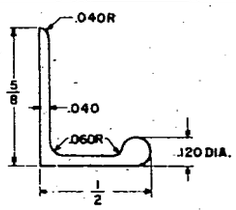


EQUIVALENT SECTION TO BE SAME AS ORIGINAL. USE 24S-O MATERIAL

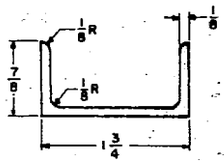
ALCOA DIE NO. 1380
24S-T4 AREA=.297



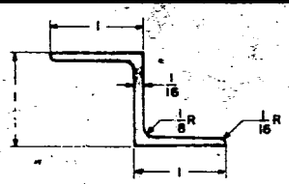
ALCOA DIE NO. 39721
14S-T6 AREA=2.943



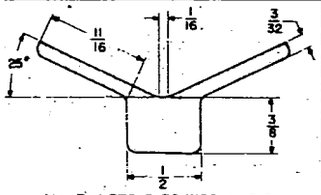
PART NO. AND10135-0402
24S-T4 AREA=.052



PART NO. AND10137-1603
75S-T6 AREA=.406

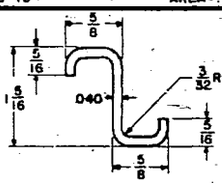


PART NO. AND10138-1009
75S-T6 AREA=.186



ALL FILLETS & ROUNDS 1/16 R

ALCOA DIE NO. 11257
24S-T4 AREA=.334



EQUIVALENT SECTION TO BE SAME AS ORIGINAL. USE 24S-O MATERIAL

ALCOA DIE NO. 12867
24S-T4 AREA=.113

NOTE:
1. HEAT TREAT ALL 75S-W* MATERIAL TO T6 TEMPER AFTER FORMING.
2. HEAT TREAT ALL 24S-O MATERIAL TO T4 TEMPER AFTER FORMING.

Figure 8-1. (Sheet 4) Extrusions and Rolled Sections

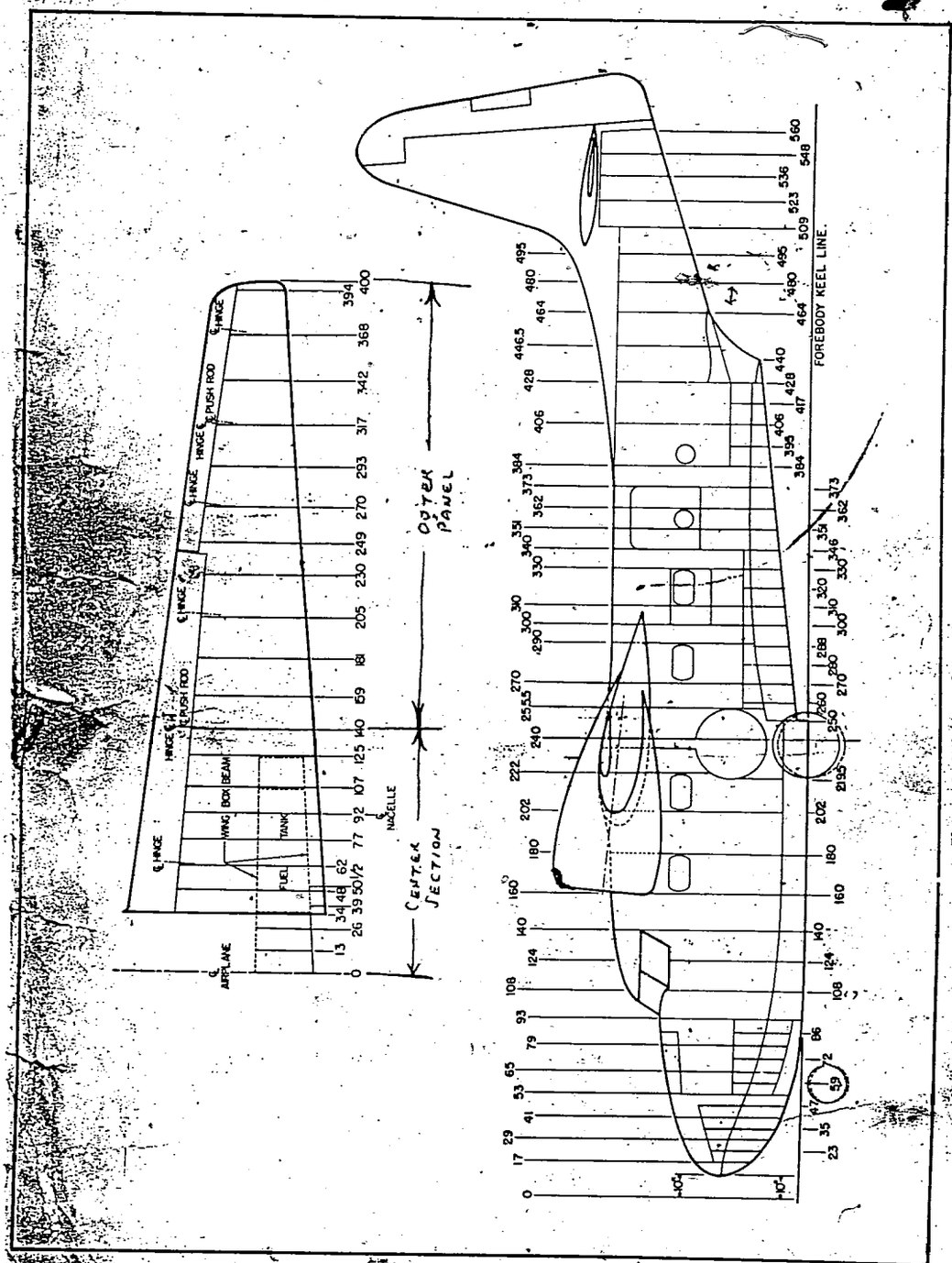
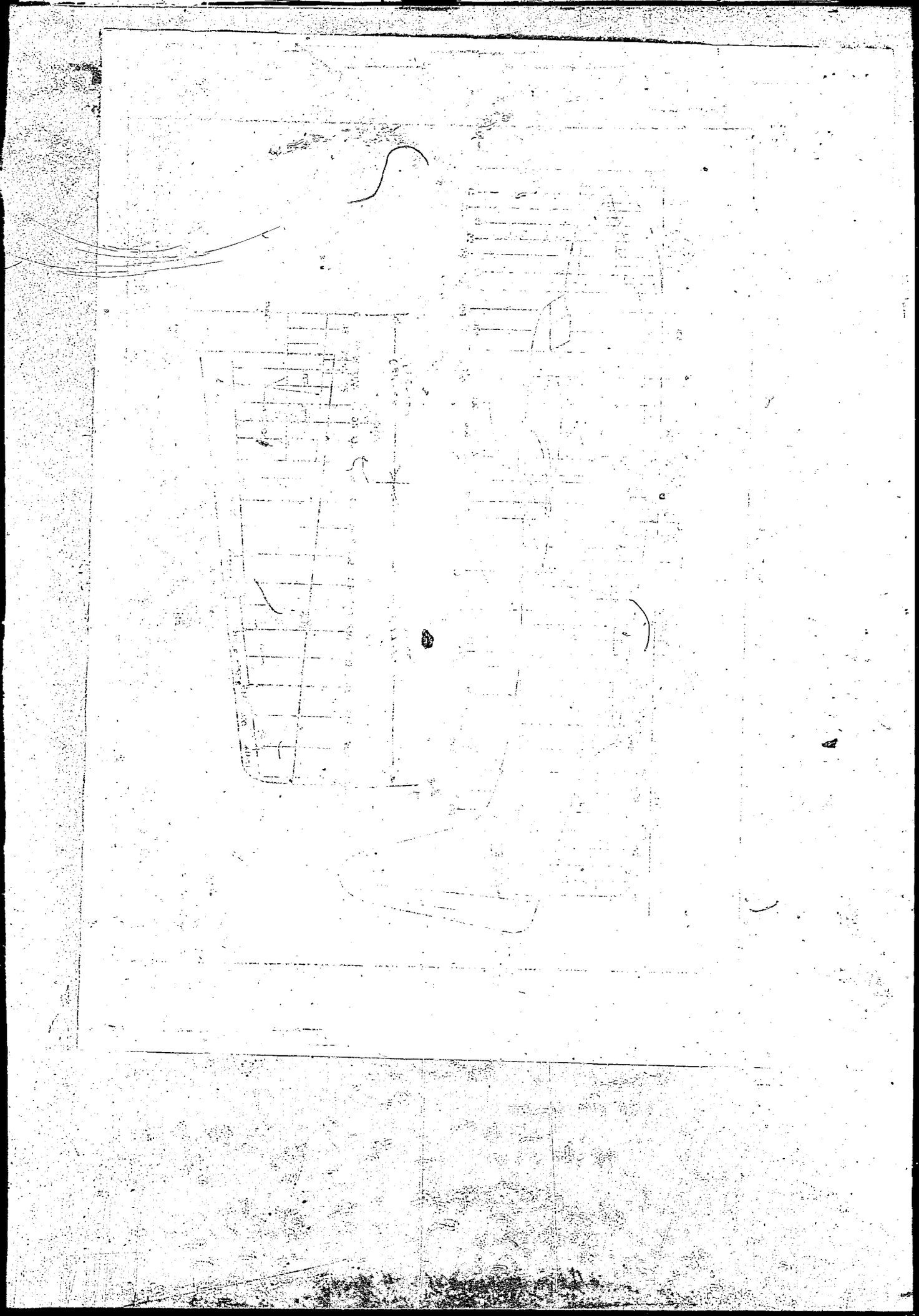


Figure 3—Wing and Fuselage Stations Diagram

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90



FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 AGL-FSDO-62 Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N-65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co.	ADDRESS (As shown on registration certificate): 108 N. Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	ALTERATION
AIRFRAME	(As described in item 3 above)			X	
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

FAA GL-FSDO-65 CMH BRANCH JUN 12 1986

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 North Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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 15, 1986
SIGNATURE OF AUTHORIZED INDIVIDUAL: Gary L. Butler

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	X	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
May 6, 1986	281581233	Gary L. Butler

FAA Form 337 (7-67)

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 exterior fuselage skins and hull skins and removed various bulkheads, stringers and angles on the forward fuselage between fuselage station 17 and station 140.

REPLACED THE FOLLOWING PARTS:

1) 107050-2 Bulkhead sta. 17
2) 107205L Angle btwn sta.41-93 L.H. side gear door att. angle
3) 107205R Same as above except R.H.
4) 107321L L.H. nose gear pivot point assembly.
5) 107321R R.H. nose gear pivot point assembly.
6) 107223 L L.H.vertical U-channel at sta.52 out'b of N.G. pivot
7) 107223R same as above except R.H.
8) 107059L Bulkhead assy. at sta. 72 L.H. side
9) 107061R Bulkhead at sta. 86 R.H. side
10) 107061L Bulkhead at sta. 86 L.H. side
11) 112339L Bracket at sta. 86 L.H. side
12) 107062-1L Bulkhead at sta 93 L.H. side top only
13) 107062-1R Bulkhead at sta 93 R.H. side top only
14) 107062-23 Splice plate at sta 93 at center and top of fuselage
15) 107062-18L U-channel at sta 93, L.H. vertical panel support
16) 107062-18R same as above except R.H.
17) 111054-1 Pilots knee instument panel
18) 112332R Bracket at sta 93 R.H. side
19) 112332L Bracket at sta 93 L.H. side
20) 106062-14R Angle at sta 93 R.H. side
21) 106062-14L Angle at sta 93 L.H. side
22) 107062-14 Angle at sta 93 at top

Installed the above parts using original rivet size and spacing and MS20426AD and MS20470AD where applicable as per AC43.13-1A Chapter 5,par.232e,f, page 121,dated 1985 and using procedures in AC43.13-1A Chapter2, section 3, dated 1985.

2) REPLACED THE FOLLOWING FUSELAGE AND HULL SKINS:

1) 107225-2L Skin from sta 17-93 L.H. top deck
2) 107225-2R same as above except R.H.
3) 107225-3L Skin from sta 17-140 from stringer 12 up, L.H. side
4) 107225-3R same as above except R.H.
5) 107225-1B-L Skin from sta 53-93 L.H. side belly
6) 107225-1B-R same as above except R.H.
7) 107225-1A-L Skin from sta 17-53 L.H. side belly
8) 107225-1A-R same as above except R.H.
9) 107225-5L Skin from sta 93-160 L.H. side of belly
10) 107225-5R same as above except R.H.
11) 107003-2 Skin from sta 124-140 over cockpit enclosure
12) 107003-3 Skin from sta 124 fwd. over power control levers

See additional sheets for completion and fuselage station identifacation.

☒ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE. 1977—771-021/290

N65CC May 6, 1986

All skins were anodized and primed with epoxy primer and sealed with sealant manufactured by products research and chemical comp. No. PR-1431-G TypeIII (corrosion preventative and salt water resistant) between all skins and aircraft structure. They were installed using original rivet size and spacing and MS20426AD and MS20470AD as per AC43.13-1A Chapter 5, par. 232 e,f; page 121 dated 1985. All work accomplished I/A/W Service Manual Section 4, par, 1a, page 225 dated Aug. 1, 1951 and procedures in the AC43.13 -1A Chapter2, section 3 dated 1985.

The following skins; 107225-1B-R and 107225-5L were originally made out of R301W .051 thickness and were replaced with 2014 T3 .050 thickness. This was approved by the Engineering Branch of the ColumbusFlight Standards District Office. Approval date is 4-25-86

----------End----------

NGSCC MAY 6, 1986

Memorandum

U.S. Department of Transportation
Federal Aviation Administration

Subject: INFORMATION: ~~Substitution of 2014-T3~~ for R 301 W Aluminum

Date: April 25, 1986

From: Manager, Airframe Branch, ACE-120C

Reply to Attn of: SRosenfeldX7030

To: Ohio FSDO 62
Columbus, OH
ATTN: Ed Winter

We have researched your telephone question concerning whether 2014-T3 aluminum can be substituted for R 301 W aluminum.

The tensile strength of 2014-T3 is about 5% lower at ultimate and 13% lower at yield than R 301 W. However, these properties are based upon "minimum values" for 2014-T3 and "typical values" for R 301 W. If the same statistical bases were used for both sets of properties, we feel that they would prove to be nearly identical. Therefore, 2014-T3 can be used as a suitable substitute for R 301 W.

FOR Kenneth W. Payauys

N65CC MAY 6, 1986

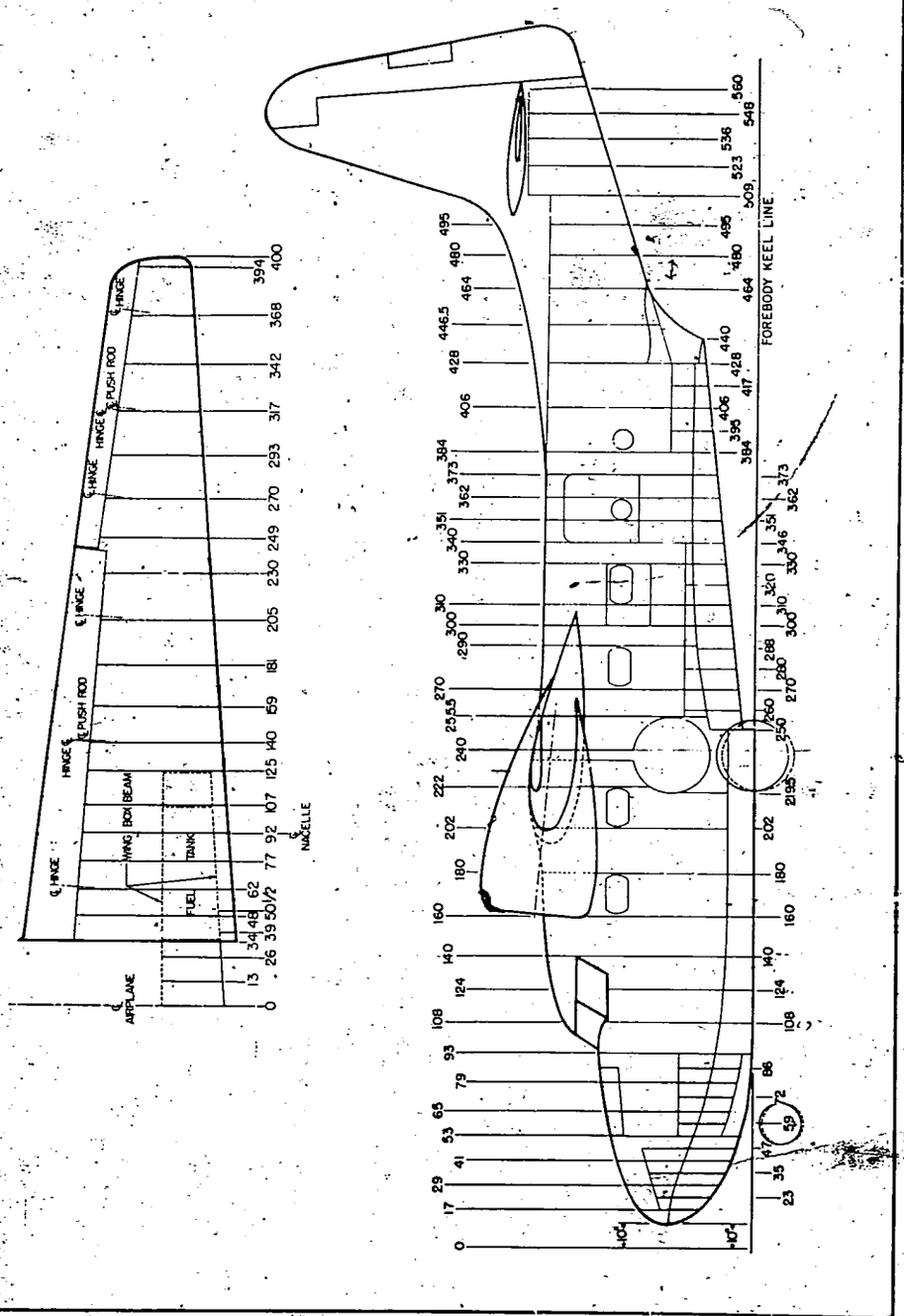


Figure 3—Wing and Fuselage Stations Diagram

NGSCC MAY 6, 1986

ALUMINUM ALLOY TEMPER DESIGNATION TABLE

Alloy Designation		Heat Treat by Vendor			Heat Treat by Customer		
New	Old	Sheet	Plate	Extrusion	Sheet	Plate	Extrusion
2024	24S-T	2024-T3	2024-T4	2024-T4	2024-T4	2024-T4	2024-T42
2014	R301-W	2014-T3			2014-T4	2014-T4	
	R301-T	2014-T6			2014-T6	2014-T6	
2014	14S-W	2014-T3	2014-T4	2014-T4	2014-T4	2014-T4	2014-T42
	14S-T	2014-T6	2014-T6	2014-T6	2014-T6	2014-T6	2014-T62
7075	75S-T	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6
6061	61S-W	6061-T4	6061 T4	6061-T4	6061-T4	6061-T4	6061-T4
	61S-T	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6

Alloy Designation		Strain Hardened	Strain Hardened and Then Partially Annealed
New	Old		
1100 and 3003	2S and 3S	H12 H14 H16 H18	H22 H24 H26 H28

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 AGL-FSDO-62
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 N. Herman, New Bremen, Ohio 45869

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				

O-1 SUPR. O-2 O-3 O-4 O-5 O-6 G-1 G-2 G-3 M-1 M-2 M-3 M-4 M-5

JUN 1 2 1986
FAA GL-FSDO-65
CMH BRANCH

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Gary Lee Butler 412 North Front Street St. Marys, Ohio 45885	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	281581233

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 8, 1986
SIGNATURE OF AUTHORIZED INDIVIDUAL: Gary L. Butler

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 [X] APPROVED [ ] REJECTED

BY					
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	X	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
May 1, 1986	281581233	Gary L. Butler

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 Various bulkheads, stiffeners, angles, and brackets from the fuselage from station 384 to 560.

REPLACED THE FOLLOWING PARTS:

1) 107088-3L Bulkhead at sta 384 L.H. side.
2) 107088-9 Horizontal stiffeners at sta 384 on aft side
3) 107088-10 same as above.
4) 107088-13 same as above.
5) 107088-16 same as above.
~~6) 107088----------~~
6) 112326-R Bracket at sta 384
7) 112281-2 Plate at sta 384 5.5" Dia. on lower portion
8) 107092-25R Angle at sta 428 on fwd. side
9) 112321R Bracket at sta 428 on R.H. side
10) 112321L Bracket at sta 428 on L.H. side
11) 107097 -13RH Angle stiffener at sta509 for horiz. stab. mount
12) 107097-13LH Angle stiffener at sta 509 for horiz. stab. mount
13) 107101 Bulkhead assy. at sta 560

Installed the above parts using sealant manufactured by Products Research and Chemical Comp. No. PR-1431-G Type III (Corrosion Preventative, Salt water resistant) between parts and structure and all parts were coated with primer. The original rivet size and spacing were used and MS20426AD and MS20470AD rivets were applicable per AC43.13-1A Chapter 5, par.232 ef, page 121 dated 1985 and used procedures in AC43.13-1A Chapter 2, section 3, dated 1985.

2) Removed the dorsal fin from fuselage and replaced the skins between fuselage station 384 and station 428 on the L.H. and R.H. sides. The original skin plating was 2014 T6 .032 was replaced with2024 T3 .040 as per Grumman Structural Repair ManualAN-01-85AB-3 Section 1, par. 1-30a page 3 and table from appendix 1, page 376.

Note: The old designation for ~~R301T is~~ 2014 T6 was R301T.

Both skins were anodized and primed and installed with sealant No. PR1431G Type III between skins and aircraft structure. Original rivet size and spacing were used and MS20470 and MS20426AD rivets used where applicable. All work accomplished I/A/W Service Manual Section 4, par. 1a page 225 dated Aug. 1, 1951 and procedures in the AC43.13-1A Chapter2, Section 3 dated 1985.

Reinstalled the dorsal fin on the fuselage.

Attached are pages from the repair manual and fuselage station identification drawings.

☒ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977-771-021/290

head bolts of the same diameter (see figure C-3). Holes drilled for replacement bolts must be drilled for a drive fit (see figure C-2).

1–27A. BLIND RIVETS. The following blind rivets may be used interchangeably, size for size:

Flush Head (100) Type (MS20601AD)	*Brazier Head Type (MS200600AD)*
Huck 100V	Huck P
Huck 9SP-100-A	Huck 9SP-B-A
Rocket SC-A	Rocket SB-A
Cherry CR162	Cherry CR163

1–27B. Huck 9SP, Rocket and Cherry rivets should be installed so that the pin is capable of withstanding at least a 15 pound push-out load 24 hours after driving. Where necessary, Huck 9SP, Rocket or Cherry rivets may be degreased to increase the resistance of the pin to push-out.

1–27C. OVERSIZE RIVETS. When necessary in field work to substitute an oversize rivet for a flush rivet in dimpled sheet, observe the following precautions:

a. Do not use oversize rivets where a spacing between rivets of less than three rivet diameters will result. This does not apply to one or two isolated rivets in a row.

b. An oversized brazier head rivet is an acceptable substitute for a flush rivet provided it is driven with a flat set in order to assure the proper filling of the remaining portion of the dimple by the rivet head, and in order to prevent a concentration of pressure around the edge of the rivet head, with a consequent local scoring of the dimpled sheet.

1–27D. REPAIR FASTENERS IN STEEL. When steel is used in combination with aluminum alloy, as for instance, a steel splice repair part joining two aluminum alloy members, the fasteners should be of steel only, in ream size holes.

1—28. REPAIR MATERIALS.

1—29. GENERAL. Aluminum alloys, chrome molybdenum steel and corrosion resistant steel have been employed in the original construction of the airplane and may also be used for repair as specified on the appropriate repair diagrams. All steel repair parts should be cadmium plated, after drilling, if possible. This is especially important for external parts subject to salt spray. Cadmium plating and subsequent baking should be done in accordance with Grumman Aircraft Quality Control Manual No. 7.000. Dissimilar metals coming into contact, such as tool steel against aluminum alloy, must be insulated from each other in order to prevent corrosion. See the General Manual for Structural Repair, AN 01-1A-1, Section XIV for corrosion prevention and Section V for heat treatment.

1–30. ALUMINUM ALLOYS.

a. FORMED PARTS. The majority of airframe members have been fabricated from R301 or 14S (QQ-A-255) clad aluminum alloy sheet. Some have been made from 24S (QQ-A-362) clad aluminum alloy sheet or 61S (QQ-A-327) aluminum alloy sheet. For repair purposes, it is preferable to use material equal to the original alloy. When doubt exists as to the original alloy, 75S-T6 bare (QQ-A-283) or clad (QQ-A-287) aluminum alloy sheet should be used for replacement. 24S aluminum alloy may be substituted for R301 or 14S only when the next heavier gage is used. Also, R301 or 14S may be substituted for 75S only when the next heavier gage material is used.

b. EXTRUSIONS. Extrusions used in the airplane are made from 75S (QQ-A-277), 14S (QQ-A-261) and 24S (QQ-A-267) aluminum alloy. When an extrusion is not available, sheet material may be used for building up an equivalent provided the material is the same, the cross sectional area is equal to or greater than that of the extrusion and the shape is similar to that of the extrusion. (See Section VIII for extrusions and equivalent sections.)

WARNING

Under no cirmumstances should any of the high strength aluminum alloys (75S, R301, 14S or 24S) be installed in the airplane without heat treatment to the highest temper.

1–31. HEAT TREATMENT. 24S aluminum alloy should be heat treated in accordance with the General Manual for Structural Repair, AN 01-1A-1, Section V. Because 75S-T requires an involved heat treatment, this procedure should not be done in the field. Replacement should be made from stock or spares properly heat treated as in the original construction.

1–32. R301-0 is heat treated to R301-W by heating to 940°F±10° and quenching in water. This same procedure is also used for requenching R301-W or R301-T. Requenched R301-T becomes R301-W.

Note

The equipment and procedure for R301 is the same as used for 24S but the furnace must be set 20° higher.

R301-W is artificially aged to R301-T by heating in an air furnace at 340°F±5° for eight to ten hours. R301-0 cannot be artificially aged to "T" temper without first being heat treated to R301-W.

1–33. FORMING AND DIMPLING. 75S-T sheet has low ductility and extreme spring-back, and cannot be dimpled or formed in this temper. This material is used for a few special parts which are cut and drilled only. 75S-T extrusions also have extreme spring-back and cannot be joggled, and are used in this airplane for parts requiring only machining or very slight bending. R301-0 has better formability than 24S-0. It distorts when heat treated to R301-W. R301-W has formability about equal to 24S-W unless it is freshly quenched; then it has formability about equal to 24S-0. It retains this formability about one and one-half hours, then rapidly

N65CC MAY 1, 1986

ALUMINUM ALLOY TEMPER DESIGNATION TABLE

Alloy Designation		Heat Treat by Vendor			Heat Treat by Customer		
New	Old	Sheet	Plate	Extrusion	Sheet	Plate	Extrusion
2024	24S-T	2024-T3	2024-T4	2024-T4	2024-T4	2024-T4	2024-T42
2014	R301-W	2014-T3			2014-T4	2014-T4	
	R301-T	2014-T6			2014-T6	2014-T6	
2014	14S-W	2014-T3	2014-T4	2014-T4	2014-T4	2014-T4	2014-T42
	14S-T	2014-T6	2014-T6	2014-T6	2014-T6	2014-T6	2014-T62
7075	75S-T	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6	7075-T6
6061	61S-W	6061-T4	6061 T4	6061-T4	6061-T4	6061-T4	6061-T4
	61S-T	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6	6061-T6

Alloy Designation		Strain Hardened	Strain Hardened and Then Partially Annealed
New	Old	H12	H22
1100	2S	H14	H24
and	and	H16	H26
3003	3S	H18	H28

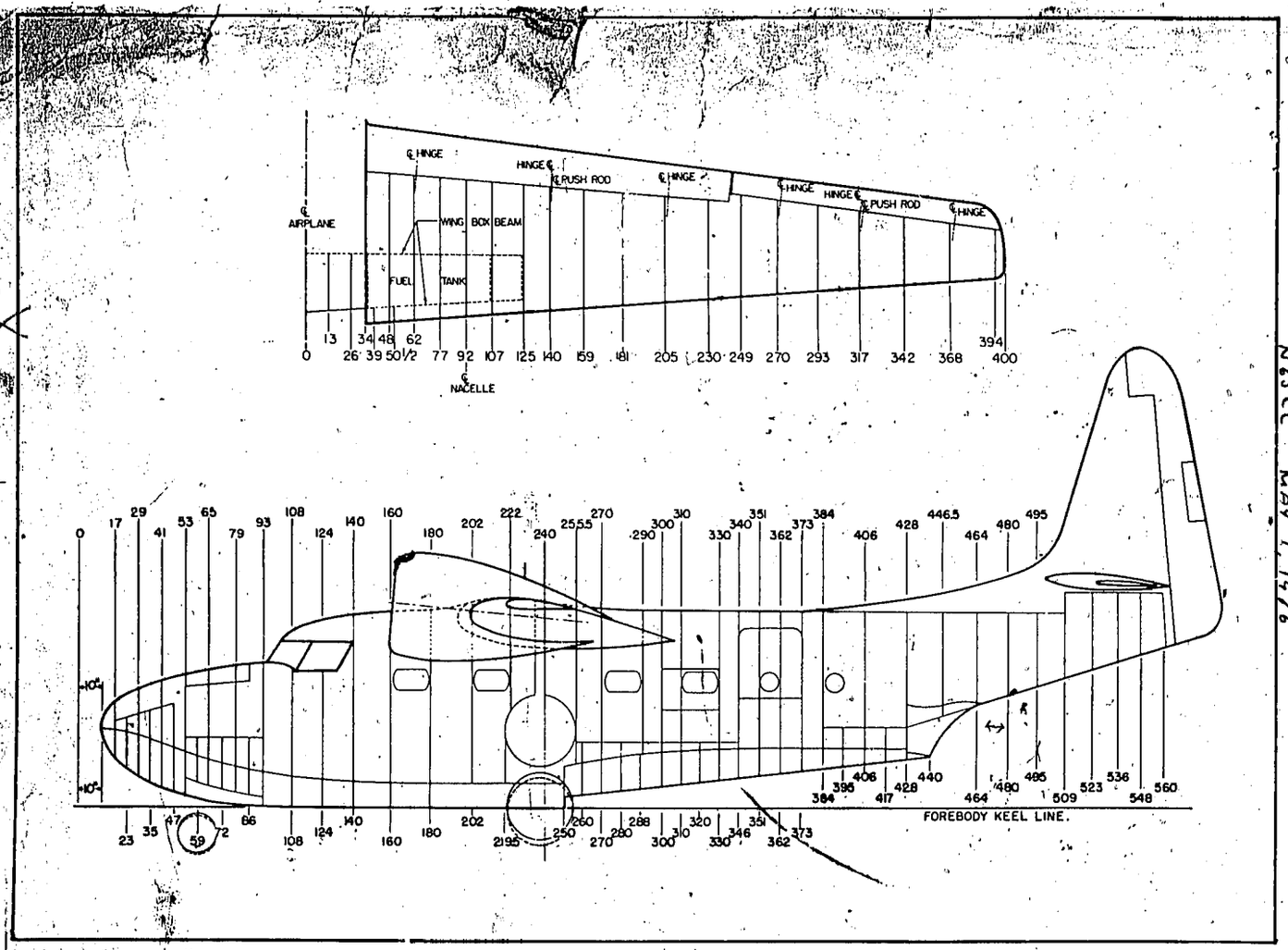


Figure 3—Wing and Fuselage Stations Diagram

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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: GLPSDO-62
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (As shown on registration certificate): Crown Co	ADDRESS (As shown on registration certificate): 108 North Herman, New Bremen, Ohio 45869

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
F. J. Landre P.O.Box 2403 Hialeah, Florida., 33012.	++ U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&1313890

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
November 25, 1985.	F J Landre

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
11/25/85.	IA1313890	F J Landre

FAA Form 337 (7-67)

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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.)*

Grumman G-73, R. Aileron S/N 259. Repair work was accomplished by Dean Franklin Aviation Enterprises, Inc. FAA repair station#765-30. See attached yellowtags.
This aileron was covered with Ceconite in accordance with Ceconite Inc. STC SA1351WE & AC43.13-1A, Ch. 3, Sec. 1 & 2. Nitrate dope was applied as follows.
6 coats brush clear,
4 coats spray clear,
4 coats spray silver pigment.
Balance not accomplished at this time.

---------- E N D ----------

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE 1977 771-021/290

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 1-8-90

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 AGL-FSDO-62
Columbus, Ohio

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 Aircraft Engineering	MODEL: G-73 (Mallard)
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N65CC
2. OWNER	NAME (*As shown on registration certificate*): Crown Co.	ADDRESS (*As shown on registration certificate*): 108 North Herman, New Bremen, Ohio 45869

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					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
F. J. Landre P.O.Box 2403 Hialeah, Fla., 33012.	+ U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	AE1313890

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
October 14, 1985.	F J Landre

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
10/14/85.	IA1313890	F J Landre

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
BATCH NO. 3 DATE: 1-8-90

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.)*

Grumman G-73 L. Elivator, S/N257. Repair work accomplished by Dean Franklin Av Aviation Enterprises, Inc. FAA repair station #765-30 See attached Yellow Tag. This Elivator was covered with Ceconite in accordance with Ceconite Inc. STC SA1351WE & AC43.13-1A, Ch. 3, Sec. 1 & 2. Nitrate dope was applied as follows.
6 coats brush clear,
4 coats speay clear,
4 cpats spray silver pigment.
Balance not accomplished at this time.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977-771-021/290

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-X8-86

AC 250

Form Approved.
Budget Bureau No. 04-R058.2

FEDERAL AVIATION AGENCY

APPLICATION FOR AIRWORTHINESS CERTIFICATE

(FAR 21)

INSTRUCTIONS: Print or type. Do not write in shaded areas; these are for FAA use only. Submit original only to an authorized FAA Representative. If additional space is required, use reverse side.

I. AIRCRAFT DESCRIPTION

1. REGISTRATION MARK: N-7356 65CC	2. AIRCRAFT MAKE: Grumman	3. AIRCRAFT MODEL DESIGNATION: G-73	FAA CODING: 395 1902
4. AIRCRAFT SERIAL NO.: J-56	5. ENGINE MAKE: P & W	6. ENGINE MODEL DESIGNATION: R-1340-S1H1	52016
7. NO. OF ENGINES: 2 ea.	8. PROPELLER MAKE: Hamilton Standard	9. PROPELLER MODEL DESIGNATION: 23D40-51	10. YR. AIRC. MANUFACTURED: 12/19/1950.

II. CERTIFICATION REQUESTED

A. APPLICATION IS HEREBY MADE FOR:

3	X	ORIGINAL CERTIFICATE—AIRCRAFT IS	NEW	X	USED	IMPORT
4		AMENDMENT OR MODIFICATION OF CURRENT CERTIFICATE				
5		OTHER (Specify)				

B. AIRWORTHINESS CLASSIFICATION (For multiple certification, check appropriate items)

1	X	STANDARD (Indicate category)	NORMAL		UTILITY		ACROBATIC	X	TRANSPORT CAR 4A	
2		LIMITED								
3		RESTRICTED (Indicate operation(s) to be conducted)	1		AGRICULTURE & PEST CONTROL	2	AERIAL SURVEYING	3	AERIAL ADVERTISING	
			4		FOREST (Wild life conservation)	5	PATROLLING	6	WEATHER CONTROL	
			0		OTHER (Specify)					
4		EXPERIMENTAL (Indicate operation(s) to be conducted)	1		RESEARCH AND DEVELOPMENT	2	AMATEUR BUILT	3	EXHIBITION	
			4		RACING	0	TO SHOW COMPLIANCE WITH FAR			
5		PROVISIONAL (Indicate class)	1		CLASS I	2	CLASS II		FAA CODING	

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on Certificate of Aircraft Registration) — IF DEALER CHECK HERE →

NAME: Amphibias Airways

ADDRESS (Number, street, city, State and ZIP code): P O Box 723 Buena Vista Sta. Miami, Florida.

B. AIRCRAFT CERTIFICATION BASIS

AIRCRAFT SPECIFICATION OR TYPE CERTIFICATION DATA SHEET (Give No. and Rev. No.): A-783 #4

AIRWORTHINESS DIRECTIVE SUMMARY (Give year and last card No.): April 1, 1968 through 68-24 + 25

AIRCRAFT LISTING (Give page No(s.))

SUPPLEMENTAL TYPE CERTIFICATE (Give No(s.)): STC SA635SO

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

	AIRCRAFT NEW—NO PREVIOUS HISTORY	TOTAL AIRFRAME HOURS RECORDED: 10,010	FAA CODING
X	RECORDS MAINTAINED IN COMPLIANCE WITH FAR 91.173		

I hereby certify that I am the registered owner (or his agent) of the aircraft described above; that the aircraft is registered with the Federal Aviation Agency in accordance with section 501 of the Federal Aviation Act of 1958, and applicable Federal Aviation Regulations; and that the aircraft has been inspected and is airworthy and eligible for the classification(s) requested.

DATE OF APPLICATION	NAME AND TITLE (Print or type)	SIGNATURE
Dec. 23,1968.	F. J. Landre (Agent)	F. J. Landre

IV. INSPECTION AGENCY VERIFICATION

IN ACCORDANCE WITH FAR 21.183, THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY:

2	CERTIFICATED AIR CARRIER (Give Certificate No.)	3	CERTIFICATED MECHANIC (IA) (Give Certificate No.) IA1313890	6	CERTIFICATED DOMESTIC REPAIR STATION (Give Certificate No.)
5	AIRCRAFT MANUFACTURER (Give name of firm)				FAA CODING

DATE	TITLE	SIGNATURE
12/23/68.	Inspector	F. J. Landre

V. AIRWORTHINESS DOCUMENTATION

	A. CURRENT OPERATING LIMITATIONS AVAILABLE IN AIRCRAFT	X	G. THIS INSPECTION RECORDED IN AIRCRAFT RECORDS
	B. CURRENT OPERATING LIMITATIONS ATTACHED	X	H. STATEMENT OF CONFORMITY, FAA FORM 317 (Attach when required)
X	C. CURRENT APPROVED FLIGHT MANUAL AVAILABLE IN AIRCRAFT		I. PREVIOUS AIRWORTHINESS CERTIFICATE ISSUED IN ACCORDANCE WITH FAR ____ CAR ____ (Orig. attached)
	D. DATA, DRAWINGS, PHOTOGRAPHS, ETC. (Attach when required)		
X	E. CURRENT WEIGHT & BALANCE INFORMATION AVAILABLE IN AIRCRAFT	X	J. AIRWORTHINESS CERTIFICATE ISSUED IN ACCORDANCE WITH FAR 21.183(d) (Copy attached)
	F. MAJOR REPAIR AND ALTERATION FORM 337 (Attach when req.)		

VI. FAA REPRESENTATIVE CERTIFICATION

X	A. I have inspected the aircraft described above, find it conforms to its type certificate, and is in condition for safe operation.			
	B. I have inspected the aircraft described above, find it is in condition for safe experimental operation.			
	C. Current Airworthiness Certificate amended.			
DATE: 12-68 / 12-23-68	DESIGNATION NO.: MFG. INSPECTOR	OFFICE NO.: 7-43 / MIA-ETDO	SIGNATURE: William H. Tucker	

FAA Form 305 (6-65) OBSOLETE PREVIOUS EDITION * GPO : 1965 OF—780-702 0052-024-7000 (8130)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N7356	Grumman G73	356	Transport CAR 4a

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	FAA REPRESENTATIVE	DESIGNATION NUMBER
12-23-68	William H. Tapp William H. Tacker	7-0-43

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 8100-2 (7-67) FORMERLY FAA FORM 1362 GPO 1967—O-270 931

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N7356	Grumman G-73	1-36	Transport CAR 4a

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	FAA REPRESENTATIVE	DESIGNATION NUMBER
Replacement 12-23-68	George R. Mattern	AS JU/FSDO 7-3-61

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 8100-2 (7-67) FORMERLY FAA FORM 1362

GPO : 1967—O-270 931

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION—FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N 7356	GRUMMAN G-73	353	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	FAA REPRESENTATIVE	DESIGNATION NUMBER
Reissuement 12-23-58	John [illegible]	SO-GADO-5

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 8100-2 (7-67) FORMERLY FAA FORM 1362

GPO 1967—O-270 931

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

MICRO

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved Budget Bureau No. 04-R0146

STATEMENT OF CONFORMITY

SECTION I – AIRCRAFT

1. MAKE Grumman	2. MODEL G-73
3. SERIAL NO. J-56	4. REGISTRATION NO. N-7356

SECTION II – ENGINE

1. MAKE	2. MODEL
3. SERIAL NO.	

SECTION III – PROPELLER

1. MAKE	2. HUB MODEL
2. BLADE MODEL	4. HUB SERIAL NO.
5. BLADE SERIAL NOS.	

SECTION IV – CERTIFICATION

I hereby certify that:

☐ A. I have complied with Section 21.33(a).

☐ B. The aircraft described above, produced under type certificate only (FAR 21 Subpart F), conforms to its type certificate, is in a condition for safe operation, and was flight checked on _____. *(Date)*

☐ C. The engine or propeller described above, presented herewith for type certification, conforms to the type design therefor.

☐ D. The engine or propeller described above produced under type certificate only (FAR 21 Subpart F), conforms to its type certificate and is in a condition for safe operation. The engine or, if applicable, the variable pitch propeller was subjected by the manufacturer to a final operational check on _____. *(Date)*

Deviations: none

This aircraft has been inspected in accordance with an ANNUAN inspection and was determined to be in airworthy condition. All applicable airworthiness directives and factory service bullitens have been complied with. Aircraft inspected to conform to spec. No. A-783 Rev. 4 31 Oct. 1952.
Aircraft weighed and equipment list issued.

SIGNATURE OF CERTIFIER F. J. Landre F. J. Landre	TITLE Inspector
ORGANIZATION	DATE 12/23/68.

FAA Form 317 (11-67) SUPERSEDES PREVIOUS EDITION

INSTRUCTIONS

This form should be submitted to a representative of the Administrator under the following circumstances:

1. By the applicant for a type certificate or a supplemental type certificate at the time he presents an aircraft or parts thereof to the FAA for tests.

2. By the applicant for a type certificate or a supplemental type certificate for each engine or propeller submitted for type certification.

3. By the type certificate holder or licensee manufacturing products under a type certificate only, upon the initial transfer by him of the ownership of each product or upon application for the original issue of an aircraft airworthiness certificate, or an Airworthiness Approval Tag (FAA Form 186).

This form should be completed as follows:

Section I. Aircraft. Complete the pertinent part of only this section when certification covers an aircraft or part thereof.

Section II. Engine. Complete this section when certification covers an engine.

Section III. Propeller. Complete this section when certification covers a propeller.

Section IV. Certification.

Item A. Check this block when an aircraft or part thereof is presented for flight or ground tests during type certification or supplemental type certification.

Item B. Check this block when the holder or licensee of a type certificate only, initially transfers the ownership of an aircraft manufactured under that type certificate, or applies for the original issuance of an airworthiness certificate.

Item C. Check this block when an engine or propeller is presented for type certification.

Item D. Check this block when an engine or propeller is presented for airworthiness approval and insert the date the product completed a final operational check.

The certification must be signed by an authorized person who holds a responsible position in the manufacturing organization.

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved
Budget Bureau No. 04-R060.1

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: G-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N 7356
2. OWNER	NAME (As shown on registration certificate): Antilles Air Boats, Inc.	ADDRESS (As shown on registration certificate): West SEaplane Ramp Christiansted, St. Croix, USVI 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.
Charles R. Freehling P.O. Box 731 Frederiksted, St. Croix, USVI 00840	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	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	SIGNATURE OF AUTHORIZED INDIVIDUAL
November 30, 1979	Charles R. Freehling Charles R Freehling

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	X	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
November 30, 1979	1617154	Charles R. Freehling Charles R Freehling

FAA Form 337 (7-67) ☆ U.S. Government Printing Office 1977—772-646/141 (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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. Reduction of maximum certificated take-off weight from 12,750 lbs. to 12,500 lbs. in accordance with STC SA635SO.

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

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

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-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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N 7356
2. OWNER	NAME (*As shown on registration certificate*): Antilles Air Boats, Inc.	ADDRESS (*As shown on registration certificate*): West Seaplane Ramp, Christiansted St. Croix, USVI 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					
PROPELLER					
APPLIANCE	TYPE: 111020 (Chair MANUFACTURER: Grumman				X

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
TOMAS O'NEIL RAMOS Cond. La Rosa, Bld. A-2 Apt. 5 Rio Piedras, P.R.	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	1690355

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
October 2, 1979	Tomas O'Neil Ramos TOMAS O'NEIL RAMOS

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 [X] APPROVED [ ] REJECTED

BY							
		FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	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
10/2/79	1617154	CHARLES FREEHLING Charles Freehling

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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) Received two modified cockpit chairs, Assemble P/N 111020 from Chalk's International Airline, installed with TSO shoulder harness in compliance with FAR 135.171. This installation previously approved on Form 337, May 5, 1979 on Aircraft N 7306 for duplication. Modification drawing AE 3580, Load Test Report and statement of compliance form 8110 approved by DER Mr. J. Patterson, SO-211.

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

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

TMENT OF TRANSPORTATION
FED-RAL 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 50-FS00-61

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-73
	SERIAL NO. J-56	NATIONALITY AND REGISTRATION MARK US N-7356
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC	ADDRESS (As shown on registration certificate) West Seaplane Ramp, Christiansted, St Croix, USVI 00820

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
CLAUDE AUSTIN c/o Antilles Air Boats, Inc Christiansted, St Croix, USVI	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A & P 2227109

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
March 20, 1979	CLAUDE AUSTIN Claude Austin

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 [X] APPROVED [ ] REJECTED

BY							
		FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	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
March 20, 1979	IA 1617154	CHARLES R. FREEHLING Charles R. Freehling

FAA Form 337 (7-67) ☆ U.S. Government Printing Office 1977—772-646/141 (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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) Replaced right wing skin #1 bottom Ref. Figure 136, Station 317 to 400 New Skin 2024T3.032.

(2) Installed access hole Station 366 as per Nav. Aer. 01-85V-3 Figure 112 Panel Patch Repair.

(3) All work performed in accordance with AC 43-13-1A Chapter 2, Section 3, and Nav. Aer. 01-85V-3.

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

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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

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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N7356
2. OWNER	NAME (As shown on registration certificate): Antilles Airboats, Inc.	ADDRESS (As shown on registration certificate): Seaplane Ramp, Veterans Drive St. Thomas, 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.
Chalk's Int'l. Airline, Inc. MacArthur Causeway, Watson Island, Miami, Fla. 33132	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	705-135

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
27 December 1978	Kenneth M. Willis

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 [X] 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	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
27 December 1978	705-135	[illegible]

FAA Form 337 (7-67)

GPO : 1971 O - 410-878

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

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.)*

Replaced L&R Wing Aileron Hinge Brackets Part No. 106325L&R, 106326L&R and 106326L&R.

Installation in accordance with AC 43-13-1. End.

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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

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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N7356
2. OWNER	NAME (As shown on registration certificate): Antilles Airboats, Inc.	ADDRESS (As shown on registration certificate): Seaplane Ramp, Veterans Drive, St. Thomas, 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.
Chalk's Int'l. Airline, Inc. MacArthur Causeway, Watson Isl. Miami, Fla. 33132	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	705-135

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
27 December 1978	Kenneth M. Wilks

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 [X] 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	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
27 December 1978	705-135	[illegible]

FAA Form 337 (7-67) GPO : 1971 O - 410-878 (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3/8 - 86

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.

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

Installed emergency main landing gear up lock release by method of "T" handle and cable through wheel well bulkhead utilizing 1/8 stainless cable and neco press cable eye.

Installed emergency watertight breakaway door in wheel well to allow access of emergency gear extension rod from inside cabin at station 240 on both sides of fuselage. End.

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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

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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N7356
2. OWNER	NAME (*As shown on registration certificate*): Antilles Airboats, Inc.	ADDRESS (*As shown on registration certificate*): Seaplane Ramp, Veterans Drive St. Thomas, 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.
Chalk's Int'l Airline, Inc. MacArthur Causeway, Watson Isl. Miami, Fla. 33132	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	705-135

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
27 December 1978	Kenneth Morellis

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 [X] APPROVED [ ] REJECTED

BY							OTHER (*Specify*)
		FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	INSPECTION AUTHORIZATION	
		FAA DESIGNEE	X	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
27 Dec. 1978		[illegible]

FAA Form 337 (7-67) (8320)

GPO : 1971 O - 410-878

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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 right and left windshields of Grumman G-73, N-7356 were replaced with Rohm-Haas "TUFFAK", Polycarbonate material, U. S. Government Specification 393A. The windshields were fabricated in accordance with Chalk's International Airlines Drawing No. 1-7306-56 and attachments. The manufacturers specifications of the Polycarbonate windshields will meet strength requirements of C.A.R. 04a.505 as amended. The impact strength of the "TUFFAK" windshields is 12.0-18.0 foot pounds, reference ASTM test method No. D256.

The safety of these windshields is much greater than the previously installed windshields. The flame retardancy meet the special industry codes as U.L. and the Federal Aviation Regulations. The windshields were installed in accordance with FAR 43.13, and Chalk's International Airlines, Inc., approved maintenance program and procedures. End.

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

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-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-73
	SERIAL NO. J-56	NATIONALITY AND REGISTRATION MARK US N7356
2. OWNER	NAME (As shown on registration certificate) ANTILLES AIR BOATS, INC	ADDRESS (As shown on registration certificate) West Seaplane Ramp, Christiansted, ST CROIX, USVI 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	R-1340-51H1	11166	X	
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
ENGINE SUPPORT, INC. PT. 2 BOX 513 SEBRING AIR TERMINAL SEBRING, FLA. 33870	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	3610 POWER PLANT CLASS 1 & 2

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
December 13, 1978	James W. Turner JAMES W. TURNER

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	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
December 18, 1978	3610	James W. Turner JAMES W. TURNER

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

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 disassembeld 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 & Stud Inspection).

Service Bulletin 175B-3 complied with (Fly weights & Fly weight liners).

Parts listings on file this station under WO#5940

☐ ADDITIONAL SHEETS ARE ATTACHED

★1975-G.P.O.-1703-M/673-200/175

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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 50-7500-61

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-73
	SERIAL NO. J-56	NATIONALITY AND REGISTRATION MARK N-7356
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)			XX	
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
F. J. Landre P.O.Box 2403 Hialeah, Florida., 33012	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	AM1313890

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
Nov. 14, 1978.	F J Landre

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	X	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
11/14/78	IA1313890	F J Landre

FAA Form 337 (7-67) GPO : 1971 O - 410-8[illegible] (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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.)*

Grumman G-73. L.H. Aileron S/N FL1242. This aileron was stripped, cleaned, inspected and recovered with Geconite in accordance with Geconite Inc. STC SA1351WE and AC43.13-1A, Sec.3, Ch. 1 & 2.
Nitrate dope was applied as follows,
6 coats brush clear,
4 coats spray clear,
4 coats spray silver pigment.
Balance not checked at this time.
---------- E N D ----------

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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-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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N7356
2. OWNER	NAME (As shown on registration certificate): ANTILLES AIR BOATS, INC.	ADDRESS (As shown on registration certificate): CHRISTIANSTED, ST CROIX, U.S.V.I.

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.	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A & P 2227109

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
SEPTEMBER 20, 1978	Claude Austin CLAUDE AUSTIN

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 [X] APPROVED [ ] REJECTED

BY						
	FAA FLT. STANDARDS INSPECTOR	MANUFACTURER	X	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
SEPTEMBER 20, 1978	IA 1617154	Charles R. Freehling CHARLES R. FREEHLING

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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. Replaced top aft skin left wing flap from flap rib station 85.3 to rib station 133.17 and nose skin from rib station 95.1 to rib station 114.6. New skin 2024-T3, .025 anodized.

2. Installed new flap horn assembly P/N 112053 station 107.6.

   a. All work done in accordance with AC 43-13-1A, Chapter 2, Section 3, Paragraph 96 to 101; Chapter 6, Paragraph 247 to 252 and GRUMMAN MALLARD SERVICE MANUAL, SECTION IV.

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

☐ ADDITIONAL SHEETS ARE ATTACHED

★1975-G.H.O.-1703-M/673-200/175

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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-PSDO-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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N7356
2. OWNER	NAME (As shown on registration certificate): ANTILLES AIR BOATS	ADDRESS (As shown on registration certificate): West Seaplane Ramp, CHRISTIANSTED, ST CROIX, 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.
CLAUDE AUSTIN C/o ANTILLES AIR BOATS, INC CHRISTIANSTED, ST CROIX, U.S.V.I.	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A+P 2227109

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
SEPTEMBER 3, 1978	Claude Austin

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 [X] APPROVED [ ] REJECTED

BY							
		FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	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
SEPTEMBER 3, 1978	I.A. I617154	Charles R. Freehling CHARLES R. FREEHLING

FAA Form 337 (7-67) (3320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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. Replaced hull skin from station 180 to station 250 Left side Ref. Figure #135 hull skin plating Diagram #21, skin plating 2014-TC.051 replaced by 2024-T3.063.

2. Installed new channel P/N 10730L Left side from station 180 to station 250, counting from keel up the first 4 channels.

3. Installed new keel P/N 107131 from station 93 to station 250.

4. Spliced Right hull skin from 43.5" forward of station 250 to station 250 Ref. Figure #135 hull skin plating Diagram #21, skin plating 2014-TC.051 replaced by 2024-T3.063 splice plate, plate inside hull of 2024-T3.063 with two rows rivets each side.

5. Installed new channel P/N 10730R Right side spliced at 37.5" forward of station 250 to station 250, splice I/A/W GRUMMAN Structural Repair Manual Nav. Aer. 01-85VA-3 G-21A Figure #83, and Riveting Schedule 83, channel replace from keel up Right side, first 3 channels.

6. Repaired station 250 with bulkhead insert and splice plate doubler I/A/W GRUMMAN Structural Repair Manual Nav. Aer. 01-85VA-3 G-21A Figure #75, insert from between channel #2 and #3 Left side and between channel #1 and #2 Right side to 14" above keel.

7. Installed new keelson between station 238 and station 250.

8. Repaired Right wing flap, installed new trailing edge from P/N 106267-1, 6.5" from inboard through the following 34" outboard.

9. Repaired Right wheel well skin station 248 next to chine.

a. All work above done in accordance with approved data and A.C. 43-13-1, chapter 2, section 3. (Grumman Structural Repair Manual Nav. Aer. 01-85VA-3)

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

☐ ADDITIONAL SHEETS ARE ATTACHED

★ 1075-G.H.O.-1

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

FAA C

DEPAR 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-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- 73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N7356
2. OWNER	NAME (As shown on registration certificate): Antilles Air Boats	ADDRESS (As shown on registration certificate): West Seaplane Ramp Christiansted, St. Croix, USVI 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)				XX
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Eric Crossfield c/o Antilles Air Boats Christiansted, St. Croix, USVI	[X] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [ ] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	A&P 259766640

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
April 27, 1978	Eric Crossfield

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 [X] APPROVED [ ] REJECTED

BY						
	[ ] FAA FLT. STANDARDS INSPECTOR	[ ] MANUFACTURER	[X] 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
April 27, 1978	I.A. 1617154	Charles F Rulling

FAA Form 337 (7-67) GPO : 1971 O - 410-878 (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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 following passenger seats were installed in this aircraft in accordence with Aero Trades STC SA310EA.

One single and one double compartment C Statéon 177.

One single and one double compartment D Station 210.

One single---------- compartment E Station 238½.

One single and one double compartment F Station 283.

One single and one double compartment G Station 360.

All work accomplished in accordance with STC and AC 43.13-1.

The following equipment was installed in this aircraft prior to weighing. 3 place divan, manufactured by Dean Franklin Aviation Enterprises, Inc. Reference is made to FAA-1600 dated February 18, 1968 installation on Grumman Mallard G-73 N7338. Report #DF-101 on stress analysi in ships records and on file at Chalk"s International Airline, Inc. Miami, Fla. Installation made in accordance with approved drawings. this installation made with minor deviations from the original installation in N7338. These minor changes do not effect the structrual integrity of the installation.

----------END----------

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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-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-73
	SERIAL NO. J-56	NATIONALITY AND REGISTRATION MARK N7356
2. OWNER	NAME (*As shown on registration certificate*) ANTILLES AIR BOATS, INC.	ADDRESS (*As shown on registration certificate*) CHRISTIANSTED, ST. CROIX 00820

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

UNIT	MAKE	MODEL	SERIAL NO.	5. TYPE: REPAIR	5. TYPE: ALTERATION
AIRFRAME	(As described in item 1 above)				
POWERPLANT	PRATT & WHITNEY	R1340-S1H1	ZP325443	X	
PROPELLER					
APPLIANCE — TYPE					
APPLIANCE — MANUFACTURER					

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
ENGINE SUPPORT, INC. SEBRING AIR TERMINAL RT 2 BOX 513 SEBRING FLORIDA 33870	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	3610 POWER PLANT CLASS 1 & 2

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
June 9 1977	Robert C. Lovell Robert C. Lovell

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							OTHER (*Specify*)
		FAA FLT. STANDARDS INSPECTOR		MANUFACTURER		INSPECTION AUTHORIZATION	
		FAA DESIGNEE	X	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
June 9 1977	3610	Robert C. Lovell Robert C. Lovell

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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 55-6-2 complied with.
Service Bulletin 1758-B complied with.
Parts listing on file this station under W.O. #5327.

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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-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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N 7356
2. OWNER	NAME (*As shown on registration certificate*): ANTILLES AIR BOATS, INC.,.	ADDRESS (*As shown on registration certificate*): SEAPLANE RAMP, CHRISTIANSTED, ST. CROIX

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION				5. TYPE	
UNIT	MAKE	MODEL	SERIAL NO.	REPAIR	ALTERATION
AIRFRAME	(As described in item 1 above)				
POWERPLANT	PRATT & WHITNEY	R1340-S1H1	2515	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 RT 2 BOX 513' SEBRING, FLORIDA 33870	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	3610 POWER PLANT CLASS 1 & 2

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
Nov 30, 1976	Robert C. Lovell *Robert C. Lovell*

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 [X] 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	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
Nov 30, 1976	3610	Robert C. Lovell *Robert C. Lovell*

FAA Form 337 (7-67) (8320)

GPO : 1971 O - 410-878

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

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.

FAA A.D. Note 56-6-2 complied with.
Service Bulletin 1758-B complied with.
Parts listing on file this station under W.O. #4913.

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

ARTMENT 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
MIA GADO
7-3-05

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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N2356
2. OWNER	NAME (As shown on registration certificate): Antilles Air Boats	ADDRESS (As shown on registration certificate): Veterns Drive St.Thomas U.S. Virgin Islands

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Dennis Albert Russell 8130 West 16th Ave. Hialeah, Florida	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&P #1657303

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
9 July 1974	Dennis Albert Russell

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		X 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
9 July 1974	1383930	Donald A. Lumsell

FAA Form 337 (7-67) GPO : 1971 O - 410-878 Pilot's Copy (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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 following passenger seats were installed in this aircraft in accordance with Aero Trades Drawing # GA3010 for STC 310EA.
Aero Trades Mfg. Seats installed as follows;
One single and one double compartment C Station 177.
One single one double at compartment D Station 210.
One single ----------Compartment E Station 238 ½.
One single and one double compartment F Station283.
One single and one double compart G Station 360.
Installed 3 place divan mfg. by Dean Franklin Aviation Enterprises, Inc. Reference is made to FAA-1600 dated February 18, 1968 installation on Grumman Mallard G-73 N7338. Report # DF-101 on stress analysis in ships records and on file at Chalks International Airline Inc. Miami Fla. Installation made with minor deviations and do not change the structrual integrity of the installation.
All work accomplished in accordance with approved dwgs. andAC43.13-1.
----------END ----------

☐ ADDITIONAL SHEETS ARE ATTACHED

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

FAA good

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: MIAMI, FLA. 7305

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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N7356
2. OWNER	NAME (As shown on registration certificate): Antilles Air Boats, Inc.	ADDRESS (As shown on registration certificate): Veterns Drive St. Thomas Virgin Islands

3. FOR FAA USE ONLY

4. UNIT IDENTIFICATION / 5. TYPE

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

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Donald A. Sumrall 9960 N. Kendall Dr. Miami, Fla.	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	1383930

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
27 April 1974	Donald A. Sumrall

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						OTHER (Specify)
	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
27 April 1974	1383930	Donald A. Sumrall

FAA Form 337 (1-65) OBSOLETE PREVIOUS EDITION 0052-025-8000 (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

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.)*

Replaced hull Skin left and right side from station #180 to station # 250, Reference 21 figure 135 section four of Grumman service manual, 36 X 90 inch skin panels 2014-TC-051 replaced with 2024-.063-T3 I/A/W FAA form 3110-3 in reference to dwg. AE2238 fuselage bottom skin repair change "A" Skin .063-2024-T3 QQ-A250/5 replaces material .051-2014-T6 AMS 4029.
Added reinforcing formers at station # 190, station #210 and station #230 using 2024-T3 .063 attached to longitudinal stringers six inches either side of keel, four inch channel 2024-T3 with std. rivet pattern used as skin splice back up plates.

Installed new keel section P/N 107131.
All work procedures I/A/W AC 43.13-1 Section3.

******END *******

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. GOVERNMENT PRINTING OFFICE : 1965 OF—761-748

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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 7-3-05

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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N7356
2. OWNER	NAME (As shown on registration certificate): Antilles Air Boats Inc.	ADDRESS (As shown on registration certificate): Veterns Drive St. Thomas, 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)				XX
POWERPLANT					
PROPELLER					
APPLIANCE	TYPE / MANUFACTURER				

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Donald A. Sumrall 9960 N. Kendall DR. Miami Florida	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	1383930

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
28 April 1974	Donald A. Sumrall

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)
		FAA DESIGNEE		REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
28 April 1974	1383930	Donald A. Sumrall

FAA Form 337 (1-65) OBSOLETE PREVIOUS EDITION 0052-025-8000 (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

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.)*

Replaced cloth fibir fresh air duct in cabin side wall with non-corrosive fire resistant PCV plastic tubing using existing mounting brackets and airframe routing. ****END**

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. GOVERNMENT PRINTING OFFICE : 1965 OF—761-748

Donald A. Sumrall
Sumrall's Air Service
9960 N. Kendall Drive
Miami Florida 33156

28 April 1974

Director of Maintenance
Antilles Air Boats
St. Thomas U.S. Virgin Islands

Dear Sir:

Grumman Mallard N7356 s/n J-56 was inspected I/A/W an annual inspection this date and was determined to be in airworthy condition at this time for flight to St. Thomas, Virgin Islands where the following items are to be completed before the aircraft is to be put into commercial service.

1- Seats to be secured I/A/W STC SA310HA.
2- Interior installed and all aircraft placards I/A/W aircraft specification and FAR 135
3- Engine cowlings modified I/A/W Aircraft Specification Item 109.
4- Safty equipment I/A/W FAR 135.

cc/FAA/SAS

Donald A. Sumrall
Donald A. Sumrall
A&P1383930IA

Donald A. Sarnell
Surveillance Air Service
1000 E. Kendall Drive
Miami Florida 33156

22 April 1974

Director of Maintenance
Antilles Air Boats
St. Thomas U.S. Virgin Islands

Dear Sir:

Enclosed United N7558 s/n 1-66 was inspected I/A/W an annual inspection this date and was determined to be in airworthy condition at this time for flight to St. Thomas, Virgin Islands where the following items are to be completed before the aircraft is to be put into commercial service.

1- Seats to be secured I/A/W STC SA1130.
2- Interior installed and all aircraft placards I/A/W aircraft specification and FAR 135
3- Engine cowlings modified I/A/W Aircraft Specification Item 100.
4- Safety equipment I/A/W FAR 135.

cc/FAA/SAS

Donald A. Sarnell
Airworthiness

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

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 MIA GADO 7-3-05

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-73
	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N7356
2. OWNER	NAME (*As shown on registration certificate*): Amphibies Airways	ADDRESS (*As shown on registration certificate*): P. O. Box 723 Buena Vista Sta. Miami, Florida

3. FOR FAA USE ONLY

The data/~~alteration~~ identified herein complies with the applicable airworthiness requirements and is approved only for the above described aircraft, subject to conformity inspection by a person authorized in FAR 43, section 43.7.

DEC. 23 1968 (Date) — Signature of FAA Inspector: L. M. Young — MIA GADO 7-3-05

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.
Frank J. Landre P. O. Box 2403 Hialeah, Florida	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	1313890 A&P

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 20, 1968 — SIGNATURE OF AUTHORIZED INDIVIDUAL: F. J. Landre

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 XX APPROVED ☐ REJECTED

BY							
		FAA FLT. STANDARDS INSPECTOR		MANUFACTURER	X	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
12-23-68	IA1313890	F. J. Landre

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

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 following equipment was installed in this aircraft prior to weighing. 3 place divan, manufactured and installed by Dean Franklin Aviation Enterprises, Inc. Ser. #J-39. Reference is made to FAA-1600 dated Feb. 18, 1968 installation on Grumman Mallard G-73 N7339. Report #DF-101 on stress analysis in ships records. Installation made in accordance with approved drawings. This installation made with minor deviations from the original installation in N7339. These minor changes do not effect the structural integrity of the installation.

---------- END ----------

RECEIVED
FAA
DEC 30 1969
SO-GADO-5
MIAMI, FLORIDA

FEB 4 11 15 AM '69
OKLAHOMA CITY, OKLA

CONVEYANCE FILED WITH
FAA AIRCRAFT REGISTRY

☐ ADDITIONAL SHEETS ARE ATTACHED

☆ U.S. GOVERNMENT PRINTING OFFICE : 1965 OF—761-748

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

FAA Pay C

United States of America
Department of Commerce
Civil Aeronautics Administration
Washington, D. C.

No. 35613

Export Certificate of Airworthiness

This certifies *that the product identified below and more particularly described in Specification(s)[1] of the Civil Aeronautics Administration, Numbered* A-783 *has been examined and as of the date of this certificate is considered airworthy in accordance with applicable airworthiness requirements of the United States Government, and in compliance with special requirements of the importing country as filed with the United States Government, except as noted below. This certificate in no way attests to compliance with any agreements or contracts between the vendor and purchaser, nor does it constitute authority to operate an aircraft.*

Product: Aircraft (complete)

Manufacturer: Grumman Aircraft Engineering Corporation

Model: G-73

Serial No.: U-56

New ☐ *Newly Overhauled*

Used Aircraft ☒

Country to which exported: Japan

Note: Long-range temporary fuel tanks installed in cabin for ferry flight to Japan and must be removed upon arrival in Japan.

S. E. Stothers — D.M.R.
Signature of Authorized Representative

PACIFIC AIRMOTIVE CORPORATION
Agency Represented

Dec. 3, 1959
Date

Appr. Repair Sta. #88
Agency or Designee Number

[1] *For complete aircraft, list applicable specification numbers for the aircraft, engine, and propeller. Applicable specifications, if not attached to this export certificate, will have been forwarded to the appropriate governmental office of the importing country.*

U. S. GOVERNMENT PRINTING OFFICE: 1956—O-405842

Form ACA-26 (10-56)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form approved.
Budget Bureau No. 41-R042.7.

APPLICATION FOR CERTIFICATE OF AIRWORTHINESS FOR EXPORT

EXPORT CERTIFICATE NO. *(To be filled in by CAA representative)*[1] 35613

INSTRUCTIONS

This application should be submitted (one copy only) to a representative of the CAA when the article[2] to be exported is presented for inspection and should be executed as follows:

A. Items 1, 2, 3, and 7 in connection with *all exports*, and

B. *For Complete Aircraft*, items 4A, C, D (excluding propeller serial numbers), 5, and, when applicable, 6 and 8.

C. *For Engines*, items 4C and 8, and, when applicable, 6.

D. *For Propellers*, items 4D and 8.

E. *For Type Certificated Equipment* (other than engines or propellers), items 4B, and, when applicable, 8.

APPLICATION IS MADE FOR A CERTIFICATE OF AIRWORTHINESS FOR EXPORT TO COVER THE PRODUCT(S) DESCRIBED BELOW, WHICH IS:

☐ NEW ☒ USED ☐ MILITARY SURPLUS ☐ DELEGATION OPTION

1. NAME AND ADDRESS OF EXPORTER
PACIFIC AIRMOTIVE CORPORATION
2940 North Hollywood Way
Burbank, California

2. NAME AND ADDRESS OF FOREIGN PURCHASER
Toyo Menka Kaisha Ltd.
No. 1 - 1 Chome, Otemachi
Chiyoda - ku, Tokyo, Japan

3. COUNTRY OF DESTINATION

DESCRIPTION OF PRODUCT(S)

UNIT	MAKE AND MODEL	SERIAL NO.	IDENTIFICATION NO.	T. C. NO.	P. C. NO.
A. COMPLETE AIRCRAFT	GRUMMAN G 73	J-56	N51181	A-783	23
B. EQUIPMENT		TYPE OF EQUIPMENT *(Such as float, ski, etc.)*	QUANTITY		
		Floats	2		

C. ENGINE(S)

	MANUFACTURER	MODEL	T. C. NO.	P. C. NO.	SERIAL NO.
(1)	Pratt Whitney	R1340 - AN-1	E129-6		327979
(2)	Pratt Whitney	R1340 - S1H1	E129-6		14657
(3)					
(4)					
(5)					
(6)					

D. PROPELLER(S)

	MANUFACTURER	MODEL	T. C. NO.	P. C. NO.	SERIAL NO.[3]
(1)	Hamilton Standard	23040-51	P-719-6		158615
(2)	Hamilton Standard	23040-51	P-719-6		160698
(3)					
(4)					
(5)					
(6)					

[1] See CAR 1.1(4).
[2] Only complete type certificated aircraft, aircraft engines, propellers, wheels, floats, skis, position lights, and landing flares are eligible for a certificate of airworthiness for export.
[3] Serial numbers not required with respect to propellers installed in aircraft being exported.

16—58734-4

Form ACA-306 (3-55)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

5. FLIGHT TEST (AN AIRCRAFT SHALL BE FI[illegible]-TESTED NOT EXCEEDING 60 DAYS PRIOR TO INSPEC[illegible] FOR EXPORT AND THE FOLLOWING ENTRIES WITH RESPECT THERETO SHALL BE MADE)

DATE OF FLIGHT TEST: December 3, 1959

DURING THIS TEST DID THE CONTROLS, POWER PLANT, AND INSTRUMENTS FUNCTION SATISFACTORILY: [X] YES [ ] NO (Explain in "Remarks")

6. INDICATE BELOW, THE OPERATING HISTORY OF USED AIRCRAFT AND AIRCRAFT ENGINES BEING EXPORTED

UNITS AS LISTED IN ITEMS 4A AND C		DATE— MANUFACTURED	MODIFIED	OVERHAULED	OPERATING TIME (Hours) TOTAL	SINCE OVERHAUL
COMPLETE AIRCRAFT		GRUMMAN			5021:00	5021:00
ENGINES	a.	PRATT WHITNEY		6-30-59	4072:12	188:20
	b.	PRATT WHITNEY		5-8-58	3822:45	14:45
	c.					
	d.					
	e.					
	f.					

7. DOES THE UNIT(S) FOR WHICH A CERTIFICATE OF AIRWORTHINESS FOR EXPORT IS REQUESTED COMPLY WITH—

A. APPLICABLE CIVIL AIR REGULATIONS, AIRWORTHINESS DIRECTIVES, AND OTHER REQUIREMENTS OF THE CAA: [X] YES [ ] NO (Explain in "Remarks")

B. APPLICABLE SPECIAL REQUIREMENTS OF THE COUNTRY OF DESTINATION: [ ] YES [ ] NO (Explain in "Remarks")

8. PARTS SUSCEPTIBLE TO RAPID CORROSION HAVE BEEN PROPERLY TREATED [X] YES [ ] NO DATE 10-26-59
[ ] TO BE TREATED, AS PER EXPLANATION UNDER "REMARKS"

9. REMARKS:

Long Range fuel tanks for ferry flight was installed by Volitan Aviation Inc.
Approved repair station #4196 approved on 337 dated December 3, 1959.
To be removed upon arrival at destination.

Four seats stowed in cabin.

The undersigned, on his own behalf or having been duly authorized by the exporter or purchaser described herein, certifies that the above statements are true and that the unit(s) described herein is (are) airworthy and in a condition for safe operation, except as noted under "Remarks" above.

12-4-59 (DATE) Wm Myarquid (SIGNATURE OF APPLICANT OR AUTHORIZED REPRESENTATIVE) Manager Aircraft Div. (TITLE)

APPROVAL

It has been determined that the data given in items 5, 7, 8, and 9 above, insofar as they relate to the airworthiness of the product(s) described herein, are true and correct, and that the product(s) is (are) in a state of airworthiness equivalent to that required for a similar product certificated as, or installed on, a civil aircraft of U. S. registry.

NAME AND ADDRESS OF THE APPROVING AGENCY: PACIFIC AIRMOTIVE CORPORATION, 2940 North Hollywood Way, Burbank

DATE: 12-3-59

TITLE AND SIGNATURE OF CAA AGENT OR AGENCY REPRESENTATIVE: S. E. Stothers
S. E. STOTHERS Chief Inspector, D.M.R.

DESIGNEE OR REPAIR STATION NO.: Approved Repair Sta. 88 Airframe Class 1, 344

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE—CIVIL AERONAUTICS ADMINISTRATION

CERTIFICATE OF AIRWORTHINESS

1. NATIONALITY AND REGISTRATION MARKS	2. AIRCRAFT AIRWORTHINESS CLASSIFICATION
N51181	STANDARD

3. This Certificate of Airworthiness is issued pursuant to the Civil Aeronautics Act of 1938 as amended. The aircraft identified hereon is considered airworthy when maintained and operated in accordance with the Civil Air Regulations and applicable aircraft Operation Limitations.

4. This Certificate will remain in effect as long as the aircraft is maintained in accordance with Part 43 of the Civil Air Regulations unless surrendered, suspended, revoked, or a termination date is otherwise established by the Civil Aeronautics Board.

5. DATE OF ISSUANCE	6. CAA REPRESENTATIVE	7. ~~XXXXXXXX~~
4-16-56	Robert E. Fisher CHIEF, AIRCRAFT & AIRMAN ACCESS BRANCH	REISSUED 10-20-59

8. *Any alteration or misuse of this Certificate is punishable by a fine of not exceeding $1,000 or imprisonment not exceeding 3 years, or both.*

GPO 16—72863-1

Form ACA-1369B (8-50)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE—CIVIL AERONAUTICS ADMINISTRATION

CERTIFICATE OF AIRWORTHINESS

1. NATIONALITY AND REGISTRATION MARKS	2. AIRCRAFT AIRWORTHINESS CLASSIFICATION
N-5118	STANDARD

3. This Certificate of Airworthiness is issued pursuant to the Civil Aeronautics Act of 1938 as amended. The aircraft identified hereon is considered airworthy when maintained and operated in accordance with the Civil Air Regulations and applicable aircraft Operation Limitations.

4. UNLESS SOONER SURRENDERED, SUSPENDED, REVOKED, OR A TERMINATION DATE IS OTHERWISE ESTABLISHED BY THE CIVIL AERONAUTICS BOARD THIS CERTIFICATE WILL ~~XXXXX~~ REMAIN IN EFFECT AS LONG AS AIRCRAFT IS MAINTAINED IN ACCORDANCE WITH PART 43

5. DATE OF ISSUANCE OR RENEWAL	6. CAA REPRESENTATIVE	7. DESIGNATION NO.
7-17-56	H. J. MALEY	3-5

8. *Any alteration or misuse of this Certificate is punishable by a fine of not exceeding $1,000 or imprisonment not exceeding 3 years, or both.*

GPO 16—63778-1

Form ACA-1362 (12-50)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

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

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 9
e. ☐ MULTIPLE CERTIFICATE UNDER THE PROVISIONS OF CAR 8
f. ☐

50

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	b. AIRCRAFT MODEL	c. AIRCRAFT SERIAL NO.
GRUMMAN	G-73	J-56

d. ENGINE MAKE	e. ENGINE MODEL
PRATT& WHITNEY	S3H1

4. AIRCRAFT REGISTRATION INFORMATION (*Complete all items*)

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
GENERAL MOTORS CORP.	3044 W. GRAND BLVD. DETROIT 2, MICH.	N 5118 new 51181 Cancelled 10-26-9

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 2-15-51
b. ☐ APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B). FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON _____ (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

Paul C. Grieg
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

APRIL 16, 1956 (DATE)
AGENT (TITLE)

16—60837-2

Form ACA-305 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

MAY 7 1956

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

AIRCRAFT INSPECTION REPORT

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

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

1. AIRCRAFT AND ENGINE CERTIFICATION BASIS
   - a. [X] AIRCRAFT SPECIFICATION NO. A783 THROUGH SHEET REVISION NO. 4
   - b. [ ] AIRCRAFT LISTING PAGE NO. ____
   - c. [X] AIRWORTHINESS DIRECTIVE SUMMARY 54-26-2 (YEAR) THROUGH CARD NO. 56-7
   - 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. [X] COMPLIANCE WITH APPLICABLE AIRWORTHINESS DIRECTIVES RECORDED
   - c. [X] AIRCRAFT RECORDS INDICATE THE AIRFRAME HAS BEEN OPERATED A TOTAL OF 3027:15 HOURS
   - d. [X] ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
     - SERIAL NO. 327986 TOTAL HOURS 384:15
     - SERIAL NO. 327979 TOTAL HOURS 382:30
     - SERIAL NO. ____ TOTAL HOURS ____
     - SERIAL NO. ____ TOTAL HOURS ____

3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)
   - a. LAST AIRWORTHINESS INSPECTION CONDUCTED 4-16-56 (DATE)
     - [ ] BY AIRCRAFT MANUFACTURER
     - [X] BY APPROVED REPAIR STATION, CERTIFICATE NO. 3757
     - [ ] BY MECHANIC, CERTIFICATE NO. ____
   - b. [X] PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

RECEIVED MAY 21 11 37 AM '56 ADMIN & RECORDS BRANCH 300

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED
   - a. [ ] OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
   - b. [ ] CURRENT OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
   - c. [X] CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT
   - d. [X] CURRENT WEIGHT AND BALANCE INFORMATION IS AVAILABLE IN AIRCRAFT
   - e. [X] THIS INSPECTION HAS BEEN RECORDED IN THE AIRCRAFT RECORDS
   - f. [X] CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISSUED TO EXPIRE APRIL 16,1957 (DATE)
   - g. [X] PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE JUNE 23,1956 (DATE)
     BY DAN KELLEY (NAME OF ISSUING REPRESENTATIVE) (DATE) 3376 (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. 3757 by CAR 52 and was found to be:
   - [X] AIRWORTHY
   - [ ] UNAIRWORTHY

   D. L. Morton — D. L. MORTON (REPAIR STATION AUTHORIZED SIGNATURE) — 4-16-56 (DATE)

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
AVIATION SAFETY AGENT'S SIGNATURE	CAA DESIGNATION NO.	DATE	[ ] ACCEPTED [ ] REINSPECTED [ ] SPOT CHECKED
	Reg. 3 KQ ASDQ 5	5-7-56	

[ ] ATTACHMENT

U. S. GOVERNMENT PRINTING OFFICE 16—60837-2

Form ACA-8040 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

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

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	b. AIRCRAFT MODEL	c. AIRCRAFT SERIAL NO.
GRUMMAN	G-73	J-56

d. ENGINE MAKE	e. ENGINE MODEL
PRATT & WHITNEY	R-1340-S1H1

4. AIRCRAFT REGISTRATION INFORMATION (*Complete all items*)

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
GENERAL MOTORS CORPORATION	3044 W. GRAND BLVD. DETROIT 2, MICHIGAN	N-5118

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 Feb 13, 1951
b. ☐ APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B). FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON _____ (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 ☐ WEIGHT AND BALANCE REPORT
☐ ACA-337 ☐ DATA, DRAWINGS, ETC.
☐ ACA-317 ☐ UNAPPROVED DEVIATION DATA

D. L. Morton
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)
6-23-55 (DATE) Agent (TITLE)

16—60837-2

Form ACA-305 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

JUN 27 1955

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

AIRCRAFT INSPECTION REPORT

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

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

1. AIRCRAFT AND ENGINE CERTIFICATION BASIS

a. ☒ AIRCRAFT SPECIFICATION NO. A-783 THROUGH SHEET REVISION NO. 5
b. ☐ AIRCRAFT LISTING PAGE NO. _____
c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 54-26-2 (YEAR) THROUGH CARD NO. 55-12
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 2643:00 HOURS
d. ☒ ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:

SERIAL NO. 327986 TOTAL HOURS 000:00
SERIAL NO. 327911 TOTAL HOURS 106:05
SERIAL NO. _____ TOTAL HOURS _____
SERIAL NO. _____ TOTAL HOURS _____

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

a. LAST AIRWORTHINESS INSPECTION CONDUCTED 6-23-55 (DATE)
☐ BY AIRCRAFT MANUFACTURER
☐ BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
☒ BY MECHANIC, CERTIFICATE NO. A & E 542266
b. ☒ PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

RECEIVED JUN 27 10 18 AM '55 ADMIN & RECORDS BRANCH W-300

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED

a. ☐ OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
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 6-23-56 (DATE)
g. ☒ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 7-15-55 (DATE)
BY D. L. Morton (NAME OF ISSUING REPRESENTATIVE) (DATE) 173 (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

(REPAIR STATION AUTHORIZED SIGNATURE) (DATE)

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
Dan Kelley Dan Kelley	3376	6-23-55	☒ ACCEPTED
AVIATION SAFETY AGENT'S SIGNATURE	CAA DESIGNATION NO.	DATE	☐ REINSPECTED
J D Maley	KC-257-5	6/27/55	☐ SPOT CHECKED

☐ ATTACHMENT

U. S. GOVERNMENT PRINTING OFFICE 16—60837-2

Form ACA-305a (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

73 CAA

MAR 1956

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	MODEL	SERIAL NO.	NATIONALITY AND REGISTRATION MARK
	GRUMMAN	G-73	J-56	N-5118

2. OWNER	NAME (*First, middle, last*)	ADDRESS (*Street and number, city, zone and State*)
	GENERAL MOTORS CORPORATION	3044 WEST GRAND BOULEVARD DETROIT 2, MICHIGAN

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

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

4. AIRCRAFT WEIGHT AND BALANCE DATA
**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*)*
AIRPLANE	10,155.5 10,350	-10.447 Floats off -10.147 Floats on	2,594.5 2,400

5. CONFORMITY STATEMENT (*Complete and check*)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
GENERAL MOTORS AIR TRANSPORT SECTION BAY #1, DETROIT CITY AIRPORT DETROIT 13, MICHIGAN	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	3757

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.

3-14-56
(Date repair and/or alteration completed)

P. C. GRIEP A&E 326485 Paul C. Griep
(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 ☐ REJECTED } BY { ☐ CAA Designee ☐ CAA Aviation Safety Agent ☐ Manufacturer ☒ Repair Station ☐ Canadian Department of Transport Inspector of Aircraft ☐ Other (*Specify*)

3-14-56
(Date of approval or rejection)

D. L. Morton
D. L. MORTON, CHIEF INSPECTOR
(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 3/16/56 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

_____ (CAA designation number)

Y J Maley (Signature Aviation Safety Agent)

Reg. 3 KC
ASDO 5

16-54010-4

Form ACA-337 (MS

INSTRUCTIONS

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

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

8. DESCRIPTION OF WORK ACCOMPLISHED.*

Installed seperate parking brake valve on floor six inches ahead of hand pump selector valve.

Valve is piped into system and operated in manner called for on attached sheets.

Installation similar to that approved on Grumman Mallard, G-73, registration #N2974, S/N J-34, dated 10-30-54.

Weight change negligable.

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

Check block if additional sheets are attached. ☐

U. S. GOVERNMENT PRINTING OFFICE 16—54010-4

BRAKES

A. Normal

Normal braking action is controlled by toe ~~heels~~ BRAKES on the pilot's rudder pedals. Since this brake system is independent of the hydraulic system it retains fluid for system operation in the master brake cylinder reservoir.

B. Parking or Emergency Brakes

A 3-position (On, Normal & Park) parking brake selector valve is located immediately forward of the hand pump selector valve. Spring type catches are used to hold the valve handle in the "ON" and "NORMAL" position; the internal valve mechanism holds the valve when it is placed in the "PARK" position.

For Emergency or Parking Brakes:

1. Set the parking brake valve in the "ON" position and operate the hand pump. Several strokes of the hand pump will build up enough pressure to hold the aircraft (600 psi max. required). A relief valve will unload the system at 1000 psi.

2. Turn the parking brake valve to the "PARK" position. This locks the pressure in the parking brake system.

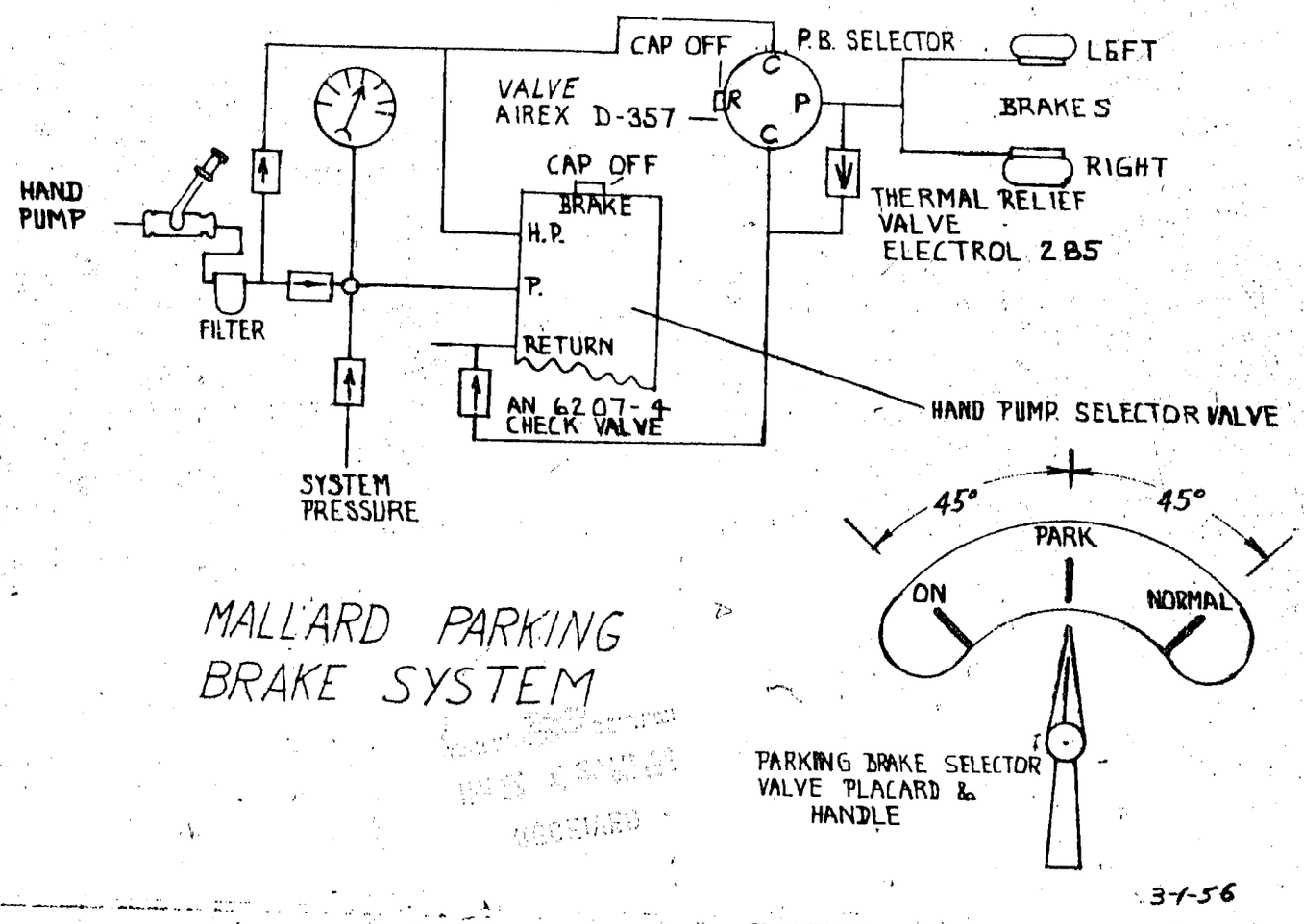
3. To release the brakes, turn the selector to "NORMAL". This releases all the pressures in the parking brake system.

WARNING - The parking brake valve must be set in the "NORMAL" position at all times when not using the parking brakes. With the valve in some other position it is possible to build up pressure in the parking brake system, thereby locking the main landing gear wheels.

N 5118

Attachment To 337 dated 9-14-56

Attachment to 337 dated 3-14-56
N 5718



MALLARD PARKING
BRAKE SYSTEM

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

783

DEC 12 1955

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	MODEL: G-73	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N-5118
2. OWNER	NAME (First, middle, last): GENERAL MOTORS CORPORATION	ADDRESS (Street and number, city, zone and State): 3044 WEST GRAND BOULEVARD DETROIT 2, MICHIGAN		

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

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

4. AIRCRAFT WEIGHT AND BALANCE DATA
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)*
AIRPLANE	10,155.5 Land operation 10,350 water operation	-10.447 land operation -10.147 water operation	2594.5 land. 2400 water

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
GENERAL MOTORS AIR TRANSPORT SECTION BAY #1 DETROIT CITY AIRPORT DETROIT 13, MICHIGAN	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	3757

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.

DECEMBER 6, 1955
(Date repair and/or alteration completed)

JUAN RIVAS, GENERAL FOREMAN
(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 ☐ REJECTED } BY { ☐ CAA Designee ☐ CAA Aviation Safety Agent ☐ Manufacturer ☒ Repair Station ☐ Canadian Department of Transport Inspector of Aircraft ☐ Other (Specify)

DECEMBER 6, 1955
(Date of approval or rejection)

D. L. MORTON, CHIEF INSPECTOR
(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 12/13/55 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

(CAA designation number)

(Signature Aviation Safety Agent)

Reg. 3 KC
ASDO 5

JB—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

INSTRUCTIONS

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

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

8. DESCRIPTION OF WORK ACCOMPLISHED.*

1. #5 inspection (2000 hr), overhaul and following work accomplished.
2. Interior completely reupholstered, divans removed and 4 Aerosmith W-19 seats installed and pull tested per TSO C-25.
3. Grimes anti-collision light installed, model G-5790.
4. Electrical wing slot de-icer boots installed as per B.F. Goodrich dwg #G10982D, wired as per Grumman dwg #108750.
5. New instrument panel installed as per GM dwg #GM17-1201
6. Carburetor alcohol anti-icer system installed as per GM dwg #101100, approved on 337 dated 2-25-55 for Grumman G-73 serial number J-40, registration number: N-5110.
7. Radio equipment and antennas relocated as per attached equipment list
8. Nose taxi light installed as per Aero Trades dwg #SK100 & SK102.
9. Aircraft weighed as per attached weight & balance report and equipment list pages 1 thru 10.
10. All work accomplished in accordance with manufactures instructions and CAM 18.
11. For other repairs and modifications see attached work accomplished sheets 1 thru 3.

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

Check block if additional sheets are attached. ☐

U. S. GOVERNMENT PRINTING OFFICE — 16—54010-4

1 of 3

N-5116
Serial Number: J-56
December 6, 1955

DEC 13 1955

WORK ACCOMPLISHED

AIRFRAME GENERAL

#6 inspection completed (2000 hour)
New interior installed
Divans removed and 4 approved Aerosmith type W-19 seats installed
Seat mounting installation pull tested as per TSO C-25
New radio wiring installed and radio installation modified, equipment located as per attached Equipment List
Aircraft repainted
Cabin windows replaced
All corrosion removed and treated
Rivets replaced where necessary
Slight damage at hull near squat strut repaired
Dent in hull repaired on left side below cradel point
Guard installed over nose wheel indicator
New instruments and panel installed
Wings internally and externally inspected, necessary repairs & riveting accomplished

CONTROL SYSTEM

All fabric controls tested with Seyboth tester in green
Bearings and bolts replaced in control system where necessary
Replaced left main aileron cable at center section
Replaced right main aileron cable assembly
Pulleys, fairleads and push rods replaced as required
Removed, disassembled, inspected and replaced parts as necessary in control column
Rudder pedals and mountings inspected
All cables re-tensioned and lubricated.

DE-ICING AND ANTI-ICING SYSTEM

All de-icer boots replaced
Electrical wing slot de-icer boots installed as per B. F. Goodrich dwg # G109020, wired as per Grumman print #108750.
Overhauled prop and windshield alcohol system
Installed carburetor alcohol system as per 337 dated 2-25-55 for N-5110, serial number J-40, approved by R. Petras, Region 3 Engineering 3-25-54.

293

N-5116
Serial Number: J-56
December 6, 1955

WORK ACCOMPLISHED

HYDRAULIC SYSTEM

Hydraulic accumulator replaced
Flap relief valve replaced
Wing flap selector valve replaced
Left and right cowl flap actuating cylinders replaced
Left and right cowl flap selector valves replaced
Hydraulic pressure gauge replaced
D-357 valve replaced
285 valve replaced
Nose wheel actuating cylinder replaced
Hydraulic hand pump replaced
Wing flap actuating cylinders replaced
Brake shuttle valve replaced
Landing gear bumpers replaced
Individual parking brake valve installed as per "Aero Trades" approved installation.
Brake pucks replaced
Chrome brake discs installed
L/G dash pots replaced
Hydraulic brake lines replaced
L/G main wheel bearings replaced
Down lock hydraulic lines replaced
Entires hydraulic system checked for operation

ELECTRICAL

Nose taxi light installed as per drawing SK100 and SK102
Grimes rotating anti-collision light installed as per manufacturers instructions
All electric wiring checked and replaced as necessary
Generator control circuit modified for over voltage protectors
Individual ammeters and voltmeter installed
Instrument panel lighting modified
Ice lights installed
Inverter racks installed as per GM dwg #17119-2
Two inverters installed

ENGINES

#6 inspection completed on both engines
Right prop replaced
Right generator replaced
Left prop governor control cable replaced
Left carburetor heat control cable replaced

DEC 13 1955 383

N-5118
Serial Number: J-56
December 6, 1955

WORK ACCOMPLISHED

RADIO SECTION

Speakers installed in overhead panel
Radio control panel installed as per GM dwg 1211-11
Control box for RTA-1B installed in bulkhead above co-pilot seat
J box for radio installed beneath radio rack in rear baggage compartment
J box installed on right side of nose compartment bulkhead
Radio circuit breaker panel installed on right side of cockpit similar to electrical ~~circuit~~ circuit breaker panel installed on left side.
2 Lear type whip antennas installed on each side of nose compartment door
2 diapole antennas installed on top of vertical fin
Loop relocated as per attached Equipement List
Flux valve installed in vertical fin
Flux valve amplifier installed in cabnet aft of co-pilot bulkhead
T-11 relocated in tail baggage compartment.

N-5118
Serial Number: J-56
December 7, 1955

EQUIPMENT LIST

REQUIRED EQUIPMENT

ITEM NO.		WEIGHT	ARM
1	2 Ham Std Props, Hubs 23D40-51 blades 6533A-18	252 ea.	154
2	Ham Std Prop Gov type 4K11	6 ea	162
102	2 Oil coolers (Clifford Mfg Co) 10" X 9"	18	184
103 (c)	System fuel & oil	102	194
104 (b)	Thompson TFD-10300 Electric Fuel boost pumps	7 ea	204
201	2 9.50 X 16 main wheels & brakes with 6 ply nylon tires	120 ea	237
202	19 X 6.89-10 nose wheel & 6 ply tire	37	59
302	Exide battery 12-ES-9L		
401	CAA Approved Airplane Flight Manual (Revised)	73	229

DE-ICING EQUIPMENT

501	Surface de-icers Goodrich type II, model 705		
	(a) Two wing boots (removable)	24	210
	(b) Stabilizer boot (removable)	8	505
	(c) Fin boot (removable)	7	533
	(d) De-icer fixed portion electronically cycled installation	74	279
502	Propeller Anti-Icer		
	(a) Prop lines & Ham Std slinger rings	4	154
	(b) 7.5 gal alcohol tank, pump & accessories (fluid wt 50 lbs)	62	240
503	Windshield Anti-Icer Utilizes fluid from prop anti-icer tank		
	Carb anti-icer system (Dwg #101100) fluid weight 50 lbs	65	250

DEC 1 [illegible]

B-5118
Serial Number 1-56
December 7, 1955

EQUIP MT LIST

Item No.		Weight	
1	2 Gas [illegible], Model [illegible]-51 Dieses [illegible]-1R	292 ea.	[illegible]
2	[illegible] Iron for type [illegible]	6 ea.	[illegible]
102	2 Oil coolers (Oil ord [illegible] Co) 10" x 9"	12	[illegible]
103 (a)	Water fuel & oil	102	[illegible]
104 (a)	Hamerson [illegible]-1000 Electric fuel boost pumps	7 ea.	[illegible]
201	2 9.00 x 16 main wheels & brakes with 6 ply nylon tires	320 ea.	[illegible]
202	1 5.00-10 nose wheel & 6 ply tire	17	[illegible]
203	Axle battery 12-80-[illegible]		
301	Oil Improved Airplane Flight Manual (Pilot)	13	[illegible]
501	Surface de-icers Goodrich type II, Model 705		
	(a) Two wing boots (removable)	24	[illegible]
	(b) Stabilizer boot (removable)	8	[illegible]
	(c) Fin boot (removable)	7	[illegible]
	(d) De-icer fluid pumpion electron-ically actual installation	70	[illegible]
502	Propeller Anti-Ice		
	(a) Prop lines & Nam Sta slinger rings	4	[illegible]
	(b) 7.5 gal alcohol tank, pump & accessories (fluid wt 50 lbs)	52	[illegible]
503	Windshield Anti-Icer Utilize fluid from prop anti-icer tank		
	Pneu anti-icer system (Ok dry [illegible]) fluid weight 50 lbs	6	[illegible]

E-5118
Serial Number: J-56
December 7, 1955

EQUIPMENT LIST

	WEIGHT	ARM
Two generators, 100 amp Leece Neville type 2473G12	32 ea	175
Two starters, Eclipse type 36E00	27 ea	191
Two fuel booster motors, Delco	7 ea	204
Two engine fuel pumps, Pesco	6 ea	204
Two vacuum pumps, Pesco 207	4 ea	184
Two tach generators, Kollsman type 1001802		
Two prop feathering pumps, Hm Std 59664-1		
Surface combustion heater ADS-100H-P410	90	439
Two Pratt & Whitney R-1340 S3H1 Engines		
Two landing lights Grimes C-3801-1	7 ea	251
One nose taxi light		16
Two voltage regulators type 1042	2.5	248
Two windshield wipers, Kearfoot type 6	2	99
One thermos bottle	4	229
One thermos bottle	4	242
Sink in lavatory compartment	6	347
Two carbon dioxide bottle, engine fire extinguisher	40 ea	237
Chemical toilet		
One thermos bottle	3	374
Two coat closets	4	342
One set of position lights		
One position light flasher	2.1	433
One fire extinguisher	10	153
One fire extinguisher	10	386
One fire axe	2.5	386
One Grimes Anti-collision light G-5790		248
One Misco tank or portable ice box	42	420

R-5118
Serial Number: J-56
December 7, 1955

EQUIPMENT LIST

INTERIOR EQUIPMENT	WEIGHT	ARM
2 passenger chairs (rear cabin)	35 lbs	326
2 passenger chairs rear	35	286
2 passengers chairs fwd	35	209
2 passenger chairs fwd	35	162
1 first aid kit	6	366
1 Bilge pump, Perko	9	353
~~XXXXXXXXXXXXXX~~		
1 boarding ladder	31	351
20 each fire detector engine compartment Wilcolator A4981	.15 ea	190
1 "Fasten Seat Belt No Smoking Sign"	2.2	145
Oxygen installation including 1 cylinder	50	300
100 feet 1/2" nylon rope	7	70
100 feet 1/4" nylon rope	1.5	70
1 tow bar	9	408
1 tool box		425
1 each emergency light (B. K. Sweeney)		140
1 each emergency light (B. K. Sweeney)		380

N-5118
Serial Number: J-56
December 7, 1955

EQUIPMENT LIST

RADIO EQUIPMENT	WEIGHT	ARM
1 R5-ARN-7 ADF Receiver	54.5	37
1 Battery box for aux receiver 104	5.2	48
1 Isolation amplifier F-11	8	35
1 R-23-ARC-5 Range receiver	11.5	38
2 Bendix power supply MP-74A	19	22
1 MN-89B Glide slope	13.5	36
1 PE-86 Dynamotor	9.5	22
1 RMI amp MN-89A	6.3	31
1 AVR 104 amp	1.4	43
1 T-11 Transmitter	3.5	390
2 MN-85 VOr nav receivers (31 ea.)	62	401
1 AVR receiver ARV 104 control head	1.4	91
1 RTA-1C transmitter	75	413
1 OMNI bearing indicator	1	395
1 Lear gyro amplifier	10.5	145
2 Inverters & relays (13.5 ea)	27	146.5
1 ADF Loop		148
2 VHF Nav Antennas		530
1 Range antenna		70
1 ADF sense antenna		70
1 Horse tail antenna VHF		
1 Bull ring glide slope antenna		100
1 MN53 Marker receiver	11.75	413

B-5118
Serial Number: J-56
December 7, 1955

EQUIPMENT LIST

INSTRUMENT PANEL	WEIGHT	ARM
Vacuum gyro horizon		93
Airspeed indicator (2 each)		90
Aux AVR 104 radio head		92
Flap position indicator		89
Directional gyro		91.5
Vertical speed indicator (2 each)		90
Cross pointer		90
Altimeter (2 each)		90.5
Radio compass head		91.5
Clock (2 each)		92.5
Engine gauge unit (2 each)		91
Turn & bank indicator (2 each)		90.5
Electric gyro horizon		89.5
Omni mag		89.5
Carb air temp indicator		92
Magnetic compass		104
Volt ammeters (2 each)		95
Voltmeter		
Fuel quantity indicator		117
Outside air temp indicator		91.5
Cylinder heat temp indicator		92.5
Tach indicator		91
Hook		53
Anchor		67
Rope		61
Bird proof windshield G.A.E.C. #107460	9.7	107

GENERAL MOTORS CORPORATION

Detroit City Airport

Detroit 13, Mich.

Date: 6 December 1955 License: N-5118

By: P. C. Griep Serial: J-56

CAA: D. L. Morton Model: Grumman G-73 (Mallard)

Weighed with an electric weighing unit

Cox and Stevens
Model C-57 Serial 1519
Calibrated 2-10-55

Results: Aircraft empty dry weight:

1. Land Plane Configuration

10,155.5 pounds at 223.2" (arm) or 226.83 (index)

CAA empty weight C.G. location is
→10.447" from rear face of main beam or
22.9% MAC

2. Amphibian Configuration

10,350 pounds at 223.5" (arm) or 231.7 (index units)

CAA empty weight C.G. location is
→10.147" from rear face of main beam or
23.25% MAC

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

Date: 6 December 1955

License: N-5118

Aircraft Weight & Balance

Wheel	Scale Reading	Correction	Net Wt.	Arm	Moment
Left Main (yellow)	4846	+2	4848		
Right Main (blue)	4861	+1	4862		
Sub-Total	9707	+3	9710	233.647	2,266,000
Nose (red)	656	+1	657	93	61,100
Total	10,363	+4	10,367		2,327,100

Index = $\frac{\text{weight x arm}}{10,000}$ As weighed index = 232.71

Items weighed not a part of Empty Dry Weight

	Weight	Index
Oil (18 gal)	135	2.9
Alcohol (1.5 gal)	10.5	.24
RTA-1B	75	3.1
	220.5	6.24

Items not weighed to be included in Empty Dry Weight

	Weight	Index
Tow Bar	9	.35

I. Empty Dry Weight in land plane configuration including residual fuel

	Weight	Index
As weighed	10,367	232.71
Minus	- 220.5	-6.24
Plus	+ 9	+ .35
	10,155.5	226.83

Land Plane 10,155.5# at 223.2(arm) or 226.83 (index)

II. Empty Dry Weight - Amphibian

	Weight	Index
Empty Dry - Land	10,155.5	226.83
Floats	102	2.387
Bilge pump, anchor, rope, gaff	36	.234
10 ea Life preservers (Mae West)	17.5	.7
1 ea four-man life raft	39	1.56
	10,350.0	231.71

Amphibian 10,350# at 223.5(arm) or 231.7 (index)

Date: 6 December 195

License: N-5118

Examples for Checking Loading

All examples are given first in Land configuration and then in Amphibian configuration

1. Basic Loading	Weight	Index
Dry Weight	10,155.5	226.83
Pilot	170	2.1
Co-pilot	170	2.1
Oil (16 gal)	120	2.6
Alcohol (15 gal)	102.	2.4
	10,717.5	236.03
Amphibian	194.5	4.88
	10,912.0	240.91

2. Maximum Fuel		
Basic Weight	10,717.5	236.03
Fuel (338 gal)	2,028.0	44.5
	12,745.5	280.53
Amphibian		
Basic Weight	10,912	240.91
Fuel (306 gal)	1,836	41.5
	12,748	282.41

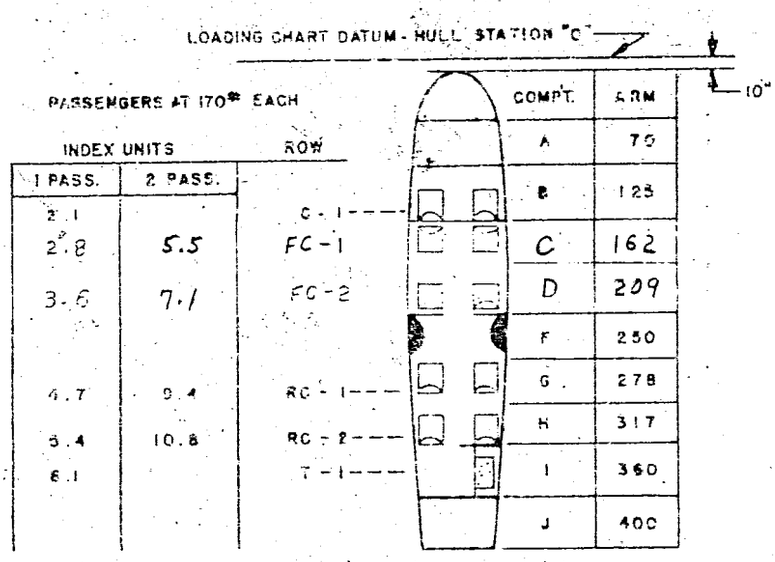
3. Most Rearward Loading		
Basic Weight	10,717.5	236.03
4 Passengers L3	170	4.7
L4	170	5.4
R3	170	4.7
R4	170	5.4
Minimum fuel (91 gal)	546	11.9
	11,943.5	268.13
Amphibian	194.5	4.88
	12,138.0	273.01

4. Most Forward Loading		
Basic Weight	10,717.5	236.03
4 Passengers L1	170	2.75
L2	170	3.55
R1	170	2.75
R2	170	3.55
Minimum Fuel (91 gal)	546	11.90
	11,943.5	260.53
Amphibian	194.5	4.88
	12,138.0	265.41

To obtain the index units refer to the loading chart tables with the respective weights.

PASSENGER AND CARGO LOADING DIAGRAM

Maximum Allowable Take-Off Gross Weight 12750
Maximum Allowable Landing Gross Weight 12750



NOTE: 1. The airplane shall be so loaded that the plot of Gross Weight vs. Index Units falls within the limiting lines on the Center of Gravity Limit Chart on page 60. Basic Weight and Index Units for the empty airplane plus Pilot are given above or on page 65. Index Units for Fuel, Oil, Cargo or Baggage, and Miscellaneous items are obtained from their respective tables, and Index Units for Passengers from diagram above.

2. IT IS THE RESPONSIBILITY OF THE OWNER AND THE PILOT to insure that the airplane is loaded properly. The Empty Weight and Empty Weight C.G. are listed on page 63 for this airplane as delivered from the factory. If the airplane has been altered, refer to the latest approved Alteration and Repair Form (A.C.A.—337) for the information necessary to revise the Airplane Basic Weight on page 65 of this report.

MALLARD

CHART 4

MALLARD LOADING CHART
CENTER OF GRAVITY LIMIT CHART

DEC 1955

Gross Wt.	Center of Gravity in Percent of M.A.C. 15%	16%	18%	20%	22%	24%	25%	26%	26.5%
10000	216.4	217.2	219.0	220.7	222.4	224.1	225.0	225.9	226.4
10050	217.4	218.3	220.0	221.8	223.5	225.3	226.1	227.0	227.5
10100	218.5	219.4	221.1	222.9	224.6	226.4	227.3	228.1	228.6
10150	219.6	220.5	222.2	224.0	225.7	227.5	228.4	229.2	229.7
10200	220.7	221.6	223.3	225.1	226.9	228.6	229.5	230.4	230.9
10250	221.8	222.7	224.4	226.2	228.0	229.7	230.6	231.5	232.0
10300	222.8	223.7	225.5	227.3	229.1	230.9	231.8	232.6	233.1
10350	223.9	224.8	226.6	228.4	230.2	232.0	232.9	233.8	234.3
10400	225.0	225.9	227.7	229.5	231.3	233.1	234.0	234.9	235.4
10450	226.1	227.0	228.8	230.6	232.4	234.2	235.1	236.0	236.5
10500	227.2	228.1	229.9	231.7	233.5	235.3	236.3	237.2	237.7
10550	228.2	229.2	231.0	232.8	234.6	236.5	237.4	238.3	238.8
10600	229.3	230.3	232.1	233.9	235.8	237.6	238.5	239.4	239.9
10650	230.4	231.3	233.2	235.0	236.9	238.7	239.6	240.5	241.0
10700	231.5	232.4	234.3	236.1	238.0	239.8	240.8	241.7	242.2
10750	232.6	233.5	235.4	237.2	239.1	241.0	241.9	242.8	
10800	233.6	234.6	236.5	238.3	240.2	242.1	243.0	243.9	
10850	234.7	235.7	237.6	239.4	241.3	243.2	244.1	245.1	
10900	235.8	236.8	238.7	240.5	242.4	244.3	245.3	246.2	
10950	236.9	237.9	239.8	241.6	243.5	245.4	246.4	247.3	
11000	238.0	238.9	240.8	242.7	244.7	246.6	247.5	248.4	
11050	239.1	240.0	241.9	243.9	245.8	247.7	248.6	249.6	
11100	240.1	241.1	243.0	245.0	246.9	248.8	249.8	250.7	
11150	241.2	242.2	244.1	246.1	248.0	249.9	250.9	251.8	
11200	242.3	243.3	245.2	247.2	249.1	251.0	252.0	253.0	
11250	243.4	244.4	246.3	248.3	250.2	252.2	253.1	254.1	
11300	244.5	245.5	247.4	249.4	251.3	253.3	254.3	255.2	
11350	245.6	246.5	248.5	250.5	252.4	254.4	255.4	256.4	
11400	246.6	247.6	249.6	251.6	253.5	255.5	256.5	257.5	
11450	247.7	248.7	250.7	252.7	254.7	256.6	257.6	258.6	
11500	248.8	249.8	251.8	253.8	255.8	257.8	258.8	259.7	
11550	249.9	250.9	252.9	254.9	256.9	258.9	259.9	260.9	
11600	251.0	252.0	254.0	256.0	258.0	260.0	261.0	262.0	
11650	252.0	253.1	255.1	257.1	259.1	261.1	262.1	263.1	
11700	253.1	254.1	256.2	258.2	260.2	262.2	263.3	264.3	
11750	254.2	255.2	257.3	259.3	261.3	263.4	264.4	265.4	
11800	255.3	256.3	258.4	260.4	262.4	264.5	265.5	266.5	
11850	256.4	257.4	259.5	261.5	263.6	265.6	266.6	267.6	
11900	257.5	258.5	260.6	262.6	264.7	266.7	267.8	268.8	
11950	258.5	259.6	261.6	263.7	265.8	267.8	268.9	269.9	
12000	259.6	260.7	262.7	264.8	266.9	269.0	270.0	271.0	
12050	260.7	261.8	263.8	265.9	268.0	270.1	271.1	272.2	
12100	261.8	262.8	264.9	267.0	269.1	271.2	272.3	273.3	
12150	262.9	263.9	266.0	268.1	270.2	272.3	273.4	274.4	
12200	263.9	265.0	267.1	269.2	271.3	273.5	274.5	275.5	
12250	265.0	266.1	268.2	270.3	272.5	274.6	275.6	276.7	
12300	266.1	267.2	269.3	271.4	273.6	275.7	276.8	277.8	
12350	267.2	268.3	270.4	272.5	274.7	276.8	277.9	278.9	
12400	268.3	269.4	271.5	273.6	275.8	277.9	279.0	280.1	
12450	269.4	270.4	272.6	274.7	276.9	279.1	280.1	281.2	
12500	270.4	271.5	273.7	275.9	278.0	280.2	281.3	282.3	
12550	271.5	272.6	274.8	277.0	279.1	281.3	282.4	283.4	
12600	272.6	273.7	275.9	278.0	280.2	282.4	283.5	284.6	
12650	273.7	274.8	277.0	279.2	281.3	283.5	284.6	285.7	
12700	274.8	275.9	278.1	280.3	282.5	284.6	285.8	236.8	
12750	275.8	277.0	279.2	281.4	283.6	285.8	286.9	238.0	

← Forward Limit Rearward Limit →

CHART 1

BAGGAGE
Compartment B

Weight	Index
30	1.2
60	2.4
90	3.6
120	4.8
150	6.0
180	7.2
210	8.4
240	9.6
270	10.8
300	12.0
330	13.2
360	14.4
390	15.6
420	16.8
450	18.0
480	19.2
510	20.4
540	21.6

CHART 2

FUEL (6 lbs/Gal)
MAIN TANKS

Gal	Weight	Index
20	120	2.6
40	240	5.3
60	360	7.9
80	480	10.5
100	600	13.2
120	720	15.8
140	840	18.4
160	960	21.1
180	1080	23.7
200	1200	26.4
220	1320	29.0
240	1440	31.6
260	1560	34.3
280	1680	36.9
300	1800	39.5
320	1920	42.2
340	2040	44.8
360	2160	47.4
380	2280	50.1
	N5110	only

CHART 3

OIL (7.5 lbs/Gal)

Gal	Weight	Index
5	37.5	.8
10	75	1.6
15	112.5	2.4
20	150	3.2

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

JUN 27 1955

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)

	MAKE	MODEL	SERIAL NO.	NATIONALITY AND REGISTRATION MARK
1. AIRCRAFT	GRUMMAN	G-73	J-56	N-5118

	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
2. OWNER	GENERAL MOTORS CORPORATION	3044 WEST GRAND BLVD. DETROIT 2, MICHIGAN

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check) MAJOR REPAIR	MAJOR ALTERATION
a. AIRFRAME	(As described in item 1 above)				XXX
b. POWERPLANT					
c. PROPELLER					
d. 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)*
AIRPLANE	9868.8 with floats 9766.8 without floats	-12.55 with floats -12.67 without floats	2881.2 floats on 2983.2 floats off

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
D. L. Morton for G. M. Air Transport Section Detroit City Airport Detroit 13, Michigan	☒ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	12159

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.

6-23-55 (Date repair and/or alteration completed)

D. L. Morton (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 ☐ REJECTED BY ☒ CAA Designee ☐ CAA Aviation Safety Agent ☐ Manufacturer ☐ Repair Station ☐ Canadian Department of Transport Inspector of Aircraft ☐ Other (Specify)

6-23-55 (Date of approval or rejection)

D. L. Morton #173
D. L. Morton (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 6/27/55 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

KC-2575 (CAA designation number)

Y. J. Smalley (Signature Aviation Safety Agent)

16—54010-4

Form ACA-337 (4-52)

INSTRUCTIONS

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

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

8. DESCRIPTION OF WORK ACCOMPLISHED.*

Removed cabin radio and cabinet.

	Weight	Arm	Moment
Aircraft empty	9903.8	221.2	2190720.56
Radio & cabinet	-35	240	-8400
New empty weight with floats installed	9868.8		2182320.56
New Empty C.G. floats on	-12.55		Index 218.23
New empty weight with floats removed	-102	234	-23868
	9766.8		2158452.56
New empty C.G. floats removed	-12.67		Index 215.84

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

Check block if additional sheets are attached. ☐

U. S. GOVERNMENT PRINTING OFFICE 16—54010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

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

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	b. AIRCRAFT MODEL	c. AIRCRAFT SERIAL NO.
GRUMMAN	G-73	J-56

d. ENGINE MAKE	e. ENGINE MODEL
Partt & Whitney	R-1340-S1H1

4. AIRCRAFT REGISTRATION INFORMATION (*Complete all items*)

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
General Motors Corporation	3044 W. Grand Blvd. Detroit 2, Michigan	N- 5118

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 Feburary 13, 1951
b. ☐ APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B). FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON _____ (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

Ford A Pine
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

7-15-54 (DATE)
Agent (TITLE)

16—60337-2

Form ACA-305 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

JUL 27 1954

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

AIRCRAFT INSPECTION REPORT

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

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

1. AIRCRAFT AND ENGINE CERTIFICATION BASIS

a. ☒ AIRCRAFT SPECIFICATION NO. A-783 THROUGH SHEET REVISION NO. 4
b. ☐ AIRCRAFT LISTING PAGE NO. _____
c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 1953 (YEAR) THROUGH CARD NO. 54-14
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 2063:30 HOURS
d. ☒ ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:

SERIAL NO. 14657 TOTAL HOURS 374:25
SERIAL NO. 327982 TOTAL HOURS 506:15
SERIAL NO. _____ TOTAL HOURS _____
SERIAL NO. _____ TOTAL HOURS _____

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

a. LAST AIRWORTHINESS INSPECTION CONDUCTED 7-15-54 (DATE)
☐ BY AIRCRAFT MANUFACTURER
☐ BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
☒ BY MECHANIC, CERTIFICATE NO. 72106-41
b. ☒ PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

RECEIVED AUG 2 4 07 PM '54 RECORDS BRANCH V-500

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED

a. ☐ OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
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 7-15-55 (DATE)
g. ☒ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 8-27-54 (DATE)
BY Dan Kelley (NAME OF ISSUING REPRESENTATIVE) 3376 (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

(REPAIR STATION AUTHORIZED SIGNATURE) _____ (DATE) _____

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
W. L. Morton	173	7-15-54	
AVIATION SAFETY AGENT'S SIGNATURE	CAA DESIGNATION NO.	DATE	☒ ACCEPTED ☐ REINSPECTED ☐ SPOT CHECKED
J. Dudley	Reg. 8 RO ASDO 5	7/28/54	

☐ ATTACHMENT

U. S. GOVERNMENT PRINTING OFFICE 16—60837-2

Form ACA-305a (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

9

5118

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	MODEL: G-73	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N5118
2. OWNER	NAME (First, middle, last): GENERAL MOTORS CORPORATION	ADDRESS (Street and number, city, zone and State): 3044 WEST GRAND BLVD. DETROIT 2, MICHIGAN		

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check): MAJOR REPAIR	MAJOR ALTERATION
a. AIRFRAME	(As described in item 1 above)				
b. POWERPLANT				XX	
c. PROPELLER					
d. 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	WITH FLOATS 9903.3	-12.45	2846.2
	FLOATS REMOVED 9801.8	-12.56	2948.2

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
AERO TRADES INC. MAC ARTHUR AIRPORT RONKONKOMA, NEW YORK	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	115

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.

DEC. 29, 1954 (Date repair and/or alteration completed)

Joseph R. Etzel (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 ☐ REJECTED BY ☐ CAA Designee ☐ CAA Aviation Safety Agent ☐ Manufacturer ☒ Repair Station ☐ Canadian Department of Transport Inspector of Aircraft ☐ Other (Specify)

AERO TRADES INC. MacARTHUR AIRPORT RONKONKOMA, L. I., N. Y.

DEC. 29, 1954 (Date of approval or rejection)

Joseph R. Etzel
JOSEPH R. ETZEL, CHIEF INSPECTOR (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 1-21-55 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

agent (CAA designation number)

R G Poole (Signature Aviation Safety Agent)

16—54010-4

JAN 6 REC'D

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

INSTRUCTIONS

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

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

8. DESCRIPTION OF WORK ACCOMPLISHED.*

REPLACED MAIN LEFT AND RIGHT UPPER AND LOWER LANDING GEAR LEGS WITH OVERHAULED ASSEMBLIES, CONSULT ATTACHED PHOTO STAT FOR APPROVAL OF LOWER SECTION INSTALLED IN RIGHT POSITION.
REPLACED LEFT AND RIGHT MAIN LANDING GEAR DRAG LINKS WITH OVERHAULED DRAG LINKS.
INSTALLED NEW MAIN DRAG LINK PIN BUSHINGS P/N112308 IN L/R SIDES, BUSHINGS LINE REAMED TO FIT NEW DRAG LINK PINS.
COMPLETE NOSE WHEEL ASSEMBLY, INCLUDING SHIMMY DAMPER AND RETRACT CYLINDER OVERHAULED AND REINSTALLED.
NOSE WHEEL REBALANCED.
MAIN LANDING GEAR ACTUATING CYLINDERS, OVERHAULED & REINSTALLED.
MAIN LANDING GEAR DOWN LOCK CYLINDERS OVERHAULED AND REINSTALLED.
LANDING GEAR DASHPOTS OVERHAULED AND REINSTALLED.
REPLACED ALL DOWN LOCK HYDRAULIC FLEX LINES ON L/R LANDING GEARS.
REPLACED SHEARED RIVIT ON OUTBOARD SIDE OF RIGHT UPPER WHEEL WELL.

END.

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

Check block if additional sheets are attached. ☒

U. S. GOVERNMENT PRINTING OFFICE 16—54010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

10

5118

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	MODEL	SERIAL NO.	NATIONALITY AND REGISTRATION MARK
	GRUMMAN	G-73	J-56	N5118

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and state)
	Aero Trades, Inc.	Mac Arthur Airport Ronkonkoma, New York

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				XX	
c. PROPELLER					
d. APPLIANCE	TYPE AND MANUFACTURER Bendix M/Gear Assy.	L/H 69629 R/h 69630			

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	WITH FLOATS 9905.8	-12.45	2346.2
	FLOATS REMOVED 9801.8	-12.55	2948.2

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Central Aviation & Marine Corp. Mac Arthur Airport Sayville, NY	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	3585

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.

12-29-54
(Date repair and/or alteration completed)

R. Kane Chief Inspector.
(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 / ☐ REJECTED } BY { ☐ CAA Designee ☐ CAA Aviation Safety Agent ☐ Manufacturer ☒ Repair Station ☐ Canadian Department of Transport Inspector of Aircraft ☐ Other (Specify)

DECEMBER 29, 1954
(Date of approval or rejection)

Joseph R. Etzel
JOSEPH R. ETZEL, CHIEF INSPECTOR
(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 1-21-55 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

agent
(CAA designation number)

R. G. Poole
(Signature Aviation Safety Agent)

16—54010-4

Form ACA-337 (4-52)

INSTRUCTIONS

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

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

8. DESCRIPTION OF WORK ACCOMPLISHED.*

Overhauled and tested as per manufacturers specifications.

Note: See attached Photostat, on L/G leg.

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

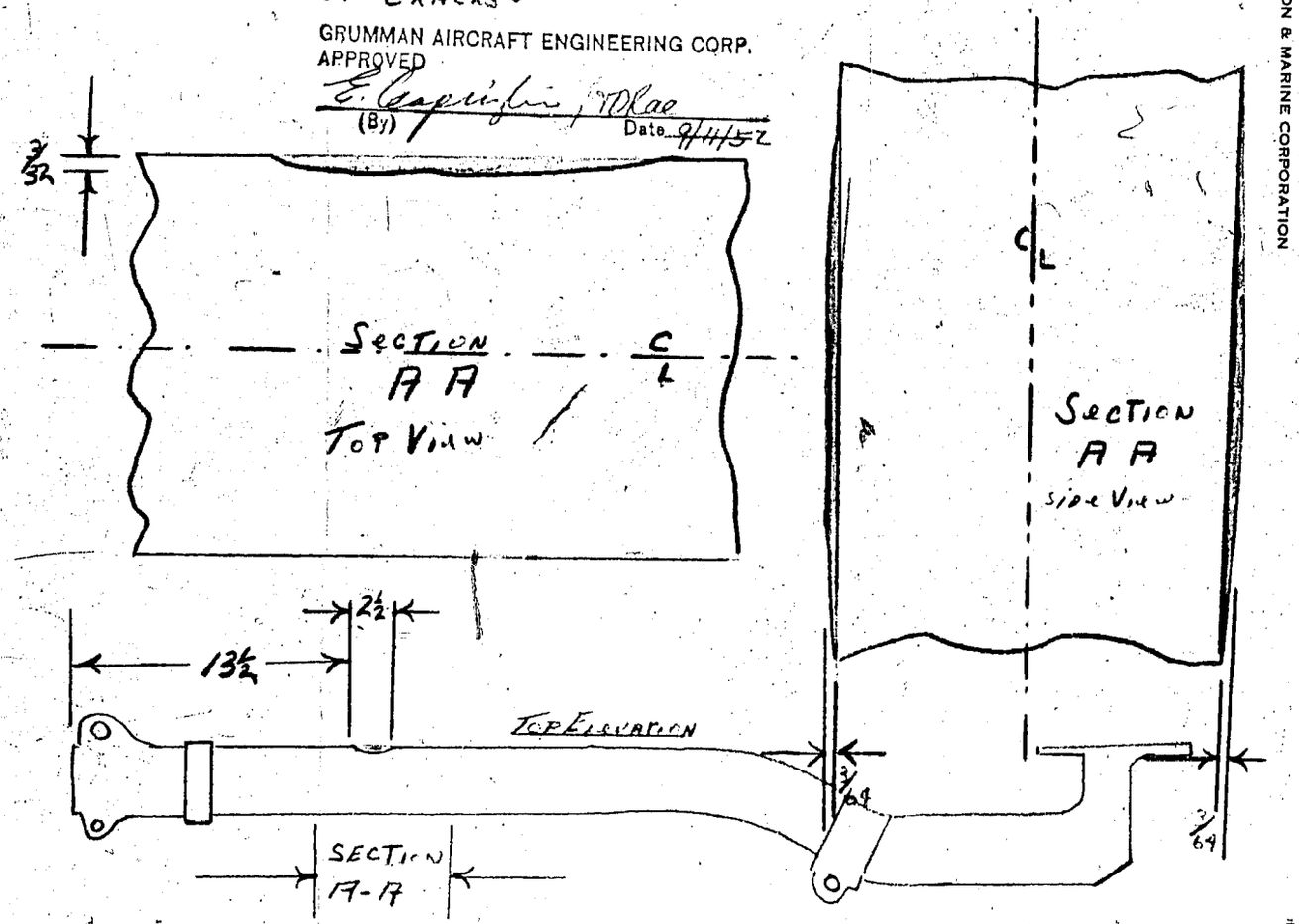
Check block if additional sheets are attached: ☒

U. S. GOVERNMENT PRINTING OFFICE 16—54010-4

NOTE -
DAMAGE CONSISTS OF DENTED AREA INDICATED, DEPTH OF DENT APPX. 3/32 IN. SWELLING AT SIDE OF DENT 3/64 PER SIDE
NO INDICATION OF CRACKS -

GRUMMAN AIRCRAFT ENGINEERING CORP.
APPROVED
E. Caprigliano / DRae
(By) Date 9/4/52

GRUMMAN WALLARD
MAIN L/G LOWER LUG.
BENDIX P/N 69824



CENTRAL AVIATION & MARINE CORPORATION

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

AUG 28 1953

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

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

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	b. AIRCRAFT MODEL	c. AIRCRAFT SERIAL NO.
GRUMMAN	MALLARD G-73	J-56

d. ENGINE MAKE	e. ENGINE MODEL
Pratt & Whitney	R-1340

4. AIRCRAFT REGISTRATION INFORMATION (*Complete all items*)

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
GENERAL MOTORS CORPORATION	3044 W.Grand Blvd, Detroit 2, Michigan.	N-5118

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 February 13, 1951
b. ☐ APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B). FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON _____ (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-3[illegible]
☐ ACA-317
☐ WEIGHT AND BALANCE REPORT
☐ DATA, DRAWINGS, ETC.
☐ UNAPPROVED DEVIATION DATA

Sidney O. Everett
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

8-27-53 (DATE) Agent. (TITLE)

16—60587-2

Form ACA-305 (11-51)

12-60

083

aw 10-2-3

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

SEP 22 1953

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

AIRCRAFT INSPECTION REPORT

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

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

1. AIRCRAFT AND ENGINE CERTIFICATION BASIS
   - a. [X] AIRCRAFT SPECIFICATION NO. A-783 THROUGH SHEET REVISION NO. 4
   - b. [ ] AIRCRAFT LISTING PAGE NO. _____
   - c. [X] AIRWORTHINESS DIRECTIVE SUMMARY 1953 (YEAR) THROUGH CARD NO. 53-16
   - 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. [X] COMPLIANCE WITH APPLICABLE AIRWORTHINESS DIRECTIVES RECORDED
   - c. [X] AIRCRAFT RECORDS INDICATE THE AIRFRAME HAS BEEN OPERATED A TOTAL OF 1542.45 HOURS
   - d. [X] ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
     - SERIAL NO. 18099 TOTAL HOURS 767.40
     - SERIAL NO. 11840 TOTAL HOURS 767.40
     - SERIAL NO. _____ TOTAL HOURS _____
     - SERIAL NO. _____ TOTAL HOURS _____

3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)
   - a. LAST AIRWORTHINESS INSPECTION CONDUCTED August 26, 1953 (DATE)
     - [ ] BY AIRCRAFT MANUFACTURER
     - [ ] BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
     - [X] BY MECHANIC, CERTIFICATE NO. A & E 154311
   - b. [X] PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED
   - a. [ ] OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
   - b. [X] CURRENT OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
   - c. [X] CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT
   - d. [X] CURRENT WEIGHT AND BALANCE INFORMATION IS AVAILABLE IN AIRCRAFT
   - e. [X] THIS INSPECTION HAS BEEN RECORDED IN THE AIRCRAFT RECORDS
   - f. [X] CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISSUED TO EXPIRE August 27, 1954 (DATE)
   - g. [X] PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE November 22, 1953 (DATE)
     BY Dan Kelley (NAME OF ISSUING REPRESENTATIVE) (DATE) 3376 (DESIGNATION NO.)

RECEIVED SEP 30 1 45 PM '53 ADMIN. & RECORDS BRANCH W-300

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

   (REPAIR STATION AUTHORIZED SIGNATURE) _____ (DATE) _____

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
DAN KELLEY Dan Kelley	3376	August 27, 1953	
AVIATION SAFETY AGENT'S SIGNATURE	CAA DESIGNATION NO.	DATE	[X] ACCEPTED
Albert L Mueller	3-257-5	9-25-53	[ ] REINSPECTED
			[ ] SPOT CHECKED

[ ] ATTACHMENT

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

5-D

Form ACA-337
(11-48)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form Approved.
Budget Bureau No. 41-R052.2.

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

(SEE REVERSE SIDE OF THIS FORM FOR INSTRUCTIONS)

	MAKE	MODEL	SERIAL NO.	NATIONALITY AND REGISTRATION MARK
1. AIRCRAFT	Grumman	G-73	J-56	N5118

	NAME (*First, middle, last*)	ADDRESS (*Street and number, city, zone, and State*)
2. OWNER	General Motors Corporation	3044 West Grand Blvd. Detroit 2, Michigan

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*) ◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆◆				XX
b. PROPELLER BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER				

4. AIRCRAFT

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

WEIGHT AND BALANCE DATA

	EMPTY WEIGHT (*Pounds*)*	EMPTY CENTER OF GRAVITY (*Inches from datum*)*	USEFUL LOAD (*Pounds*)*
With Floats *Weight and balance data and/or alterations described below were made.*	9903.8	-12.45 F	2846.2
With floats removed	9801.8	-12.55	2948.2

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

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

	NAME	ADDRESS (*Street and number, city, zone, and State*)	DATE WORK ACCOMPLISHED
6. AGENCY	General Motors Hangar	Detroit City Airport Detroit 5, Michigan	4-8-53

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.)

This form ACA337 supplements ACA337 dated 1-27-53 in order to show empty weight and empty C.G. of airplane with and without wing floats installed so that future removal and installation can be recorded by log book entry.

Wing floats removed:	Empty weight with floats	Arm	Moment
	9903.8	221.2	2,190,735.14
Weight of Floats	-102.0	234.0	-23,868.00
Empty weight of aircraft w/o floats	9801.8	221.1	2,166,865.14

With wing floats removed CG range is -17.3 to -8.4

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.

Arthur Hazen (Signature of supervising mechanic) — 154311 A&E (Certificate number and rating) — APRIL 8, 1953 (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

	DESIGNEE'S SIGNATURE	NO.	DATE
☒ APPROVED	Dan Kelley Dan Kelley	3376	4-8-53
☐ REJECTED	CAA AGENT SIGNATURE Victor Faipele	☐ ACCEPTED ☐ REINSPECTED	DATE 4-8-53

16—54010-2

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, 3*a*, 4, 5, 6, and 7.

   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.

   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.

   b. **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.

   c. **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

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

6-D

A1

Form ACA-337
(11-48)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

DEC 29 1952

Form approved.
Budget Bureau No. 41-R052.3.

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

(SEE REVERSE SIDE OF THIS FORM FOR INSTRUCTIONS)

1. AIRCRAFT	MAKE: Grumman	MODEL: G-73	SERIAL NO.: J-56	NATIONALITY AND REGISTRATION MARK: N5118
2. OWNER	NAME (*First, middle, last*): General Motors Corp.	ADDRESS (*Street and number, city, zone, and State*): 3044 W. Grand Blvd Detroit 2, Mich.		

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*)				XX
b. PROPELLER BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER				

4. AIRCRAFT WEIGHT AND BALANCE DATA

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

*AFTER the repairs and/or alterations described below were made.	EMPTY WEIGHT (*Pounds*)*	EMPTY CENTER OF GRAVITY (*Inches from datum*)*	USEFUL LOAD (*Pounds*)*
	9,801.8	-12.55	2,948.2

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

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

6. AGENCY	NAME	ADDRESS (*Street and number, city, zone, and State*)	DATE WORK ACCOMPLISHED
	General Motors Hangar	Detroit City Airport Bay #1, Detroit 5, Mich.	12/21/52

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

	WT	ARM	MOMENT
Removed wing floats:			
Previous Empty Weight of Aircraft	9903.8	221.2	2,190,733.14
Floats removed	-102.0	234.0	-23,868.00
New Empty Weight of Aircraft	9801.8	221.1	2,166,865.14

New useful Load: 2,948.2
New Computed E. C. G. is -233.65 ÷ 221.1 = - 12.55

(OVER)

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

APPROVED, SUBJECT TO INSPECTION
AIRCRAFT ENGINEERING BRANCH
C. A. A. - REGION 3
BY [illegible] DATE 1/6/53

☒ FORWARDED FOR ENGINEERING APPROVAL

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

Arthur Hazen (Signature of supervising mechanic) 154311 A+E (Certificate number and rating) 12-26-52 (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED	DESIGNEE'S SIGNATURE	NO.	DATE
☐ REJECTED	CAA AGENT SIGNATURE: R Kenny	☐ ACCEPTED ☐ REINSPECTED	DATE 1-27-53

16—54010-3

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, 3*a*, 4, 5, 6, and 7.

     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.

     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.
   - *b.* 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.
   - *c.* 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—64010-2 U. S. GOVERNMENT PRINTING OFFICE

Loading Schedule Revised Accordingly

Upon satisfactory completion of CAA flight tests to substantiate removal of the floats, the landing gear warning system will be revised to incorporate aural as well as visual indications of gear position. A Form ACA-337 covering such changes will be submitted at a later date.

*With wing floats removed, CG range is -17.3 to -8.4. ← Rpt to CAA agent

Aural warning system required to indicate wheels up when throttles are closed.

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

DEC 2 1952

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

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

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

12-50

3. AIRCRAFT IDENTIFICATION (*Complete all items*)

a. AIRCRAFT MAKE	b. AIRCRAFT MODEL	c. AIRCRAFT SERIAL NO.
GRUMMAN	G-73	J-56

d. ENGINE MAKE	e. ENGINE MODEL
Pratt & Whitney	R-1340-AN-1

4. AIRCRAFT REGISTRATION INFORMATION (*Complete all items*)

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
General Motors Corporation	3044 W. Grand Blvd, Detroit 2, Michigan.	N- 5118

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 February 13, 1951.
b. ☐ APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B). FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON _____ (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

J. R. Lahman
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

November 22, 1952 (DATE)
Agent. (TITLE)

16—60837-2

Form ACA-305 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

AIRCRAFT INSPECTION REPORT

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

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

1. AIRCRAFT AND ENGINE CERTIFICATION BASIS
   - a. [X] AIRCRAFT SPECIFICATION NO. A-783 THROUGH SHEET REVISION NO. 4
   - b. [ ] AIRCRAFT LISTING PAGE NO. _____
   - c. [X] AIRWORTHINESS DIRECTIVE SUMMARY 1952 (YEAR) THROUGH CARD NO. 52-26
   - 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. [X] COMPLIANCE WITH APPLICABLE AIRWORTHINESS DIRECTIVES RECORDED
   - c. [X] AIRCRAFT RECORDS INDICATE THE AIRFRAME HAS BEEN OPERATED A TOTAL OF 1059.25 HOURS
   - d. [X] ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
     - SERIAL NO. 118140 TOTAL HOURS 283.
     - SERIAL NO. 18099 TOTAL HOURS 283.
     - SERIAL NO. _____ TOTAL HOURS _____
     - SERIAL NO. _____ TOTAL HOURS _____

3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)
   - a. LAST AIRWORTHINESS INSPECTION CONDUCTED November 22, 1952. (DATE)
     - [ ] BY AIRCRAFT MANUFACTURER
     - [ ] BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
     - [X] BY MECHANIC, CERTIFICATE NO. A & E. 154311
   - b. [X] PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED
   - a. [ ] OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
   - b. [ ] CURRENT OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
   - c. [X] CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT
   - d. [X] CURRENT WEIGHT AND BALANCE INFORMATION IS AVAILABLE IN AIRCRAFT
   - e. [X] THIS INSPECTION HAS BEEN RECORDED IN THE AIRCRAFT RECORDS
   - f. [X] CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISSUED TO EXPIRE November 22, 1953 (DATE)
   - g. [ ] PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE December 28, 1952. (DATE) BY Dan Kelley (NAME OF ISSUING REPRESENTATIVE) 3376 (DESIGNATION NO.)

RECEIVED CERTIFICATE SECTION DEC 5 10 59 AM '52

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

   (REPAIR STATION AUTHORIZED SIGNATURE) _____ (DATE) _____

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
DAN KELLEY Dan Kelley	3376	November 22, 1952	
AVIATION SAFETY AGENT'S SIGNATURE	CAA DESIGNATION NO.	DATE	[X] ACCEPTED
H Bach	3-579M3	12/2/52	[ ] REINSPECTED
			[ ] SPOT CHECKED

[X] ATTACHMENT

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

C.A.A.

Form ACA-337
(11-48)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form approved.
Budget Bureau No. 41-R052.3.

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

(SEE REVERSE SIDE OF THIS FORM FOR INSTRUCTIONS)

1. AIRCRAFT	MAKE GRUMMAN ~~Hallard~~	MODEL G-73	SERIAL NO. J-56	NATIONALITY AND REGISTRATION MARK N5118
2. OWNER	NAME (*First, middle, last*) General Motors Corp.	ADDRESS (*Street and number, city, zone, and State*) 3044 W. Grand Blvd. Detroit 2, Michigan		

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*)				XX
b. PROPELLER BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER				

4. AIRCRAFT WEIGHT AND BALANCE DATA

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

*AFTER the repairs and/or alterations described below were made.	EMPTY WEIGHT (*Pounds*)*	EMPTY CENTER OF GRAVITY (*Inches from datum*)*	USEFUL LOAD (*Pounds*)*
	9903.8	221.20 Aft. Hull Station "0" Or -12.45 Fwd of Rear Face of Main Beam	2846.2

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

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

6. AGENCY	NAME General Motors Hangar	ADDRESS (*Street and number, city, zone, and State*) Detroit City Airport, Bay #1 Detroit 5, Michigan	DATE WORK ACCOMPLISHED 11-22-52

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

See Reverse Side for Weight and Balance

(Aircraft Loading Schedule Revised)

RECEIVED DEC 5 10 59 AM '52 CERTIFICATE SECTION

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.

Arthur Hazen	154311 A4E	11-22-52
(Signature of supervising mechanic)	(Certificate number and rating)	(Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED	DESIGNEE'S SIGNATURE Dan Kelley Dan Kelley	NO. 3376	DATE 11-22-52
☐ REJECTED	CAA AGENT SIGNATURE J Bath	☒ ACCEPTED ☐ REINSPECTED	DATE 12/2/52

16—54010-3

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3 - 18 - 86

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, 3*a*, 4, 5, 6, and 7.

     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.

     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.
   - *b.* 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.
   - *c.* 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—64010-2 U. S. GOVERNMENT PRINTING OFFICE

	WT	ARM	MOMENT
Aircraft	9850.0	219.09	2,158,120.44
Removed Equipment:			
ARC/17 VHF Comm. Set	-13.7	41.50	-568.55
VHF Antenna Mask	- 1.0	163.	-163.00
ARC/MD-7 Power Supply & Modulator	-19.0	29.	-551.00
ARC/5 Trans. VHF	-15.5	65.5	-1,015.25
	9800.8		2,155,822.64

	WT	ARM	MOMENT
Aircraft	9800.8		2,155,822.64
Installed Equipment:			
Bendix MN-85	+28.6	392.	+11,207.20
Bendix TA-8 Trans.	+49.0	392.	+19,208.00
Bendix MP Power Supply	+ 7.0	41.5	+290.50
Collins VHF Antenna	+ 3.4	372.0	+1,264.80
Wiring Harness & Mounting Bracket	+15.	196.	+2,940.00
	9903.8		2,190,733.14

$$\frac{2,190,733.14}{9903.8} = 221.20 \quad \text{Aft of Station "0"}$$

$$\begin{array}{r} -233.65 \\ +221.20 \\ \hline -12.45 \end{array} = -12.45 \text{ Fwd of rear face of main spar.}$$

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

Form ACA-305
(11-49)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

JAN 2 1952

Form Approved
Budget Bureau No. 41-R041.4

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

INSTRUCTIONS
Please submit this form to the Civil Aeronautics Administration Aviation Safety Field Representative

1. APPLICATION (CHECK WHETHER)
- ☐ ORIGINAL AIRWORTHINESS CERTIFICATE
- ☒ ANNUAL INSPECTION

2. AIRWORTHINESS CLASSIFICATION
- ☒ STANDARD
- ☐ RESTRICTED
- ☐ EXPERIMENTAL
- ☐ LIMITED
- ☐ OTHER

AIRCRAFT

3. MAKE: GRUMMAN
4. MODEL: G-73-2
5. NATIONALITY AND REGISTRATION MARK: N-5118
6. MANUFACTURER'S SERIAL NO.: J-56

ENGINE

7. MAKE: Pratt & Whitney
8. MODEL: WASP-SH1

9. OWNER'S NAME: General Motors Corporation.

10. (GIVE ADDRESS ONLY IF IT HAS BEEN CHANGED FROM THAT GIVEN ON YOUR CERTIFICATE OF REGISTRATION, FORM ACA-500)

11. ATTACHMENTS (CHECK WHICH)
- ☒ ACA-319
- ☐ WEIGHT AND BALANCE REPORT
- ☐ ACA-337
- ☐ DATA, DRAWINGS, ETC.
- ☐ ACA-317
- ☐ UNAPPROVED DEVIATION DATA

12. I CERTIFY that the above statements are true.

J. R. Salmon (OWNER OR AUTHORIZED AGENT)

December 28, 1951. (DATE)

Agent. (TITLE)

Form ACA-305a
(11-49)

AIRCRAFT INSPECTION REPORT
(To be completed by CAA representatives)

13. It has been determined that the aircraft described in 305 above is in conformity with the following:
(CHECK AND COMPLETE APPLICABLE ITEMS)

a. ☒ AIRCRAFT SPECIFICATION NO. A-783 THROUGH SHEET REVISION NO. 2
b. ☐ AIRCRAFT LISTING PAGE NO.
c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 1951 (YEAR) THROUGH CARD NO. 51-28
d. ☐ OPERATIONS LIMITATIONS FORM ACA-309 ISSUED.
e. ☐ OPERATIONS LIMITATIONS FORM ACA-309 IS AVAILABLE IN AIRCRAFT.
f. ☒ CURRENT, APPROVED, AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT.
g. ☒ ALL APPLICABLE NOTES, INSTRUMENT MARKINGS, AND PLACARDS HAVE BEEN COMPLIED WITH.
h. ☒ CERTIFICATE OF AIRWORTHINESS FORM ACA-1362 WAS ISSUED.

FINDINGS

14.
- ☒ AIRWORTHY
- ☐ UNAIRWORTHY

15. DESIGNEE'S SIGNATURE: DAN KELLEY Dan Kelley

16. DESIGNATION NO.: 3376

17. DATE: DECEMBER 28, 1951.

18. AVIATION SAFETY AGENT'S SIGNATURE: H Bach

19.
- ☒ ACCEPTED
- ☐ REINSPECTED

20. DATE: 1/2/52.

21. REASON FOR DISAPPROVAL, OR REMARKS (INDICATE IF YOU HAVE USED THE REVERSE TO CONTINUE THIS OR OTHER ITEM) ☐ YES ☒ NO

aw 1-18-2 MWX

EVA

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

Form ACA-887 (11-48)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form 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 Mallard (Grumman)	MODEL G-73	SERIAL NO. J-56	NATIONALITY AND REGISTRATION MARK N-5118
2. OWNER	NAME (First, middle, last) General Motors Corporation	ADDRESS (Street and number, city, zone, and State) 3044 W. Grand Blvd. Detroit 2 Michigan.		

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

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

4. AIRCRAFT WEIGHT AND BALANCE DATA

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

*AFTER the repairs and/or alterations described below were made.	EMPTY WEIGHT (Pounds)*	EMPTY CENTER OF GRAVITY (Inches from datum)*	USEFUL LOAD (Pounds)*
	9820	219.03 aft. Hull station "0" or -14.62 FWD from rear face of main beam.	2930.

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

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

6. AGENCY	NAME C. H. Hangar.	ADDRESS (Street and number, city, zone, and State) Bay 1. Detroit City Airport. Detroit 5, Michigan	DATE WORK ACCOMPLISHED 10-19-51.

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.)

Installed 1, ARC5 Modulator unit & rack. 17 Lbs.
" 1, ARC5 VHF. Transmitter & rack. 15 Lbs.

Aircraft	9788	219.63	2149738.44
Modulator	17	21	357.
Transmitter	15	55	825.
	9820		2150920.44

$\frac{2150920.44}{9820}$ = 219.03 AFT Stat. "0"

$\frac{233.65}{219.03}$ = -14.62 FWD. of rear face of main beam.

Loading Schedule Revised.

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.

(Signature of supervising mechanic) PI-19-C (Certificate number and rating) 10-19-51 (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED	DESIGNEE'S SIGNATURE Dan Kelley Dan Kelley	NO. 3376	DATE October 19,1951.
☐ REJECTED	CAA AGENT SIGNATURE C V Walther	☒ ACCEPTED ☐ REINSPECTED	DATE 10-24-51

16—34010-2

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, 3*a*, 4, 5, 6, and 7.

     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.

     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.
   - *b.* **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.
   - *c.* **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

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

Form ACA-337
(11-48)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

OCT 10 1952

Form approved.
Budget Bureau No 41-R052.3.

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

(SEE REVERSE SIDE OF THIS FORM FOR INSTRUCTIONS)

1. AIRCRAFT	MAKE GRUMMAN Hellard	MODEL G-73	SERIAL NO. J-56	NATIONALITY AND REGISTRATION MARK N-5118
2. OWNER	NAME (*First, middle, last*) General Motors Corporation	ADDRESS (*Street and number, city, zone, and State*) 3044 W. Grand Blvd. Detroit 2, Michigan		

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*)				XX
b. PROPELLER BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER				

4. AIRCRAFT WEIGHT AND BALANCE DATA

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

*AFTER the repairs and/or alterations described below were made.	EMPTY WEIGHT (*Pounds*)*	EMPTY CENTER OF GRAVITY (*Inches from datum*)*	USEFUL LOAD (*Pounds*)*
	9850	219.09 Aft. Hull station "0" or -14.56 Fwd. from rear face of main beam	2900.

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

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

6. AGENCY	NAME G.H. Hangar	ADDRESS (*Street and number, city, zone, and State*) Detroit City Airport, Bay #1 Detroit 5, Michigan	DATE WORK ACCOMPLISHED 10-7-52

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

Installed "Cadillac" Cabin Radio:

	WT	ARM	MOMENT
Aircraft	9820	219.03	2,150,920.44
Cabin Radio	+30.	240.00	+ 7,200.00
	9850		2,158,120.44

$\frac{2,158,120.44}{9,850}$ = 219.09 Aft Station "C" $\frac{233.65}{219.09}$ = -14.56 Fwd. of rear face of main beam

(Aircraft Loading Schedule Revised)

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.

William J. Granton (Signature of supervising mechanic) | A&E 469817 (Certificate number and rating) | 10-7-52 (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED ☐ REJECTED	DESIGNEE'S SIGNATURE Dan Kelley Dan Kelley	NO. 3376	DATE Oct. 7, 1952
	CAA AGENT SIGNATURE H B Fach	☒ ACCEPTED ☐ REINSPECTED	DATE 10/10/52

16—54010-3

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, 3*a*, 4, 5, 6, and 7.

   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.

   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.

   b. **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.

   c. **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

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86

Form ACA-305 (12-47)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

FORM APPROVED
BUDGET BUREAU NO. 41-R041.3

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

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

APPLICATION (Check whether)
- [X] ORIGINAL AIRWORTHINESS CERTIFICATE
- [ ] ANNUAL INSPECTION

AIRWORTHINESS CLASSIFICATION
- [X] STANDARD
- [ ] RESTRICTED
- [ ] EXPERIMENTAL
- [ ] LIMITED
- [ ] OTHER

AIRCRAFT

MAKE	MODEL	TYPE CERTIFICATE NO.
Grumman	G73	783

REGISTRATION NO.	MANUFACTURER'S SERIAL NO.
N5118	J56

ENGINE

MAKE	MODEL
Pratt & Whitney(2)	S-1-H-1(Wasp)

OWNER'S NAME: General Motors Corp.

PERMANENT ADDRESS (Street and number, city, zone, and State): 3044 West Grand Blvd. Detroit, Michigan

ATTACHMENTS (Check which)
- [ ] ACA-319
- [X] WEIGHT AND BALANCE REPORT
- [ ] ACA-337
- [ ] DATA, DRAWINGS, ETC.
- [ ] ACA-317
- [ ] UNAPPROVED DEVIATION DATA

I CERTIFY that the above statements are true.

Marian Loughlin
Owner or authorized agent.

12/20/50 (DATE) (TITLE)

Form ACA-305a

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:

ALL APPLICABLE MANDATORY NOTES, INSTRUMENT MARKINGS AND PLACARDING REQUIREMENTS HAVE BEEN COMPLIED WITH [X] YES [ ] NO

AIRCRAFT SPECIFICATION—AIRWORTHINESS DIRECTIVE NO(S). A- 783 ADS thru 50-49 (Specify)

FORM ACA-1362, CERTIFICATE OF AIRWORTHINESS, ISSUED [X] ORIGINAL [ ] ANNUAL INSPECTION

(Check whether)
[ ] OPERATION LIMITATIONS FORM ACA-339 WAS ISSUED, OR
APPROVED AIRPLANE FLIGHT MANUAL IS IN THE AIRCRAFT

FINDINGS

[X] AIRWORTHY
[ ] UNAIRWORTHY

DESIGNEE'S SIGNATURE AND NO. Edwin Lovejoy DMIR 1009 — DATE 12/20/50

CAA INSPECTOR'S SIGNATURE Edwin W. Schwebli — [X] ACCEPTED [ ] REINSPECTED — DATE 12/30/50

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

Copy of letter by General Motors Corporation dated December 19, 1950 covering Washington assigned identification numeral and Grumman Aircraft Engineering Corporation letter dated December 28, 1950 requesting registration of the above described aircraft are retained by the New York District Office of Manufacturing Inspection Branch to cover absence of ACA 132 Number Assignment Card.

2-2-1 W-X 9-1

U. S. GOVERNMENT PRINTING OFFICE 16—54226-1

FAA AIRCRAFT REGISTRY
CAMERA NO. 4N DATE: 3-18-86