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
WP-2707

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.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name (As shown on registration certificate): Reid W. Dennis	Address (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, CA 94062

3. For FAA Use Only

The data 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

05-23-01 [signature]
DATE SIGNATURE OAK-FSDO

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.
A.G. Macfie 306 Martina Street Point Richmond, CA 94801	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

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: 20 May 2001

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		Person Approved by Transport Canada Airworthiness Group		

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
5/24/01	[redacted]	[signature]

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) Grumman Mallard s/n J-8 Modified to provide provisions for 24VDC power and antenna facilities for portable Garmin GPS295 unit.

2a) Garmin GA56 permanent antenna installed forward of bow hatch in location vacated by removal of (unused) Wulfsberg Flitefone antenna. Antenna mounted in accordance with Garmin document # 190-00094-00 rev. C, GA 56 Antenna Installation Instructions. Antenna mounted on a fabricated aluminum mounting adapter plate .250" thick to allow for existing holes in aircraft structure.

2b) R-179 coaxial cable with BNC connectors routed from antenna to instrument panel mounted BNC bulkhead connector. Antenna cable routed along existing wire runs from antenna location to left side of bow area, laterally along main harness forward of instrument panel, to lower center console. R-179 coaxial cable free run from instrument panel BNC connector to anticipated location for GPS unit. Cables do not interfere with any access to instruments or flight controls, or inhibit movement of same.

2c) Unused Flitefone circuit breaker removed, 1 amp Klixon circuit breaker installed in same location and relabeled as "GPS". 20 gauge MZ2759/16-20 wire run from c/b to panel mounted connector for GPS power. MS3112E8-4P connector installed in lower center inst panel and wired accordingly. Panel connector to be placarded "1 amp maximum load".

2d) Aircraft to be reweighed, and new weight & balance report issued prior to flight (net weight change is minimal, however other airframe work necessitates reweighing at this time).

3) No special procedures applicable.

4) No changes in servicing information.

5) N/A

6) N/A

7) N/A

8) N/A

9) N/A

10) N/A

11) N/A

12) N/A

13) N/A

14) N/A

15) N/A

16) This ICA to be revised by submittal of a revised form 337 with revised ICA to the local FSDO.

| | 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
T.I.G. WP-27

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.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name *(As shown on registration certificate)*: Reid W. Dennis	Address *(As shown on registration certificate)*: 225 Mountain Wood Lane, Woodside, Ca 94062

3. For FAA Use Only

The data 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

03-24-2003 Tim Gerrard
DATE SIGNATURE OAK-FSDO

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.
Andrew G. Macfie 306 Martina St. Point Richmond, CA 94801	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

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
29 MARCH 2003	Andrew G. Macfie

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
29 MARCH 2003	[redacted]	Andrew G. Macfie

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. **Introduction**: This aircraft, Grumman G-73 s/n J-8, has been altered by installation of a cabin entertainment and power system. The system consists of the following components; CDC-2000 moving map display computer, cabin j-box (including video amplifier, video selector, 2 audio amplifiers, circuit breakers and associated junction blocks), cabin bus relay with circuit breaker, aft cabin video display, provision for a forward cabin video display, remorte control IR detector, 115 VAC cabin power inverter with outlet cord, video switching panel, and all associated wiring. The avionics aspects of this installation have been DER approved (see form 8110-3 dated 26 FEB 03). The mechanical aspects of this installation are all designed and installed in accordance with AC43.13-2A chapter 1 and load tested in accordance with AC43.13-2A chapter 1 paragraphs 2 & 3 (see mechanical drawing N2945cabin rev. (original)). Aircraft weight and balance report superceded and a revised report issued, see N2945 weight & balance report/equipment list this date. Form 8110-3, electrical drawing RD442000 rev.2, and mechanical drawing N2945cabin rev. (original) are attached.

2. **Description:** The cabin entertainment and power system provides a moving map display on one video monitor, located in the aft cabin wing carry-through structure. Wiring provisions are installed to locate a second video display in the right side of the cockpit bulkhead at a future date. Provisions are installed to locate a portable video source (i.e. DVD player) in the right forward lower cabinet, and connect the output to the system in order to view in-flgiht video programs. The moving map is driven by a Universal Avionics CD-2000 CD-ROM based moving map system, with the processor located in the lower left forward cabinet. Audio jacks are provided at each cabin seat in order to connect a standard headphone to monitor the audio portion of programming, and are also tied to the cabin PA system. A 115VAC inverter is installed to provide AC power for passenger use. The 115VAC outlet is located in the right lower forward cabinet.

3. **Control & operation:** All of these cabin systems are non-essential equipment, and the 28VDC power for this bus is controlled by a relay located in the left mid cabin cabinet with attendant 50 amp circuit breaker. The bus can be depowered by opening a single switch on the cockpit bulkhead, to the pilot's right and above. All individual circuit breakers for these systems are located on the cabin j-box in the lower left forward cabinet. Consult the CD-2000 user's manual for further information on moving map usage. Switching from moving map to video source is accomplished via a lighted switch/annunciator in the upper right forward cabinet. The cabin 115VAC power can be turned on or off via a switch located in the upper right forward cabinet.

4. Servicing: n/a

5. **Maintenance Instructions**: All equipment installations shall be inspected for security, general condition, corrosion, and damage during the existing scheduled inspections.

6. **Troubleshooting**: All 28VDC electrical circuits shall be troubleshot in accordance with standard practices, using drawing RD442000 rev. 2 (or later revision) as a reference. Problems with individual components shall be addressed in accordance with the applicable manufacturer's instructions.

7. Removal and replacement: n/a

8. **Diagrams:** See drawing N2945cabin and Grumman G-73 Mallard Service Manual station diagram for locations of components.

☒ 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.

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

9. Special Inspection requirements: n/a
10. Protective treatments: n/a
11. Data: n/a
12. Special tools: n/a
13. Commuter category: n/a
14. Recommended overhaul: n/a
15. Airworthiness limitations: n/a

16. **Revision:** This ICA shall be revised by submittal of a revised form 337 with ICA to the responsible FSDO for review and approval.

☐ Additional Sheets Are Attached

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

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
TRA, WP-27

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.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name *(As shown on registration certificate)*: Reid W. Dennis	Address *(As shown on registration certificate)*: 225 Mountain Wood Lane, Woodside, Ca 94062

3. For FAA Use Only

The data 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

07/29/2002 Tim Gemmill
DATE SIGNATURE OAK-ESDO

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.
Andrew G. Macfie 306 Martina St. Point Richmond, CA 94801	X	U.S. Certificated Mechanic	[redacted]
		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
29 July 2002	Andrew G. Macfie

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
1 August 2002		

Mallard Bilge Pump System

The system consists of four pumps, rated at 750gph with integral float switches. Mounted on plates which are

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. Grumman G-73 Mallard s/n J-8, N2945, altered by installation of a 24VDC electric bilge pump system.

2a. Four bilge pumps p/n RM750-24 were installed in the aircraft bilges at F.S. 135, 176, 227 and 246. A check valve p/n PLV 1219 was installed in the outlet of each pump to prevent drainback. The bilge pumps were mounted on locally fabricated brackets meeting the requirements of AC43.13-2A chapter 1 paragraphs 1-10. The installations were statically tested I/A/W AC43.13-2A Chapter 1 paragraphs 2&3 and no deformation or failure was noted.

2b. The bilge pump outlets were plumbed to discharge outlet fittings (AN832-10D) in the right wheel well uysing 3/4" marine sanitation hose.

2c. The bilge pumps were connected to the "hot" 24VDC battery bus in the left whell well cabinet as per the attached schematic drawing. Wire specification, circuit protection, switches and indicator lights as shown on the drawing. All electrical aspects of this installation are in accordance with AC43.13-1B Chapter 11 requirements.

3. N/A

4. Access to the bilge pumps is through the cabin center floorboards.

5. Bilge pumps, float switches, plumbing and wiring are to be inspected for security, corrosion, proper functioning and general condition in conjunction with the N2945 approved maintenance program at those intervals during which the cabin floor is removed for normal scheduled inspection of the bilge structure.

6. N/A
7. N/A
8. N/A
9. N/A
10. N/A
11. N/A
12. N/A
13. N/A
14. N/A
15. N/A

16. This ICA is to be revised when required by submittal of a revised 337 in ICA format to the FAA FSDO having jurisdiction over the aircraft at that time.

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

☐ Additional Sheets Are Attached

Mallard Bilge Pump System

The system consists of four pumps, rated at 750gph with integral float switches. Mounted on plates which are riveted in the aircraft's bilge, at sta.135, 176, 227, & 246. One way check valves are installed immediately down stream of the pump outlets. The fwd (sta. 135 & 176) and rear pumps (sta. 227 & 246) outlets are connected in parallel. From the pump the outlet at sta.135 the discharge hose is routed through a plastic bulkhead fitting at sta.140, then through a tee fitting where it connects to the pump at sta.176. From the outlet side of the tee the hose is routed through the bulkhead lightening holes just below the cabin floor towards the aft of the aircraft. The pump at sta.227 outlet hose is routed through the same lightening holes as the fwd pump hose. It connects through a tee fitting to the pump at sta.246. At sta.246 the hoses are routed together, then through a lighting hole in the bulkhead below the RH wheel well at sta.250. From there the hoses go through a bulkhead lighting hole at sta.260, then turn right and are routed up the RH wall of the aircraft just aft of the RH wheel well at sta.265. They pass through a bulkhead at sta.255, then down through the bulkhead at the top of the RH wheelwell at sta.252. They continue down through the well and are connected to the discharge outlets at sta.252 in the aft of the RH wheelwell. Doubler plates are added to the bulkheads at the top of the RH wheelwell at sta.252, and at sta.255. Where the hoses pass through to retain their structural integrity. The hoses have gear clamps installed at every connection, and are adel clamped to bulkheads and stringers as needed.

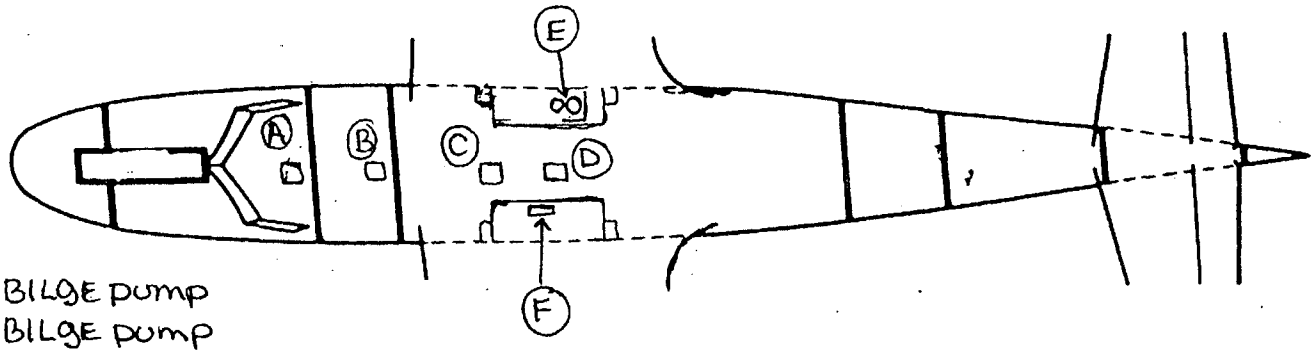
Electrical power for the system is taken from a 20 amp fuse at the battery buss in the RH engine nacelle. The 15amp circuit breaker switch, the ptt lights, the three position pump switches & 3 amp circuit breakers. Are located on a control panel in the LH wheelwell electrical box at sta.240. The three position switches allow the pumps to be shut off, manually controlled, or automatically controled through the float switches. The ptt lights illuminate when any of the pumps are operating. The power wire from the battery buss is routed with the airframe wiring. Power to the pumps is routed down the bulkhead aft of the LH wheelwell, through bulkhead lighting holes with the pump hoses, to terminal strips that are mounted high on the bulkheads just under the floor near the pumps. The wiring is adel clamped to the airframe as needed.

Parts list for bilge pump system

Qty	DESCRIPTION
4	Rule Marine RM750-24 Bilge pump 750gph.
4	Rule Marine PLV1219 Check valve
100ft	PSH-34 ¾" sanitation hose
1	¾" plastic bulkhead fitting
2	¾" plastic tee fittings
2	AN832-10D pump discharge outlet fittings
2	-10AN to ¾" barb brass fittings
3	A, B,& C position bilge pump brackets
1	D position bilge pump bracket
1	7270-1-15 circuit breaker master switch
4	MS35058-21 three position pump switches
4	7277-2-3 circuit breakers
4	MS25041-8 ptt lights
85ft	M22759/16-18 wire
20ft	M22759/16-14 wire

Weight & Balance Calculations

Bilge pump assembly	412.0 grams
Bilge pump + mounting bracket for positions A, B, &C	550.0 grams
Bilge pump + mounting bracket for position D	530.0 grams
Bilge pump attach hardware	15.0 grams
Discharge outlet fittings	500.0 grams
100ft ¾" sanitation hose	8.4 kg
Electrical wire	500.0 grams
Factory bilge pump system (removed)	2.3 kg



(A) BILGE PUMP
(B) BILGE PUMP
(C) BILGE PUMP
(D) BILGE PUMP
(E) BILGE PUMP DISCHARGE OUTLETS
(F) BILGE PUMP CONTROL PANEL

HEAVY LINES INDICATE WATERTIGHT BULKHEADS.

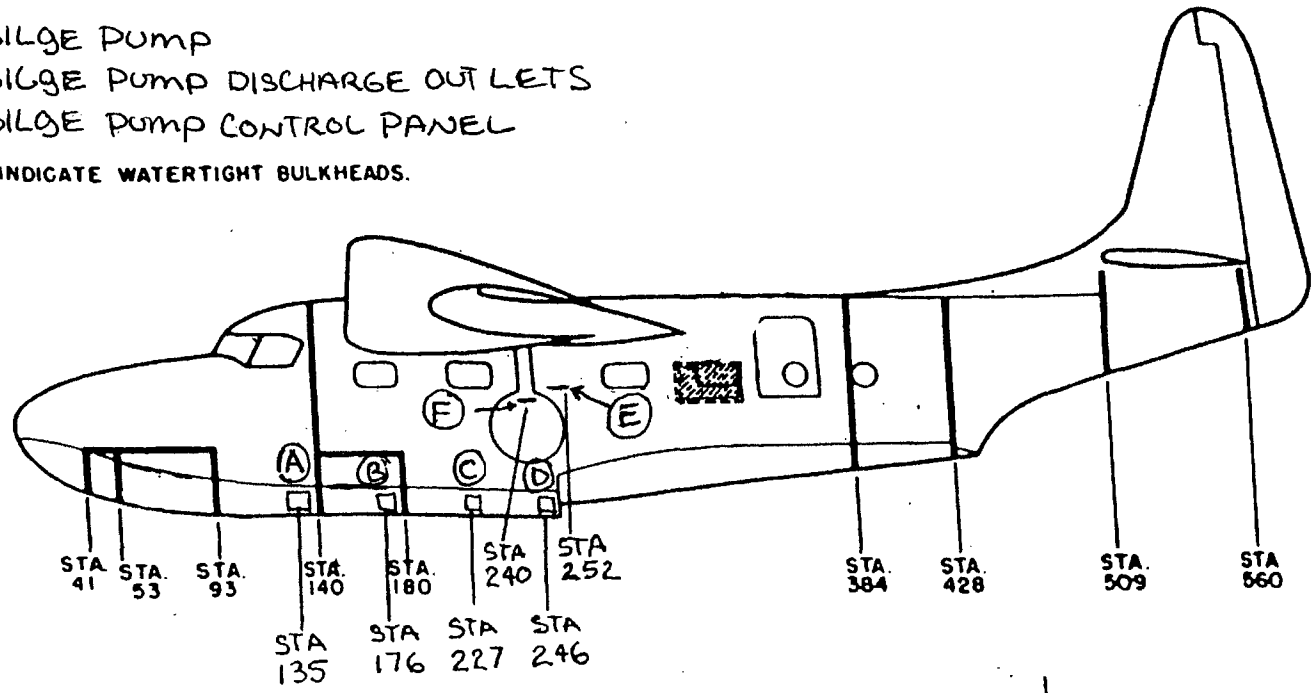
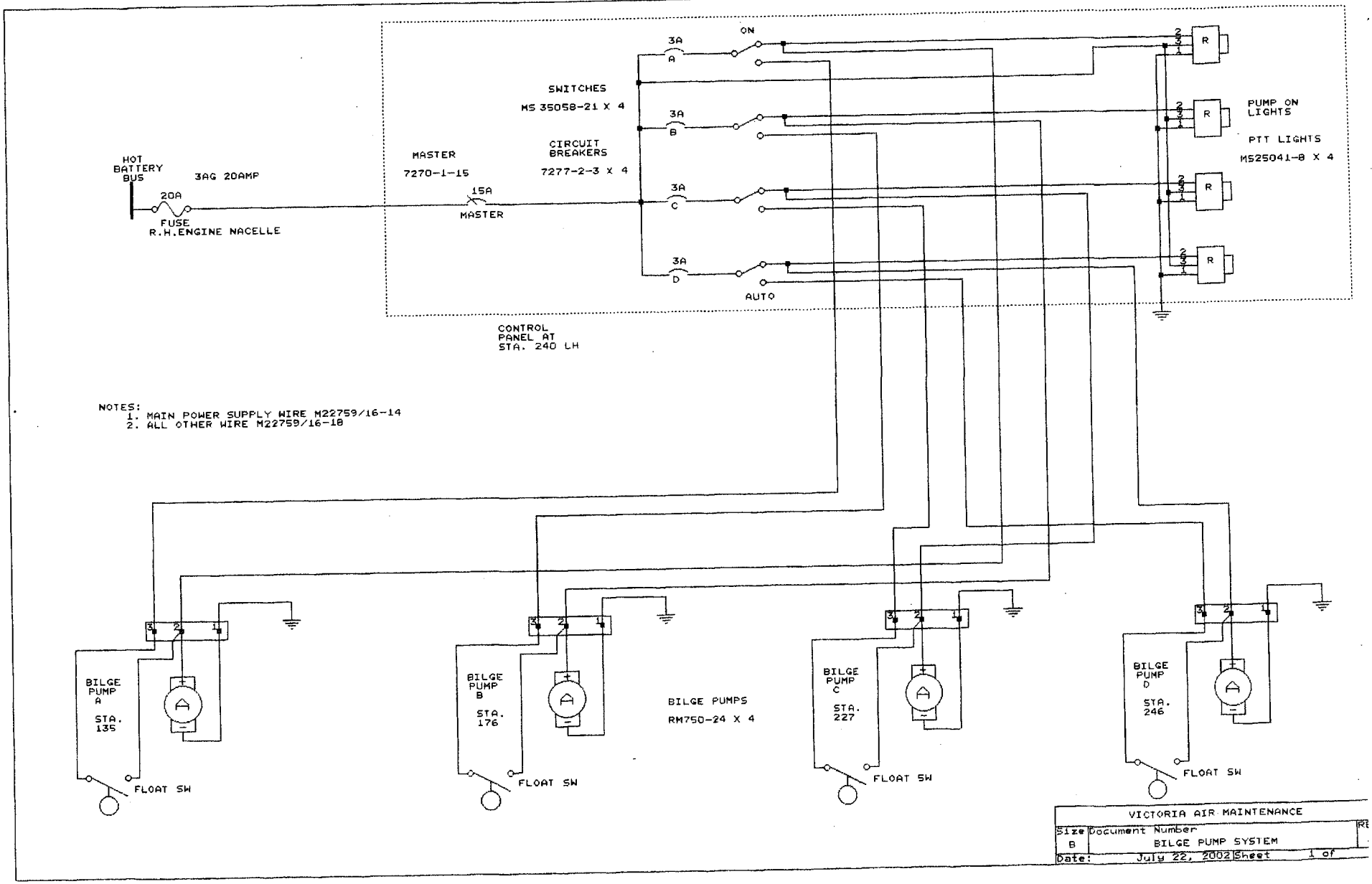
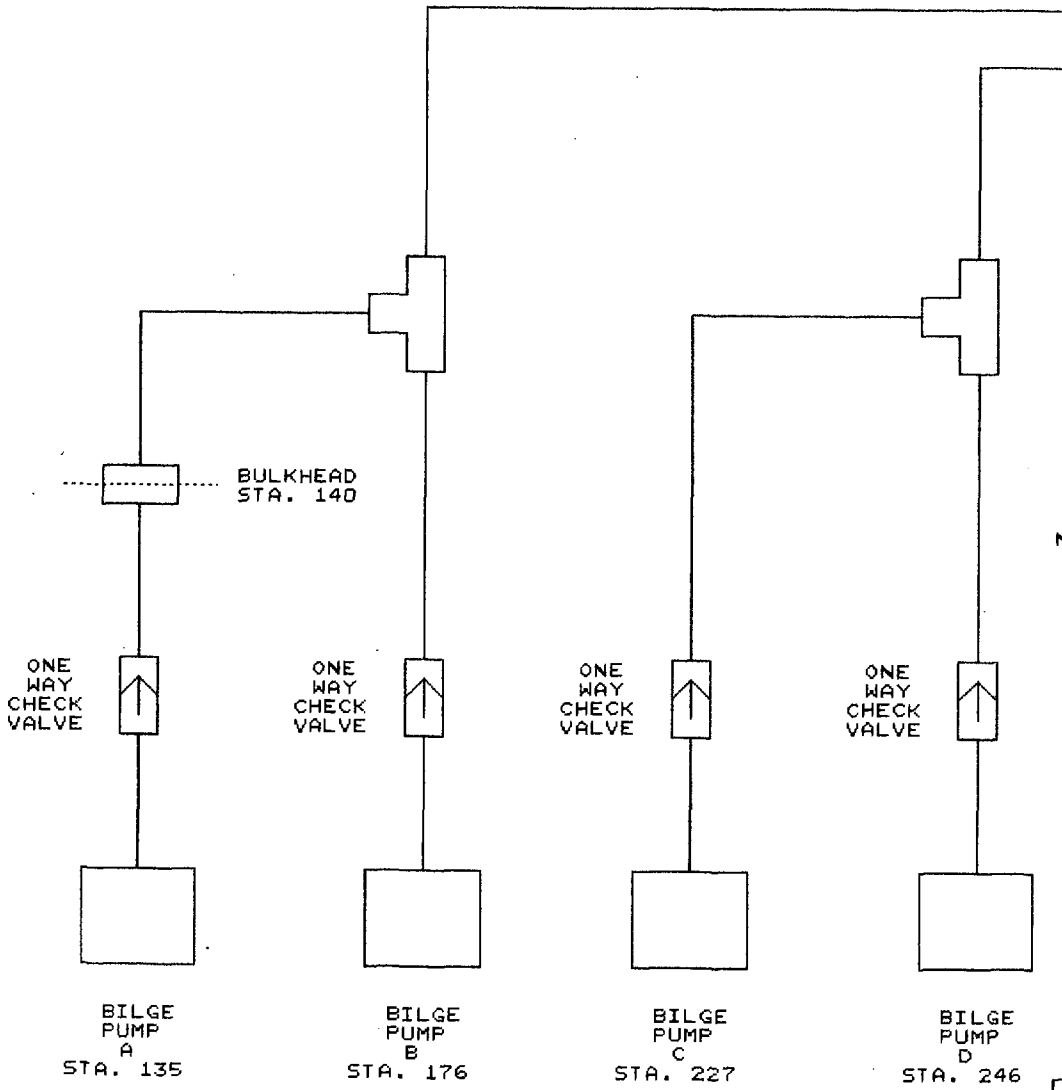


Figure 38—Hull Compartmentation Diagram


HOT BATTERY BUS
3AG 20AMP
20A
FUSE
R.H.ENGINE NACELLE
MASTER
7270-1-15
15A
MASTER
SWITCHES
MS 35058-21 X 4
CIRCUIT BREAKERS
7277-2-3 X 4
3A
A
3A
B
3A
C
3A
D
ON
AUTO
R
PUMP ON LIGHTS
PTT LIGHTS
MS25041-8 X 4
CONTROL PANEL AT STA. 240 LH
NOTES:
1. MAIN POWER SUPPLY WIRE M22759/16-14
2. ALL OTHER WIRE M22759/16-18
BILGE PUMP A
STA. 135
BILGE PUMP B
STA. 176
BILGE PUMPS
RM750-24 X 4
BILGE PUMP C
STA. 227
BILGE PUMP D
STA. 246
FLOAT SW
FLOAT SW
FLOAT SW
FLOAT SW
VICTORIA AIR MAINTENANCE
Size B
Document Number
BILGE PUMP SYSTEM
Date: July 22, 2002
Sheet 1 of



NOTES:
1. ALL HOSE 3/4 INCH I.D. SANITATION HOSE
2. CHECK VALVES PART # PLV 1219
3. BILGE PUMPS # RM750-24
4. DISCHARGE OUTLETS # AN 832-10D

VICTORIA AIR MAINTENANCE		
Size A	Document Number BILGE PUMP SYSTEM	REV 1
Date: July 22, 2002	Sheet 2 of 2	

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
T-1A. INP-27

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: G73
	Serial No.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name *(As shown on registration certificate)*: Reid dennis	Address *(As shown on registration certificate)*: 225 Mountian Wood Lane Woodside California 94062 USA

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.
Victoria Air Maintenance Ltd. 9550 Canora Rd Sidney B.C V8L 4R1 Canada		U.S. Certificated Mechanic	461-91
		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
July 12 2002	

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	X	Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
July 12 2002	461-91	

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.)

Aircraft interior removed for refurbishment.
Removed plywood floorboards and replaced with Phenolic/nomex panels .400" P/N 66-000-9100 suppplied by Skyline products under P/O 843883J8.
All interior wood panels stripped and new teak veneer installed and finished with waterbased material.
All interior lighting and ventilation fixtures paint stripped and repainted.
Cockpit instrument panels removed, paint stripped and reinstalled.
Pitot static test carried out by Victoria Avionics under W/O # 020-047.
All seats and upholstery recovered and installed by Davlin Upholstery Under W/O # 360.
Upholstery and interior furnishings installed as per origional Grumman specifications using materials that conform to 14 CFR 25.853 (a) Appendix F Part 1 (a) (1) (ii) (Amendment 25-83).Material Certification Documents attached.
Aircraft reweighted and new weight and balance calculated.

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

Additional Sheets Are Attached

KEY TO FIGURE 39

HULL INTERIOR ARRANGEMENT

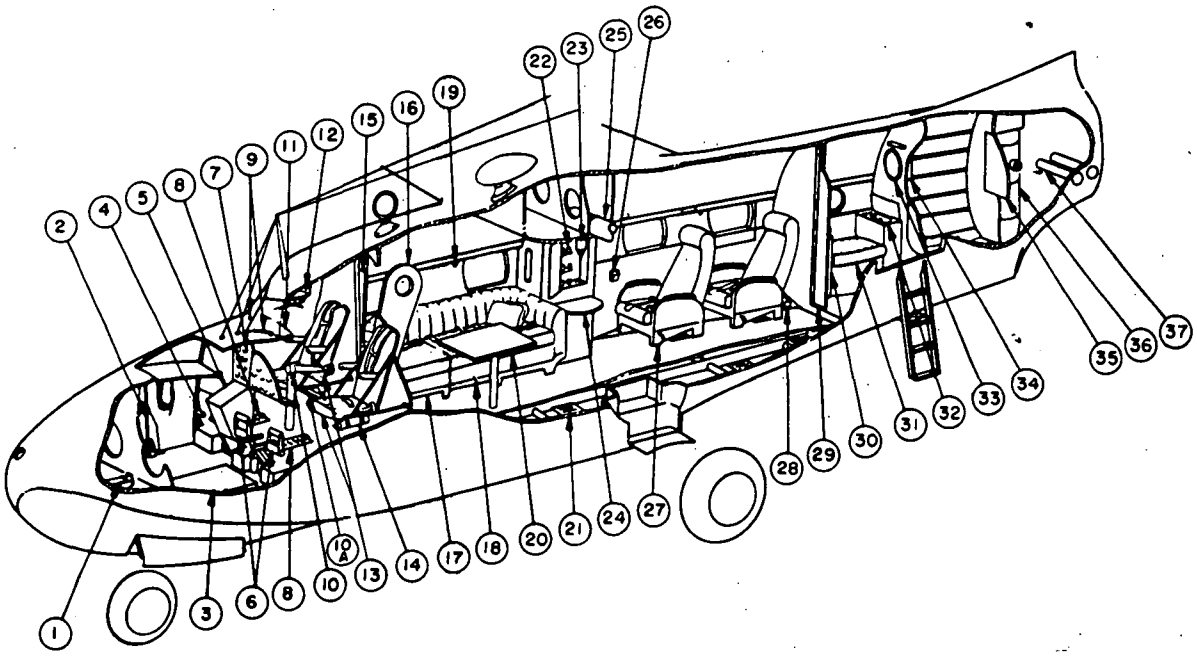
1. Bilge Pump (stowed in clips - attach to tubing outlets for use).
2. Anchor and Nylon Rope.
3. Radio Units (under hinged cover).
4. Co-pilot's Pedals.
5. Map Case.
6. Pilot's Pedals.
7. Instrument Panel.
8. Heater Duct Outlets (pilot's cabin).
9. Windshield Wipers.
10. Control Wheel and Column.

10A. Co-pilot's Control Arm (stowed under seat).

11. Radio Control Switches etc. (on cowl).
12. Engine Controls etc. (overhead panel).
13. Pilot's and Co-pilot's Seats.
14. Hand Fire Extinguisher.
15. Stowage Locker.
16. Pilot's Cabin Door.
17. Divan (with cushions and safety belts).
18. Divan Removable Section.
19. Ventilator Controllable Valves.
20. Cabin Table.
21. Heater Duct Outlet (main cabin).
22. Drinking Glasses (stowed in racks).
23. Thermos Bottle.
24. Serving Shelf.
25. CO_2 Fire Extinguisher Cylinder.
26. Ash Receivers.
27. Cabin Chair (with safety belt).
28. Hand Fire Extinguisher.
29. Lavatory Compartment Curtain.
30. Stowage Compartment.
31. Chemical Toilet (with hinged seat cover).
32. Basin.
33. Mirror.
34. Basin Reservoir (smaller reservoir located in rear compartment aft bulkhead on later airplanes.
35. Door to Heater Compartment.
36. Heater Unit.
37. Flare Tubes.

ITEMS NOT NOTED

Baggage Stowage Straps.
Radio Equipment.
Boarding Ladder Stowage.
Coat Hangers (in aft baggage compartment).
Landing Gear Control (on bulkhead back of pilot's seat).
Hydraulic System Hand Pump (back of co-pilot's seat).
Hydraulic System Hand Pump Selector Valve (on floor between seats).
Flare Switches (on bulkhead above pilot's seat).
Bow Hatch Release Handle (on the right below cowl).



Victoria Air Maintenance Ltd
Hanger #10 Victoria International Airport
9550 Canora Rd Sidney B.C. V8L4R1

WEIGHT AND BALANCE REPORT

Manufacturer	GRUMMAN
Model	G 73
Date	JULY 12 2002
Registration	N2945
Place weighted	Hangar 10 Victoria International Airport
Scales used	GE LPA400
Owner	REID DENNIS

Reaction	Scale Reading	Tare	Net weight	Arm	Moment
Left Main	4481		4481	237.53	1064372
Right Main	4515		4515	237.53	1072448
Sub Total	8996		8996		2136820
Tail			0		0
Nose	973		973	60.28	58652.44
Total as weighted	8996		9969	220.23	2136820

Measurements

A/C Datum=
D=" The horizontal distance from the datum to the C/L of the main wheels.
L= " The horizontal distance from the datum to the C/L of the nose or tail wheel.
F=" Weight of nose wheel
R=" Weight of tail wheel.
W="Total empty weight of aircraft.

D=237.53
L=60.28
F=973
R=
W=9969

Aircraft Empty Weight: 9969
Empty Weight C.of G. 220.23
C of G limits
Empty Weight : ***Includes the weight of the airframe, engines, required equipment, optional or special equipment hydraulic fluid, fixed ballast, full engine oil and residual fuel.***

Maximum gross weight: 12500

A/C empty weight: 9969

Usefull load 2531

I certify that this data has been prepared in accordance with the provisions of CAR 605.92 and to the best of my knoledge represents the true empty weight and centre of gravity of this aircraft.

MJ Ingram M269588
AMO #461-91

skyline products
division ISOVOLTA

MATERIAL CERTIFICATION

DATE: January 25, 2002 CUSTOMER: Victoria Air Maintenance

DESCRIPTION: P/N 66-000-9100 Phenolic/Nomex Panels .400"

QUANTITY: 10 each PURCHASE ORDER NO: 843883J8

JOB NO: 24002990 LOT NO: 1

THE FOLLOWING SIGNATURE ATTESTS THAT THE PARTS IDENTIFIED ABOVE WERE MANUFACTURED AND TESTED IN ACCORDANCE WITH THE REQUIREMENTS SPECIFIED ON THE PURCHASE ORDER.

QUALITY ASSURANCE

Disclaimer: As Skyline Products has no control over the application or selection of various substrates used at the final application, the buyer must test this product in its final configuration to determine acceptability to industry regulations and requirements.

P. O. Box 287 • 495 Territorial Road • Harrisburg, Oregon 97446 • Phone (541) 995-6395 • Fax (541) 995-8425

Flame-Out Inc.

FAA Approved Test Center

FEB. 25 '02 (MON) 11:46

TAPIS

CK

CERTIFICATE OF CONFORMITY

Sold To:
DAVLIN UPHOLSTERY
1111 BEWDLEY AVENUE
VICTORIA, B.C V9A5M9
CANADA

Ship to:
DAVLIN UPHOLSTERY
1111 BEWDLEY AVENUE
VICTORIA, B.C. V9A5M9
CANADA

ATTN: DAVE

PHONE : 250-385-2147
FAX : 250-384-4184

Customer PO
26459 V

Shipping Method

Quantity	Item	Description
48.00	GPFR0260	260 MED. BEIGE - FR GROSPOINT

SEATING/SIDEWALL FABRIC

OUR ORDER #: GP26459
YOUR ORDER #: 26459 V
ORDER DATE : Feb 4, 2002

IT IS HEREBY CERTIFIED THAT THE MATERIALS IN THE ABOVE SHIPMENT ARE IN CONFORMANCE WITH THE REQUIREMENTS, SPECIFICATIONS, AND DRAWINGS APPLICABLE TO THE ABOVE PURCHASE ORDER.

THESE MATERIALS MEET FAR 25.853 REQUIREMENT FOR AVIATION.

Specialty Foam
& Packaging

Established 1946

2105 - 51st Ave. E., Suite 200 • Fife, WA 98424 • (888) 804-8242 (PST) • FAX (253)-922-5338 • www.irfoam.com

CERTIFICATE OF CONFORMANCE

To: Davlin Upholstery
1111 Bewdley Avenue
At Rear
Victoria BC, Canada V9A 5M9

Date: June 3, 2002

PO #725325

PILOT/CO-PILOT
SEATING
FOAM

To Whom It May Concern:

This is to certify that the material furnished has been manufactured, inspected and tested in accordance with your purchase order requirements.

Test reports covering the subject material indicate conformance with applicable requirements and are on file, available for examination.

Applicable specifications called for by purchase order are:

FAR 25.853

Product and quantity:

1 – Confor NT Yellow 36 x 48 x .75
1 – Confor Medium Pink 36 x 48 x .75
1 – Confor Firm Blue or White 36 x 48 x .75
1 – Confor Extra Firm Green or Blue 36 x 20 x .75

IR Specialty Foam & Packaging

Ca s Aircraft Interiors, In
509 Crumley Chapel Road
Birmingham, Al 35214
(205) 798-4726 Fax: (205) 798-4024

12 SECOND VERTICAL FLAMMABILITY TEST RESULTS

CARPET

CUSTOMER: DAVLIN UPHOLSTERY

TEST REPORT NO: 6200 FLAME RETARDANT: N/A

CONDITIONING ROOM: DATE & TIME IN: 11-Feb-02 10:00 AM

DATE & TIME OUT: 12-Feb-02 10:10 AM

AVERAGE (MIN 24 HOURS)

TEMP: 71 DEGREES REL HUM: 52 %

TEST SAMPLE DESCRIPTION: Carpet/Aircraft Interior Products Design Accent Sandpiper

Roll Item No: 240570

FLAME APPLICATION 12 SECONDS	EXTINGUISH TIME (SECONDS)	BURN LENGTH (INCHES)	BURN DRIPPINGS (SECONDS)
SAMPLE # 1	1.1	1/4	
SAMPLE # 2	1.4	1/4	
SAMPLE # 3	0.4	1/4	
AVERAGE	1.27	1/4	

NOTE: Burn test performed in accordance with FAR 25.853(a) Appendix F Part I (a), (1), (ii) which includes floor covering, textiles, (including draperies and upholstery) seat cushions, padding decorative and non-decorative coated fabrics, leather, trays, galley furnishings, acoustical insulation, or linens of Class B through E cargo or baggage compartments.

12 Second vertical burn test must meet the following conditions: Average Self Extinguish Flame Time may not exceed 15 seconds, Average Burn Length may not exceed 8 inches, and Average Burn of Drippings may not exceed 5 seconds after falling.

COMMENTS: FOR: Grummond Mallard S/N J8

TEST RESULT: PASSED X FAILED _____

Tested by: Carol Ann Watts

DATE: 2/12/02

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL A ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE 02/12/02

FAA F 8110-3 70) SUPERS S PREVI EDITION

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO	TYPE (Airplane, Radio, Helicopter, etc.	NAME OF APPLICANT:
Grummond	Mallard	Airplane S/N J8	Davlin Upholstery

LIST OF DATA

IDENTIFICATION	TITLE
100% wool carpet Aircraft Interior Products Design Accent Sandpiper Roll Item No: 240570 Test Report No: 6200	Determination of flammability of materials per Carol's Aircraft Interiors, Inc. Procedure No. 870406 (Test Method #2). Approved 6/27/87. CARPET

PURPOSE OF DATA
To comply with FAR 25.853 (a) for materials used in aircraft interiors.

APPLICABLE REQUIREMENTS (List specific sections)

FAR 25.853 (a) Appendix F. Part I (a) (I) (ii).

CERTIFICATION - Under the authority vested by direction of the Administrator and in accordance with the conditions and limitations of appointment under Part 183 of the Federal Aviation Regulations, data listed above and on attached sheets numbered _____ AS ABOVE 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
☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Carol Ann Watts	DERT-510414CE	STRUCTURES FLAMMABILITY ONLY

Record No: 2685

Ship Shape

Custom Products, Inc.

P.O. Box 1141
Mooresville , NC 28115
(704)663-4159 Fax 663-7904

SEATING/
ARMREST
LEATHER

Tested For : *Douglass Interior Products*

Test Date : Jan 07, 2002

Inv/PO No : 15577

Test Report : 010702

P/N : LL3825

Pattern : LEATHER

Color : BOWMORE

D/L No : 29161

TWELVE SECOND VERTICAL FLAMMABILITY TEST RESULTS

14 CFR 25.853 (a) Appendix F Part I (a) (1) (ii) (Amendment 25-83)

	SELF-EXTINGUISH TIME (seconds)	BURN LENGTH (inches)	EXTINGUISH TIME (seconds)
	1.70	0.40	0.00
	2.10	0.30	0.00
	1.30	0.40	0.00
Average:	*1.70*	*0.37*	*0.00*
Average:			
Max:	15.0	8.0	5.0

TESTED BY: R. Whitlow

Passed: ☒ Failed: ☐

U.S. DEPARTM. F TRANSPORTATION
FEDERAL AVI, ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE
January 7, 2002

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	CUSTOM PRODUCTS INC

LIST OF DATA

IDENTIFICATION	TITLE
TEST REPORT NO. 010702 DATED: 01/07/2002	TEST REPORT 12 SECOND VERTICAL BURN TEST RESULTS ON RAW MATERIAL PER CUSTOM PRODUCTS TEST PROCEDURE # 1 APPROVED 9/20/84 SEATING/ARMREST LEATHER

PURPOSE OF DATA TO COMPLY WITH 14 CFR part 25.853(a) PART I (a) (I) (ii) OF APPENDIX (F) FOR MATERIAL FOR AIRLINE CUSTOMERS.

APPLICABLE REQUIREMENTS (List specific sections)
14 CFR part 25.853(a) Appendix F Part I (a) (1) (ii) (AMENDMENT 25-83)

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 AS ABOVE 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**
☒ **Approve these data**

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBERS(S)	CLASSIFICATION(S)
David D. McKnight	DERY-511100-CE	Structures- Flammability only

Record No: 2334

Ship Shape

Custom Products, Inc.

P.O. Box 1141
Mooresville, NC 28115
(704)663-4159 Fax 663-7904

SPAR
LEATHER

Tested For : *Douglass Interior Products*

Inv/PO No : 15206

P/N : LL3844

Color : DALWHINNIE

Test Date : Sep 26, 2001

Test Report : 092601

Pattern : LEATHER

D/L No : 27092

TWELVE SECOND VERTICAL FLAMMABILITY TEST RESULTS

14 CFR 25.853 (a) Appendix F Part I (a) (1) (ii) (Amendment 25-83)

	SELF-EXTINGUISH TIME (seconds)	BURN LENGTH (inches)	EXTINGUISH TIME (seconds)
	1.30	0.50	0.00
	3.50	0.60	0.00
	1.10	0.80	0.00
Average:	*1.97*	*0.63*	*0.00*
Average:			
Max:	15.0	8.0	5.0

TESTED BY: B. Whitlow

Passed: ☒ Failed: ☐

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: September 26, 2001

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Airplane, Radio, Helicopter, etc.)	NAME OF APPLICANT
NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	CUSTOM PRODUCTS INC

LIST OF DATA

IDENTIFICATION	TITLE
TEST REPORT NO. 092601 DATED: 09/26/2001	TEST REPORT 12 SECOND VERTICAL BURN TEST RESULTS ON RAW MATERIAL PER CUSTOM PRODUCTS TEST PROCEDURE # 1 APPROVED 9/20/84

SPAR LEATHER

PURPOSE OF DATA: TO COMPLY WITH 14 CFR part 25.853(a) PART I (a) (I) (ii) OF APPENDIX (F) FOR MATERIAL FOR AIRLINE CUSTOMERS.

APPLICABLE REQUIREMENTS (List specific sections)
14 CFR part 25.853(a) Appendix F Part I (a) (1) (ii) (AMENDMENT 25-83)

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 AS ABOVE 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
- ☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBERS(S)	CLASSIFICATION(S)
David D. McKnight	DERY-511100-CE	Structures- Flammability only

5.

# CALGARY Vertical Flammability Test
FAA25.853(a) app.f Part I (a) (i) (ii)

Foam Type: Q46 Pour Date: 06FEB01
Series: 11 Slab Number: 4 Sample Type: C2

Technician: SARAH

Permeability: 19
Test Date: 07FEB01 Retest: 0

CABIN SEATING FOAM (CUSHIONS)

	Distance Burned	Burn Time	Drip Burn
	1.80	0.00	0
	1.50	0.00	0
	1.60	0.00	0
	1.70	0.00	0
	1.90	0.00	0
AVG:	1.70	0.000	0.00

Rating: PASSED

Comments: SMOKE AND DRIP

Specifications

Distance Burned - Maximum 8 inches on Average
Burning Time - Maximum 15 seconds on Average
Drip Burn - Maximum 5 seconds on Average

W/O 39660

S.

CALGARY VERTICAL FLAMMIBILITY TEST
FAA 25.853 (a) app. f Part I (a) (i) (ii)

Pelw 3

Foam Type : Q25 Pour Date ; 05Dec 00
Series : 11 Slab Number ; 3 Sample Type : C2

Technicians : SARAH / VAY
Permeability : 25
Test Date : 07Dec 00 Retest : 0

CABIN SEATING FOAM :

(BACKRESTS)

	Distance Burned	Burn Time	Drip Burn
	1.5	0	0
	1.8	0	0
	1.7	0	0
	1.9	0	0
	1.6	0	0
AVG	1.7	0	0

Rating : Passed

Comments : Smoke and drip

SPECIFICATIONS

Distance Burned : Maximum 8 inches on Average
Burn Time : Maximum 15 inches on Average
Drip Burn : Maximum 5 inches on Average

W/o 80581

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
TMAC WP-27

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.: J-8	Nationality and Registration Mark.: N2945
2. Owner	Name (As shown on registration certificate): Reid W. Dennis	Address (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, CA 94062

3. For FAA Use Only

The data 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

05-21-01 [signature] OAK-FSDO
DATE SIGNATURE

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.
A.G. Macfie 306 Martina Street Point Richmond, CA 94801	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

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
20 May 2001	[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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
22 MAY 2001	[redacted]	[signature]

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) Grumman Mallard s/n J-8 Modified to a configuration similar to later manufactured aircraft by relocation of left and right fuel boost pump assemblies from bracket attached to left side of engine mounts to bracket located on firewalls. This modification relieves a problem with cracking in the boost pump brackets, and improves access to the left magneto for servicing. No information available on exact details of factory produced boost pump mounts.

2a) Firewall brackets fabricated from extruded aluminum zee section, Tiernay metals section 60-3427, material 6061-T6511. Brackets attached to firewall using a combination of existing screw locations and added AN525-1032R10 screws with AN365-10932A locknuts and AN960-10 washers (5 screws per bracket). Boost pump and fuel strainer asemblies fastened to brackets using AN5-( )A bolts, AN960PD516 washers, and MS21059L5 nutplates.

2b) Boost pump/fuel strainer installation load tested in accordance with AC43.13-2A Chapter 1 paragraph 2 & 3, no deformation or damage noted.

2c) Fuel hoses rerouted and clamped to facilitate modification, all hoses of same basic specification as unmodifed configuration.

2d) Fuel system is schematically unchanged by this modification, and the boost pump relocation has moved the pumps approximately 10".

2e) Aircraft to be reweighed, and new weight & balance report issued prior to flight (net weight change is minimal, however other airframe work necessitates reweighing at this time).

3) No special procedures applicable.

4) No changes in servicing information.

5) Maintenance instructions for boost pump and strainer assembly unchanged. Mounting brackets to be inspected for security, condition, and corrosion during normal scheduled maintenance per FAA approved inspection program for N2945.

6) N/A

7) N/A

8) N/A

9) N/A

10) N/A

11) Boost pump and strainer mounting bolts to be torqued in accordance with Grumman Mallard Service Manual standard torque for 5/16-24 fasteners.

12) N/A

13) N/A

14) N/A

15) N/A

16) This ICA to be revised by submittal of a revised form 337 with revised ICA to the local FSDO.

| | 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
T.A. WP-27

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.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name *(As shown on registration certificate)*: Reid W. Dennis	Address *(As shown on registration certificate)*: 225 Mountain Wood Lane, Woodside, CA 94025

3. For FAA Use Only

The data 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

02-21-01 Thist T. Jerrard
DATE SIGNATURE OAK-FSDO

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.
Andrew G. Macfie	X	U.S. Certificated Mechanic	[redacted]
		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: 28 FEB 2001

Signature of Authorized Individual: Andrew G. Macfie

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
28 FEB 2001	[redacted]	Andrew G. Macfie

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. This alteration consists of reduction in maximum allowable takeoff weight for this aircraft from 12,750 pounds to 12,500 pounds.

2. This alteration is accomplished by installation of the Reid W. Dennis Airplane Flight manual Supplement no. 1 in the Grumman Mallard Airplane Flight Manual.

3. n/a
4. n/a
5. n/a
6. n/a
7. n/a
8. n/a
9. n/a
10. n/a
11. n/a
12. n/a
13. n/a
14. n/a

15. See AFM Supplement no. 1.
16. This I.C.A. to be revised by submittal of a new form 337 with the new I.C.A. to the local FSDO.

----------nothing follows----------

| | Additional Sheets Are Attached

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

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
FSG, WP-27

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 Mallard
	Serial No.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name *(As shown on registration certificate)*: Dennis, Reid W.	Address *(As shown on registration certificate)*: 225 Mountain Wood Lane, Woodside, CA 94062

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.
A.G. Macfie Aircraft Consulting 306 Martina St. Point Richmond, CA 94801	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

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
26 June 1999	Andrew O'Mack

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
26 June 1999	[redacted]	Andrew O'Mack

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.)

Left wing pylon and float assembly repaired as follows:

1) Left pylon repaired by disassembly and replacement of structure, including upper and lower ribs, upper and lower skin doublers, all vertical stringers, forward and aft vertical channels, and forward and aft outer skins.

2) Left float assembly repaired by disassembly and replacement of structure, including left upper skin, left and right forward lower skins, left and right aft lower skins, attach angle doubler, attach angle fitting, and #6 former web. #8 former lower left skin attach flange repaired by replacement of flange in accordance with figure 1 (attached). Crack in #4 former outboard corner repaired by installation of doubler in accordance with figure 2 (attached).

3) All rivet layout, spacing and installation as per original or AC43.13-1B chapter 4 section 4 as applicable.

4) All parts etched and alodined using Aldoine 1201. All parts finished internally with Crown epoxy fuel tank coating or zinc chromate primer as applicable. All parts primed externally using PPG DP-50 epoxy primer.

5) Float assembly watertight integrity checked upon completion by leak checking via filling with water. Float found to be satisfactory.

6) Float and pylon reinstalled on aircraft (along with right pylon and float) in accordance with Mallard G-73 Service Manual. Previous major alteration form 337 for operation of aircraft without floats superceded.

7) Aircraft Weight and Balance records updated to reflect float and pylon installation (see weight and balance report this date).

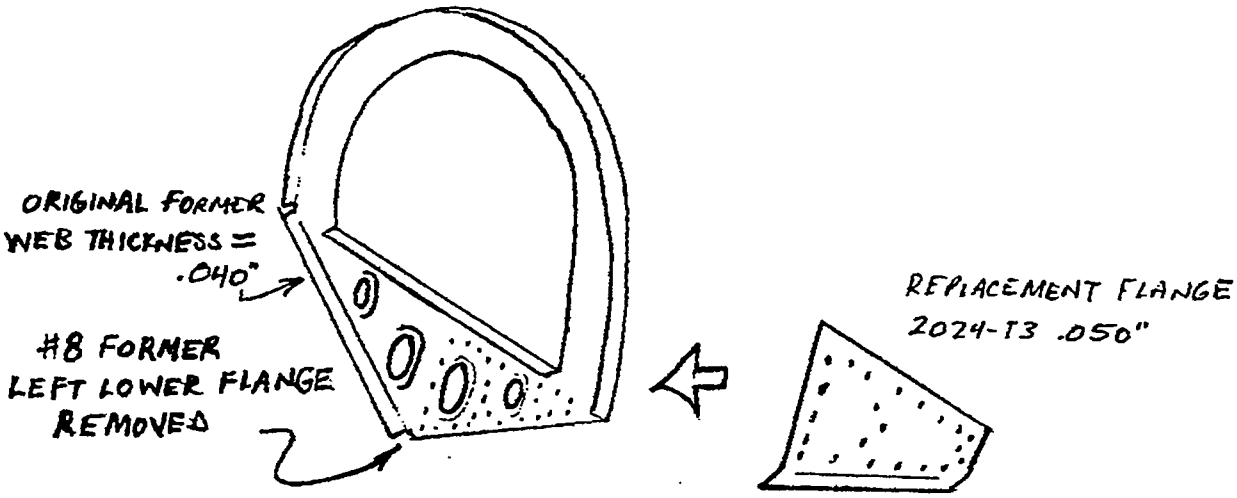
----------attachment figures 1 and 2 follow only----------

☒ Additional Sheets Are Attached

GRUMMAN G-73 MALLARD N2945

FORM 337 ATTACHMENT

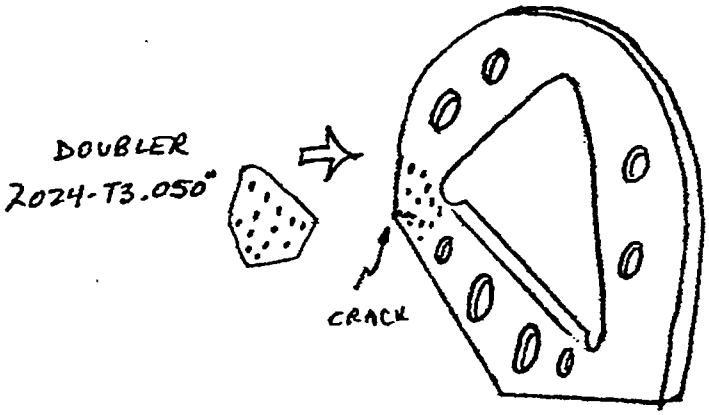
FIGURE 1 #8 FORMER REPAIR



REPLACEMENT FLANGE ATTACHED WITH
5 EACH - MS 20470 AD 5 - ( ) RIVETS
50 EACH - MS 20470 AD 4 - ( ) RIVETS.

FIGURE 2 #4 FORMER REPAIR

$\frac{1}{2}$" CRACK IN RIGHT LOWER CORNER OF FORMER WEB (STOP DRILLED)



DOUBLER ATTACHED WITH
17 EACH - MS 20470 AD 4 - ( ) RIVETS

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 SAC. FSDO

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. 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 violation (Section 901 of Federal Aviation Act of 1958).

1. Aircraft	Make: Grumman	Model: G-73
	Serial No.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name *(As shown on registration certificate)*: Reid W. Dennis	Address *(As shown on registration certificate)*: 225 Mountain Wood Lane, Woodside, CA

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.
Andrew G. Macfie 306 Martina St. Point Richmond, CA 94801	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certified Repair Station Manufacturer	[redacted]

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

Date: October 20th, 1997
Signature of Authorized Individual: Andrew G. Macfie

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
December 3rd, 1998	[redacted]	Andrew G. Macfie

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.)

Wing floats and pedestals removed in accordance with CAA from 337 dated January 27th 1952.
Aircraft is restricted to no water landings.
Aircraft reweighed subsequent to float removal, see weight and balance report with equipment list dated 13 November 1998.

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

☐ Additional Sheets are Attached

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
SAC. FSDO

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1000 for each such violation (Section 901 Federal Aviation Act of 1958)

1. Aircraft	Make: Grumman	Model: G-73
	Serial No.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name (As shown on registration certificate): Reid W. Dennis	Address (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, CA

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 / Mnfctr				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Andrew G. Macfie 306 Martina St. Point Richmond, CA 94801	x U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

D. I certify that the repair and/or alteration 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 herin is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
June 23rd, 1998	Andrew G. Macfie

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		Person Appr. by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7/1/98	49625712	Glenn Burnham GLENN BURNHAM, PRESIDENT-FLYING FOSSILS INC.

FAA 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.

B. Description of Work Accomplished

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

Aircraft belly damage repaired as follows:

Aircraft bottom skin left & right from F.S. 160-250 removed due to damage and replaced with 2024-T3 .063" aluminum.

Aircraft bottom skin left F.S. 93-160 removed due to damage and replaced with .063" 2024-T4 aluminum.

(Original skin panels were .051" 24ST).

Hull former bottom extension at F.S. 202 damaged, replaced as per original with .063" 2024-T3 aluminum.

Hull former bottom extension at F.S. 160 damaged, replaced as per original with .063" 2024-T3 aluminum.

Longitudinal members at keel reinforcement from F.S. 230 to 250 replaced as per original due to buckling damage with replacment members of .063" 2024-T3 aluminum.

Stringer closest to keel on right side at F.S. 236.5 to F.S. 250 replaced with new unit fabricated from .050" 2024-T3 aluminum due to buckling damage (original stringer 24ST .050"). Stringer splice performed at F.S. 236.5 in accordance with attached page 1.

Step former at F.S. 250, flange cracked on right side from centerline out approximately 6", area repaired in accordance with attached page 2.

All skin panels, former extensions, and longitudinal members attached using original fastener layout and number. All hull structural members etched with Alumiprep, Alodined, and interior surfaces painted with Crown epoxy primer.

Keel member removed due to damage, new keel extrusion installed as per original.

Hull panels sealed using Pro Seal PS870B sealant on all faying surfaces and fillets. Hull leak checked and watertight integrity satisfactorily established.

Aircraft to be reweighed prior to flight, and appropriate weight and balance report completed.

——— nothing follows ———

X Additional Sheets Are Attached

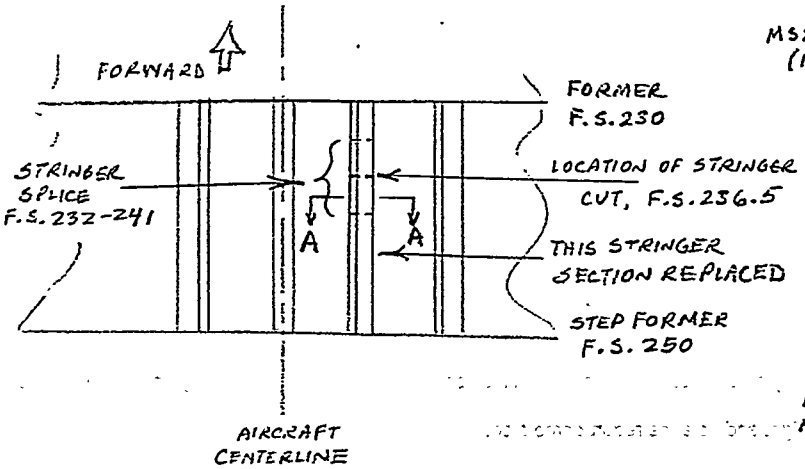
U.S. GPO: 1994-568-012/00019

Attahcment to Form 337 for Grumman G-73/N2945
page 1
work completed June 23rd, 1998

General Notes: Stringer splice design and fastener number and layout in accordance with AC43.13-1A change three, section 3, para. 97, para. 99, para. 100g, h, i & j.
Replacement stringer section and splice members etched, alodined, and epoxy primed prior to installation.

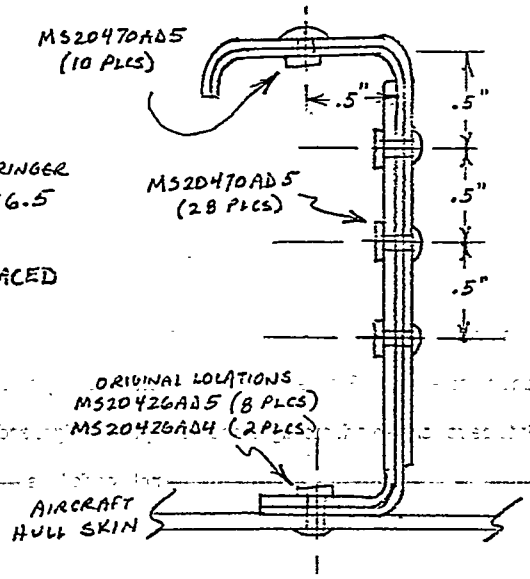
Location of stringer replacement and splice:

VIEW LOOKING DOWN



Stringer cross section at splice:

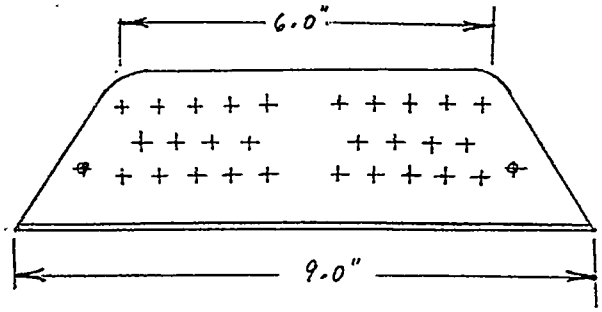
SECTION A-A



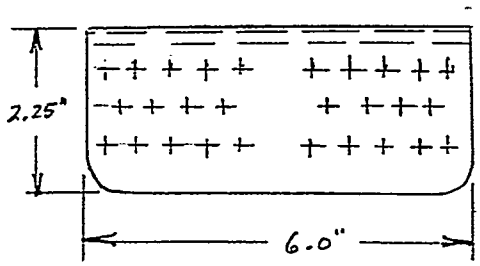
Detail of inner & outer splice members:

INSIDE SPLICE MEMBER
SIDE VIEW

MATERIAL: 2024-T3 .063"
FASTENER LEGEND: + MS20470AD5
⊕ MS20470AD4



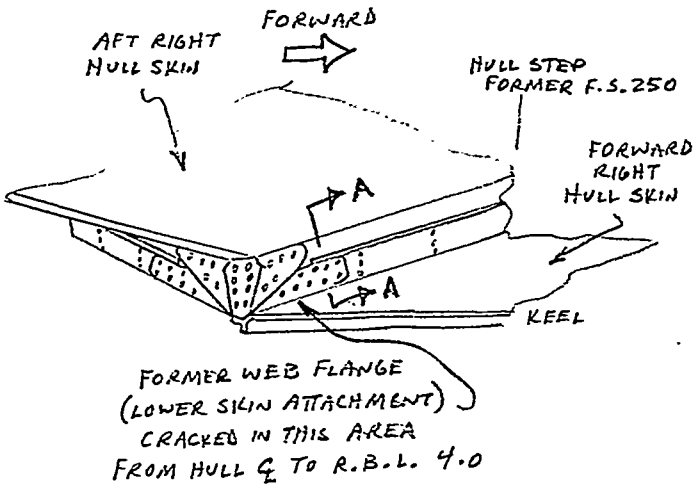
OUTSIDE SPLICE MEMBER
SIDE VIEW



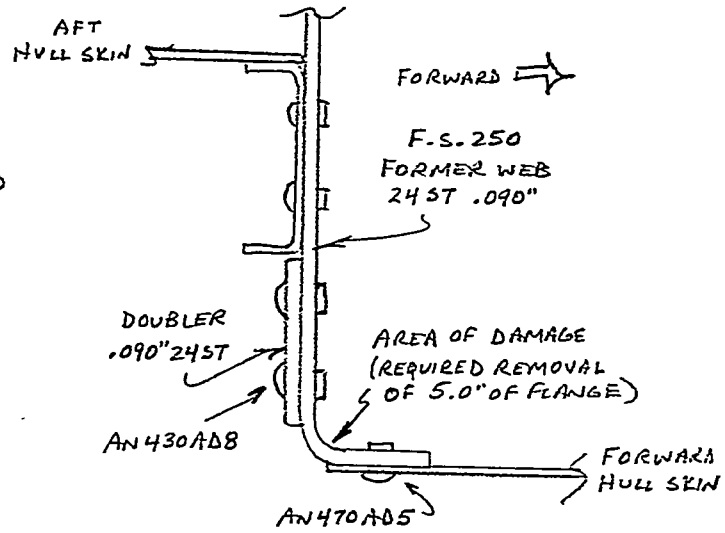
Attahcment to Form 337 for Grumman G-73/N2945
page 2
work completed June 23rd, 1998

General Notes: Step former flange repair designed and installed in accordance with AC43.13-1A change three, section 3, para. 97, para. 98, para. 99, para. 100b, and para. 100g. All original parts reused, and all replacement parts etched, alodined and epoxy primed prior to installation.

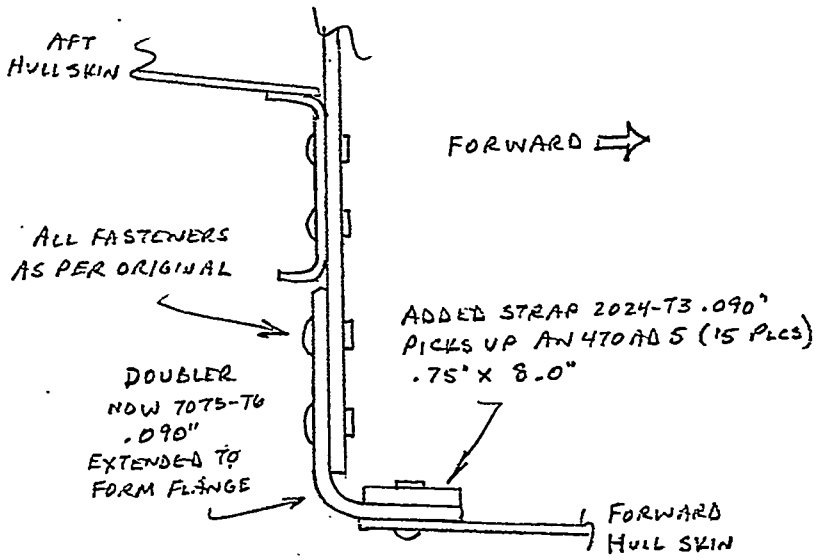
Location of step former damage:



Original cross section A-A of area:



Cross section A-A as repaired:



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
SAC. FSDO

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1000 for each such violation (Section 901 Federal Aviation Act of 1958)

1. Aircraft	Make: Grumman	Model: G-73
	Serial No.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name (As shown on registration certificate): Reid W. Dennis	Address (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, CA

3. For FAA Use Only

APPROVAL BY EXAMINATION OF DATA ONLY-ONE AIRCRAFT. THE DATA IDENTIFIED HEREIN COMPLIES WITH THE APPLICABLE AIR WORTHINESS REQUIREMENTS AND IS APPROVED FOR THE ABOVE DESCRIBED AIRCRAFT, SUBJECT TO CONFORMITY INSPECTION BY A PERSON AUTHORIZED IN FAR 43.7 ..

EARL R. BENEDICT
FAA INSPECTOR

JUN 30 1998 — DATE
SIGNATURE
SAC. FSDO — OFFICE

4. Unit Identification				**5. Type**	
Unit	**Make**	**Model**	**Serial No.**	**Repair**	**Alteration**
Airframe	----------(As described in Item 1 above)----------				X
Powerplant					
Propeller					
Appliance	Type / Mnfctr				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Andrew G. Macfie 306 Martina St. Point Richmond, CA 94801	x U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

D. I certify that the repair and/or alteration 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 herin is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
June 25th, 1998	Andrew G. Macfie

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		Person Appr. by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7/3/98	49625712	GLENN BURNHAM, PRESIDENT - FLYING FOSSILS INC.

FAA 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.

B. Description of Work Accomplished

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

Aircraft hydraulic system altered as follows: All hydraulic tube assemblies in aircraft removed (original tubing assemblies were copper "everdure" or 6061-T6 aluminum, with single flare or eremeto-type fittings). All assemblies duplicated using stainless steel tubing (.035" wall thickness, 304 alloy) meeting MIL-T-8504B, MS20818-( )D b-nuts, and MS20819-( ) sleeves. All flares formed in accordance with MS33584. All tubing assemblies installed in aircraft in accordance with AC43.13-1A change three, chapter 10, section 1, para. 393b and figure 10.1. New assemblies satisfactory for aircraft ultimate hydraulic pressure of 1700 PSI (relief valve pressure).

All aircraft hydraulic systems tested after tubing installation for satisfactory operation, and all connections leak checked after system testing.

Aircraft to be reweighed prior to flight, and appropriate weight and balance report completed.

---------- nothing follows ----------

___Additional Sheets Are Attached

U.S. GPO: 1994-568-012/00019

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
SAC. FSDO

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1000 for each such violation (Section 901 Federal Aviation Act of 1958)

1. Aircraft	Make: Grumman	Model: G-73
	Serial No.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name (As shown on registration certificate): Reid W. Dennis	Address (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, CA

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 / Mnfctr				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Andrew G. Macfie 306 Martina St. Point Richmond, CA 94801	x U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

D. I certify that the repair and/or alteration 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 herin is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
June 25th, 1998	Andrew G. Macfie

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		Person Appr. by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
7/9/98	49625712	Glenn Burnham GLENN BURNHAM, PRESIDENT-FLYING FOSSILS INC

FAA 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.

B. Description of Work Accomplished

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

Damage to aircraft left wing repaired as follows:

Left lower aft wing skin W.S. 125-230 replaced as per original with 2024-T3 .032" aluminum, all fasteners as per original or acceptable substitue.

Left lower aft wing skin W.S. 230-293 replaced as per original with 2024-T3 .032" aluminum, all fasteners as per original or acceptable substitue.

Left upper aft wing skin W.S. 230-270 replaced as per original with 2024-T3 .032" aluminum, all fasteners as per original or acceptable substitue.

Left wing stringers at W.S. 249 rib, chafing damage between rib and stringers repaired in accordance with DER approved drawing "G-73 s/n J-8 stringer repair - June 25th, 1998" , see form 8110-3 attached.

Wing supported by jigging at W.S. 317 during repair process to preserve symmetry.

All skin replacement performed in accordance with AC43.13-1A change three, section 3, para. 97 and para.99.

All replacement skins and parts etched with Alumiprep, Alodined, and primed with PPG DP-40 epoxy primer prior to installation.

Aircraft to be reweighed prior to flight, and appropriate weight and balance report completed.

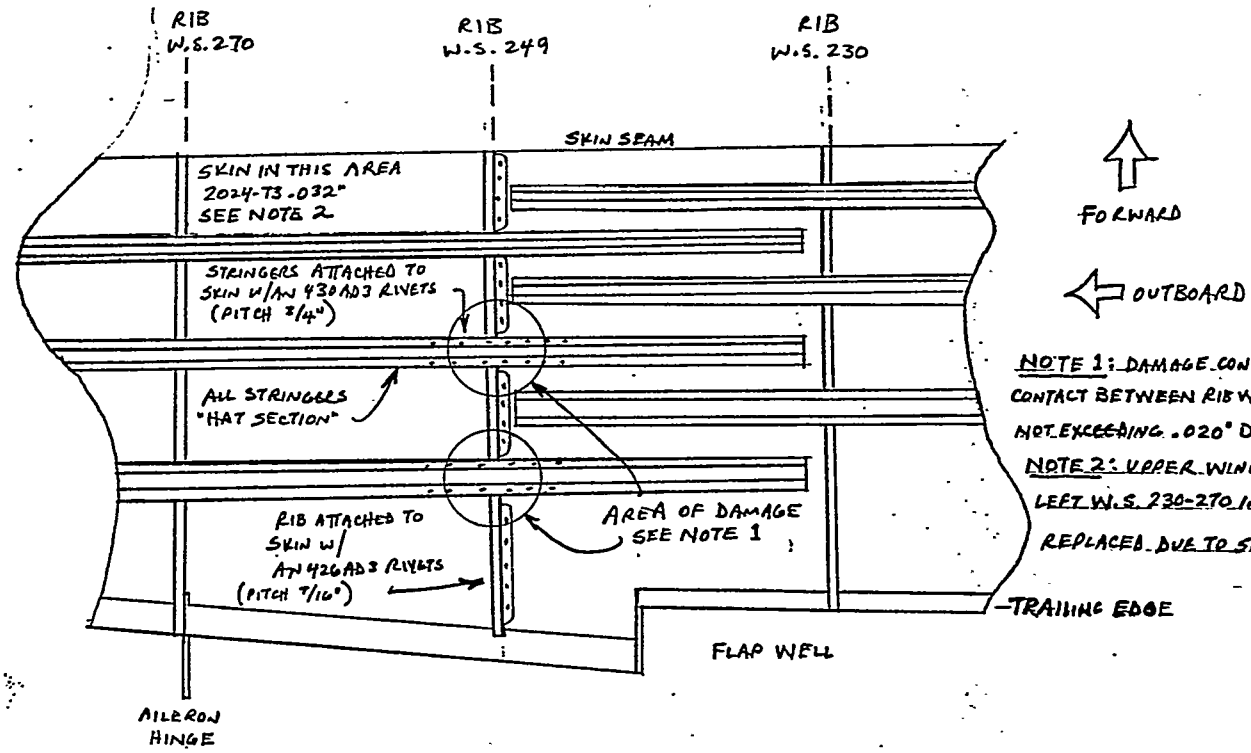
---------- nothing follows ----------

X Additional Sheets Are Attached

G-73 S/N J-8 STRINGER REPAIR - JUNE 25TH, 1998 SHEET 1 OF 2

VIEW LOOKING DOWN AT TOP SURFACE OF LEFT WING - LOCATION OF DAMAGE

(SHOWN WITH TOP SKIN REMOVED FOR CLARITY)



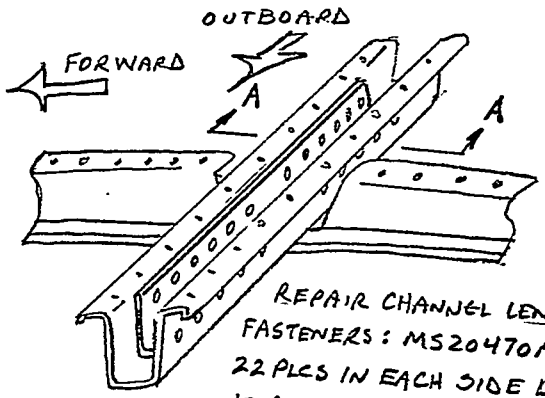
NOTE 1: DAMAGE CONSISTS OF RUBBING CONTACT BETWEEN RIB WEB & STRINGER NOT EXCEEDING .020" DEPTH.

NOTE 2: UPPER WING SKIN FROM LEFT W.S. 230-270 IN THIS AREA REPLACED DUE TO SLIGHT BUCKLING.

G-73 S/N J-8 STRINGER REPAIR - JUNE 25TH, 1998 SHEET 2 OF 2

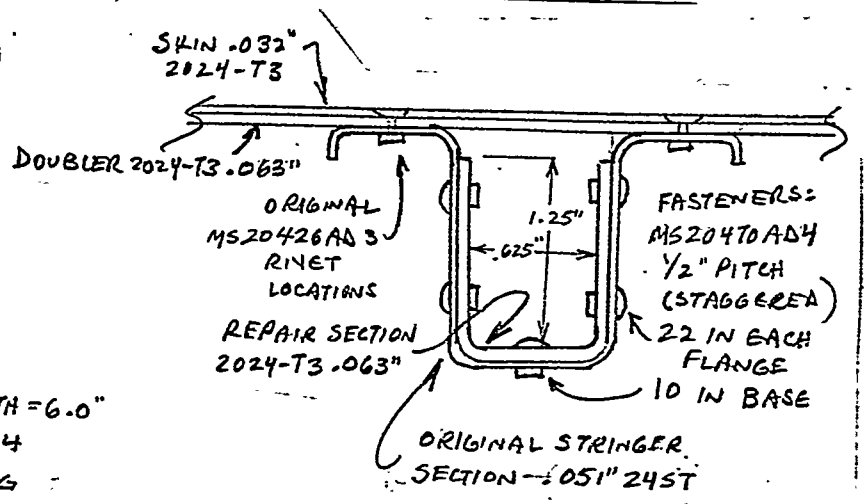
DETAIL OF STRINGER CHANNEL

(THIS REPAIR TYPICAL OF 2 LOCATIONS)

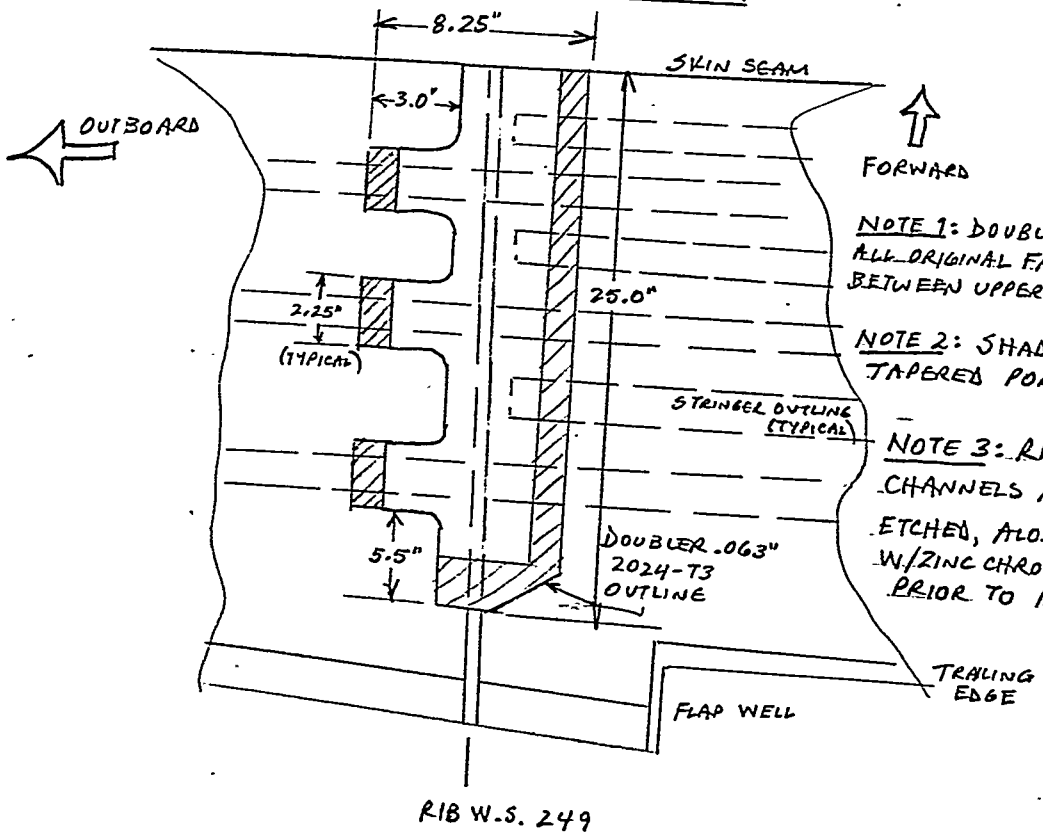


REPAIR CHANNEL LENGTH = 6.0"
FASTENERS: MS20470AD4
22 PLCS IN EACH SIDE LEG
10 PLCS IN BOTTOM LEG

REPAIR CHANNEL SECTION A-A



LAYOUT OF REPAIR DOUBLER



NOTE 1: DOUBLER INSTALLED USING ALL ORIGINAL FASTENER TYPE & LOCATIONS BETWEEN UPPER WING SKIN & RIB/STR'S.

NOTE 2: SHADED AREAS DEPICT TAPERED PORTIONS OF DOUBLER

NOTE 3: REINFORCEMENT CHANNELS AND DOUBLER ETCHED, ALODINED, AND PRIMED W/ZINC CHROMATE PRIMER PRIOR TO INSTALLATION.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH THE FEDERAL AVIATION REGULATIONS

DATE: July 2, 1998

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE *(Airplane, Radio, Helicopter, etc.)*	NAME OF APPLICANT
Frakes	G-73	Airplane	A.G. Macfie

LIST OF DATA

IDENTIFICATION	TITLE
G-73 s/n J-8 stringer repair June 25th, 1998 (2 sheets) END END	Drawing, stringer repair END END END END

Notes:

1) This approval indicates the data listed above demonstrates compliance only with the regulations specified by paragraph and subparagraph listed below as "APPLICABLE REQUIREMENTS". (Compliance to additional regulations not listed here may be required.) This form may not constitute FAA approval of all the engineering design data necessary for substantiation to necessary requirements for the entire repair.
2) These data cover installation provisions only, and are issued in support of a major modification of the subject aircraft.
3) Structural aspects approved only.
4) End of data.

PURPOSE OF DATA

In support of a field approval of a major repair: G-73 S/N J-8 Only

APPLICABLE REQUIREMENTS *(List specific sections)*

Aircraft certificated to CAR 4a.
For this repair: CAR 4b.200, 4b.201, 4b.300, 4b.301, 4b.302, 4b.304

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

☒ Approve these data

SIGNATURE(S) OF DESIGNATED ENGINEERING REPRESENTATIVE(S)	DESIGNATION NUMBER(S)	CLASSIFICATION(S)
Robert M. Halvorson	NM-2175	Structures

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
SAC. FSDO

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. 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	Model: G-73
	Serial No.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name (As shown on registration certificate): REID W. DENNIS	Address (As shown on registration certificate): 225 MOUNTAIN WOOD LANE WOODSIDE, CA

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.
ANDREW G. MACFIE 306 MARTINA ST. POINT RICHMOND, CA 94801	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

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: 4/22/98

Signature of Authorized Individual: Andrew G. Macfie — ANDREW G. MACFIE

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
4/22/98	49625712	Glenn Burnham GLENN BURNHAM, PRESIDENT-FLYING FOSSILS INC.

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.)

LEFT AFT NOSE LANDING GEAR DOOR HINGE AREA F.S. 79-93 (LEFT SIDE) DAMAGE REPAIRED IN ACCORDANCE WITH ATTACHED DATA SHEETS 1-4.

ALL REPLACEMENT PART DESIGN AND FASTENER CRITERIA IN ACCORDANCE WITH AC 43.13-1A SECTION 3 PARAGRAPHS 96-100 AND FIGURE 2.28.

HULL WATERTIGHT INTEGRITY TESTED UPON REPAIR COMPLETION AND FOUND SATISFACTORY. WEIGHT AND BALANCE CHANGE NEGLIGIBLE.

END

☒ Additional Sheets Are Attached

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

GRUMMAN G-73 MALLARD S/N J-8 N2945

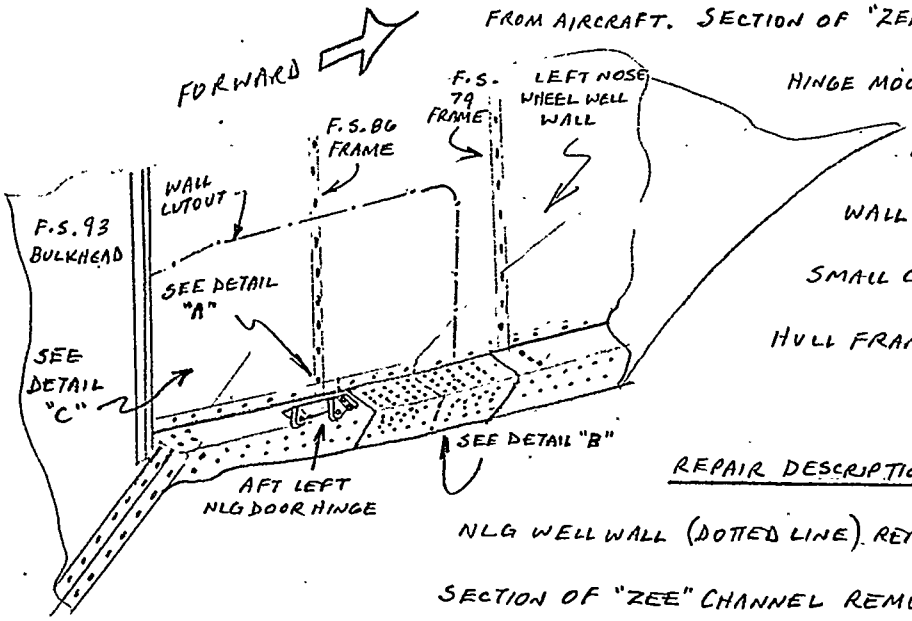
NOSE WHEEL WELL REPAIR

GENERAL REPAIR SCHEME

FORM 337 ATTACHMENT
SHEET 1 OF 4
DATE: 4/22/98

VIEW LOOKING UP & AFT INTO NOSE WHEEL WELL, LEFT SIDE

DESCRIPTION OF DAMAGE: LEFT NOSE LANDING GEAR DOOR AND AFT DOOR HINGE SEPERATED FROM AIRCRAFT. SECTION OF "ZEE" CHANNEL (NOSE GEAR DOOR HINGE MOUNTING SURFACE) AND SMALL PORTION OF LEFT NOSE WELL WALL TORN OUT WITH DOOR & HINGE. SMALL CRACKS IN BASE OF F.S. 86 HULL FRAME.



REPAIR DESCRIPTION: SECTION OF LEFT NLG WELL WALL (DOTTED LINE) REMOVED FOR ACCESS. AFT SECTION OF "ZEE" CHANNEL REMOVED. INSERT REPAIR INSTALLED ON AFT SIDE OF F.S. 86 FRAME (SEE DETAIL "A"). NEW "ZEE" CHANNEL SECTION FABRICATED & INSTALLED WITH INSIDE & OUTSIDE SPLICE ANGLES (SEE DETAIL "B"). NEW LEFT AFT NLG DOOR HINGE & BACKUP FITTINGS INSTALLED IN ACCORDANCE WITH GRUMMAN G-73 SERVICE MANUAL AND I.P.C. INSERT INSTALLED IN LEFT NLG WELL WALL CUTOUT SECTION WITH INSIDE DOUBLER (SEE DETAIL "C"). HULL AREA LEAK CHECKED UPON COMPLETION.

GENERAL NOTES:

① ALL RIVET LOCATIONS, SIZE, NUMBER AND SPACING ORIGINAL OR I/A/W AC43.13-1A SECTION 3 PARA. 96 - 100 AND FIGURE 2.28.

② ALL NEW PARTS TREATED WITH ALUMIPREP & ALODINE I/A/W MFG'S INSTRUCTIONS. ALL FAYING SURFACES PAINTED W/CROWN FUEL TANK COATING & SEALED WITH P/S 870-B SEALANT.

GRUMMAN G-73 MALLARD S/N J-8 N2945

NOSE WHEEL WELL REPAIR

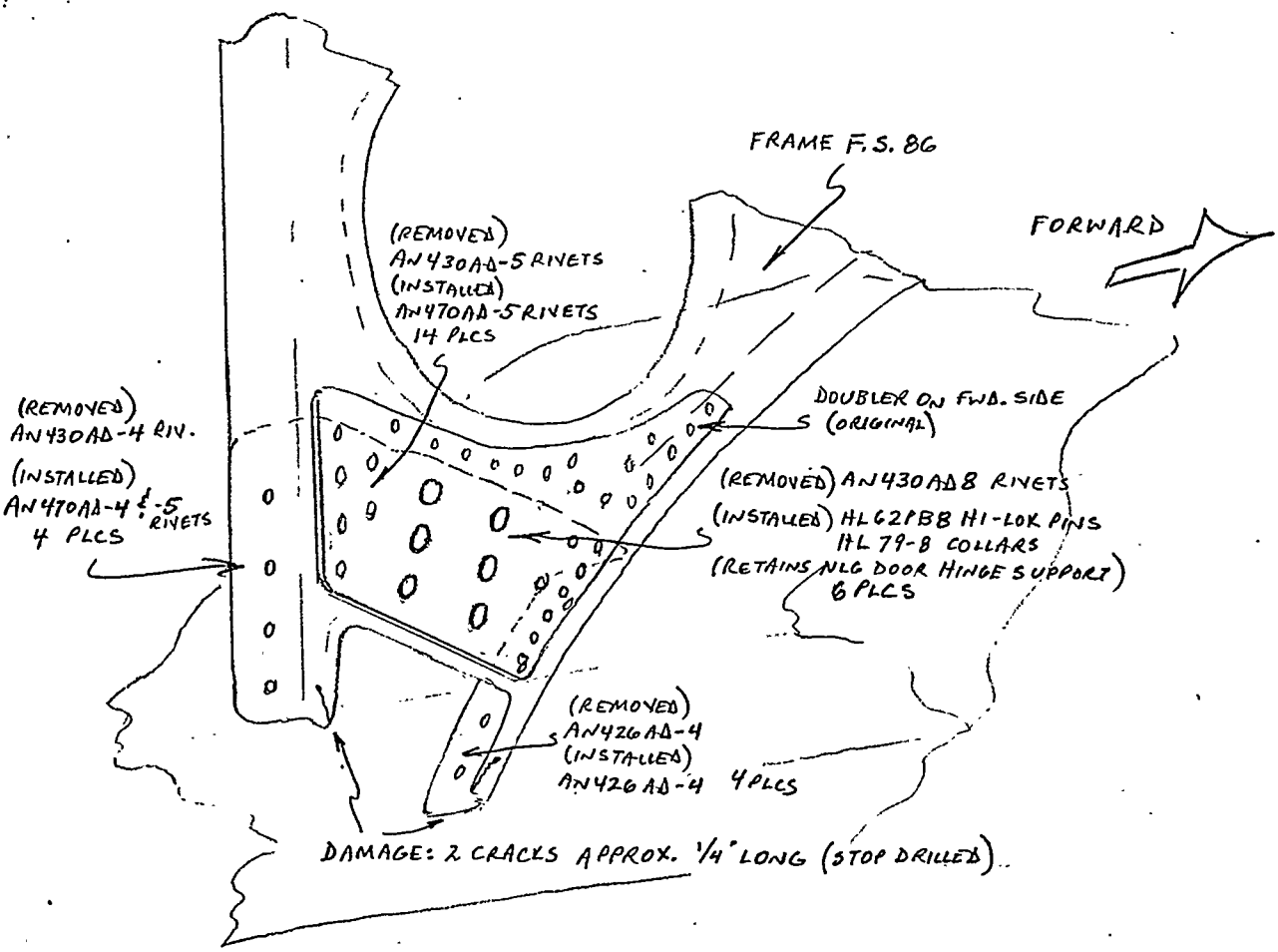
HULL FRAME F.S. 86 REPAIR DETAIL "A"

FORM 337 ATTACHMENT

SHEET 2 OF 4

DATE: 4/22/98

VIEW LOOKING UP & AFT INTO NOSE WHEEL WELL, LEFT SIDE (AFT LEFT DOOR HINGE AREA)



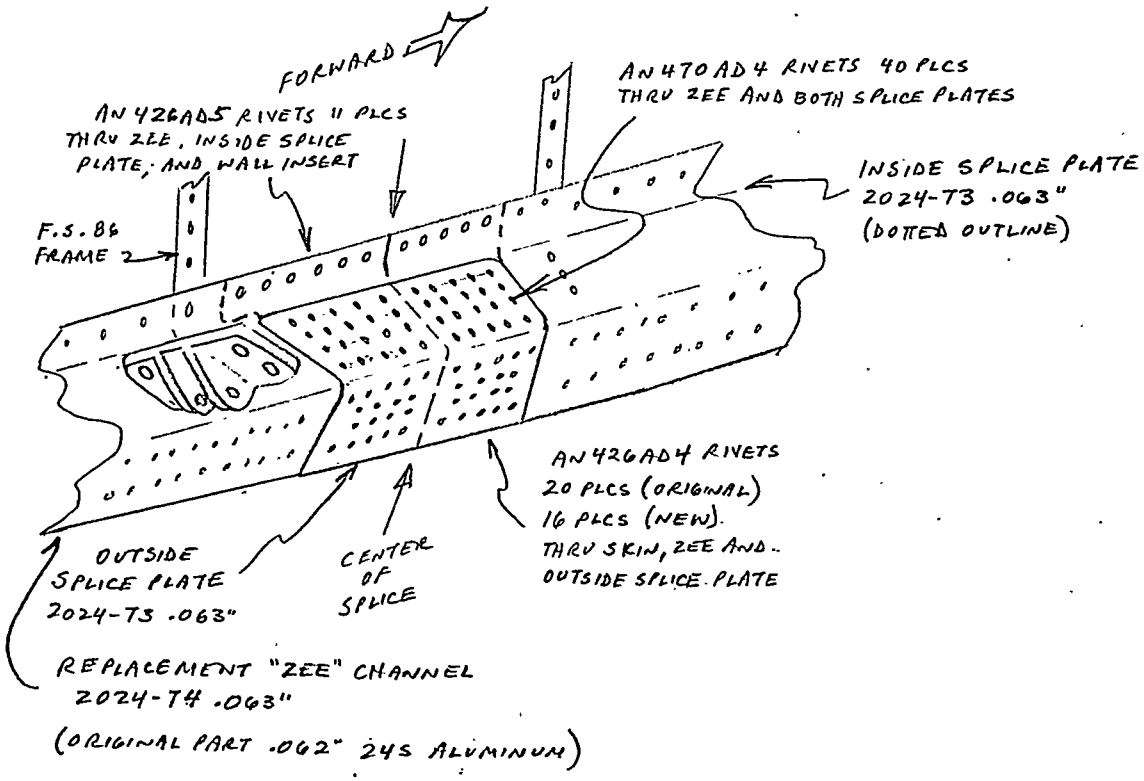
REPAIR: FORMED 2024-T3/.050" INSERT ON AFT SIDE OF FRAME, PICKS UP ORIGINAL FASTENER LOCATIONS AS SHOWN. REPAIR PART TREATED WITH ALUMIPREP & ALODINE, PAINTED WITH CROWN FUEL TANK COATING.
ALL FASTENERS INSTALLED IN ACCORDANCE WITH AC43.13-1A & 2A OR MFG'S INSTRUCTIONS AS APPLICABLE.

GRUMMAN G-73 MALLARD S/N J-8 N2945 FORM 337 ATTACHMENT

NOSE WHEEL WELL REPAIR SHEET 3 OF 4

"ZEE" CHANNEL REPAIR F.S. 93-79 DETAIL "B" DATE: 4/22/98

VIEW LOOKING UP & AFT INTO NOSE WHEEL WELL, LEFT SIDE



GRUMMAN G-73 MALLARD S/N J-8 N2945

FORM 337 ATTACHMENT

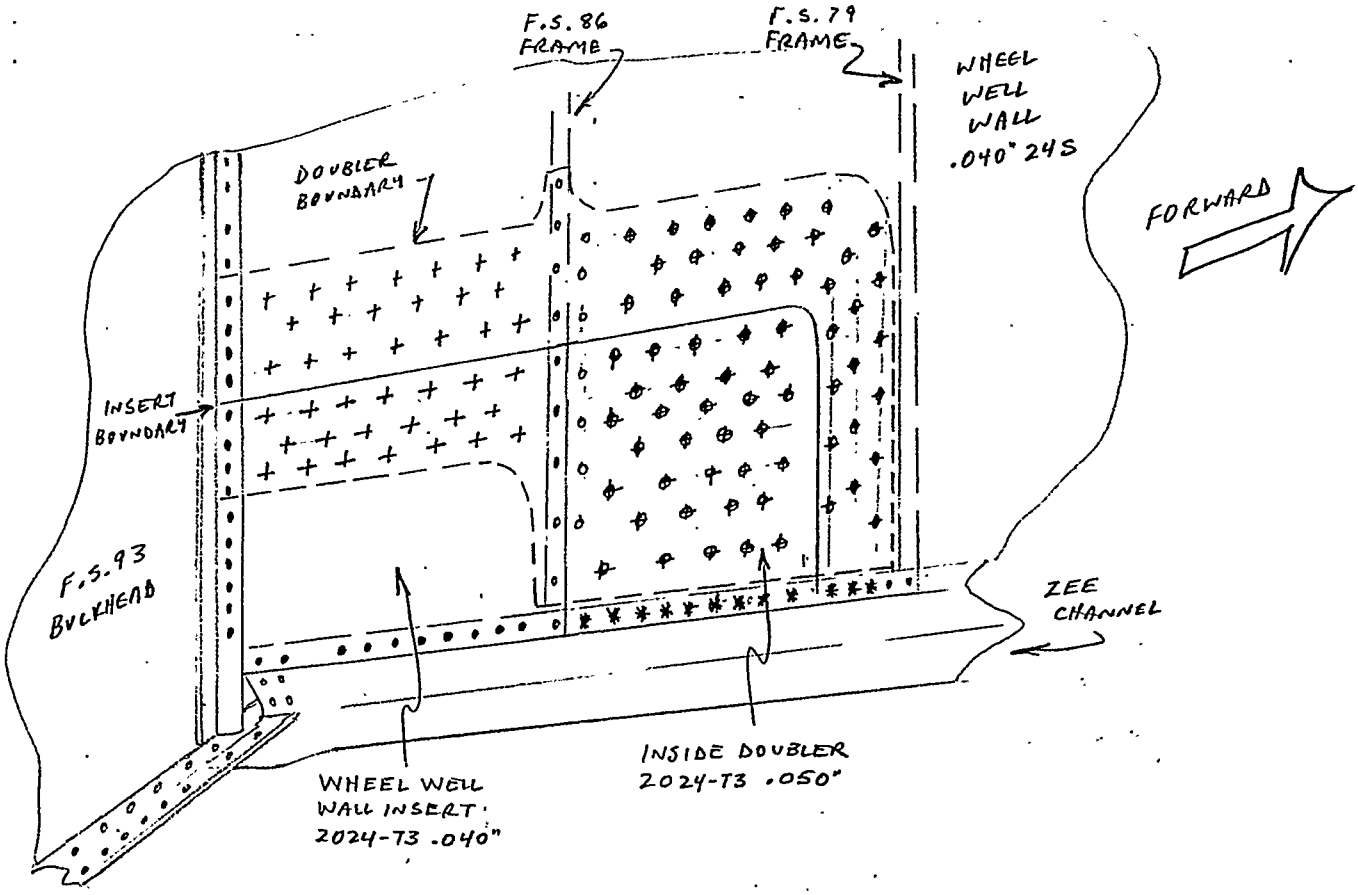
NOSE WHEEL WELL REPAIR

SHEET 4 OF 4

LEFT WELL WALL INSERT & DOUBLER INSTL - DETAIL "C"

DATE: 4/22/98

VIEW LOOKING UP & AFT INTO NOSE WHEEL WELL, LEFT SIDE



RIVET LEGEND:
- o AN470AD5 IN ORIGINAL LOCATION
- • AN470AD4 IN ORIGINAL LOCATION
- + AN470AD5 NEW LOCATION
- ⊕ AN426AD5 NEW LOCATION
- * AN426AD5 IN ORIGINAL LOCATION

NOTE: SHOWN WITH NOSE WHEEL STRIKE PLATE OMMITTED FOR CLARITY.

Form Approved
O.M.B. No. 2120-0018

U.S. Department of Transportation
Federal Aviation Administration

APPLICATION FOR AIRWORTHINESS CERTIFICATE

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 an attachment. For special flight permits complete Sections II and VI or VII as applicable.

I. AIRCRAFT DESCRIPTION

1. REGISTRATION MARK	2. AIRCRAFT BUILDER'S NAME (Make)	3. AIRCRAFT MODEL DESIGNATION	4. YR. MFR	FAA CODING
N2945	GRUMMAN	G-73	46	
5. AIRCRAFT SERIAL NO.	**6. ENGINE BUILDER'S NAME (Make)**	**7. ENGINE MODEL DESIGNATION**		
J-8	PRATT & WHITNEY	R-1340-S1H1		
8. NUMBER OF ENGINES	**9. PROPELLER BUILDER'S NAME (Make)**	**10. PROPELLER MODEL DESIGNATION**	**11. AIRCRAFT IS (Check if applicable)**	
2	HAMILTON STANDARD	23D40	IMPORT	

II. CERTIFICATION REQUESTED

APPLICATION IS HEREBY MADE FOR: (Check applicable items)

A	1		STANDARD AIRWORTHINESS CERTIFICATE (Indicate category)		NORMAL		UTILITY		ACROBATIC		TRANSPORT		GLIDER		BALLOON
B	X		SPECIAL AIRWORTHINESS CERTIFICATE (Check appropriate items)												
		2	LIMITED												
		5	PROVISIONAL (Indicate class)	1		CLASS I									
				2		CLASS II									
		3	RESTRICTED (Indicate operations to be conducted)	1		AGRICULTURE AND PEST CONTROL		2		AERIAL SURVEYING		3		AERIAL ADVERTISING	
				4		FOREST (Wildlife conservation)		5		PATROLLING		6		WEATHER CONTROL	
				7		CARRIAGE OF CARGO		0		OTHER (Specify)					
		4	EXPERIMENTAL (Indicate operations to be conducted)	1		RESEARCH AND DEVELOPMENT		2		AMATEUR BUILT		3		EXHIBITION	
				4		RACING		5		CREW TRAINING				MKT SURVEY	
				0		TO SHOW COMPLIANCE WITH FAR									
		6	X SPECIAL FLIGHT PERMIT (Indicate operation to be conducted then complete Section VI or VII as applicable on reverse side)	1	X	FERRY FLIGHT FOR REPAIRS, ALTERATIONS, MAINTENANCE OR STORAGE									
				2		EVACUATE FROM AREA OF IMPENDING DANGER									
				3		OPERATION IN EXCESS OF MAXIMUM CERTIFICATED TAKE-OFF WEIGHT									
				4		DELIVERING OR EXPORT		5		PRODUCTION FLIGHT TESTING					
				5		CUSTOMER DEMONSTRATION FLIGHTS									
C	8		MULTIPLE AIRWORTHINESS CERTIFICATE (Check ABOVE "Restricted Operation" and "Standard" or "Limited," as applicable.)												

III. OWNER'S CERTIFICATION

A. REGISTERED OWNER (As shown on certificate of aircraft registration) — IF DEALER, CHECK HERE ☐

NAME	ADDRESS
DENNIS, REID W.	225 MOUNTAIN WOOD LANE, WOODSIDE, CA

B. AIRCRAFT CERTIFICATION BASIS (Check applicable blocks and complete items as indicated)

X	AIRCRAFT SPECIFICATION OR TYPE CERTIFICATE DATA SHEET (Give No. and Revision No.) A-783 REV. 9	X	AIRWORTHINESS DIRECTIVES (Check if all applicable AD's complied with and give latest AD No.) 97-13-03 (THRU 97-21M)
	AIRCRAFT LISTING (Give page number(s))		SUPPLEMENTAL TYPE CERTIFICATE (List number of each STC incorporated)

C. AIRCRAFT OPERATION AND MAINTENANCE RECORDS

☐	CHECK IF RECORDS IN COMPLIANCE WITH FAR 91.173.	TOTAL AIRFRAME HOURS 5983.8	3 EXPERIMENTAL ONLY (Enter hours flown since last certificate issued or renewed)

D. CERTIFICATION — 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 Administration 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 airworthiness certificate requested.

DATE OF APPLICATION	NAME AND TITLE (Print or type)	SIGNATURE
20 NOV 97	ANDREW G. MARGE, MAINT. MGR.	Andrew G Marge

IV. INSPECTION AGENCY VERIFICATION

A. THE AIRCRAFT DESCRIBED ABOVE HAS BEEN INSPECTED AND FOUND AIRWORTHY BY (Complete items 2 or 3 only if FAR 21.183(d) applies)

2	☐	FAR PART 121 OR 127 CERTIFICATE HOLDER (Give Certificate No.)	3 X	CERTIFICATED MECHANIC (Give Certificate No.) [redacted]	5 ☐ CERTIFICATED REPAIR STATION (Give Certificate No.)
8	☐	AIRCRAFT MANUFACTURER (Give name of firm)			

DATE	TITLE	SIGNATURE
20 NOV 97	A & P MECHANIC	Andrew G Marge

V. FAA REPRESENTATIVE CERTIFICATION

(Check ALL applicable blocks in items A and B)

A. I find that the aircraft described in Section I or VII meets requirements for: ☐ THE CERTIFICATE REQUESTED ☐ 4 AMENDMENT OR MODIFICATION OF CURRENT AIRWORTHINESS CERTIFICATE

B. Inspection for a special flight permit under Section VII was conducted by: ☐ FAA INSPECTOR ☐ CERTIFICATE HOLDER UNDER: ☐ FAA DESIGNEE ☐ FAR 65 ☐ FAR 121, 127 or 135 ☐ FAR 145

DATE	DISTRICT OFFICE	DESIGNEE'S SIGNATURE AND NO.	FAA INSPECTOR'S SIGNATURE
OCT 21 1997	SAC FSDO		EARL R. BENEDICT

FAA Form 8130-6 (11-88) SUPERSEDES PREVIOUS EDITION

*U.S.GPO:1989-241-872/90913

VI. PRODUCTION FLIGHT TESTING

A. MANUFACTURER

NAME	ADDRESS

B. PRODUCTION BASIS *(Check applicable item)*

- [ ] PRODUCTION CERTIFICATE *(Give production certificate number)*
- [ ] TYPE CERTIFICATE ONLY
- [ ] APPROVED PRODUCTION INSPECTION SYSTEM

C. GIVE QUANTITY OF CERTIFICATES REQUIRED FOR OPERATING NEEDS →

DATE OF APPLICATION	NAME AND TITLE *(Print or type)*	SIGNATURE

VII. SPECIAL FLIGHT PERMIT PURPOSES OTHER THAN PRODUCTION FLIGHT TEST

A. DESCRIPTION OF AIRCRAFT

REGISTERED OWNER: REID W. DENNIS	ADDRESS: 225 MTN. WOOD LANE WOODSIDE, CA
BUILDER *(Make)*: GRUMMAN	MODEL: G-73
SERIAL NUMBER: J-8	REGISTRATION MARK: N2945

B. DESCRIPTION OF FLIGHT — CUSTOMER DEMONSTRATION FLIGHTS [ ] *(Check if applicable)*

FROM: YOLO COUNTY AIRPORT (293)	TO: YACAVILLE/NUT TREE AIRPORT (045)	
VIA: DIRECT	DEPARTURE DATE: 24 OCT 97	DURATION: 23 OCT-25 OCT 97

C. CREW REQUIRED TO OPERATE THE AIRCRAFT AND ITS EQUIPMENT.

[X] PILOT [ ] CO-PILOT [ ] NAVIGATOR [ ] OTHER *(Specify)*

D. THE AIRCRAFT DOES NOT MEET THE APPLICABLE AIRWORTHINESS REQUIREMENTS AS FOLLOWS

NOSE LANDING GEAR DOORS AND WING FLOATS/PEDESTALS REMOVED.

E. THE FOLLOWING RESTRICTIONS ARE CONSIDERED NECESSARY FOR SAFE OPERATION *(Use attachment if necessary)*

NO WATER LANDINGS.

DO NOT EXCEED V_{LE} (150 MPH IAS).

F. CERTIFICATION — 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 Administration 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 for the flight described.

DATE	NAME AND TITLE *(Print or type)*	SIGNATURE
20 NOV 97	ANDREW G. MALFIE A/P MECHANIC	Andrew G. Malfie

VIII. AIRWORTHINESS DOCUMENTATION (FAA use only)

- [ ] A. Operating Limitations and Markings in Compliance with FAR 91.31 as Applicable
- [ ] B. Current Operating Limitations Attached
- [ ] C. Data, Drawings, Photographs, etc. *(Attach when required)*
- [ ] D. Current Weight and Balance Information Available in Aircraft
- [ ] E. Major Repair and Alteration, FAA Form 337 *(Attach when required)*
- [ ] F. This Inspection Recorded in Aircraft Records
- [ ] G. Statement of Conformity, FAA Form 8130-9 *(Attach when required)*
- [ ] H. Foreign Airworthiness Certification for Import Aircraft *(Attach when required)*
- [ ] I. Previous Airworthiness Certificate Issued in Accordance with FAR _____ CAR _____ *(Original Attached)*
- [ ] J. Current Airworthiness Certificate Issued in Accordance with FAR _____ *(Copy attached)*

U.S. Department
of Transportation
Federal Aviation
Administration

Sacramento Flight Standards District Office
District Field Office
Western-Pacific Region

6650 Belleau Wood Lane
Sacramento, California 95822
Phone: (916) 422-0272
FAX: (916) 422-0462

FACSIMILE SPECIAL FLIGHT PERMIT

THIS AUTHORIZATION MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH FAR 91.203

PURPOSE: MAINTENANCE & STORAGE

REGISTERED OWNER OR AGENT: REID W. DENNIS

ADDRESS: (CITY, STATE, ZIP) 225 MOUNTAIN WOOD LANE WOODSIDE, CA

PHONE AND / OR FAXNO. 916-759-7073

FLIGHT: FROM YOLO COUNTY AIRPORT *TO:* NUT TREE AIRPORT VACAVILLE, CA

REGISTRATION NUMBER: N2945 *SERIAL NUMBER:* J-8

BUILDER: GRUMMAN *MODEL NUMBER:* G-73

DATE OF ISSUE: 10/21/97 *AUTHORIZATION EXPIRES UPON ARRIVAL AT DESTINATION OR: (date)* 10/25/97.

Signature of FAA Representative: Earl R. Benedict

These operating limitations are a part of the Special Flight Permit issued to the aircraft described above. Flight crew members must be properly certificated and rated in accordance with FAR 61.

1. The flight shall be made in accordance with Visual Flight Rules, Day Only, unless authorized in the special operating limitations below.
2. Occupants shall be limited to crew essential for the purpose of the flight.
3. This special flight permit is not valid unless an appropriately certificated mechanic or repair station certifies in the aircraft records that the aircraft is in safe condition for the intended flight.
4. Operation of this aircraft is subject to the approval of the registered owner.
5. Any Airworthiness Directive pertinent to this make and model of aircraft requiring accomplishment before further flight, or any for which the time limit has been reached or exceeded, must be complied with before ferry flight is initiated. This is not applicable to an appliance if the aircraft can be safely operated without the item. The appliance must be rendered inoperative for flight and so placard. This is not applicable to any AD that permits special flights to a base for the accomplishment of inspections and/or modifications required by the AD.

SPECIAL OPERATING LIMITATIONS: NO WATER LANDING
DO NOT EXCEED VLE

RECEIVED
OAKLAND F.S.D.O.

JUN 1 9 1997

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
NP-27 GOM

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	Model: G-73
	Serial No.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name (As shown on registration certificate): Dennis Reid W.	Address (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, CA 94062

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.
Andrew G. Macfie 724 Golden Gate Avenue Richmond, CA 94801	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

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
13 June 1997	Andrew G. Macfie

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
13 June 1997	49625712	Glenn Burnham

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. Removed existing main wheel and brake assemblies. Modified main landing gear strut flanges and installed Cleveland brake conversion kit p/n 199-113 in accordance with Cleveland wheel & brake installation drawing 50-83 and S.T.C. number SA651GL dated October 28, 1982.

2. Aircraft reweighed subsequent to installation of above referenced components. All previous weight & balance reports superceded, new weight and balance report dated 13 June 1997.

END

☐ Additional Sheets Are Attached

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

RECEIVED
OAKLAND F.S.D.O.

JUN 19 1997

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
WP-27 GDM

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	Model: G-73
	Serial No.: J-8	Nationality and Registration Mark: N2945
2. Owner	Name (As shown on registration certificate): Dennis Reid W.	Address (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, CA 94062

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.
Andrew G. Macfie 724 Golden Gate Avenue Richmond, CA 94801	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	[redacted]

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
13 June 1997	Andrew G. Macfie

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
13 June 1997	49625712	Glenn Burnham

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. Removed existing nosewheel assembly. Installed alternate nose wheel assembly in accordance with Frakes Aviation Drawing FA5096, rev. D, dated June 21, 1974 and S.T.C. number SA1862SW dated August 14, 1974 revision 1.

2. Aircraft reweighed subsequent to installation of above referenced component. All previous weight & balance reports superceded, new weight and balance report dated 13 June 1997.

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

☐ Additional Sheets Are Attached

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

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

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
SFO-FSDO

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. 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	Model: G - 73 Mallard
	Serial No.: J-8	Nationality and Registration Mark: N 2945
2. Owner	Name (As shown on registration certificate): Reid, Dennis	Address (As shown on registration certificate): 225 Mountain Wood Lane Woodside, CA

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.
Ron Reed Rt. 1 Box 44 Half Moon Bay, CA 94019	X U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	1551967

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
5-18-92	Ron Reed

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		Person Approved by Transport Canada Airworthiness Group	

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
5-18-92	1551967	Ron Reed

FAA Form 337 (12 89)

FAA AIRCRAFT REGISTRY
CAMERA NO. 3 DATE: 6-25-92

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.)

Recovered two ailerons, two elevators and rudder useing ceconite 102. All work done in accordance with ceconite procedure manual number 101 under STC SA 2666WE

No Weight Change
END

☐ Additional Sheets Are Attached

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 1 - 27 - 92

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 27 HRD

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 Mallard
	SERIAL NO.: J-8	NATIONALITY AND REGISTRATION MARK: N2945
2. OWNER	NAME (As shown on registration certificate): Mr. Reid Dennis	ADDRESS (As shown on registration certificate): 225 Mountain Wood Lane Woodside, CA

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				

DEC 1991

6. CONFORMITY STATEMENT

A. AGENCY'S NAME AND ADDRESS	B. KIND OF AGENCY	C. CERTIFICATE NO.
Andrew G. Macfie 474 Beloit Ave. Kensington, CA 94708	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	[redacted]

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: 11/21/91

SIGNATURE OF AUTHORIZED INDIVIDUAL: Andrew G. Macfie

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
11/21/91	[redacted]	Steven L. Picatti

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 1 - 27 - 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.)*

Upper left wing skin cracks repaired by stop drilling and installation of surface patches in location and manner described on Figure 1 (attached). Rivet choice and location as per original manufacture, or as noted on Figure 1. Repair area and patches primed using epoxy polyamide primer. Rivets installed in accordance with AC 43.13-1A Change three page 51, paragraph 99, b, c, and f. Repairs aerodynamically faired to wing structure using PR-1422B sealant. Change in weight and balance negligible. End

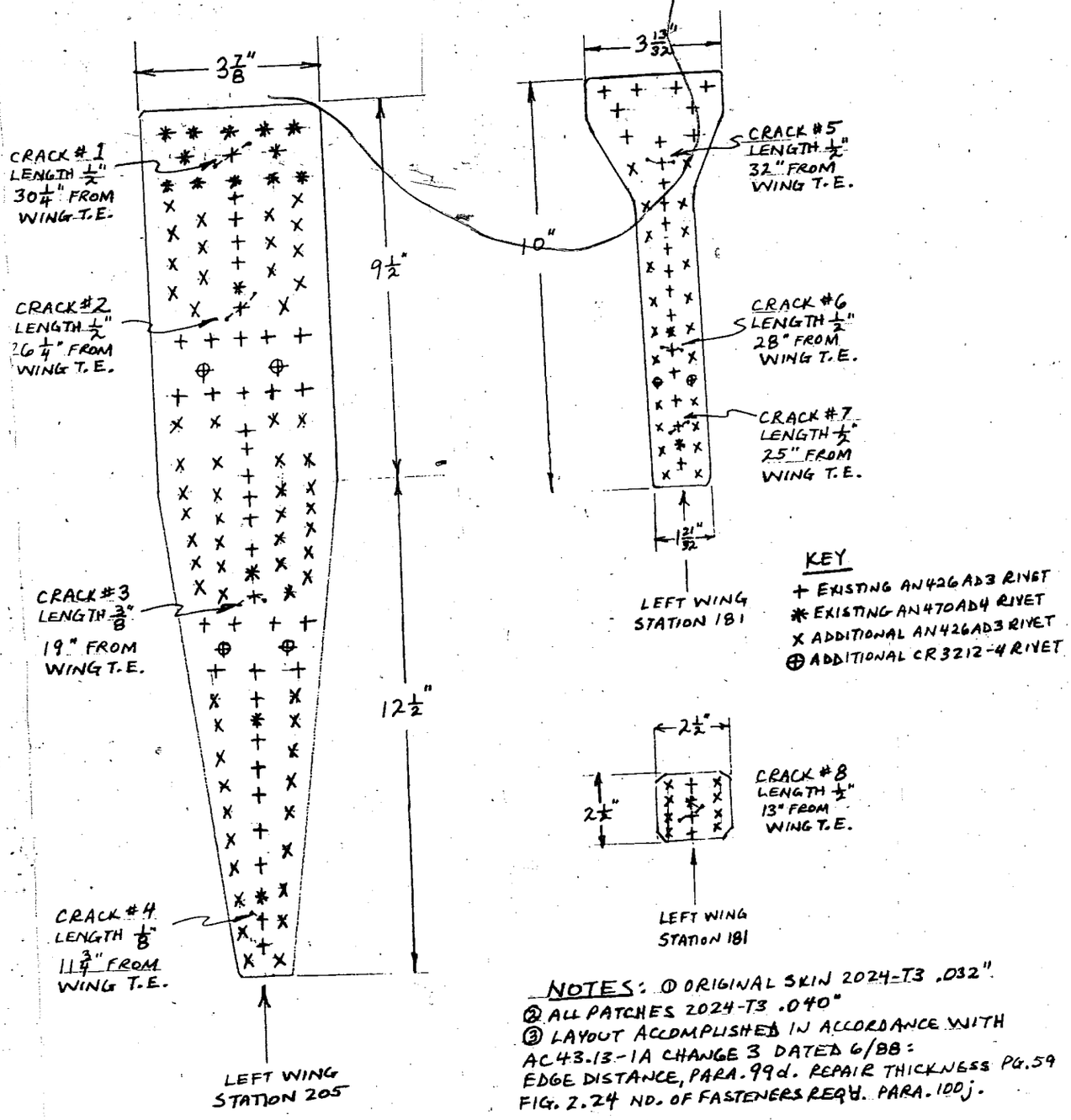
☒ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1986-659-121/40260

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 1 - 27 - 92

FIGURE 1

GRUMMAN G-73 MALLARD / S-N JB / N2945
UPPER LEFT WING SKIN REPAIR COMPLETED 11/21/91



NOTES: ① ORIGINAL SKIN 2024-T3 .032"
② ALL PATCHES 2024-T3 .040"
③ LAYOUT ACCOMPLISHED IN ACCORDANCE WITH AC43.13-1A CHANGE 3 DATED 6/88:
EDGE DISTANCE, PARA. 99d. REPAIR THICKNESS PG. 59 FIG. 2.24 NO. OF FASTENERS REQ'D. PARA. 100j.

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 N DATE: 1 - 27 - 92

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 9-16-88

Pal

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
AWP FSDO-14

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.: J8	NATIONALITY AND REGISTRATION MARK: N-2945
2. OWNER	NAME (As shown on registration certificate): Reid Dennis	ADDRESS (As shown on registration certificate): 225 Mountain Wood Lane Woodside, CA 94062

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.
TOWER AVIONICS CENTER HANGAR 8, OAKLAND INTL AIRPORT OAKLAND, CALIF 94614	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	Radio class I,II, III. Instrument I,II,III & IV 3863

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
9-28-84	[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		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
9-28-84	3863	[signature]

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 9-16-88

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.)*

REMOVED existing NAV/RNAV switching relay unit. Replaced with Foster DI-681 Data Base and interface unit per AC 4313-2A FIG 2.5 on existing nose radio shelf. This installation complies with STC SA 679 GL and flight manual supplement Foster P/N 016A0550A. All work performed in accordance with manufacturer's installation instructions. Electrical load does not exceed 80% rated alternator/generator capacity. Weight and balance negligible. Reference Tower Avionics Center W/O 37952.
RNAV Certified for VFR flight only.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

☆ U.S. GPO: 1981 - 775-332/47

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 9-16-88

Raw

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: AWP-FSDO-14

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.: J8	NATIONALITY AND REGISTRATION MARK: N-2945
2. OWNER	NAME (*As shown on registration certificate*): Reid Dennis	ADDRESS (*As shown on registration certificate*): 225 Mountain Wood Lane Woodside, CA 94062

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.
TOWER AVIONICS CENTER HANGAR 8, OAKLAND INTL AIRPORT OAKLAND, CALIF 94614	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	3863 Radio Class I,II,III, Instrument I,II,III, & IV

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
8/21/84	Roy A Rose

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
8/21/84	3863	[illegible]

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 9-16-88

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.)*

INSTALLED Wulfsberg Flitefone III system, Installed RT18A on existing nose radio rack F.S. 35.0, per AC 4313-2A Fig 2.4. Installed WH18 handset on rear of Copilots seat with adel clamps around seat back tubes, F.S. 134.0, Installed AT 46I antenna on nose top F.S. 41.0 per AC 43.13-2A Fig 3.26. All work performed in accordance with manufactures installation instructions. Electrical load does not exceed 80% rated generator capacity. Weight and Balance revision computed. Reference Tower Avionics Center W/O 130916.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

☆ U.S. GPO: 1981 - 775-332/47

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 7-16-88

RGW

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 AWP-FSDO-GVNEL
FEB 24 1983

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

1. AIRCRAFT	MAKE: Grumman	MODEL: G-73
	SERIAL NO.: J 8	NATIONALITY AND REGISTRATION MARK: N 2945
2. OWNER	NAME (As shown on registration certificate): Reid Dennis	ADDRESS (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, CA. 94062

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.
Tower Avionics Center Hangar 8, Oakland Int'l Airport Oakland, CA 94614	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	Radio Class I,II,III Instrument I,II,III IV: 3863

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
1-11-83	Roy A. Rose

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
1-11-83	3863	[illegible]

FAA Form 337 (7-67)

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 1 DATE: 9-16-88

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.)*

Removed Dual Collins 51R-3 NAV Receivers and 1ea. 351A accessory. Removed 1ea. ARC F11A Audio Amp. Removed ARC R-30 ADF System. Removed 1ea. 51V4 G/S Receiver and 1ea. 51Z6 Marker Beacon Receiver. Removed 1ea. Bonzer TRN70 Radio Altimeter System. Removed 1ea.Bendix MN97H Omni Indicator.

Installed 1ea. King KHF950 HF Transceiver System. Installed KTR 953 Receiver/ Exciter on Existing radio shelf F.S.403, per AC43.13-2A fig.2.3. Installed KAC 952 HF Coupler on shelf in tail cone,F.S. 442.0, per AC43.13-2A fig.2.4. Coupler connected to existing HF long wire antenna. Installed KCU 951 Control in center pedistal. Wired as system to aircraft Audio. Installed dual Collins VIR31A NAV Receivers on existing nose radio racks per AC43.13-2A fig.2.4. Wired NAV 1 to existing Collins 331A3G HSI,Pilot's panel. Installed Collins 331A3G HSI in Copilot's Instrument Panel wired to NAV 2 and existing No. 1 Compass system. Installed Collins 51Y4A ADF Receiver on nose radio rack F.S. 54.0 per AC43.13-2A fig.2.4. Installed 137A-6A ADF Loop antenna on cabin roof center line F.S.144.0 per 43.13-2A fig.3.21. Installed 614L-8 ADF Control in center Pedistal. Wired as system to existing Pilot's RMI and ADF sense antenna. Installed Collins AL-101 Radio Altimeter system. Installed Collins 860F1 Transceiver on existing tail radio shelf F.S.406.0 per AC43.13-2A fig.2.4. Installed Collins 339H1 Indicator in Pilot's Instrument Panelin place of removed. Installed 2ea. U.B.Corp ADS 43010 Radio Altimeter antennas to tail cone belly skin @ F.S. 445.0 per AC43.1B-2A fig.3.5. Installed dual Collins 346B-3 Audio Amps on existing nose radio shelf F.S.65.0 per AC 43.13-2A fig.2.3. Wired as Pilot's and Copilot's Audio systems. Installed in Copilot's Instrument Panel 1ea. AIM 504-0006-914 Vacuum Horizon; 1ea. Kollsman 614K-023 Rate of Climb: 1ea. American Instrument clock and 1ea.RCA MI-59108-1 DME Indicator. Installed in Pilot's Instrument Panel 1ea.Weston ID 48 NAV Repeater wired to NAV 2; 1ea. Davtron M-903 DVOR wired to NAV 1 and NAV 2. Installed Davtron M-303 OAT in center sub-panel, with temp probe through nose skin top station 67.0.

All work performed in accordance with manufacturers' installation instructions. Altimeter system tested in accordance with FAR 91.171 and found to comply with appendices'E' & 'F' FAR part 43. Transponder system tested in accordance with FAR 91.172 and found to comply with appendix 'F' and paragraph(C),appendix'E' FAR part 43.

Electrical load does not exceed 80% rated alternator/generator capacity.

Weight and balance revision computed.

Reference Tower W/O 124999.

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Form Approved
Budget Bureau No. 04-R060.1

FOR FAA USE ONLY
OFFICE IDENTIFICATION AWP 4530 (d)

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	MODEL: G-73
	SERIAL NO.: J 8	NATIONALITY AND REGISTRATION MARK: N 2945
2. OWNER	NAME (As shown on registration certificate): Reid Dennis	ADDRESS (As shown on registration certificate): 225 Mountain Wood Lane Woodside, CA 94062

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.
TOWER AVIONICS CENTER HANGAR 8, OAKLAND INTL AIRPORT OAKLAND, CA 94614	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	Radio Class I, II III. Instrument I, II, III, IV. 3863

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
8-3-83	Ray A Rose

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
8-3-83	3863	

FAA Form 337 (7-67)

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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 existing oxygen cylinders from lavatory area. Removed existing cockpit regulators and blinker indicators.
Reinstalled existing oxygen cylinders on existing nose shelf per AC 43.13-2A, ref. Fig. 6.3 and 6.4.
Installed Scott MDL 8883 regulator on LH side panel F.S. 143.
Replaced all cabin low pressure supply lines following existing routing under floor and behind side panels to existing cabin outlets. All work performed per AC 43.13-2A, Chapter 6. Oxygen system installations in non pressurized aircraft. Weight and balance revision computed.
Ref. Tower Avionics Center Work Order 128957.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

RAW

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

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

Form Approved
Budget Bureau No. 04-R0601

FOR FAA USE ONLY
OFFICE IDENTIFICATION AWP-FSDO-64

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 8	NATIONALITY AND REGISTRATION MARK: N 2945
2. OWNER	NAME (As shown on registration certificate): Reid Dennis	ADDRESS (As shown on registration certificate): 225 Monntain Wood Lane Woodside, CA 94062

3. FOR FAA USE ONLY

The alteration 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 F. A. R. 43.5 (b) & (c).

7/29/83 [signature] WE-FSDO-GA
DATE SIGNATURE

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.
TOWER AVIONICS CENTER HANGAR 8, OAKLAND INTL AIRPORT OAKLAND, CA 94614	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	Radio class I,II, III. Instrument I,II,III,IV. 3863

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: 8-2-83
SIGNATURE OF AUTHORIZED INDIVIDUAL: Ray O Rose

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
8-3-83	3863	[signature]

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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 existing DME indicator. Installed RCA MI-591084-1 DME distance indicator in co-pilot's instrument panel. Installed Foster RNC 601 CDU in place of relocated RCA DME indicator, pilot's instrument panel. Installed Foster LR 651 Loran receiver on existing nose radio shelf per AC 43.13-2A, Fig. 2.5. Installed Foster LA-120 preamp and NY 151 antenna on acft skin, top right of centerline F.S. 304, per AC 43.13-2A, Fig. 3.22. This installation complies with STC SA 679 GL and flight manual supplement Foster P/N 016A0550A. All work performed in accordance with manufacturer's installation instructions. Electrical load does not exceed 80% rated alternator/generator capacity. Weight and balance revision computed.
RNAV certified for VFR flight only.

Ref. Tower Avionics Center Work Order 128957

END

ADDITIONAL SHEETS ARE ATTACHED

☆U.S. GOVERNMENT PRINTING OFFICE: 1977—771-021/344

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

OCT 31 1955

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-8

d. ENGINE MAKE	e. ENGINE MODEL
Pratt & Whitney	Wasp S1H1

4. AIRCRAFT REGISTRATION INFORMATION (*Complete all items*)

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
Frank W. Fuller Jr.	301 Mission St. San Francisco, Calif.	N- 2945

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 12-6-46
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

Frank W. Fuller Jr.
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

9-26-55 (DATE)
Owner (TITLE)

16—60837-2

Form ACA-305 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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. 5
b. [ ] AIRCRAFT LISTING PAGE NO. _____
c. [X] AIRWORTHINESS DIRECTIVE SUMMARY 1955 revision (YEAR) THROUGH CARD NO. 55-21
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 2092 HOURS
d. [X] ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:

SERIAL NO. P-327918 TOTAL HOURS 2092
SERIAL NO. P-327919 TOTAL HOURS 2092
SERIAL NO. _____ TOTAL HOURS _____
SERIAL NO. _____ TOTAL HOURS _____

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

a. LAST AIRWORTHINESS INSPECTION CONDUCTED 10-26-55 (DATE)
[ ] BY AIRCRAFT MANUFACTURER
[ ] BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
[X] BY MECHANIC, CERTIFICATE NO. A&E M-8172
b. [X] PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

RECEIVED DEC 15 2 50 PM 55 ADMINISTRATIVE RECORDS BRANCH W-320

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 10-27-56 (DATE)
g. [X] PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 10-9-55 (DATE)
BY Joseph R. Etzel (NAME OF ISSUING REPRESENTATIVE) Repair Station No. 115 (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 [X] AIRWORTHY [ ] UNAIRWORTHY
(Check appropriate item)

DESIGNEE'S SIGNATURE F.C. Kaeser F.C.Kaeser	DESIGNATION NO. 1385	DATE 10-27-55	
AVIATION SAFETY AGENT'S SIGNATURE Reg. 1 NY ASDO 19	FAA DESIGNATION NO.	DATE	[X] ACCEPTED [ ] REINSPECTED [ ] SPOT CHECKED

[ ] ATTACHMENT

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

PAN

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
Awe-FSDO-04

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.: J8	NATIONALITY AND REGISTRATION MARK: 2945
2. OWNER	NAME (As shown on registration certificate): Dennis, Reid	ADDRESS (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, CA 94062

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.
TOWER AVIONICS CENTER HGR 8, Oakland Intl Airport Oakland, CA 94614	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	3863

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

DATE: JUNE 5, 1978
SIGNATURE OF AUTHORIZED INDIVIDUAL: Jon J. Lohan

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
6/5/78	3863	Jon J. Lohan

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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 Collins 618T-3 HF Transceiver with 390J-2 rack and associated 488A-2 Static Inverter in aft portion of rear baggage compartment. Installed antenna coupler Collins 490T-1A and rack in tail section upper left hand side. Installed on swing bracket, under co pilots seat, Collins 714E-2 HF control. Previously installed wiring harness used between transceiver and control with mic and audio wired to existing ARC F-11 audio system.

All work performed in accordance with mfg installation instructions and AC 43.13-1A and -2. Electrical load does not exceed 80% rated alternator/generator capacity.

Weight and balance revision computed.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. G.P.O. 1972/720-694/545/1303

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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
WE FSDO 64

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.: S/N J8	NATIONALITY AND REGISTRATION MARK: N2945
2. OWNER	NAME (As shown on registration certificate): Dennis Reid	ADDRESS (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, California

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.
Bay Aviation Services, Inc. P.O. Box 2109 Airport Station Oakland, Calif. 94614	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC X CERTIFICATED REPAIR STATION MANUFACTURER	4726

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 24, 1977

SIGNATURE OF AUTHORIZED INDIVIDUAL: Robert W. Kneeland

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
3-24-77	4726	

FAA Form 337 (7-67)

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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 Aero Flash strobe lights on wing tips including model 907-12 power supply current drain .5 amps. wt. change neg. All work done in accordance with manufacturers installation instructions and methods outlined in ~~FAR~~ AC43-13-2 Chapter 4.

R.W.Kneeland for Bay Aviation Services, Inc.

FAA Repair Station #4726 Oakland, Ca.

☐ ADDITIONAL SHEETS ARE ATTAC

U.S. G.P.O. 1972/720-694/545/1303

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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-8	NATIONALITY AND REGISTRATION MARK: N-2945
2. OWNER	NAME (*As shown on registration certificate*): R. W. Dennis	ADDRESS (*As shown on registration certificate*): 225 Mountain Wood Lane Woodside, Ca. 94062

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.
TOWER AVIONICS CENTER Oakland Intl Apt., Hgr. 8 Oakland, Calif. 94614	[ ] U.S. CERTIFICATED MECHANIC [ ] FOREIGN CERTIFICATED MECHANIC [X] CERTIFICATED REPAIR STATION [ ] MANUFACTURER	#3863

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 16, 1976	[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 [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
12-16-76	3863	[signature]

FAA Form 337 (7-67) (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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 COLLINS 17L-7 TRANSMITTER
51X-2 Receiver
390-H Mount

INSTALLED KING KTR-900A Transceiver & Mount (In Nose Compartment)

Electrical load does not exceed 80% rated alternator/ generater capacity. All work performed in accordance with mfg. installation instructions & AC 43.13-1A & -2.

Wt. & Balance revision computed.

END

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. G.P.O. 1972/720-694/545/1303

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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: Mallard G-73
	SERIAL NO.: J-8	NATIONALITY AND REGISTRATION MARK: N2945
2. OWNER	NAME (As shown on registration certificate): Dennis, Reid W.	ADDRESS (As shown on registration certificate): 225 Mountain Wood Lane, Woodside, Calif. 94062

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.
Bay Aviation Services, Inc. P.O. Box 2545 Airport Station Oakland, California 94614	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC XX CERTIFICATED REPAIR STATION MANUFACTURER	4726

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: 4/1/75

SIGNATURE OF AUTHORIZED INDIVIDUAL: James C. Foster

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	XX	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT		

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
4/1/75	4726	Robert Leland

FAA Form 337 (7-67) (8320)

GPO : 1971 O - 410-878

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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 foxbord PC 600 series fuel management system according to MFG's Instructions for installation. All work done in accordance with FAR AC 43.13-1A.

Wiring installation furnished by Tower Avionics Center, Oakland Airport FAA Repair Station 3863.

Engineering data furnished by MFG. See attachments 1 through 8. Neg. weight change.

☒ ADDITIONAL SHEETS ARE ATTACHED

Application Engineering Data

AED
372-1
September 1971

CONTINUOUS IN-FLIGHT MONITORING OF AIRCRAFT FUEL SUPPLY AND FUEL CONSUMPTION RATE

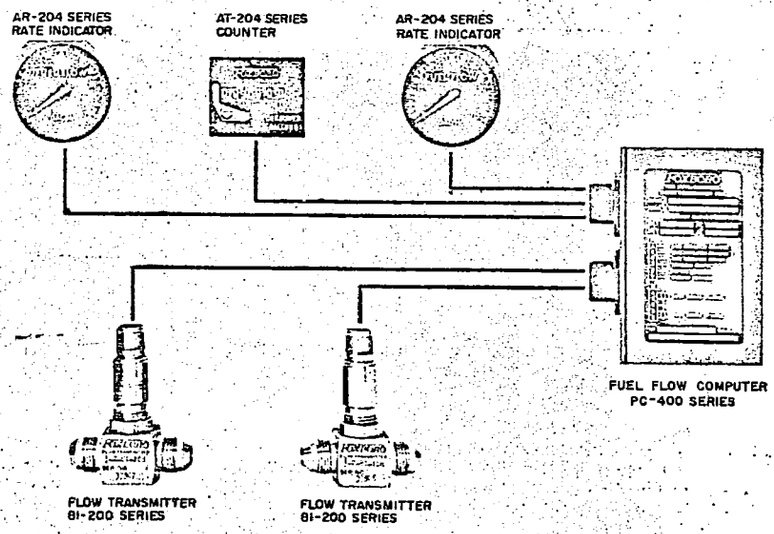


FIGURE 1. AIRBORNE FUEL MANAGEMENT SYSTEM

The flight characteristics of modern high-performance aircraft often impose increased demands on both manufacturer and operator as they work to maintain consistent standards of safety and reliability. A vital part of this challenge is answered by the avionics industry in providing better instruments and improved techniques for navigation and communication.

FOXBORO AIRBORNE FUEL MANAGEMENT SYSTEM

The Airborne Fuel Management System, shown in Figure 1, contributes to flight safety by providing the pilot, at a glance, with a continuous account of fuel status. He has a digital presentation of how much fuel remains (or has been consumed), as well as a direct indication of the fuel consumption rate of each engine - providing a valuable check on its operation. With its use of accurate flow transmitters and digital electronic techniques, this system represents a new concept in aircraft fuel measurement.

DESCRIPTION

The Foxboro Airborne Fuel Management System consists of the following components:

1. One 81-200 Series Airborne Turbine Flow Transmitter PER ENGINE, installed in the fuel line (using standard AN fittings).
2. A PC-400 Series Fuel Flow Computer which may be mounted anywhere in the aircraft.
3. One AR-204 Series (2 inch dia.) Flow Rate Indicator PER ENGINE, mounted on the instrument panel.
4. An AT-204 Series presettable (4 to 6 digit) "Fuel Consumed" or "Fuel Remaining" Counter mounted on the instrument panel.

The turbine flow transmitter generates electrical pulses at a rate proportional to the volume of fuel flowing through it to the engine. These pulses are conditioned and converted to an analog signal which drives a standard deflection type meter to indicate the fuel con-

The Foxboro Company Foxboro, Massachusetts, U.S.A. 02035
FOXBORO
PRINTED IN U.S.A.

N2945 #1

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

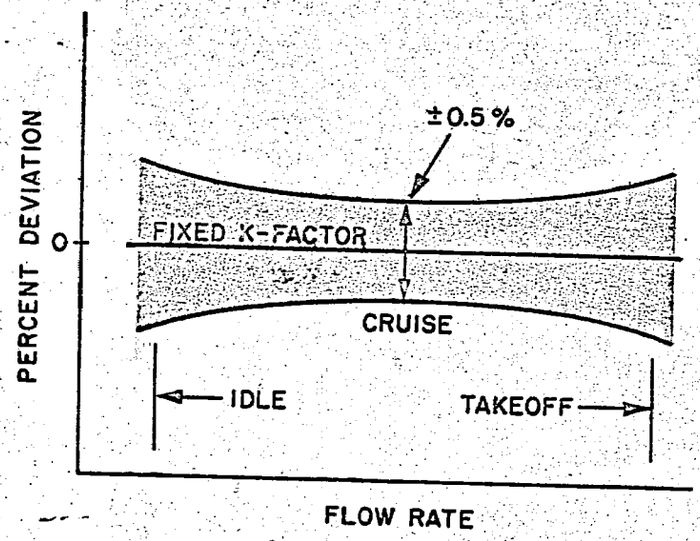


Figure 2. Typical Flowmeter Profile

sumption rate in Gallons per Hour or Pounds per Hour. The conditioned pulses are simultaneously scaled to engineering units and transmitted to an electro-mechanical counter which registers the total amount of fuel consumed or the quanity remaining abroad the aircraft. When a "Fuel Remaining" indication is provided, the quantity of fuel loaded is initially set on the counter. As fuel is consumed, the counter subtracts, leaving an indication of the fuel remaining.

RELIABLE LIGHT WEIGHT COMPONENTS

Special consideration has been given to reliability and to minimizing weight. The shock-proof turbine flow transmitters incorporate design features which have been developed during more than thirteen years of airborne applications. The Fuel Flow Computer is provided with environmental protection. All components of the system meet the requirements of F. A. A. Document TSO-C44a. For a twin-engine aircraft, the total system weight is slightly over four pounds.

NO CALIBRATION NEEDED WHEN REPLACING COMPONENTS

All components are directly interchangeable without requiring a system recalibration.

CALIBRATION IN POUNDS OR GALLONS

The system may be scaled to read out in either pounds or gallons. To minimize the influence of density on a system reading out in pounds, a family of turbine flow transmitters have been designed - each based on the specific density of a particular aviation fuel.

Using the Foxboro Fuel Management System, the relationship between pounds and gallons may be expressed as follows:

$$K_1 = \frac{K_2}{\rho}$$

Where:

K_1 = pulses per pound

K_2 = pulses per gallon

ρ = density of the fuel at a fixed temperature

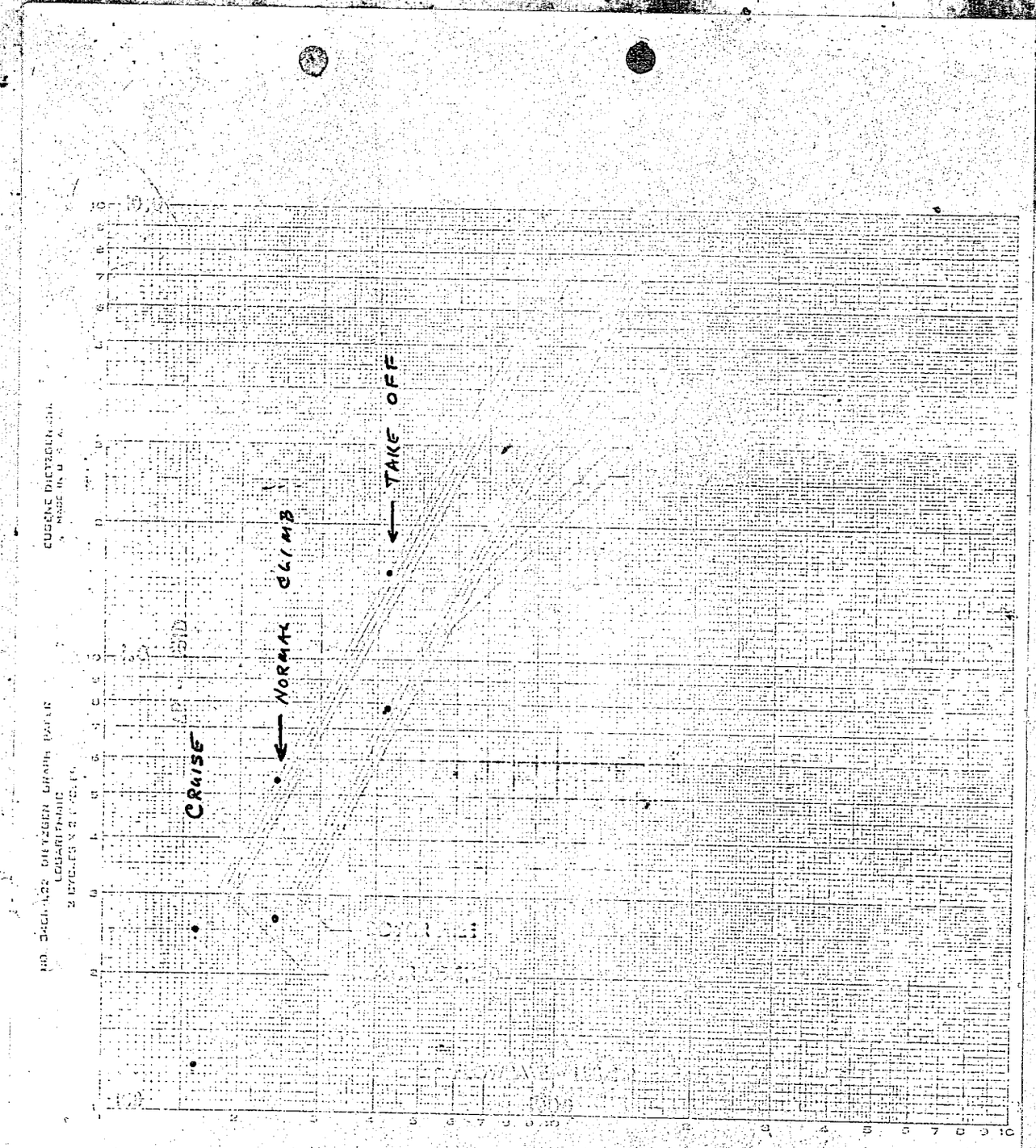
MEASUREMENT ACCURACY

The flow transmitter is designed and calibrated to yield a fixed calibration factor (number of pulses per gallon) over the flow range of the aircraft. Figure 2 is a typical design envelope for flow rate versus % deviation, covering the fuel flow range. The point of maximum accuracy is set at cruise where the majority of flight time is accured. Application of digital electronic techniques in conjunction with a flow transmitter having a fixed calibration factor has resulted in an extremely accurate measurement system.

NZ945 #2

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84



N2945 #3

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

FLIGHT OPERATION

CHECKS PRIOR TO TAKE-OFF

Mixture NA-Y9J	— Automatic Rich
Others	— Full Rich
Propeller	— High rpm
Boost Pump	— As required by airplane manufacturer
Carburetor Heat	— Cold
Filtered Air	— As required
Cowl Flaps	— Full Open

Check the following at 2000 rpm, or at field barometric manifold pressure.

Manifold Pressure	— Field barometric (or pre-start reading)
Magneto Check	— Maximum drop 100 rpm
Oil Pressure	— 60 psi minimum
Fuel Pressure	— 4 psi minimum
Oil Inlet Temperature	— 93°C maximum — 40°C minimum
Cylinder Head Temperature	— Below 200°C desired, to allow for rise during take-off

The final step before taking off is to adjust the cowl flaps (if provided) to a position suitable for take-off and initial climb.

TAKE-OFF

1. Advance throttle not to exceed 36.5 in. Hg.
2. Adjust propeller control — 2250 rpm.
3. When operating with grade 91/96 fuel, take-off manifold pressure is 38.0 in. Hg at sea level and 36.5 in. Hg at critical altitude as shown in curve Inst. 7335-2.

POWER REDUCTION AFTER TAKE-OFF

1. Reduce manifold pressure to 35.0 in. Hg maximum at sea level (reducing to 32.5 in. Hg maximum at 8100 ft).
2. Reduce rpm to 2200.

If it is desired to reduce power below normal rated, refer to Engine Operating Table, page 12, then:

3. Retard throttle to selected manifold pressure.
4. Reduce rpm to the selected value.

N2945 24

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

CLIMB

Mixture NA-Y9J — Automatic Rich
Others — Full Rich — Lean as required for smooth operation above 5000 ft.
Propeller — Climb rpm — 2200 rpm maximum
Throttle — Climb manifold pressure 32.5 in. Hg maximum
Filtered Air — As required
Carburetor Heat — Adjust to maintain 32°C carburetor air temperature

NOTE: For all normal flight operations, 32°C carburetor air temperature is desirable. When maximum performance is required, use Full Cold except with NA-Y9C carburetor, for which 32°C carburetor air temperature is mandatory. Select desired climb power from Engine Operating Table, page 12.

LIMITS

Cylinder Head Temperature — 260°C maximum
Oil Inlet Temperature — 93°C maximum
— 40°C minimum
Oil Pressure
Above 2000 rpm — 70 psi minimum
Below 2000 rpm — 60 psi minimum
Fuel Pressure — 4 psi minimum
Carburetor Air Temperature — 35°C maximum — applies only when using preheat.

ESTABLISHING CRUISE

After reaching cruise altitude and accelerating to cruise airspeed, select desired cruise power (see Engine Operating Table, page 12) and then:

1. Adjust throttle to selected manifold pressure for cruise.
2. Reduce engine speed to selected rpm for cruise.
3. Close cowl flaps as aircraft speed increases and cruise cylinder head temperatures are obtained.
4. Adjust preheat to maintain 32°C carburetor air temperature after engine has cooled to normal flight condition.
5. Adjust mixture for cruising. If engine has NA-Y9J carburetor, move mixture control to automatic lean. If engine has another carburetor and fuel-air ratio instrumentation, lean as follows:

400 bhp — 0.060 minimum F/A
Below 400 bhp — 0.072 minimum F/A

If there is no F/A instrumentation, lean the mixture until smooth engine operation is obtained, particularly above 5,000 feet altitude.

N2445 #5

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

CRUISING FLIGHT

Carburetor Heat — Adjust to maintain 32°C Carburetor Air Temperature.

Filtered Air — As required.

LIMITS

Cylinder Head Temperature	— 232°C maximum
	— 200°C or less desired
Oil Inlet Temperature	— 93°C maximum
	— 40°C minimum
Oil Pressure	
2000 rpm	— 30 psi minimum
1900 rpm and below	— 55 psi minimum
Fuel Pressure	— 4 psi minimum
Carburetor Air Temperature	— 38°C maximum — applies only when preheat is used.

ICING

ICING CONDITIONS

1. Visible freezing or subfreezing moisture forms ice in the airscoop and in and on carburetor metering elements or throttle valve.

2. Under certain quite common conditions of high humidity, ice can form in the carburetor and between the fuel discharge nozzle and engine impeller at carburetor air temperatures as high as 32°C, due to the refrigerating effect of the fuel-air mixture in this part of the induction system. Be alert for this type of icing, because it can occur at relatively high temperatures and in sultry atmospheric conditions which are not generally associated with ice formation.

3. Carburetor ice is particularly apt to occur during part throttle operation.

PREVENTION OF ICING

1. Maintain 32°C to 38°C carburetor air temperature.

2. It is most effective to use carburetor preheat at least 15 minutes before entering known icing conditions, such as visible moisture (clouds) at subfreezing temperatures.

3. Since some icing conditions are not at all obvious, it is a wise precaution to use carburetor preheat for all flight conditions when there is any possibility of icing.

N2945 46

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

ENGINE CHECK CHART WASP (R-1340) S1H1 & S1H1-G ENGINES

CARBURETOR: NA-Y9J, and others (1)

FUEL GRADE: 80/87 (5)
OIL S.U.S. at 210°F: 100 or 120

POWER SETTINGS: CURVE INST. 7335-1 & -2

OPERATING CONDITION	BHP	PROP CONTROL OR RPM	MAX. MANIFOLD PRESS. IN. HG	MIXTURE CONTROL (1)		MIN. F/A FOR MANUAL LEANING	OIL-IN. TEMP. °C		OIL PRESS.		CYL. HEAD TEMP. °C MAX. (7)	CARB. AIR TEMP. °C MAX. (6)
				NA-Y9J	Others		MIN.	MAX.	MIN.	MAX.		
Start		Low than High rpm (2)	1/10 to 1/4 throttle	Auto Rich	Full Rich				Pressure to show almost immediately			
Warm-up		High rpm (2)	1000 rpm	Auto Rich	Full Rich			93			232	
Ground Test		High rpm (2)	(4)	Auto Rich	Full Rich		40	93	60		232	
Take-off — 80/87 Fuel	600	2250	36.5 (8)	Auto Rich	Full Rich		40	93	70	90	260	38
Alternate Take-off (Grade 91/96 Fuel)	600	2250	38.0 (8)	Auto Rich	Full Rich		40	93	70	90	260	38
Normal Rated Power	550	2200	35.0 (8)	Auto Rich	Full Rich	0.092	40	93	70	90	260	38
Max. Cruise	400	2000	26.5	Auto Lean	Rich Best Power	0.080	40	93	60		232	38
Max. Economy	400 or less	1900 or less	27.5 or less	Auto Lean	Lean Best Power	0.072	40	93	50		232	38
Dive or Max. Overspeed		2640 max. (3)	Over 12 (3)	Auto Rich	Full Rich		40	93				
Glide and Approach		2000 (2)	As required	Auto Rich	Full Rich		40	93	60		232	
Stop		High than Low rpm (2)	Idle	Idle Cut-off	Idle Cut-off				10 for Idle		200	

OIL PRESSURE: Desired adjustment at 2000 rpm, 60°C Oil-Inlet Temp.: 75-85 psi

Normal Operating Range:

2000 rpm	60 psi minimum
1400-1800 rpm	50 psi minimum
Idling	10 psi minimum

FUEL PRESSURE:
Above 1200 rpm 5 ± 1 psi
Below 400 rpm 2 psi minimum

NOTES

(1) The NA-Y9J carburetor incorporates an automatic mixture control unit to maintain uniform mixtures in Auto Rich or Auto Lean. Other models do not have this unit and require manual mixture adjustment to compensate for changes in altitude and temperature.
(2) Propeller Governor Setting: High rpm is full low pitch; low rpm is full high pitch. Counterweight type propellers are stopped and started in low rpm for mechanical reasons.
(3) During dives or rapid descent, use as high a manifold pressure as practicable, preferably over 12 in. Hg, to reduce master rod bearing loads. The maximum rpm (2640) is time limited to 30 seconds maximum.
(4) Set field barometric manifold pressure, which is equal to that shown on manifold pressure gage before starting. (Approx. 30 in. Hg at Sea Level.)
(5) The ratings for this engine are based upon grade 80/87 fuel. If it is desired to use grade 91/96 or higher, increased take-off manifold pressure may be used as shown in those charts. Higher grade fuels are less desirable due to increased lead content.
(6) Carburetor air temperature limit of 38°C max. applies only when Preheat is used. With NA-Y9C carburetors, always maintain 32°C. CAT for cruise and climb; with other carburetors, 32°C is desirable for best climb and cruise operation.
(7) For all ground and flight operation, 200°C cylinder head temperature or less is recommended for normal use.
(8) Max. manifold pressure limit at sea level. For limits at altitude, refer to Suggested Engine Operation Table on next page.

N2945 #7

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

SUGGESTED ENGINE OPERATION TABLE

TAKE-OFF, CLIMB, and CRUISE — NO RAM (4)

POWER CONDITION	% NORMAL RATED POWER	BHP (2)	RPM	MANIFOLD PRESSURE IN. HG	MIXTURE		APPROX. FUEL GAL./HR.	CRITICAL ALTITUDE (1)
					NA-Y9J	OTHER (5)		
Take-off — 80/87 Fuel		600	2250	35.0	Auto Rich	Full Rich	70	6,400
Take-off — 91/96 Fuel		600	2250	36.5	Auto Rich	Full Rich	74	5,000
Normal Rated	100	550	2200	32.5	Auto Rich	Full Rich	63	8,100
Climb	91	500	2200	29.5	Auto Rich	Full Rich	56	10,700
Climb	82	450	2100	28.0	Auto Rich	Full Rich	48	11,500
Climb	73	400	2000	26.0	Auto Rich	Full Rich	40	12,600
Max. Cruise	73	400	2000	26.0	Auto Lean	0.080	33	12,600
Cruise (3)	64	350	1900	24.0	Auto Lean	0.072	29	14,000
Cruise	64	350	1800	25.5	Auto Lean	0.072	29	12,000
Cruise	64	350	1700	27.0	Auto Lean	0.072	28	10,000
Cruise (3)	55	300	1800	21.5	Auto Lean	0.072	26	16,000
Cruise	55	300	1650	24.0	Auto Lean	0.072	25	12,700
Cruise	55	300	1500	27.0	Auto Lean	0.072	24	8,700
Cruise (3)	45	250	1700	19.0	Auto Lean	0.072	22	18,500
Cruise	45	250	1550	21.0	Auto Lean	0.072	21	15,500
Cruise	45	250	1400	23.5	Auto Lean	0.072	21	11,700

NOTES

(1) Critical altitudes will be increased by the amount of ram developed in any particular installation.

(2) Specified bhp is at the critical altitude shown, at the designated rpm, manifold pressure, and mixture settings. To obtain this bhp at lower altitudes with part throttle, increase manifold pressure approximately 0.3 in. Hg for each thousand feet below the critical altitudes shown.

(3) The cruise power settings include a range of rpm, the highest rpm being on propeller load and the lowest at approximately 120 bmep. $\left(\text{bmep} = 591 \times \frac{\text{bhp}}{\text{rpm}}\right)$

(4) All power settings are based upon NACA standard atmospheric conditions of temperature and pressure with no carburetor heat. During climb, cruise, and descent, it is desirable whenever practicable to maintain 32°C carburetor air temperature for best engine operation. With NA-Y9C carburetors, 32°C CAT must be maintained during climb and cruise. This will require increased manifold pressure at part throttle and increased rpm at full throttle to obtain the specified power. The correction amounts to about 0.5 in. Hg more manifold pressure (part throttle) or 20 more rpm (full throttle) for each 10°C increase above NACA standard day values.

(5) For carburetors not equipped with automatic mixture control units, and when above 5000 feet altitude, lean the mixture to the minimum required for smooth engine operation, or to the desired F/A ratio if such instrumentation is provided.

N2945 #8

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

San Jose GADO

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: G73
	SERIAL NO.: S/N J-8	NATIONALITY AND REGISTRATION MARK: N-2945
2. OWNER	NAME (As shown on registration certificate): FRANK W. FULLER JR.	ADDRESS (As shown on registration certificate): 1952 Forest View Avenue Hillsborough, Calif. 94010

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.
Butler Aviation Intl. Inc. San Francisco Intl. Airport San Francisco, California 94128	U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC XX CERTIFICATED REPAIR STATION MANUFACTURER	#4155 Radio Class I, Class II, AND Class III. Airframe Class I and Class III.

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 8,1971	Kerry D. Jensen Avionics Service Manager

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	XX	REPAIR STATION		CANADIAN DEPARTMENT OF TRANSPORT INSPECTOR OF AIRCRAFT	

DATE OF APPROVAL OR REJECTION	CERTIFICATE OR DESIGNATION NO.	SIGNATURE OF AUTHORIZED INDIVIDUAL
January 8, 1971	#4155	John Ryburn Maintenance Manager

FAA Form 337 (7-67)

(8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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 the following equipment in the aircraft.

Item	Description	Weight	Arm	Moment
Aircraft	Grumman G73	9815.3	219.44	2153853.2
Radar Altimeter T/R	Bonzer TRN-70	1.5	523.00	784.5
Radar Alt. Antenna	Bonzer TRN-70	.25	537.00	134.25
Radar Alt. Indicator	Bonzer AI-71	1.0	93.00	93.0
Associated Cabling		1.5	215.00	301.0
	Totals	9819.55	219.48	2155165.95

New Empty Weight 9819.55
New E.W.C.G. 219.48
New E.W. Moment 2155165.95

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. GOVERNMENT PRINTING OFFICE : 1987 OF—272-085

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

1378-0987 37 MAR 6 '68

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

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-8	NATIONALITY AND REGISTRATION MARK: N 2945
2. OWNER	NAME (As shown on registration certificate): Frank Fuller, Jr.	ADDRESS (As shown on registration certificate): 1952 Forest View Avenue, Hillsborough, California

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.
	[ ] U.S. CERTIFICATED MECHANIC	4022
	[ ] FOREIGN CERTIFICATED MECHANIC	Airframe Class 1-3-4
	[X] CERTIFICATED REPAIR STATION	Radio Class 1-2-3
	[ ] 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: MAR 25 1968

SIGNATURE OF AUTHORIZED INDIVIDUAL: Edward Hollywood
Edward Hollywood, Leadman Inspector

7. APPROVAL FOR RETURN TO SERVICE

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

BY							
	[ ]	FAA FLT. STANDARDS INSPECTOR	[ ]	MANUFACTURER	[ ]	INSPECTION AUTHORIZATION	OTHER (Specify): Verified by Operator #22
	[ ]	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
MAR 25 1968	R.S. 4022	Edward Hollywood Edward Hollywood, Leadman Inspector

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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.

CONVEYANCE FILED WITH
FAA
APR 10 10 14 AM '89
OKLAHOMA

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. Repaired rib at Sta. 5 and replaced outboard bottom skin, P/N 108201-2, Sta. 1-Sta. 8, in accordance with Grumman Repair Manual and AC43.13-1, Sec. 2. (Repair made to right hand pontoon)

2. No change in Weight and Balance.

☐ ADDITIONAL SHEETS ARE ATTACHED

U.S. GOVERNMENT PRINTING OFFICE : 1965 OF—761-748

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

1165-0918 37 Dec 2'66

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
REG. WE
CALD. Z

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 Mallard
	SERIAL NO.: J-8	NATIONALITY AND REGISTRATION MARK: USA N 2945
2. OWNER	NAME (As shown on registration certificate): P W Fuller Jr.	ADDRESS (As shown on registration certificate): 1952 Forest View Ave Hillsborough, Calif. 94402

3. FOR FAA USE ONLY

Verified by Operator #45

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.
William W Johnson PO box 182 La Honda Calif.	X U.S. CERTIFICATED MECHANIC FOREIGN CERTIFICATED MECHANIC CERTIFICATED REPAIR STATION MANUFACTURER	A&P 1239900 IA

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
10-30-66	William W. Johnson

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
	A&P 1239900 IA	William W. Johnson

FAA Form 337 (1-65) OBSOLETE PREVIOUS EDITION

0052-025-8000 (8320)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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.)*

Oct. 25 1966 Repaired Left Aileron, Replaced Ribs at Stas; 110 57, 66, 76, 85, 93, 102, 119. Spliced trailing edge between Stas. 61-106. All parts were Factory manufactured and new.

Aileron hinge brackets were stripped of paint, checked for alignment and Dye-Penetrant checked for cracks.

Aileron recovered with Ceconite by Mo Rae Aero Crafts, Oakland ,Calif.

End

☐ ADDITIONAL SHEETS ARE ATTACHED

MICRO

FAA AC 65-40B1

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

838 2780

FEDERAL AVIATION AGENCY

Form approved.
Budget Bureau No. 04-R060.

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

1. AIRCRAFT	MANUFACTURER	MODEL	SERIAL NO.	NATIONALITY AND REGISTRATION MARK
	VERIFIED BY OPERATOR #4 GRUMMAN	G-73	J-8	N-2945

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
	FRANK W. FULLER, JR.	1952 FOREST VIEW AVENUE HILLSBOROUGH, CALIFORNIA

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					2
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	9839.2	219.6" AFT OF DATUM	2910.8 LBS.

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
BAYAIRE AVIONICS, INC. BOX 2444 - HANGAR 28 OAKLAND INTERNATIONAL AIRPORT OAKLAND, CALIFORNIA	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	3963 RADIO CLASS I, II AND III LIMITED INSTRUMENT

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.

SEPTEMBER 21, 1964 (Date repair and/or alteration completed) B.H. THOMAS (Signature of authorized individual)

6. APPROVAL FOR RETURN TO SERVICE (Check and complete appropriate items)
Pursuant to the authority specified below the unit identified in item 3 was inspected in the manner prescribed by the Administrator of the Federal Aviation Agency and is

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

SEPTEMBER 21, 1964 (Date of approval or rejection) B.H. THOMAS (Signature of authorized individual; title or identification number) CHIEF INSPECTOR

7. TO BE COMPLETED ONLY BY FAA PERSONNEL

a. ☐ Forwarded for engineering comment ☐ See attached memorandum 27 OCT 07 1964

b. ☒ Accepted 9/28/64 (Date) ☐ Reinspected (Date) ☐ Spot Checked (Date)

WE-GADO-D-OAK (FAA designation number) Earl C. Lubbon (Signature Flight Standards Inspector)

Form FAA-337 (4-62)

INSTRUCTIONS

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

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

---

8. DESCRIPTION OF WORK ACCOMPLISHED.*

RADIO INSTALLATION

EMPTY WEIGHT, USEFUL LOAD AND C.G. INFORMATION WERE OBTAINED FROM ACA-337 FORM DATED NOVEMBER 26, 1963.

ITEM	WEIGHT	ARM	MOMENT
AIRCRAFT	9838.0	219.7	2161408.6
INSTALLED:			
1. WILCOX 814B ATC TRANSPONDER AND SHOCKMOUNT	13.0	401.0	5213.0
2. WILCOX 97403 ANTENNA AND MOUNT PLATE	1.8	551.0	991.8
3. GABLES CONTROL	1.1	97.0	106.7
4. INTERCONNECTING CABLES (Distributed)	5.8	211.0	1223.8
5. FIRE EXTINGUISHER (REMOVED)	-20.5	391.0	-8015.5
	9839.2		2160928.4

NEW E.W.C.G = $\frac{2160928.4}{9839.2}$ = 219.6" AFT OF DATUM

NEW USEFUL LOAD = 12750.0#-9839.2#=2910.8 LBS.

ITEM #1 WAS INSTALLED BELOW FLOOR IN COMPARTMENT AFT OF LAVATORY ON EXISTING BRACKETS AND PER MANUFACTURER'S SPECIFICATIONS.

ITEM #2 WAS INSTALLED ON BOTTOM OF FUSELAGE BELOW STABILIZER AND AFT OF PREVIOUSLY INSTALLED DME ANTENNA USING SUPPLIED MOUNTING PLATE PER MANUFACTURER'S SPECIFICATIONS.

ITEM #3 CONTROL WAS MOUNTED IN SPACE PROVIDED ON AIRCRAFT INSTRUMENT PANEL.

ELECTRICAL LOAD MEETS REQUIREMENTS SET FORTH IN CAM 18.30-12 PARA I.

/ /

---

*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. ☐

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

Verified by Operator #34 475 197

FEDERAL AVIATION AGENCY

Form approved.
Budget Bureau No. 04-R060.

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

1. AIRCRAFT	MAKE: GRUMMAN	MODEL: G-73	SERIAL NO.: J-8	NATIONALITY AND REGISTRATION MARK: N2945
2. OWNER	NAME (First, middle, last): FRANK W. FULLER, JR.		ADDRESS (Street and number, city, zone and State): 1952 FOREST VIEW AVENUE HILLSBOROUGH, CALIFORNIA	

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)				XX
b. POWERPLANT					
c. PROPELLER					
d. APPLIANCE	TYPE AND MANUFACTURER				

The alteration 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 C.A.R. 18.11 (b).

By Harold J. Buck Date Nov 26 - 1963

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	9,838.0	219.9	2,912.0

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
AiResearch Aviation Service Co. 6201 WEST IMPERIAL HIGHWAY, L.A. 45, CALIF. F.A.A. APPROVED REPAIR STATION 4022	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	4022 AIRFRAME CLASS 1-3-4 RADIO CLASS 1-2-3

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

26 NOVEMBER 63 — (Date repair and/or alteration completed)

ALFRED DEMASI, 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 of the Federal Aviation Agency and is

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

6

26 NOVEMBER 63 — (Date of approval or rejection)

ANTHONY CILLONI JOE ADAMS, CHIEF INSPECTOR REPAIR STATION 4022 — (Signature of authorized individual; title or identification number)

7. TO BE COMPLETED ONLY BY FAA PERSONNEL

a. ☐ Forwarded for engineering comment ☐ See attached memorandum

b. ☒ Accepted Nov 26 - 1963 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

7 DEC. 13 1963

WESTERN GADO, #6 4-06 (FAA designation number)

Harold J. Buck (Signature Flight Standards Inspector)

Form FAA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

INSTRUCTIONS

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

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

8. DESCRIPTION OF WORK ACCOMPLISHED.*

1. REMOVED LEAR LVTR36 VHF COMMUNICATIONS SYSTEM.

2. INSTALLED THE FOLLOWING ELECTRICAL AND ELECTRONIC EQUIPMENT IN ACCORDANCE WITH CAM 18.30-12, CAM 18.30-22, AIRWORTHINESS RELEASE NO. 421 AND AIRESEARCH AVIATION SERVICE CO. DWGS:

   516-G73-018, COLLINS 618F-1C VHF COMMUNICATIONS SYSTEM WIRING DIAGRAM.

   606-G73-010, 750 VA EMERGENCY INVERTER SYSTEM WIRING DIAGRAM.

   410-G73-006, INSTALLATION OF COLLINS 618 AND INVERTER. COLLINS INSTALLED ON RACK AT STA 33, WT. 16.5 LBS. INVERTER INSTALLED ON FLOOR AT STA 413, WT. 32.5 LBS.

   THE REMOVED LEAR VHF SYSTEM USED 4.5 AMPS.
   THE INSTALLED COLLINS VHF SYSTEM USES 5.0 AMPS.
   THE EMERGENCY INVERTER SYSTEM WILL OPERATE ONLY WHEN MAIN INVERTER SYSTEM IS OFF.
   NO CHANGE IN THE ELECTRICAL DC LOAD.

3. WEIGHT AND BALANCE REVISED.

*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. ☐

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

Form approved.
Budget Bureau No. 04-R060.

FEDERAL AVIATION AGENCY

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

1. AIRCRAFT	MAKE Grumman	MODEL G-73	SERIAL NO. J-8	NATIONALITY AND REGISTRATION MARK N-2945
2. OWNER	NAME (First, middle, last) Frank W. Fuller Jr.		ADDRESS (Street and number, city, zone and State) 1952 Forrest View Ave. Hillsbourugh, Calif.	

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)				XX
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)*
Standard	9,819	+ 218.9"	2,931

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
AiResearch Aviation Service Co. 6201 WEST IMPERIAL HIGHWAY, L.A. 45, CALIF. F.A.A. APPROVED REPAIR STATION 4022	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	4022 Airframe Class 1-3-4 Radio Class 1-2-3

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.

July 18, 1962 (Date repair and/or alteration completed)

Alfred De Masi, 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 of the Federal Aviation Agency and is

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

July 18, 1962 (Date of approval or rejection)

Joe Adams Chief Inspector Repair Sta. 4022 (Signature of authorized individual; title or identification number)

7. TO BE COMPLETED ONLY BY FAA PERSONNEL

A. C. U.

a. ☐ Forwarded for engineering comment ☐ See attached memorandum

b. ☒ Accepted 7-19-62 (Date) ☐ Reinspected (Date) ☐ Spot Checked (Date) AUG 15 1962

Reg. 4 LA
ASDO 1
(FAA designation number)

(Signature Flight Standards Inspector) A. H.

Form FAA-337 (4-52)

X 3B

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

INSTRUCTIONS

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

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

8. DESCRIPTION OF WORK ACCOMPLISHED.*

1. Removed the Bendix RTA-1-B HF Transceiver located in aft radio compt. Wt. 70Lbs.
2. Installed Collins 860 E-1 DME Interrogator. Installed on rack vacated by RTA unit Wt. 40Lbs.

3. This installation was made in accordance with AiResearch Aviation Service Co. Dwg. #509-073-007 C.A.M. 18.30-12,18.30-22 Airworthiness Release No. 421 and Collins installation instruction manual #523-0050-006.

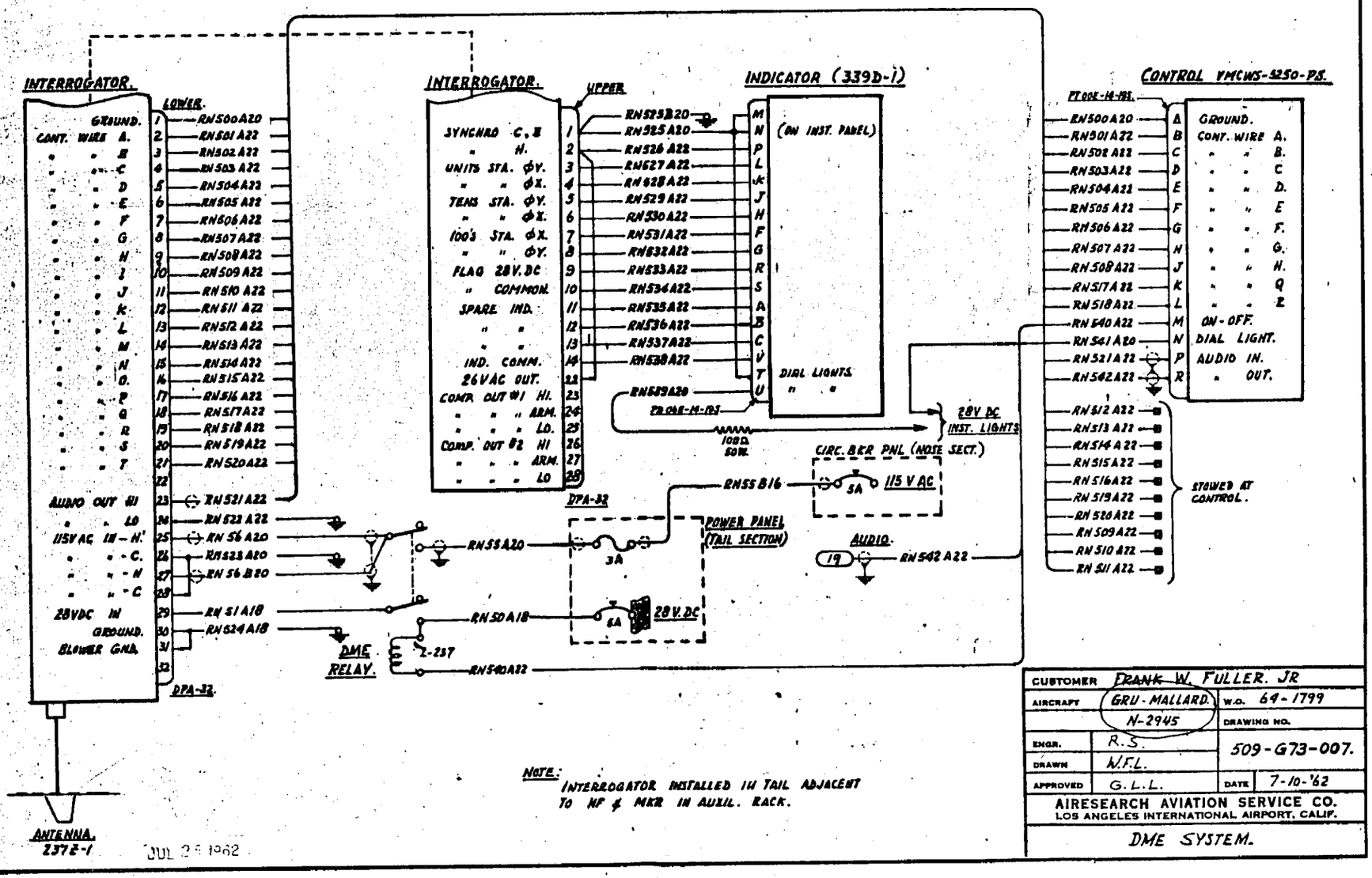
4. The electrical Dc load was decreased by 14.0 Amps.
   Removal of RTA - 20.0 Amps.
   Install DME + 6.0 Amps.

5. Weight and Balance Book revised Aircraft Weighed.

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

Check block if additional sheets are attached. ☒

U. S. GOVERNMENT PRINTING OFFICE: 1961-O-587350



NOTE: INTERROGATOR INSTALLED IN TAIL ADJACENT TO NF & MKR IN AUXIL. RACK.

CUSTOMER	FRANK W. FULLER. JR		
AIRCRAFT	GRU-MALLARD. N-2945	W.O.	64-1799
		DRAWING NO.	509-G73-007.
ENGR.	R.S.		
DRAWN	N.F.L.		
APPROVED	G.L.L.	DATE	7-10-'62

AIRESEARCH AVIATION SERVICE CO.
LOS ANGELES INTERNATIONAL AIRPORT, CALIF.

DME SYSTEM.

JUL 25 1962

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

unfolded

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

F.AA /

Form approved.
Budget Bureau No. 04-R060.

FEDERAL AVIATION AGENCY

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

1. AIRCRAFT	MAKE	MODEL	SERIAL NO.	NATIONALITY AND REGISTRATION MARK
	GRUMMAN	G-73	3-8	N-2945

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
	FRANK W. FULLER	301 Mission Street San Francisco, Calif.

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)*
STANDARD	9814.52	- 14.79	2935.48

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
AiResearch Aviation Service Co. 6201 WEST IMPERIAL HIGHWAY, L.A. 45, CALIF. F.A.A. APPROVED REPAIR STATION 4022	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	4022 AIRFRAME CLASS 1-3-4 RADIO CLASS 1-2-3

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.

October 13, 1961 (Date repair and/or alteration completed)

Alfred DeMasi, 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 of the Federal Aviation Agency and is

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

October 13, 1961 (Date of approval or rejection)

Joe A. Adams, Chief Inspector, C.U. Repair Sta. 4022 (Signature of authorized individual; title or identification number)

NOV 1961 L.V.

7. TO BE COMPLETED ONLY BY FAA PERSONNEL

a. ☐ Forwarded for engineering comment ☐ See attached memorandum

b. ☒ Accepted 10-23-61 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

Reg. 4 LA
ASDO 1
(FAA designation number)

Al Bittaur Reg. 4 LA ASDO 1
(Signature Flight Standards Inspector)

B Form FAA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

INSTRUCTIONS

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

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

8. DESCRIPTION OF WORK ACCOMPLISHED.*

1. Repaired left wing outboard of pontoon by replacing standard Grumman parts and repairs in accordance with C.A.M. 18.30-4(c).
   a. Repaired Sta. 368 Rib.
   b. Replaced Sta. 394 Rib and Tip attach Structure.
   c. Replaced Sta. 368-394 #1 & #2, & #3 Lower Stringers.
   d. Replaced Sta. 317-394 #2 Top & Bottom Skins.
   e. Replaced Sta. 342-394 Leading Edge Skin.
   f. Repaired Sta. 249-342 Leading Edge Skin.
   g. Replaced Sta. 230-394 Aft Top Skin.
   h. Replaced Sta. 293-394 Aft Bottom Skin.
   i. Replaced ALL Aileron Hinge Brackets.
   j. Replaced L/H Pitot Assembly.
   k. Replaced L/H Wing Tip.
   l. Replaced Aileron Wall Skin.

2. Recovered R/H aileron, R/H & L/H elevators and rudder with Irish linen (4) coats clear butyrate dope and (4) coats pigment butyrate dope in accordance with CAM 18.30-3.

3. No weight change.

*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 : 1959—O-538224

Form FAA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form approved.
Budget Bureau No. 41-R0524.

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

1. AIRCRAFT	MAKE: GRUMMAN MALLARD	MODEL: G-73	SERIAL NO.: 38	NATIONALITY AND REGISTRATION MARK: N-2945 (STANDARD)
2. OWNER	NAME (First, middle, last): FRANK W. FULLER, JR.	ADDRESS (Street and number, city, zone and State): 301 MISSION STREET, SAN FRANCISCO, CALIF.		

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)				XX
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)*
AIRCRAFT	9814.52	218.86 AFT OF DATUM, OR 14.79 FWD. OF STATION 233.65	2935.48

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
CLOVER FIELD RADIO SUPPLY CO. 3200 AIRPORT AVENUE MUNICIPAL AIRPORT SANTA MONICA, CALIF.	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	#4220

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.

APRIL 3, 1958
(Date repair and/or alteration completed)

Nathan J. Bain #1285950
(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)

APRIL 3, 1958
(Date of approval or rejection)

Ardath L. Carter #1285957
(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 4-15-58 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

Reg. 4 LA ASDO 1
(CAA designation number)

H. W. Kattelmann
(Signature Aviation Safety Agent)

Reg. 4 LA ASDO 1

16—54010-4

5-23-8

Form ACA-337 (4-52) MC

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

INSTRUCTIONS

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

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

6. DESCRIPTION OF WORK ACCOMPLISHED.*

REMOVED BENDIX A.D.F. SYSTEM, AND ADDED A COLLINS COMMUNICATION SYSTEM IN ACCORDANCE WITH CLOVER FIELD RADIOSUPPLY CO. SPEC.#314864-A

ITEM	WEIGHT	ARM	MOMENT
AIRCRAFT, PREVIOUS	9874.97	218.11	2153836.41
EQUIPMENT REMOVED			
RADIO CONTROL PANEL MS-120A	5.75	96	552.0
MN-36 LOOP & DEHYDRATOR	12.00	192	2304.0
SENS ANTENNA	.5	144	72.0
AN-104B VHF ANTENNA & BRACKET	3.0	386	1158.0
TACH SHAFTING	1.25	85	106.25
MN-26 ADF RECEIVER & MOUNT	38.0	41	1558.0
MN-31 LOOP AMPLIFIER & MOUNT	18.0	46	828.0
RANGE ANTENNA	.5	144	72.0
MN-37B AZIMUTH	1.4	96	134.4
MR-16C RANGE FILTER	1.75	93	162.75
WIRING & CABLES	12.0	93	1116.0
T-11 ARC VHF TRANSMITTER	3.4	73	248.2
P-10POWER UNIT	3.8	70	266.0
	101.35		8577.6
EQUIPMENT ADDED			
37R-2 ANTENNA & MOUNT	4.0	192	768.0
RELAY B-5	.7	93	65.1
390H MOUNTING RACK	2.4	41	98.4
17L-7 TRANSMITTER, VHF	14.0	41	574.0
51X-2 RECEIVER, VHF	10.0	41	410.0
RADIO CONTROL PANEL	3.75	96	360.0
WIRES & CABLES	4.8	63	302.4
POWER WIRES	1.25	166	207.5
	40.9		2785.4
EMPTY WT.	9874.97		2153836.41
WT REMOVED	- 60.45		5792.2
	9814.52		2148044.21

101.35	8577.6	EMPTY WT.	9874.97
40.9	2785.4	WT REMOVED	- 60.45
- 60.45	- 5792.2		9814.52

$$\frac{2148044.21}{9814.52} = 218.86$$ AFT OF DATUM, OR 14.79 FWD. OF STATION 233.65

NEW WT. & BALANCE INFORMATION HAS BEEN INTERED IN THE AIRCRAFT LOG BOOK IN ACCORDANCE WITH THE GRUMMAN SYSTEM OF "INDEX UNITS".

*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. 5 DATE: 4-26-84

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

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

1. AIRCRAFT	MAKE: CHUMMAN MALLARD	MODEL: G-73	SERIAL NO.: J8	NATIONALITY AND REGISTRATION MARK: N-2945 (Standard)
2. OWNER	NAME (First, middle, last): FRANK W. FULLER	ADDRESS (Street and number, city, zone and State): 351 MISSION STREET, SAN FRANCISCO, CALIF.		

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)				XX
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)*
AIRCRAFT	9874.97	218.11 Aft of Datum or 15.54 Fwd of Station 233.65	2875.03

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS:
CLOVER FIELD RADIO SUPPLY CO.
3200 AIRPORT AVENUE
MUNICIPAL AIRPORT
SANTA MONICA, CALIF.

b. KIND OF AGENCY:
- ☐ U. S. Certificated Mechanic.
- ☐ Foreign Certificated Mechanic.
- ☒ Certificated Repair Station.
- ☐ Manufacturer.
  - ☐ (Check if repair or alteration was made under delegation option procedures.)

c. CERTIFICATE NO.: # 4220

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.

MARCH 15, 1957 (Date repair and/or alteration completed)

Nathan J. Bain #1285950 (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)

MARCH 15, 1957 (Date of approval or rejection)

Ardath L. Castor #1285957 (Signature of authorized individual; title or identification number)

7. TO BE COMPLETED ONLY BY CAA PERSONNEL

a. ☐ Forwarded for engineering comment ☐ See attached memorandum ☐ Spot Checked _____ (Date)

b. ☒ Accepted 3-18-57 (Date) ☐ Reinspected _____ (Date)

Reg. 4 LA
ASDO 1 (Designation number)

H.W. Kattelmann (Signature Aviation Safety Agent)

Reg. 4 LA
ASDO 1

Form ACA-337 (4-52)

16—54010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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 and installed Navigational Radio equipment in accordance with Clover Field Radio Supply Co. Spec.#314864.

Item	Weight	Arm	Moment
Aircraft, previous	9840	218.65	2,151,517.0
EQUIPMENT REMOVED			
R-89 Glide Path Receiver	12.0	70.25	843.0
416H-1 Power Supply	9.4	72.0	676.8
416H-1 PowerSupply	9.4	68.5	643.9
OBI & Servo Amplifier Assem.	5.5	58.0	319.0
	36.3		2482.7
EQUIPMENT ADDED			
R-89Glide Path Receiver	12.0	25.0	300.0
ARC L-11 Loop	4.3	144.0	619.2
ARC G-59 Control Unit	1.6	95.0	152.0
ARC R-30 Receiver	7.0	72.4	506.8
ARC R-14Power Unit	4.8	73.0	350.4
Radio Magneric Indicator	2.87	93.0	266.91
Collins 351A Accessory Frame & Mount	33.7	64.0	2156.8
Junction Box	1.0	54.0	54.0
Wire & Cableing	4.0	74.0	296.0
	71.27		4702.11
	- 36.3		-2482.7
	34.97		2219.41
	9840.00		2151517.00
	+ 34.97		2219.41
	9874.97		2153836.41

$\frac{2153836.41}{9874.97}$ = 218.11Aft of Datum , or 15.54 Forward of Station 233.65

Gross Wt. = 12750.0
Empty Wt. = 9874.97

New Useful Load = 2875.03

New Wt. & Balance information has been intered in the Aircraft Log Book in accordance with the Grumman System of "Index Units"

*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. 5 DATE: 4-26-84

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 8	N 2945

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, town and State)
	FRANK W. FULLER Jr.	301 Mission St. San Francisco, Calif.

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check) MAJOR REPAIR	MAJOR ALTERATION
a. AIRFRAME	(As described in item 1 above)				
b. POWERPLANT					
c. PROPELLER	Hamilton Stnd.	23D40-51 6383A 13	158760 N471432/N472442/N472617 x		
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	9840	15.00" fwd. of datum	2910

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
West Coast Propeller Co. 1101 Chestnut Street Burbank, California	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	4006

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.

March 14 57 (Date repair and/or alteration completed)

1265903 Gay R. Fulton (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)

West Coast Propeller Approved Repr Sta 4006

March 14 57 (Date of approval or rejection)

Gay R. Fulton (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 3-18-57 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date) MC

Reg. 4 LA ASDO 1 (Area designation number)

H.W. Kattelmann (Signature Aviation Safety Agent) Reg. 4 LA ASDO 1

16—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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.*

Propeller disassembled, cleaned, inspected. Barrel support blocks replaced. Assembled, checked, balanced and functionally tested. New seals installed.

Setting Feather 84
Low 11

Installed on Aircraft No. N2945

Inspection Stamp PEC 24

Pecaero Engineering Corp.

*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. 5 DATE: 4-26-84

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-8	N-2945

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
	Frank W. Fuller Jr.	301 Mission St. San Francisco, Calif.

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)*
Standard	9840	15.00" fwd. of datum	2910

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
United Aircraft Corp. Pratt & Whitney Div. Airport Dept. 400 Main St. East Hartford 8, Conn.	☒ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	A&E M-16910

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

10-12-56
(Date repair and/or alteration completed)

Robert Wanagel
Robert Wanagel
(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) I.A.

10-12-56
(Date of approval or rejection)

F.C. Kaeser
F.C.Kaeser A&E M-16223
(Signature of authorized individual; title or identification number)

7. TO BE COMPLETED ONLY BY CAA PERSONNEL

a. ☐ Forwarded for engineering comment ☐ See attached memorandum
b. ☒ Accepted 10-12-56 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

(CAA designation number)

(Signature Aviation Safety Agent)

Reg. 1 NYMU
ASDO 19

16—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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.*

Following equipment removed overhauled & installed.

Pratt & Whitney R-1340, S1H1 Wasp engine Serial No. P-327918.

The fabric control surfaces, (ailerons, elevators & rudder) were recovered by

Aero Trades, Inc. MacArthur Field, Long Island, N.Y.

Weight Change Negligible

*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. 5 DATE: 4-26-84

N-288

PRATT AND WHITNEY AIRCRAFT
AIRPORT DEPARTMENT
EAST HARTFORD, CONNECTICUT

Make Grumman
Model G-73
Ser. No. J-8
Reg. No. N-2945

MAINTENANCE RELEASE* (POWERPLANT, PROPELLER, OR APPLIANCE)

	NAME	ADDRESS
OWNER	Mr. Frank W. Fuller Jr.	301 Mission Street San Francisco, California.

UNIT	MAKE	MODEL	SERIAL NUMBER
POWERPLANT	Pratt & Whitney	Wasp S1H1	P327918
PROPELLER			
APPLIANCE			

The component identified above was repaired and inspected in accordance with current Civil Air Regulations and was found airworthy for return to service.

Pertinent details of the repair are on file at this agency under our Job Order # 1574

Date October 8, 1956.

Signed George V. Dickerson (Crank)
GEORGE V. DICKERSON
CHIEF INSPECTOR

Agency Name PRATT & WHITNEY AIRCRAFT
AIRPORT DEPARTMENT
EAST HARTFORD, CONNECTICUT
CERTIFICATE NO. 2

DESCRIPTION OF WORK ACCOMPLISHED

Subject engine was given a complete major overhaul and passed the Pratt & Whitney overhaul test.

The following new major parts were installed: 8 linkpin assemblies, #1 - 3 - 8 pistons, 1 pistonpin assembly, mastered bearing (B/P -.002), 5 valve tappet rollers.

The following Pratt & Whitney Service Bulletins were incorporated during this overhaul: 683, 723, 923, 1097A, 1266, 1306C, 1323, 1352A, 1364A, 1399, 1410, 1443A, 1488A, 1488A-1, 1546A, 1571, 1591, 1595, 1597.

The following accessories were inspected, overhauled, and tested: Model HAY9E1-507 carburetor, Serial #5829136; Model S8RN magnetos, Serial #192329 (right) and #192333 (left); tubular type ignition harness.

Scintilla Service Bulletins #219, 314, 325 were complied with.

Reg. 1 NY
ASDO 19

*The use of this Maintenance Release form is approved by CAA in lieu of Form ACA 337
Reference: Civil Aeronautics Manual, Section 18-22-2(a)(2)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

JUN 26 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-8	N-2945

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
	Frank W. Fuller, Jr.	301 Mission St. San Francisco, Calif.

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
x *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	9840.1	218.65 Aft of Ref. Datum or 15.00 Fwd. of rear face of main wing beam.	2909.1

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
John A. Knackert 519 Linden Ave. San Bruno, Calif.	[X] U. S. Certificated Mechanic. [ ] Foreign Certificated Mechanic. [ ] Certificated Repair Station. [ ] Manufacturer. [ ] (Check if repair or alteration was made under delegation option procedures.)	A.& E. #1191809

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.

June 19, 1956 (Date repair and/or alteration completed)

John A. Knackert (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

[X] APPROVED / [ ] REJECTED BY [X] CAA Designee [ ] CAA Aviation Safety Agent [ ] Manufacturer [ ] Repair Station [ ] Canadian Department of Transport Inspector of Aircraft [ ] Other (Specify)

June 19, 1956 (Date of approval or rejection)

M R Clark DAMI 6257 (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. [X] Accepted JUN 28 1956 (Date) [ ] Reinspected ____ (Date) [ ] Spot Checked ____ (Date)

Reg. 4 LA SDO 21 (CAA designation number)

(Signature Aviation Safety Agent)

16—64010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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.*

	Wt.	Arm	Moment
Former Empty Wt.	9830.0	218.77	2,150,509.1
Removed Equipment:			
Bendix MN26 Range Receiver & Mount	-38.2	65	-2483.0
Bendix Loop Antenna & mount.	-3.8	32	- 121.6
Tuning Control	- 1.0	97	- 97.0
Added Equipment			
Collins VHF Nav. Receiver (51-R), shock mount, & bracket.	34.8	65	2262.0
Power Unit & Mtg. base Collins(416N-1)	10.6	72	763.2
Frequency Selector(Collins 314U)	1.8	97	174.6
Omni-Mag Indicator (Bendix MH97)	2.9	93	269.7
Electrical Harness	3.0	80	240.0
New Empty Wt.	9840.1		2,151,517.0

New C.G. $\frac{2,151,517.0}{9840.1}$ = 218.65" Aft of reference datum.

or 233.65 - 218.65 = 15.00" Forward of rear face of main wing beam (Sta. 233.65)

Gross Wt. = 12750.0 Lbs.
E.Wt. = 9840.1 Lbs.

Useful Load = 2909.9 Lbs.

The above equipment was installed in accordance with the manufacturer's recommendations and CAM 18, using materials of approved aircraft quality.

New Wt. & Balance information has been entered in the aircraft log book in accordance with the Grumman system of "Index Units"

*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—84010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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-8	NATIONALITY AND REGISTRATION MARK: N-2945
2. OWNER	NAME (First, middle, last): Frank W. Fuller JR.		ADDRESS (Street and number, city, zone and State): 301 Mission St. San Francisco, Calif.	

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)*
Standard	9,830	218.77" aft of datum -14.88	2,920

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
United Aircraft Corp. Pratt & Whitney Div. Airport Dept. 400 Main St. East Hartford 8, Conn.	☒ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	AAE M-8172

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

10-26-55
(Date repair and/or alteration completed)

Gene R. Lifer
(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)

10-28-55
(Date of approval or rejection)

F.C. Kaeser #1385
(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 11-2-55 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

(CAA designation number)

(Signature Aviation Safety Agent)

Reg. 1 NY
ASDO 19

16—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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.*

Following equipment removed, overhauled & installed.

Pratt & Whitney Wasp S1H1 engine No. P-327919.

Hamilton Standard 4K11-54T governor No. 134634.

NO WEIGHT CHANGE

*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. 5 DATE: 4-26-84

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form approved.
Budget Bureau No. 61-R052.4

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

1. AIRCRAFT	MAKE: Grumman	MODEL: G-73	SERIAL NO.: J P-8	NATIONALITY AND REGISTRATION MARK: N-2945
2. OWNER	NAME (First, middle, last): Frank W. Fuller	ADDRESS (Street and number, city, zone and State): 301 Mission St. San Francisco, Calif.		

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check): MAJOR REPAIR	MAJOR ALTERATION
a. AIRFRAME	(As described in item 1 above)				
b. POWERPLANT					
c. PROPELLER					
d. APPLIANCE	TYPE AND MANUFACTURER: H.S. Governor	4K11-54T	13463	X	

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)*
—	—	—	—

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Hamilton Standard Division United Aircraft Corp. Windsor Locks, Conn.	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☒ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	

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

10/13/55 (Date repair and/or alteration completed)

Thad N. Jones (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)

10/13/55 (Date of approval or rejection)

Richard C. Recknagel
Inspection Foreman (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 11-2-55 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

(CAA designation number) (Signature Aviation Safety Agent)

Reg. 1 NY
ASDO 19

16—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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.*

Governor inspected, overhauled, rebuilt and tested to Hamilton Standard Repair & Test Specifications.

RECEIVED
OCT 15 2 50 PM '85
AIRCRAFT REGISTRY
W-300

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

Check block if additional sheets are attached. ☐

U. S. GOVERNMENT PRINTING OFFICE 16—84010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

CAA - W

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 MALLARD	G73	J8	N 2945 (STANDARD)

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
	FRANK W. FULLER, JR.	301 MISSION STREET SAN FRANCISCO, CALIFORNIA

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)				XX
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)*
AIRCRAFT	9,830	218.77" AFT OF DATUM OR * -14.88	29.20

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
AIRESEARCH AVIATION SERVICE CO. 5907 W. IMPERIAL HIGHWAY, L. A. 45, CALIF. CAA. APPROVED REPAIR STATION 4022	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	# 4022 AIRFRAME CLASS 1-2-3-4 AND RADIO CLASS 1-2

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.

April 4, 1955 (Date repair and/or alteration completed)

T. Caldwell M 12256 (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)

April 4, 1955 (Date of approval or rejection)

Vincent B. Womack DMR STA. 4022 (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 April 20, 1955 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

4-257-1 (CAA designation number)

Edw. H. Reikma (Signature Aviation Safety Agent)

16—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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- INSTALLED .010 MICA AND 2" "AA" FIBREGLASS IN ALL CABIN ~~AREAS~~ AREAS ABOVE FLOOR. INSTALLED 2" AA FIBREGLASS IN COCKPIT AREA.

2- INTERIOR STRIPPED AND REINSTALLED WITH NEW HEADLINER, SIDEPANELS AND CHAIRS REUPHOLSTERED, NEW RUG AND PAD INSTALLED AND NEW DIVAN FABRICATED AND INSTALLED PER AIRESEARCH PRINT #M-190-44. REMOVABLE TABLE FABRICATED AND INSTALLED.

3- ELIMINATED COLD AIR OUTLETS AND INSTALLED THREE AIRITE OUTLETS IN CABIN.

4- INSTALLED GRIMES ROTATING BEACON ON TOP OF FUSELAGE WITH SWITCH IN COCKPIT.

5- INSTALLED ONE COLLINS 37P-3 GLIDESLOPE ANTENNA. AND INSTALLED TWO LANSING D-208 SPEAKERS IN THE COCKPIT.

6- AIRCRAFT WEIGHED UPON COMPLETION OF WORK.

*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. 5 DATE: 4-26-84

C AAI

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 Mallard	MODEL: G-73	SERIAL NO.: J8	NATIONALITY AND REGISTRATION MARK: N 2945 (STANDARD)
2. OWNER	NAME (First, middle, last): Frank W. Fuller		ADDRESS (Street and number, city, zone and State): 301 MISSION STREET SAN FRANCISCO, CALIF.	

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)				XX
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)*
AIRCRAFT	9,830	218.77" AFT OF DATUM OR 114.88	8920

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
AIRESEARCH AVIATION SERVICE CO. 5907 W. IMPERIAL HIGHWAY, L. A. 45, CALIF. CAA. APPROVED REPAIR STATION 4022	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☒ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	#4022 AIRFRAME CLASS 1-2-3-4 RADIO CLASS 1-2

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.

4-26-55 (Date repair and/or alteration completed)

George L. Lawson Repairman 1291883 (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)

APRIL 1, 1955 (Date of approval or rejection)

Vincent R. Womack
VINCENT R. WOMACK DNR, STA. 4022 (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 April 20, 1955 (Date) ☐ Reinspected (Date) ☐ Spot Checked (Date)

4-257-1 (CAA designation number)

Edw. H. Pickens (Signature Aviation Safety Agent)

Form ACA-337 (4-52)

16—54010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

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.*

RADIO MODIFICATIONS

Installed audio isolation and control system per AiResearch Radio Prints No. 501, 502, 503 and 504.

Equipment	Weight	Station
1 - F-11A Isolation Amplifier & Mounting Base	8.0	35
1 - Junction Box with Terminals and Relays	2.0	79
Total -	10.0	

*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. 5 DATE: 4-26-84

AiRESEARCH AVIATION SERVICE CO.
LOS ANGELES INTERNATIONAL AIRPORT
LOS ANGELES, CALIF.

REPORT NO.
PREPARED BY
DATE

REPORT NO. C-334

LOADING CHART AND ACTUAL WEIGHT

FRANK W. FULLER

MODEL: GRUMMAN G-73 (MALLARD) DATE: APRIL 5, 1955

LICENSE NO: N2945 (STD)

MFG. SERIAL NO: J8

Otto I. Foerstemann
Otto I. Foerstemann
For: AiResearch Aviation Service Company

Vincent B. Wormack DMR 4022
for Joe A. Adams
DMR Repair Station No. 4022
For: Civil Aeronautics Administration

April 5, 1955
Date of Certification

REPORT No. C-334
PREPARED BY Foerstemann
DATE 4-15-55

INDEX

REPORT No. C-334
PREPARED BY Roeratemann
DATE 4-15-55

PREFACE

This report presents the results of the actual weighing of the Grumman G-73 airplane, Manufacturer's Serial No. J8, on April 5, 1955.

Loading Chart Data of the "Index Unit" type are included herein to assist the operator in loading the airplane.

The reference datum for measuring horizontal arms throughout this report is Station 0, which is ten inches forward of the bow of the hull.

REPORT No. C-334
PREPARED BY Foerstemann
DATE 4-15-55

LOADING CHART DATA

The following Loading Chart Data has been prepared to assist the operator in loading the airplane so the resulting gross weight and balance is within the allowable limits which have been approved by the Civil Aeronautics Administration.

1. ALLOWABLE GROSS WEIGHT:

   The maximum allowable gross weight for take-off and landing is 12,750 lbs.

2. ALLOWABLE C.G. RANGE:

   The maximum allowable center of gravity range is 15% MAC to 26.5% MAC to 10,700 lbs. The range is 15% MAC to 26% MAC between 10,700 lbs. and 12,750 lbs.

3. BASIC WEIGHT:

   The basic weight represents the unloaded airplane and is the starting point for calculating all loadings. The actual for the airplane is as follows:

	WEIGHT (LBS)	INDEX
Weight Empty (Gear Down)	9,830	215.05
One Pilot (Station 125)	170	2.12
BASIC WEIGHT (1)	10,000	217.17
Co-Pilot (Station 125)	170	2.12
BASIC WEIGHT (2)	10,170	219.29

4. RESTRICTIONS:

   (a) The airplane shall be so loaded that the summation of the basic weight plus passenger, cargo, fuel and oil vs. summation of index units shall fall within the forward and aft limits balance lines on the graph for both take-off and landing.

   (b) Minimum gallons of oil to be carried must be equal to $\left(\frac{\text{gallons of fuel carried}}{25}\right)$

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

REPORT No. C-334
PREPARED BY Foerstemann
DATE 4-15-55

LOADING CHART DATA (CONTINUED)

4. RESTRICTIONS (CONT)

(c) When cargo or baggage is not available, ballast as necessary to load the airplane within limits must be carried.

5. INSTRUCTIONS FOR USE OF CHART:

(a) Totalize separately the weight and index units for all items of load including cargo, oil, fuel, passengers and any other items present but not included in the basic weight as shown herein.

(b) Add the totals obtained in (a) to the basic weight andindex as shown on page 4.

(c) Plot the answer obtained in (b) on the Balance Limits Graph. The point must fall within the indicated allowable region.

(d) Subtract the fuel weight and index units from the answer in (b) and re-plot the point on the Balance Limits Graph. The point must still fall within the indicated allowable region.

6. GENERAL:

(a) Equipment and other items which are contained in the weight empty are listed in the Equipment List contained herein.

(b) Index Units = $\frac{\text{Weight x Distance from Datum}}{10,000}$

2M 2-54 LC

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

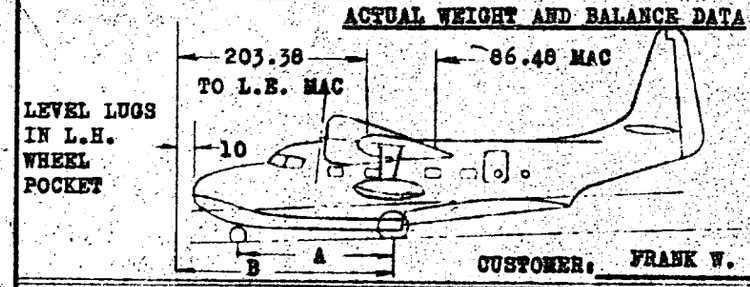
AIRESEARCH AVIATION SERVICE CO.

LOS ANGELES INTERNATIONAL AIRPORT
LOS ANGELES, CALIF.

License No: N2945 (STD)
Mfg. Serial No: J8

REPORT No. C-334
PREPARED BY Foerstemann
DATE 4-5-55
Model No: G-73

ACTUAL WEIGHT AND BALANCE DATA



CUSTOMER: FRANK W. FULLER

WEIGHT DATA (AIRPLANE HORIZONTAL AS WEIGHED)

SCALE		GROSS	TARE	NET
L.H. MAIN	YELLOW	4,330	+ 10	4,340
R.H. MAIN	BLUE	4,335	+ 15	4,350
NOSE	RED	1,272	+ 18	1,290
	TOTAL	9,937	+ 43	9,980

BALANCE DATA (AS WEIGHED)

A = ℄ Nose Wheel to ℄ Main Wheels = 144.75

B = ℄ Main Wheel to Ref. Datum = 237.38

℄ Main Wheel to C.G. = $\frac{(1290)(144.75)}{9,980}$ = 18.71

Ref. Datum to C.G. = 237.38 - 18.71 = 218.67

C.G. = $\frac{\text{C.G.} - 203.38}{86.48}$ = 17.68 % MAC

BALANCE DATA (WEIGHT EMPTY)

ADJUSTMENTS:	WEIGHT	ARM	MOMENT
AIRPLANE AS WEIGHED	9,980	218.67	2,182,326.60
Oil 20 Gal. @ 7.5#	- 150	212.0	- 32,800.00
EMPTY CORRECTED WEIGHT	9,830	218.77	2,150,526.60

% MAC = 17.80%

Vincent B. Wonder
Weighed By A/E 15434

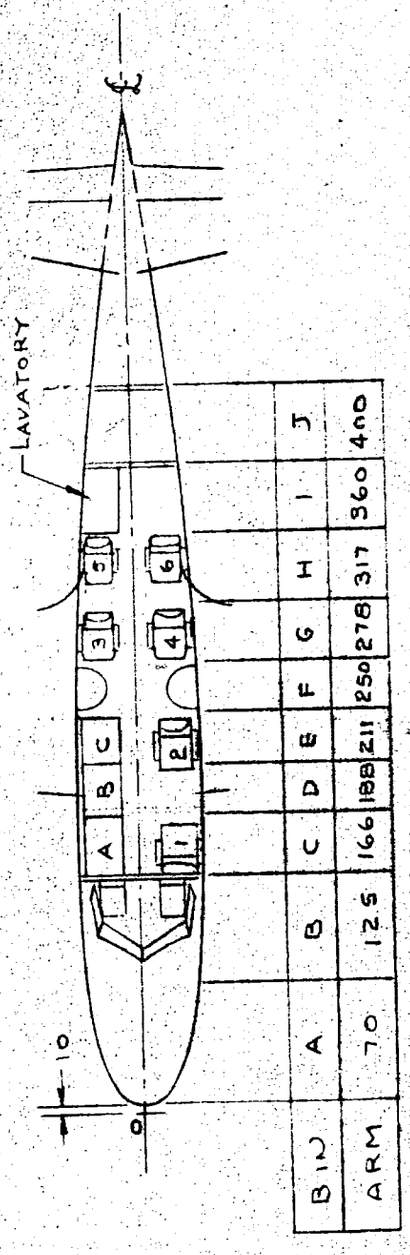
Vincent B. Wonder
Witnessed By DMR STA. 4022

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

AIRE ,E. RCH AVIATION SER ICE CO.

LOS ANGELES INTERNATIONAL AIRPORT
LOS ANGELES, CALIF.

REPORT No.
PREPARED BY
DATE



2M 3-84 LC

FAA AIRCRAFT REGISTRY
CAMERA NO. 5 DATE: 4-26-84

RECEIVED
APR 29 11 11 AM '55
ADMIN. & RECORDS BRANCH
W-300

FAA AIRCRAFT REGISTRY
CAMERA NO. 24 DATE: 11-2-83

AIR SEARCH AVIATION SERVICE CO.

LOS ANGELES INTERNATIONAL AIRPORT
LOS ANGELES, CALIF.

REPORT No. C-334
PREPARED BY Fogelsmann
DATE 4-15-55

PASSENGER		PASSENGER WEIGHT & INDEX										
POSITION	H.ARM	140	150	160	170	180	190	200	210	220	230	240
Pilot	125	1.75	1.88	2.00	2.13	2.25	2.38	2.50	2.63	2.75	2.88	3.00
Co-Pilot	125	1.75	1.88	2.00	2.12	2.25	2.38	2.50	2.63	2.75	2.88	3.00
Divan												
A	166	2.32	2.49	2.66	2.82	2.99	3.15	3.32	3.49	3.65	3.82	3.98
B	188	2.63	2.82	3.01	3.20	3.38	3.57	3.76	3.95	4.14	4.32	4.51
C	211	2.95	3.17	3.38	3.59	3.80	4.01	4.22	4.43	4.64	4.85	9.06
Seat												
1	166	2.32	2.49	2.66	2.82	2.99	3.15	3.32	3.49	3.65	3.82	3.98
2	211	2.95	3.17	3.38	3.59	3.80	4.01	4.22	4.43	4.64	4.85	5.06
3 & 4	278	3.89	4.17	4.45	4.73	5.00	5.28	5.56	5.84	6.12	6.39	6.67
5 & 6	317	4.44	4.76	5.07	5.39	5.71	6.02	6.34	6.66	6.97	7.29	7.61

AIRESEARCH AVIATION SERVICE CO.

LOS ANGELES INTERNATIONAL AIRPORT
LOS ANGELES, CALIF.

REPORT NO. C-334
PREPARED BY Foerstemann
DATE 4-15-55

FUEL (MAIN TANKS)			MA = 219.7		
GAL.	WT.	INDEX	GAL.	WT.	INDEX
20	120	2.64	220	1320	29.00
40	240	5.27	240	1440	31.64
60	360	7.91	260	1560	34.27
80	480	10.55	280	1680	36.91
100	600	13.18	300	1800	39.55
120	720	15.82	320	1920	42.18
140	840	18.45	340	2040	44.82
160	960	21.09	360	2160	47.46
180	1080	23.73	380	2280	50.09
200	1200	26.36			

FUEL (FLOAT TANKS)			MA = 241.0		
GAL.	WT.	INDEX	GAL.	WT.	INDEX
10	60	1.45	60	360	8.68
20	120	2.89	70	420	10.12
30	180	4.34	80	480	11.57
40	240	5.78	90	540	13.01
50	300	7.23	100	600	14.46

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

AIRESEARCH AVIATION SERVICE CO.

LOS ANGELES INTERNATIONAL AIRPORT
LOS ANGELES, CALIF.

REPORT No. C-334
PREPARED BY Foerstemann
DATE 4-15-55

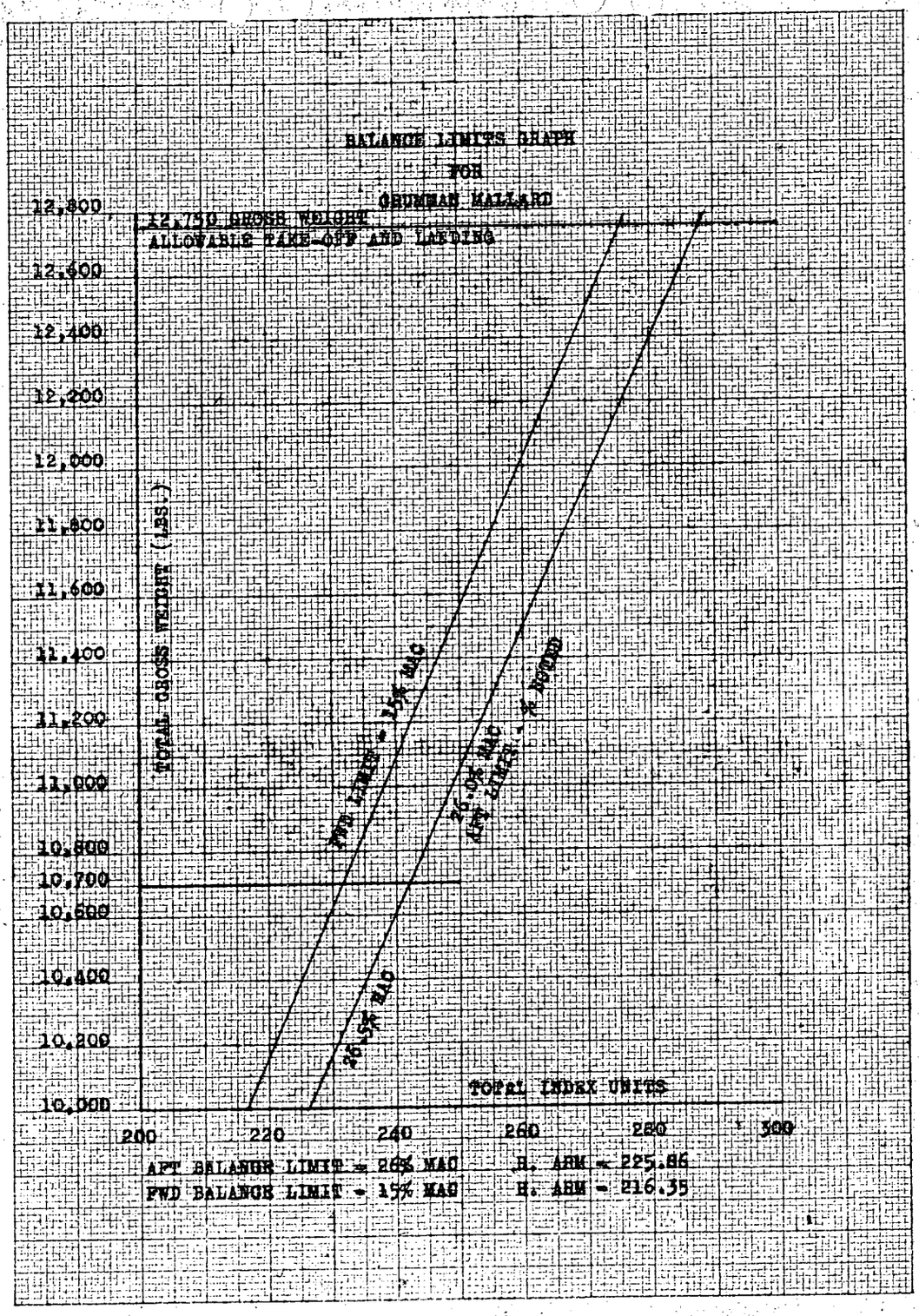
OIL				MA = 212.0	
GAL	WT.	INDEX	GAL.	WT.	INDEX
2	15	.32	12	90	1.91
4	30	.64	14	105	2.23
6	45	.95	16	120	2.55
8	60	1.27	18	135	2.86
10	75	1.59	20	150	3.18

*BAGGAGE				MA = 400.0	
WT.	INDEX		WT.	INDEX	
25	1.00		300	12.00	
50	2.00		325	13.00	
75	3.00		350	14.00	
100	4.00		375	15.00	
125	5.00		400	16.00	
150	6.00		425	17.00	
175	7.00		450	18.00	
200	8.00		475	19.00	
225	9.00		500	20.00	
250	10.00		525	21.00	
275	11.00		550	21.60	

* Includes wash water

2M 2-54 LC

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83



FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

AIRES :A. .CH AVIATION ..E. .VICE CO.

LOS ANGELES INTERNATIONAL AIRPORT
LOS ANGELES, CALIF.

REPORT NO. 0-334
PREPARED BY Foerstemann
DATE 4-15-55

ON	OFF	ITEM NO.	ITEM	WT.	H.ARM	REF.
			EQUIPMENT ADDED:			
			MISCELLANEOUS			
			1 Divan AASC Dwg. M-100-44		188.0	
			Fiberglas Blanket "AA" in Cabin	20.2	208.0	
			Mica & Cement (.010) in Cabin	30.0	208.0	
			6 Wemac Lights	1.2	200.0	
			1 Rotating Beacon (Grimes 05790)	3.0	330.0	
			1 37X Antenna	.5	499.0	
			2 D208 Speakers-Cockpit (Difference)	3.5	123.5	
			1 ARC F-11 Iso. Amplifier	8.0	35.0	
			1 J Box (Relays, Terminals, etc.)	2.0	79.0	

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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-8	NATIONALITY AND REGISTRATION MARK: N2945
2. OWNER	NAME (First, middle, last): FRANK W. FULLER JR.		ADDRESS (Street and number, city, zone and State): 301 MISSION STREET SAN FRANCISCO 19, CAL.	

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)			XX	XX
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)*
STANDARD	93981	-14.95 218.7 AFT. REF DATUM	3351.9

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.

10-9-54 (Date repair and/or alteration completed)

JOSEPH R. ETZEL 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 ☐ Other (Specify) Inspector of Aircraft

AERO TRADES INC. MacARTHUR AIRPORT RONKONKOMA, L.I., N.Y.

10-9-54 (Date of approval or rejection)

JOSEPH R. ETZEL, CHIEF INSPECTOR Joseph R. Etzel (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 _____ (Date) ☐ Reinspected 10-4-54 (Date) ☐ Spot Checked _____ (Date)

Agent (CAA designation number) R. H. Rode (Signature Aviation Safety Agent)

16—54010-4 Form ACA-337 (4-52)

OCT 14 REC'D

4

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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.*

ANNUAL INSPECTION FOR RELICENSE.
INSTALLED "DROOP NOSE CONFIGURATION" ON LEADING EDGES IN ACCORDANCE WITH GRUMMAN BLUE PRINT NO. 106930A.
INSTALLED RIGHT WING PITOT MAST, PLUMBING AND WIRING IN ACCORDANCE WITH GRUMMAN BLUEPRINT NOS. 106090 AND 110556.
INSTALLED HULL SPRAY RAILS ALONG L/R CHINES BETWEEN STATION NO. 41 & 180. INSTALLATION APPROVED ON GRUMMAN G-73 N1628 DEC. 23, 1953.
REPLACED BRAKE DISCS AND BISCUITS IN L/R BRAKES.
INSTALLED NEW NOSE WHEEL TIRE AND TUBE.
HYDRAULIC HAND PUMP SELECTOR VALVE REMOVED AND OVERHAULED AND REPLACED
REPLACED LANDING GEAR HYDRAULIC FLEX LINES AS NECESSARY.
REPLACED FLEX LINES AT BRAKE MASTER CYLINDERS.
REPLACED SEALS IN L/R FIREWALL OIL SHUT-OFF VALVES.
REPLACED MAIN WHEEL BEARINGS AND RACES.
REWORKED HEATER DRAIN LINE.
REPLACED RIGHT REAR BAGGAGE COMPARTMENT WINDOW.
REPLACED BATTERY OVERFLOW JAR.
REWORKED LOOSE COWL FLAPS ON LEFT SIDE.
REPLACED FUEL LINES ON L/R ENGINES WITH AEROQUIP LINES.
INSTALL OVERHAULED PROPELLERS, FORMS ATTACHED.

	WT.	ARM	MOMENT
OLD E.N. FROM 337 8-25-54	9339.1	218.9"	2044810.95
INSTALLED SPRAY RAILS	+ 19.0	+ 108.0	2052.0
INSTALLED DROOP SNOOT	+ 30.0	+ 214.5	643.50
INSTALLED RT. PITOT SYSTEM	+ 10.0	+ 222.0	2220.0
NEW EMPTY WEIGHT	9398.1		2055517.95

$\frac{2055517.95}{9398.1}$ = 218.7" NEW C.G. AFT OF REFERENCE DATUM.

233.65-218.7= -14.95 FWD. OF CAA DATUM.

12750-9398.1- 3351.9 NEW USEFUL LOAD.

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. 2N DATE: 11-2-83

RIGHT

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-8	N2945

	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
2. OWNER	FRANK W. FULLER JR.	301 MISSION STREET SAN FRANCISCO 19, CAL.

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)			XX	XX
b. POWERPLANT					
c. PROPELLER	H.S.P.	23D40-51 3-6533A-18	158760 E471432	X X	 X
XXXXXXX	TYPE AND MANUFACTURER		E472442 E472617	X X	X X

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	93981	-14.95 218.7 AFT. REF. DATUM	3351.9

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Airport Dept. Pratt & Whitney Div. United Aircraft Corp. 400 Main Street East Hartford, Conn.	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☒ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	

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

10-5-54 (Date repair and/or alteration completed)

Arthur L. Coffiell (Signature of authorized individual) Arthur L. Coffiell

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)

10-5-54 (Date of approval or rejection)

George V. Dickerson
Chief Inspector (Signature of authorized individual; title or identification number) George V. Dickerson Charles H. Collis

7. TO BE COMPLETED ONLY BY CAA PERSONNEL

a. ☐ Forwarded for engineering comment ☐ See attached memorandum
b. ☐ Accepted _____ (Date) ☐ Reinspected 10-4-54 (Date) ☐ Spot Checked _____ (Date)

agent (CAA designation number) R G Poole (Signature Aviation Safety Agent)

16—54010-4 Form ACA-337 (4-52)

OCT 14 REC'D

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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.*

Propeller inspected, overhauled, rebuilt, balanced and tested to Hamilton Standard Propellers Repair & Test Specifications.

The Blades were converted from Design No. 6383A-13 to 6533A-18, overhauled and installed in Propeller as replacements.

*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—64010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

LEFT

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-8	N2945

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
	FRANK W. FULLER JR.	301 MISSION STREET SAN FRANCISCO 19, CAL.

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)			XX	XX
b. POWERPLANT					
c. PROPELLER	H.S.P.	23D40-51 3-6533A-18	158762 N472618	X X	 X
~~XXXXXXX~~	TYPE AND MANUFACTURER		N472730 N548693	X X	X X

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	93981	-14.95 218.7 AFT. REF. DATUM	3351.9

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Airport Dept. Pratt & Whitney Div. United Aircraft Corp. 400 Main Street East Hartford, Conn.	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☒ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	

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

10-5-54
(Date repair and/or alteration completed)

Arthur L. Cofiell Arthur L. Cofiell
(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)

10-5-54
(Date of approval or rejection)

George V. Dickerson Chief Inspector George V. Dickerson Charles N. Collis
(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 _____ (Date) ☑ Reinspected 10-4-54 (Date) ☐ Spot Checked _____ (Date)

Agent
(CAA designation number)

W. Poole
(Signature Aviation Safety Agent)

16—54010-4

OCT 14 REC'D

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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.*

Propeller inspected, overhauled, rebuilt, balanced and tested to Hamilton Standard Propellers Repair & Test Specifications.

The Blades were converted from Design No. 6383A-13 to 6533A-18, overhauled and installed in Propeller as replacements.

*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. 2N DATE: 11-2-83

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-8

d. ENGINE MAKE	e. ENGINE MODEL
PRATT AND 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
FRANK W. FULLER JR.	301 MISSION STREET SAN FRANCISCO 19, CAL.	N 2945

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 12-6-46
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

Allan Hammerstedt
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)
10-1-54 (DATE)
Mechanic (TITLE)

10-60837-2

Form ACA-305 (11-51)

OCT 14 REC'D

11-15-4

10-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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 1954 (YEAR) THROUGH CARD NO. 54-20
   - 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 1849:15 HOURS
   - d. [ ] ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
     - L. SERIAL NO. P327918 TOTAL HOURS 1849:15
     - R. SERIAL NO. P377919 TOTAL HOURS 1849:15
     - SERIAL NO. ____ TOTAL HOURS ____
     - SERIAL NO. ____ TOTAL HOURS ____

RECEIVED
OCT 20 4 07 PM '54
AIRCRAFT RECORDS BRANCH
A-300

3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)
   - a. LAST AIRWORTHINESS INSPECTION CONDUCTED 10-9-54 (DATE)
     - [ ] BY AIRCRAFT MANUFACTURER
     - [X] BY APPROVED REPAIR STATION, CERTIFICATE NO. 115
     - [ ] BY MECHANIC, CERTIFICATE NO. ____
   - 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 10-9-55 (DATE)
   - g. [X] PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 11-2-54 (DATE)
     - BY JOSEPH R. ETZEL (NAME OF ISSUING REPRESENTATIVE) AERO TRADES APP. STA. 115 (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. 115 by CAR 52 and was found to be:
   - [X] AIRWORTHY
   - [ ] UNAIRWORTHY

   Joseph R. Etzel
   JOSEPH R. ETZEL (REPAIR STATION AUTHORIZED SIGNATURE) 10-9-54 (DATE)

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
AVIATION SAFETY AGENT'S SIGNATURE	CAA DESIGNATION NO.	DATE	[ ] ACCEPTED [X] REINSPECTED [ ] SPOT CHECKED
R. Poole	Agent	10-4-54	

[ ] ATTACHMENT

Form ACA-305a (11-51)

U. S. GOVERNMENT PRINTING OFFICE 16—60837-2

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

(11-240)

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-8	N 2945

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
	FRANK W. FULLER, JR.	301 Mission Street San Francisco 19, Calif.

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)*
Standard	9,339.1	-14.75" or 218.9" aft of datum	3,410.9

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Allan Hammerseth 880 Hensley Ave. San Bruno, California	☒ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	A & E 1067748

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.

8-25-54 (Date repair and/or alteration completed)

Allan Hammerseth (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)

(Date of approval or rejection)

(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 _____ (Date) ☐ Reinspected _____ (Date) ☒ Spot Checked 9-17-54 (Date)

(CAA designation number)

A C Edwards Reg. 4 LA ASDO 33
(Signature Aviation Safety Agent)

16—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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 new instrument panel and new instrument panel on co-pilot's side. Installed new instruments after removal of old instruments as shown on table below. All electrical wiring accomplished by United Air Lines engineer. All work was accomplished in accordance with manufacturer's recommendations and CAM-18.

Item	Weight	Arm	Moment
Old E. W.	9,335.4	219.0	2044452.6
Instrument Panel	+ 1.0	93.0	+ 93.0
Sperry H-6-B Horizon	+ 4.25	93.0	+ 395.25
Bendix Omni Mag.	+ 3.0	93.0	+ 279.0
Kollsman Air Speed	+ .75	93.0	+ 69.75
Instrument Condensers	- .75	75.0	- 55.5
Airpath Compass	- .75	93.0	- 69.75
Omni Bearing Selector Colins	- 1.9	-93.0	- 176.7
Glide Path & Localizer Cross Pointer	- 1.9	93.0	- 176.7
New E. W.	9,339.1		2044810.95

$$\frac{2044810.95}{9,339.1} = 218.9''$$ E.W. C. G. Aft of datum or -14.75 forward of rear face of main beam.

Gross weight	12,750
E. W.	9,339.1
Useful Load	3,410.9

*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. 2N DATE: 11-2-83

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

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

	MAKE	MODEL	SERIAL NO.	NATIONALITY AND REGISTRATION MARK
1. AIRCRAFT	Grumman	G-73	J-8	N 2945

	NAME (*First, middle, last*)	ADDRESS (*Street and number, city, zone and State*)
2. OWNER	Frank W. Fuller, Jr.	301 Mission Rd. San Francisco, California

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*)*
Standard	9335.4	- 14.64	3414.6

5. CONFORMITY STATEMENT (*Complete and check*)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Lear, Inc. Aircraft Service Division Santa Monica Municipal Airport Santa Monica, California	☒ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	A&E 2944

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.

11-27-53 (Date repair and/or alteration completed)

John Wyzgl (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*)

11-27-53 (Date of approval or rejection)

John H. Sparks DAMI #6500
John H. Sparks (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 12-10-53 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

Reg. 4 LA
ASDO 1
(CAA designation number)

Harold G. Bush (Signature Aviation Safety Agent)

Form ACA-337 (4-52)

54010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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 the following equipment:

Item	Wt.	Arm.	Moment
Lear LVTR-36 Transmitter, Receiver and Mount	24.0	- 85.5	- 2052
Speakers (two)	4.0	-110.	- 440
Collins Antenna (37R)	3.0	70.	21
Junction Box	1.0	-147.	- 147
Removed Collins Indicator	- 1.0	-130.	130
Installed Collins Indicator	1.0	-139.	- 139
Lear LVTR-36 Control Head	1.0	-128	- 128
Aircraft	9302.4	- 14.4	-133954.6
	9335.4		-136709.6

$\frac{-136709.6}{9335.4}$ = - 14.64 New Empty Weight C.G.

*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. 2N DATE: 11-2-83

4B-71724

APPROVED REPAIR SUBJECT TO INSTALLATION INSPECTION.
WALTER J. MAJOR, D.A.M.I. 19

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	G73	J-8	STANDARD N2845

	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
2. OWNER	Frank W. Fuller, Jr.	301 Mission Street, San Francisco, Calif.

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check) MAJOR REPAIR	MAJOR ALTERATION
a. AIRFRAME	(As described in item 1 above)				
b. POWERPLANT	Pratt & Whitney	Wasp S1H1	P-327918	Overhaul	Conversion
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	9302.4	210.248 AFT REF. DATUM LINE 14.40 FWD REAR FACE MAIN WING BEAM	3447.6

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Pratt & Whitney Aircraft Airport Department East Hartford, Connecticut	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☒ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	

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.

October 16, 1953 (Date repair and/or alteration completed)

George V. Dickerson
Chief Inspector George V. Dickerson (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)

(Date of approval or rejection) (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 (Date) ☐ Reinspected (Date) ☒ Spot Checked 11-9-53 (Date)

AGENT (CAA designation number) R. H. Poole (Signature Aviation Safety Agent)

Form ACA-337 (4-52)

16—54010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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.*

Subject engine was given a complete major overhaul and converted from model Wasp S3H1 to Wasp S1H1 and passed the Pratt & Whitney overhaul test.

The following new major parts were installed: masterod and bearing assembly, propeller thrust ball bearing, governor drive gear and pin assembly, starter and generator drive gear jaw, starter gear.

The following Pratt & Whitney Service Bulletins were incorporated during this overhaul: #619-1-A, 1082, 1118-A.

Special Instructions No. 23F-43 and No. 21F-53 were incorporated during this overhaul.

The following accessories were inspected, overhauled, and tested: Model MAY9E1-507 carburetor, Serial #5829136; Model SB9RN magnetos, Serial #192329 and #192333; tubular type ignition harness.

Scintilla Service Bulletins #244 and 231-B were complied with during this overhaul.

*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. 2N DATE: 11-2-83

Job # B-71725

APPROVED REPAIR SUBJECT TO INSTALLATION INSPECTION.
W J Major
WALTER J. PAJOR, D.A.M.I. 19

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	GRUMMMN	G73	J-8	STANDARD N2945

	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
2. OWNER	Frank W. Fuller, Jr.	301 Mission Street, San Francisco, Calif.

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check) MAJOR REPAIR	MAJOR ALTERATION
a. AIRFRAME	••••••••••••••••••••• (As described in item 1 above) •••••••••••••••••••••				
b. POWERPLANT	Pratt & Whitney	Wasp S1H1	P-327919	Overhaul	Conversion
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	9302.4	210.248 AFT REF. DATUM LINE 14.40 FWD REAR FACE MAIN WING BEAM	3447.6

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Pratt & Whitney Aircraft Airport Department East Hartford, Connecticut	☐ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☑ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	

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.

October 16, 1953 (Date repair and/or alteration completed)

George V. Dickerson
Chief Inspector George V. Dickerson (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)

(Date of approval or rejection) (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 _____ (Date) ☐ Reinspected _____ (Date) ☑ Spot Checked 11-9-53 (Date)

AGENT (CAA designation number) R J Poole (Signature Aviation Safety Agent)

16—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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.*

Subject engine was given a complete major overhaul and converted from model Wasp S3H1 to Wasp S1H1 and passed the Pratt & Whitney overhaul test.

The following new major parts were installed: propeller thrust ball bearing, masterod and bearing assembly, cam, #5 piston, #8 exhaust valve.

The following Pratt & Whitney Service Bulletins were incorporated during this overhaul: #619-A-1, 1082, 1118-A.

Pratt & Whitney Special Instructions 237-49 were incorporated.

The following accessories were inspected, overhauled, and tested: Model NAY9E1-507 carburetor, Serial #5962696; Model SB9RN magnetos, Serial #192331 and #188359; tubular type ignition harness.

*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. 2N DATE: 11-2-83

APPROVED REPAIR SUBJECT TO FINAL FAA INSPECTION.
(11-56)
W. Hagy
WALTER J. PAJOR, D.A.M.I. 19

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 GRUMMAN	MODEL G-8	SERIAL NO. STANDARD #2340	NATIONALITY AND REGISTRATION MARK
2. OWNER	NAME (First, middle, last) FRANK W. FULLER JR.	ADDRESS (Street and number, city, zone, and State) 301 MISSION STREET SAN FRANCISCO CALIFORNIA		

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check) MAJOR REPAIR	MAJOR ALTERATION
a. AIRCRAFT	(As described in item 1 above)				
b. PROPELLER BLADE OR HUB	H.S.P.	23D40-51	158760	X	
		3-6533A-18	514959	X	
			514960	X	
			514961	X	
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)*
9302.4	219.248 AFT REF. DATUM LINE 14.40 FWD. REAR FACE MAIN WING BEAM	3447.6

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

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

6. AGENCY	NAME Airport Dept. Pratt & Whitney Div. United Aircraft Corp.	ADDRESS (Street and number, city, zone, and State) 400 South Main St. East Hartford, Conn.	DATE WORK ACCOMPLISHED 10-7-53

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.)

Propeller inspected, overhauled, rebuilt & tested to Hamilton Standard Propellers Repair & Test Specifications.

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 L. Cofield	Inspector in Charge	10-7-53
(Signature of supervising mechanic)	(Certificate number and rating)	(Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED ☐ REJECTED	DESIGNEE'S SIGNATURE	NO.	DATE
	CAA AGENT SIGNATURE R.G. Poole	☒ ACCEPTED ☐ REINSPECTED	DATE 11-9-53

16—54010-2

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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. 2N DATE: 11-2-83

APPROVED FOR FLIGHT SUBJECT TO FURTHER INSPECTION.
CAA Form 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)

WALTER J. FAJOR, D.A.M. 10 (SEE REVERSE SIDE OF THIS FORM FOR INSTRUCTIONS)

1. AIRCRAFT	MAKE GRUMMAN	MODEL G73	SERIAL NO. U-6 STANDARD D2940	NATIONALITY AND REGISTRATION MARK
2. OWNER	NAME (First, middle, last) FRANK W. FULLER JR.	ADDRESS (Street and number, city, zone, and State) 301 MISSION STREET SAN FRANCISCO CALIFORNIA		

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (Check) MAJOR REPAIR	MAJOR ALTERATION
a. AIRCRAFT	(As described in item 1 above)				
b. PROPELLER BLADE OR HUB	H.S.P.	23D40-51	158762	X	
		3-6533A-18	514965	X	
c. ~~ENGINE~~			514966	X	
			514967	X	
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)*
9302.4	219.248 AFT OF REF. DATUM LINE 14440 FWD OF REAR FACE OF MAIN WING BEAM	3447.6

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
	Airport Dept. Pratt & Whitney Div. United Aircraft Corp.	400 South Main St. East Hartford, Conn.	10-7-53

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.)

Propeller inspected, overhauled, rebuilt & tested to Hamilton Standard Propellers Repair & Test Specifications.

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 L. Cofiell (Signature of supervising mechanic) — Inspector in Charge (Certificate number and rating) — 10-7-53 (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☑ APPROVED ☐ REJECTED	DESIGNEE'S SIGNATURE	NO.	DATE
	CAA AGENT SIGNATURE R H Poole	☑ ACCEPTED ☐ REINSPECTED	DATE 11-9-53

16—54010-2

FAA AIRCRAFT REGISTRY
CAMERA NO. 24 DATE: 11-2-83

INSTRUCTIONS

1. This form must be filled out in duplicate each time a major repair and/or alteration is made of an aircraft, propeller, engine, or instrument.
2. When repairs and/or alterations are made which affect the operation limitations set forth in the Airplane Flight Manual or Form ACA-309, the aircraft shall not be returned to service until the operation limitations have been corrected by an authorized representative of the CAA.
3. Certificated mechanics must, in all cases, obtain approval of the repair and/or alteration from the CAA representative prior to returning the article to service.
4. The manufacturer of an aircraft, engine, propeller, or instrument, and a certificated repair station holding the appropriate rating may return the article to service without prior approval of an authorized CAA representative, provided the alteration and/or repair does not change any of the operation limitations.
5. Repair agencies will be guided as follows when completing this form.
   a. **For an Aircraft Repair and/or Alteration**—Complete Items 1, 2, 3a, 4, 5, 6, and 7.
   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—84010-2 U. S. GOVERNMENT PRINTING OFFICE

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

APPROVED REPAIR SUBJECT TO FURTHER INSPECTION.
(11-48)
WALTER J. PAJOR, D.A.M.I. 19

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	G73	J-8 STANDARD	N2945

	NAME (*First, middle, last*)	ADDRESS (*Street and number, city, zone, and State*)
2. OWNER	FRANK W. FULLER JR.	301 MISSION STREET SAN FRANCISCO CALIFORNIA

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (*Check*) MAJOR REPAIR	MAJOR ALTERATION
a. AIRCRAFT	(*As described in item 1 above*)				
b. PROPELLER BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER H.S.P. Governor	4N1L-T4T	134634	X	

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*)*
	8302.4	219.248 AFT OF REF. DATUM LINE 14.40 FWD OF REAR FACE OF MAIN WING BEAM	3447.6

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

[X] MANUFACTURER [ ] APPROVED REPAIR STATION NO. _____ (*Specify*) [ ] CERTIFIED MECHANIC

	NAME	ADDRESS (*Street and number, city, zone, and State*)	DATE WORK ACCOMPLISHED
6. AGENCY	Airport Dept. Pratt & Whitney Div. United Aircraft Corp.	400 South Main Street East Hartford, Conn.	10-3-53

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.)

Governor inspected, overhauled, rebuilt and tested to Hamilton Standard Propellers Repair and Test Specifications.

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 L. Cofield (Signature of supervising mechanic) — Inspector in Charge (Certificate number and rating) — 10-3-53 (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

	DESIGNEE'S SIGNATURE	NO.	DATE
[✓] APPROVED			
[ ] REJECTED	CAA AGENT SIGNATURE R M Paul	[✓] ACCEPTED [ ] REINSPECTED	DATE 11-9-53

16—64010-2

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—64010-2 U. S. GOVERNMENT PRINTING OFFICE

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FORM ACA-337 (11-48)

APPROVED REPAIR SUBJECT TO INSTALLATION INSPECTION.
Co Rep

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form Approved.
Budget Bureau No. 41-R052.2.

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

WALTER J. PAJOR, D.A.M.I. 19 *(SEE REVERSE SIDE OF THIS FORM FOR INSTRUCTIONS)*

1. AIRCRAFT	MAKE: GRUMMAN	MODEL: G73	SERIAL NO.: J-8	NATIONALITY AND REGISTRATION MARK: STANDARD N2845
2. OWNER	NAME (*First, middle, last*): FRANK W. FULLER JR.	ADDRESS (*Street and number, city, zone, and State*): 301 MISSION STREET SAN FRANCISCO CALIFORNIA		

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (*Check*) MAJOR REPAIR	MAJOR ALTERATION
a. AIRCRAFT	(As described in item 1 above)				
b. PROPELLER BLADE OR HUB					
c. ENGINE					
d. INSTRUMENT	TYPE AND MANUFACTURER: H.S.P. Governor	4K11-T4P	123514	X	

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*)*
	9302.4	219.248 AFT REF. DATUM LINE 16.40 FWD. REAR FACE MAIN WING BEAM	3447.6

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
	Airport Dept. Pratt & Whitney Div. United Aircraft Corp.	400 South Main Street East Hartford, Conn.	10-3-53

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.)

Governor inspected, overhauled, rebuilt and tested to Hamilton Standard Propellers Repair and Test Specifications.

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 L Cofield (Signature of supervising mechanic) — Inspector in Charge (Certificate number and rating) — 10-3-53 (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☑ APPROVED ☐ REJECTED	DESIGNEE'S SIGNATURE	NO.	DATE
	CAA AGENT SIGNATURE: RG Poole	☑ ACCEPTED ☐ REINSPECTED	DATE: 11-9-53

16—64010-2

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

INSTRUCTIONS

1. This form must be filled out in duplicate each time a major repair and/or alteration is made of an aircraft, propeller, engine, or instrument.
2. When repairs and/or alterations are made which affect the operation limitations set forth in the Airplane Flight Manual or Form ACA-309, the aircraft shall not be returned to service until the operation limitations have been corrected by an authorized representative of the CAA.
3. Certificated mechanics must, in all cases, obtain approval of the repair and/or alteration from the CAA representative prior to returning the article to service.
4. The manufacturer of an aircraft, engine, propeller, or instrument, and a certificated repair station holding the appropriate rating may return the article to service without prior approval of an authorized CAA representative, provided the alteration and/or repair does not change any of the operation limitations.
5. Repair agencies will be guided as follows when completing this form.
   a. **For an Aircraft Repair and/or Alteration**—Complete Items 1, 2, 3a, 4, 5, 6, and 7.
      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. 2N DATE: 11-2-83

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-8

d. ENGINE MAKE	e. ENGINE MODEL
PRATT & WHITNEY	S1H1

4. AIRCRAFT REGISTRATION INFORMATION (*Complete all items*)

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
FRANK W. FULLER JR.	301 MISSION ST. SAN FRANCISCO CALIF	N- 2945

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 12.6.46
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 (15) 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

Allen Hammersell
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

NOV 2, 1953 (DATE) AGENT (TITLE)

16—60537-2

NOV 6 REC'D

Form ACA-305 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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. 3
   b. ☐ AIRCRAFT LISTING PAGE NO. _____
   c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 1948 (YEAR) THROUGH CARD NO. 53.20
   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 1594:55 HOURS
   d. ☒ ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
   R. SERIAL NO. P 327919 TOTAL HOURS 1594:55
   L. SERIAL NO. P 327918 TOTAL HOURS 1594:55
   SERIAL NO. _____ TOTAL HOURS _____
   SERIAL NO. _____ TOTAL HOURS _____

3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)
   a. LAST AIRWORTHINESS INSPECTION CONDUCTED 11/2/53 (DATE)
   ☐ BY AIRCRAFT MANUFACTURER
   ☒ BY APPROVED REPAIR STATION, CERTIFICATE NO. 115
   ☐ BY MECHANIC, CERTIFICATE NO. _____
   b. ☒ PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED
   a. ☐ OPERATION LIMITATIONS, FORM ACA-309, 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 11/2/54 (DATE)
   g. ☒ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 10/10/53 (DATE)
   BY F.C. KAESER (NAME OF ISSUING REPRESENTATIVE) 1385 (DESIGNATION NO.)

RECEIVED
NOV 12 12 19 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. 115 by CAR 52 and was found to be:
   ☒ AIRWORTHY
   ☐ UNAIRWORTHY
   Joseph R. Etzel
   JOS. R. ETZEL (REPAIR STATION AUTHORIZED SIGNATURE)
   AERO TRADES, INC.
   AERO TRADES INC. MacARTHUR AIRPORT RONKONKOMA, L.I., N.Y.
   11/2/53 (DATE)

6. CAA REPRESENTATIVE CERTIFICATION
   I HAVE INSPECTED THE AIRCRAFT DESCRIBED ON THE REVERSE AND FOUND IT ☐ AIRWORTHY ☐ UNAIRWORTHY (Check appropriate item)

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
AVIATION SAFETY AGENT'S SIGNATURE	CAA DESIGNATION NO.	DATE	☐ ACCEPTED
R R Poole	AGENT	11-9-53	☐ REINSPECTED
			☑ SPOT CHECKED

☐ ATTACHMENT

Form ACA-305a (11-51)

U. S. GOVERNMENT PRINTING OFFICE 16—C 137-2

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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

U. S. DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

1. AIRCRAFT	MAKE: GRUMMAN	MODEL: G73	SERIAL NO.: J-8 STANDARD	NATIONALITY AND REGISTRATION MARK: N2945
2. OWNER	NAME (First, middle, last): FRANK W. FULLER JR.,	ADDRESS (Street and number, city, zone and State): 301 MISSION STREET SAN FRANCISCO CALIF		

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)*
STANDARD	9302.4	219.248 AFT OF REF. DATUM LINE 14.40 FWD OF REAR FACE OF MAIN WING BEAM	3447.6

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 N. Y.	☐ 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.

NOV 2 1953 (Date repair and/or alteration completed)

JOSEPH R. ETZEL 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.

NOV 2 1953 (Date of approval or rejection)

Joseph R. Etzel (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 11-8-53 (Date) ☐ Reinspected (Date) ☒ Spot Checked (Date)

AGENT (CAA designation number)

R G Poole (Signature Aviation Safety Agent)

Form ACA-337 (4-54)

16—54010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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.*

100 HOUR INSPECTION ON AIRFRAME
REMOVED L/R ENGINES AND RE-INSTALLED PRATT & WHITNEY OVERHAULED AND FACTORY CONVERTED ENGINES S3H1 TO S1H1
LEFT - S1H1 P-327918 RIGHT - S1H1 P 327919
REWORKED ENGINE AIR SCOOPS AN D COWLINGS ACCORDING TO GRUMMAN DRAWINGS NOS. 109051C, 108320M FOR ENGINE CONVERSION.
MAGNAFLUXED E/R ENGINE MOUNTS.
INSTALLED OVERHAULED PROPELLERS
REPLACED L/R ANDNOSE WHEEL TRUNION BUSHINGS
REMOVED AND REPLACED NOSE WHEEL ASSY. OVERHAULED BY CENTRAL AVIA.
REMOVED AND REPLACED L/R MAIN LANDING GEAR ASSYS. AND BRAKES.
REPLACED SEALS IN L/R FIREWALL OUT SHUT-OFF VALVES
INSTALLED NEW TIRES ON LR. WHEELS
INSTALLED NEW L/R NOSE WHEEL FLEX LINES
INSTALLED N EW L/R GEAR DOWN LOCK FLEX LINES.
INSTALLED NEW L/R BRAKE FLEX LINES.
REBUSHED L/R COWL FLAP CYLINDERS.
REPLACED WITH FLEX LINES SOLID HYDRAULIC LINES TO COWL FLAP CYLINDERS
REPLACED L/R REAR SEC TIONS OF RUDDER CABLES.
REWORKED AND LUBRECATED OR CHANGED DEFECTIVE AILERON AND FLAP HINGE BEARINGS.
INSTALLED 4 NEW REAR CABIN WINDOWS IN PASSENGER COMPT. COMPLETE WITH NEW SEAL
REPLACED LEFT BAGGAGE AND LAVATORY WINDOWS WITH NEW SEALS
REPAIRED DAMAGED NOSE ON LEFT FLOAT, TEST AND REPAIR LEAKS.
REPAIRED DAMAGED NOSE ON RIGHT FLOAT.
REPAIRED DAMAGED RIBS ON BOTTOM OF RIGHT FLOAT AND INSTALLED NEW LOWER OUTBOARD FRONT SKIN SECTION AND TESTED FOR LEAKS
DISASSEMBLED RIGHT FLOAT PEDESTAL TO REMOVED WRINKLED SECTION AND RE-ASSEMBLED.
REMOVED HEATER, REMOVED SHROUD AND INSTALLLED AND RE-INSTALLED HEATER.
REPLACED CO-PILOTS SIDE WINDOW
INSTALLED DOUBLER PATCH AT STATION 160 AND STRINGER #10 LEFT SIDE.
INSTALLED DOUBLER PATCH AT STATION 180 AND STRINGER #10 " "
STRAIGHTENED SKIN AND REPIVITED ALONG SERINGER AT 3 AND 202 LEFT SIDE.
INSTALLED PATCH AROUND CRACKED SKIN AT STA 180 AND STRINGER #4 LEFT SIDE.

*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—54210-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

CONTINUED FROM 1

INSTALLED U CHANNEL DOUBLER PLATE BETWEEN STATIONS 140 AND 160 AND STRINGER 7 AND 8
INSTALLED INSIDE PATCHES ON LEFT SIDE AT STA. 225½ AND STRINGER #12 STA 225½ STRINGER #11
INSTALLED DOUBLERS OVER CRACKED L/R CENTERSECTION TO HULL ANGLES
INSTALLED RE-INFORCEMENT GUSSETS AT LOWER NACELLE OPENINGS IN CENTERSECTION.
INSTALLED RE-INFORCEMENTS BRACES ON LOWER NACELLE OPENINGS.
REMOVED AND RE-INSTALLED RIGHT LOWER FRAME ASSYS. AT FOLLOWING STATIONS 59,69,,72,86
REPLACED WITH FACTORY SUPPLIED LOWER RIGHT HULL SKIN BETWEEN STATIONS 53 AND 93.
INSTALLED U CHANNEL DOUBLER PLATES IN FRONT AND REAR OF FRAME AT STATION 72 ABOVE CHINE
STRAIGHTENED SKIN AND INSTALLED U CHANNEL GUSSETS BETWEEN STA 140 AND 160 AND STRINGERS 5 AND 6 RT. SIDE. BETWEEN 160 AND 180 AND STRINGERS 9 AND 10 RIGHT SIDE.
STRAIGHTENED SKIN AND INSTALLED U CHANNEL GUSSET ON HULL BOTTOM BETWEEN STA. 124 AND 140 AND STRINGERS 16 AND 17 RIGHT SIDE.
STRAIGHTENED SKIN AND INSTALLED INSIDE PATCHES AT FOLLOWING PLACES ON RIGHT SIDE OF HULL

STA. #	108 AND STRINGER	# 11
	108 "	10
	108	9
	124	9
	124	10
	160	6
	160	4

TOUCHED UP PAINT WHERE NECESSARY.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

N 340

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.: J8	NATIONALITY AND REGISTRATION MARK: U.S. N2945
2. OWNER	NAME (*First, middle, last*): Frank W. Fuller Jr.		ADDRESS (*Street and number, city, zone and State*): 301 Mission St. San Francisco Calif.	

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*)*
	9302.4	219.248 aft of ref. datum 14 fwd. of rear face of main wing beam	3447.6

5. CONFORMITY STATEMENT (*Complete and check*)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Lawrence M. Norton 218 Elm St. San Mateo, Calif	☒ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	A&E 1031120

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.

6/18/53 (Date repair and/or alteration completed)

Lawrence M. Norton (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*)

6-20-53 (Date of approval or rejection)

W. Scott Rockey 6401 (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 7-8-53 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked _____ (Date)

CA-257 (CAA designation number)

Forest J. Olge (Signature Aviation Safety Agent)

16—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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.*

The following equipment was removed from the aircraft:
(1) A Sperry Directional Gyro Indicator (Air driven)
(2) A Kollsman Magnetic Direction Indicator
The following equipment was added to the aircraft:
(1) A 115 volt-400 cycle single phase A.C. power supply system.
(2) A Sperry Type C-2A "gyrosyn" compass system
(3) Supplementary instrumentation forthe existing VHF and ADF radio navigation equipment. Namely ADual Radio and Magnetic Indicator,ServoAmplifier, and an Omni-Bearing Indicator
An existing bilge pump(portable) was relocated.
All added equipment is listed on the attached drawings (sheets 1&2)
All equipmentwas installed in accordance with the manufacturers'Recommended Procedures and in accordance with CAR18 and CAM18

Previous Wt. & Bal.	Wt.(lbs)	Arm(ins)	Moment	Index Unit
	9252.8	219.534	2031307.15	203.13
Remove Directional Gyro	-4.35	91	-396.0	
" Direction Ind.	-1.75	100	-175.0	
" Bilge pump	-8.75	41	-359	
Add Bilge pump	8.75	456	3990.0	
" C-2A indicator	4.00	90	360	
"C2A Amplifier	2.47	58	143.2	
" C-2A flux valve	1.25	498	623.0	
" Flux valve J. box	.30	468	140.5	
" " " bracket	.35	498	174.5	
" Compass J. box	.85	85	72.2	
" Slaving cutout switch	.08	93	7.5	
"Inverter & bracket	27.72	41	1137.5	
" Relay & circuit breakers	1.15	243	280.0	
" Radio magnetic indicator	2.87	99	284.0	
" OBI & ServoAmplifier assem.	5.54	58	321.5	
" Phase adapter	1.50	47	70.5	
" Voltmeter & control switch	.50	117	58.5	
" Ct. brkrs. & bracket	.55	41	22.6	
" Wiring & electric cables	6.57	224	1471.0	
Total increase	49.60	165.856	8226.5	0.82
New Weight & Balance	9302.4	219.248	2039533.65	203.953

*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—84010-4

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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

11-46

3. AIRCRAFT IDENTIFICATION (*Complete all items*)

a. AIRCRAFT MAKE	b. AIRCRAFT MODEL	c. AIRCRAFT SERIAL NO.
Grumman	G-73	J-8

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
Frank W. Fuller Jr.	301 Mission St. San Francisco, Calif.	N-2945

Acc 5-27-3

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 12-6-46
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.

102

Acc 11-13-7

ATTACHMENTS (*Check which*)
☒ ACA-319
☐ ACA-337
☐ ACA-317
☐ WEIGHT AND BALANCE REPORT
☐ DATA, DRAWINGS, ETC.
☐ UNAPPROVED DEVIATION DATA

Lawrence M. Norton
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

9-29-52 (DATE) Agent (TITLE)

16—60837-2

Form ACA-305 (11-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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. 3
   - b. [ ] AIRCRAFT LISTING PAGE NO. _____
   - c. [X] AIRWORTHINESS DIRECTIVE SUMMARY 1952 (YEAR) THROUGH CARD NO. 52-23
   - 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 1396 HOURS
   - d. [X] ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
     - SERIAL NO. P-327918 TOTAL HOURS 626
     - SERIAL NO. P-327919 TOTAL HOURS 626
     - SERIAL NO. _____ TOTAL HOURS _____
     - SERIAL NO. _____ TOTAL HOURS _____

3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)
   - a. LAST AIRWORTHINESS INSPECTION CONDUCTED 10-10-52 (DATE)
     - [ ] BY AIRCRAFT MANUFACTURER
     - [ ] BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
     - [X] BY MECHANIC, CERTIFICATE NO. M-8172
   - 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 10-10-53 (DATE)
   - g. [X] PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 10-20-52 (DATE)
     - BY F.C. Kaeser (NAME OF ISSUING REPRESENTATIVE) 1385 (DESIGNATION NO.)

RECEIVED OCT 23 2 35 PM '52 AIRWORTHINESS SECTION

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 F.C. Kaeser	DESIGNATION NO. 1385	DATE 10-10-52	[X] ACCEPTED
AVIATION SAFETY AGENT'S SIGNATURE Kastan	CAA DESIGNATION NO. 1-5790-13	DATE 10-21-52	[ ] REINSPECTED [ ] SPOT CHECKED

[ ] ATTACHMENT

Form ACA-305a (11-51)

U. S. GOVERNMENT PRINTING OFFICE 16—60837-2

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

11-46

FORM ACA-305
(3-5-47)

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)
- [ ] ORIGINAL AIRWORTHINESS CERTIF.
- [x] ANNUAL INSPECTION

CAA IDENTIFICATION
- [x] NC
- [ ] NR
- [ ] OTHER (Specify)
- [ ] NX
- [ ] NL

AIRCRAFT

MAKE	MODEL		
Grumman	G-73		
REGISTRATION NO.	MANUFACTURER'S SERIAL NO.	DATE MANUFACTURED	TYPE CERTIFICATE NO.
2945	J-8	1-23-46	783

ENGINE

MAKE	MODEL
Pratt & Whitney	S3H1

OWNER'S NAME: Frank W. Fuller Jr.

PERMANENT ADDRESS (Street and number, City, Zone and State): 301 Mission St. San Francisco, Calif.

ATTACHMENTS (Check which)
- [x] ACA-319
- [x] ACA-337
- [ ] ACA-805
- [ ] ACA-317
- [ ] WEIGHT AND BALANCE REPORT
- [ ] SPECIAL APPROVALS
- [ ] DATA, DRAWINGS, ETC.
- [ ] UNAPPROVED DEVIATION DATA

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE.
Grant C. Ruth
Grant C. Ruth
OWNER OR AUTHORIZED AGENT
10-1-51 DATE
Agent TITLE

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

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

ALL APPLICABLE MANDATORY NOTES, INSTRUMENT MARKINGS AND PLACARDING REQUIREMENTS HAVE BEEN COMPLIED WITH [x] YES [ ] NO

(AIRCRAFT SPECIFICATION - AIRWORTHINESS DIRECTIVE, NO(S). A- 783 revision 2 ADS thru 51-23 (SPECIFY)

AUTHORITY FOR EXCEPTIONS (If any) *

FORM ACA-1362, CERTIFICATE OF AIRWORTHINESS, ISSUED [ ] ORIGINAL [x] ANNUAL INSPECTION

(Check whether)
- [ ] OPERATION LIMITATIONS FORM ACA-309 WAS ISSUED, OR
- [x] APPROVED AIRPLANE FLIGHT MANUAL IS IN THE AIRCRAFT

FINDINGS

[x] AIRWORTHY [ ] UNAIRWORTHY	DESIGNEE'S SIGNATURE AND NO. F.C.Kaeser F.C.Kaeser		DATE 10-20-51
	CAA INSPECTOR'S SIGNATURE	[x] ACCEPTED [ ] REINSPECTED	DATE 11-2

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

Last operating date 10-1-51.

12-21-1

22665

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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	J8	N2945

	NAME (*First, middle, last*)	ADDRESS (*Street and number, city, zone, and State*)
2. OWNER	Frank W. Fuller, Jr.	501 Mission St. San Francisco, California

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

UNIT	MAKE	MODEL	SERIAL NO.	NATURE OF WORK (*Check*) MAJOR REPAIR	MAJOR ALTERATION
a. AIRCRAFT	(*As described in item 1 above*)				X
b. PROPELLER BLADE OR HUB					
c. ENGINE					
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*)*
	9253	219.53 ins. aft hull sta. 0 14.12 in. fwd of rear face Main wing beam	3497

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	Grant C. Ruth	1416 Vancouver Ave. Burlingame, California	May 4, 1952

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
Previous weight and balance	9217.8	219.1070	2,019,684.15
Cabin high pressure oxygen system installed			
Bottle	20.5	347	7,113.5
Regulator	2.5	347	867.5
Bottle & Regulator mount	6	347	2,082
Lines, outlets, etc.	6	260	1,560
Total increase	35	332.0857	11,623
New weight and balance	9252.8	219.5343	2,031,307.15

see other side for flow data

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.

Grant C. Ruth — (Signature of supervising mechanic)
A&E 50664-40 — (Certificate number and rating)
May 4, 1952 — (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

	DESIGNEE'S SIGNATURE	NO.	DATE
☒ APPROVED	Grant C. Ruth Designated Aircraft Maintenance Inspector	8231	May 4, 1952
☐ REJECTED	CAA AGENT SIGNATURE	☒ ACCEPTED ☐ REINSPECTED	DATE 6-6-52

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.

19—84010-2 U. S. GOVERNMENT PRINTING OFFICE

High pressure oxygen flow data for Grumman (Mallard), G-73, N2945 Based on Bottle capacity of 58.3 cubic feet (1070 liters) 2 liters required per passenger.

1 outlet operating -- endurance: 8 hours 55 minutes
2 outlets operating - endurance: 4 hours 28 minutes
3 outlets operating - endurance: 2 hours 59 minutes
4 outlets operating - endurance: 2 hours 16 minutes
5 outlets operating - endurance: 1 hour 47 minutes

Weight and balance data entered in airplane operation manual based on index system and copy submitted to CAA, original installed in operation manual.

All parts supplied by or manufactured in accordance with United Airlines approved procedures.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

A-337

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	Cruzen	C-73	J-8	N-2945

	NAME (*First, middle, last*)	ADDRESS (*Street and number, city, zone, and State*)
2. OWNER	Frank, W. Fuller Jr.	301 Mission Ave. San Francisco, Calif.

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	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*)*
	9218	-14.55" ~~fwd.~~ of datum. 219.10" aft of nose ref.	3572

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	United Aircraft Corp Pratt & Whitney Div. Airport Dept.	400 South Main St. East Hartford 8, Conn.	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.)

Previous Weight & Balance.

E.W.	9177.30
Useful load	3572.70
E.C.G.	218.70" from nose ref
Moment	2,007,009.9

OVER

OVER

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.

Gene R. Slifer	A&E M-8172	10-19-51
(Signature of supervising mechanic)	(Certificate number and rating)	(Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

	DESIGNEE'S SIGNATURE	NO.	DATE
☒ APPROVED	F.C.Kaeser	1385	10-19-51
☐ REJECTED	CAA AGENT SIGNATURE	☒ ACCEPTED ☐ REINSPECTED	DATE 11-2

16—54010-2

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

INSTRUCTIONS

1. This form must be filled out in duplicate each time a major repair and/or alteration is made of an aircraft, propeller, engine, or instrument.
2. When repairs and/or alterations are made which affect the operation limitations set forth in the Airplane Flight Manual or Form ACA-309, the aircraft shall not be returned to service until the operation limitations have been corrected by an authorized representative of the CAA.
3. Certificated mechanics must, in all cases, obtain approval of the repair and/or alteration from the CAA representative prior to returning the article to service.
4. The manufacturer of an aircraft, engine, propeller, or instrument, and a certificated repair station holding the appropriate rating may return the article to service without prior approval of an authorized CAA representative, provided the alteration and/or repair does not change any of the operation limitations.
5. Repair agencies will be guided as follows when completing this form.
   a. For an Aircraft Repair and/or Alteration—Complete Items 1, 2, 3a, 4, 5, 6, and 7.
   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—84010-2 U. S. GOVERNMENT PRINTING OFFICE

The fabric control surfaces, elevators, ailerons & rudder were recovered by Liberty Products Corp. Farmingdale, L.I. N.Y. Surfaces were covered in accord with standard practice for Grumman G-73 aircraft & manual 18.

The flaps were converted from fabric covering to metal covered by Grumman Aircraft Engineering Co.
Weight increase over fabric flaps 33 lbs. /286"

The cabin heater fuel control box was replaced with a revised box. Weight increase 7.5 lbs. /431.5"
Grumman bulletin #24.

Total weight increase 40.5 lbs.

Moment increase 12,674.25in. lbs.

New Weight & Balance.

E.W.	9218.
Useful Load	3532.
E.C.G.	14.55" fwd. of datum.
Moment	2,029,684.15

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

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)
- [ ] ORIGINAL AIRWORTHINESS CERTIFICATE
- [x] ANNUAL INSPECTION

AIRWORTHINESS CLASSIFICATION
- [x] STANDARD
- [ ] RESTRICTED
- [ ] EXPERIMENTAL
- [ ] LIMITED
- [ ] OTHER

AIRCRAFT

MAKE: Grumman
MODEL: G-73
TYPE CERTIFICATE NO.: 783
REGISTRATION NO.: 2945
MANUFACTURER'S SERIAL NO.: J-8

ENGINE

MAKE: Pratt & Whitney
MODEL: S3H1

OWNER'S NAME: Frank W. Fuller Jr.

PERMANENT ADDRESS (Street and number, city, zone, and State): 301 Mission St. San Francisco, California

ATTACHMENTS (Check which)
- [x] ACA-319
- [ ] WEIGHT AND BALANCE REPORT
- [ ] ACA-337
- [ ] DATA, DRAWINGS, ETC.
- [ ] ACA-317
- [ ] UNAPPROVED DEVIATION DATA

I CERTIFY that the above statements are true.

Frank W. Fuller Jr.
Owner or authorized agent.

10-2-50
(DATE)

Owner
(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 revision 2 ADS thru 50-39 (Specify)

FORM ACA-1362, CERTIFICATE OF AIRWORTHINESS, ISSUED [ ] ORIGINAL [x] ANNUAL INSPECTION

(Check whether)
- [ ] OPERATION LIMITATIONS FORM ACA-309 WAS ISSUED, OR
- APPROVED AIRPLANE FLIGHT MANUAL IS IN THE AIRCRAFT

FINDINGS

- [x] AIRWORTHY
- [ ] UNAIRWORTHY

DESIGNEE'S SIGNATURE AND NO.: F.C. Kaeser F.C. Kaeser # 1385 — DATE: 10-16-50

CAA INSPECTOR'S SIGNATURE: [ ] ACCEPTED [ ] REINSPECTED — DATE: 10-20-50

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

Last operating date 10-2-50

Rec 11-17-0 NO

EVA

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FORM ACA-337
(11-7-46)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

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

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

(A) For an Aircraft - Complete items 1, 2, 3a, 4, 5, 6, and 7 and submit to CAA representative for approval.

(B) For a Component Installed in an Aircraft - Complete items 1, 2, 3(b, c, or d, whichever is applicable), 4, 5, and 6, and submit as described in (A) above.

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

1. AIRCRAFT	MAKE	MODEL	SERIAL NO.	CAA IDENTIFICATION MARK
	Grumman "Mallard"	G-73	J-8	N-2945

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone, and state)
	Frank W. Fuller Jr.	301 Mission st. San Francisco, California

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

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

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

4. AIRCRAFT	EMPTY WEIGHT (Pounds)*	EMPTY CENTER OF GRAVITY (Inches from datum)*	USEFUL LOAD (Pounds)*
	9177.30 lbs.	219.70 inches from RDL	3872.70 lbs.

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

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

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

6. AGENCY	NAME	ADDRESS (Street and number, city, zone, and state)	DATE WORK ACCOMPLISHED
	Glenn D. Lenert	Ocean Blvd. And Santa Rosa ave. Sharp Park, California	26 May 1950

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

VHF radio equiptment has been added to the ship. This radio equiptment includes a VOR receiver,(Collins 51R-2); VHF transmitter (Aircraft Radio Corporation Type 18); Glide Path Receiver(R-89B/ARN-5A); Power supply for VOR receiver, and VHF Transmitter; Collins control box, radial selector, and deviation indicator for VOR equiptment; selector and switch for VHF transmitter ; and antennaes for the VOR receiver, VHF transmitter, and Glide Path Receiver. Attached are drawings and detailed explanations of this installation. Also a fixed loop was added at 2 inches aft of station 29 (United Air Lines manufacture E. B. 262). This work performed in accordance with C.A.M. 18.

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

SIGNATURE OF SUPERVISING MECHANIC	CERTIFICATE NUMBER AND RATING	DATE
Glenn D. Lenert	Airman certificate#575466 Aircraft and Aircraft Engine	31 May 1950

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED ☐ REJECTED ☐ FORWARDED FOR ENGINEERING APPROVAL	SIGNATURE OF DESIGNEE	NUMBER	DATE
	W. Scott Rockey	6401	6-9-50
	SIGNATURE OF INSPECTOR	☒ ACCEPTED ☐ REINSPECTED	DATE
	Ted A. Bellinger		6-12-50

21372

The following is a list of the weight, arm, and "index units" of the units that have been installed in the Grumman Mallard in this alteration(Grumman Aircraft Co. recomends using the "index unit" instead of moment in inch-pounds for our records. "index unit is moment in inch pounds divided by 10,000)

Basic Weight & Index Unit before VOR equiptment installed;

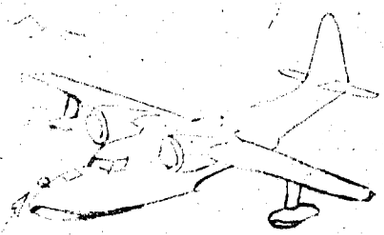
	weight	arm	index unit
	9256.9	218.32	202.10
Removed wood ADF cover	-5.0	65.5	-.03
Removed fixed loop	-5.8	140	-.08
Removed conduit and wire	-3.0	95	-.03
Added VOR receiver	30.6	64.75	.20
Glide slope receiver	12.0	70.25	.08
VOR power Supply	9.5	58.5	.06
VHF transmitter	3.5	74.25	.03
VHF power supply	3.8	67.25	.03
Shelves & support	7.4	66.3	.05
Junction box	2.8	73.5	.02
Wood cover	3.2	65.5	.02
Wiring & conduit	9.1	85	.08
Deviation indicator	1.9	90.5	.02
Bearing & Frequency selector & Panel	3.5	103.25	.04
VOR Antennae	5.0	145	.07
Glide path antennae	2.9	106.5	.03
VHF Antennae	2.5	386	.10
Fixed Loop	2.5	41	.01
Coax cables	4.0	182	.01

Basic Weight & Index Unit after VOR equiptment installed;

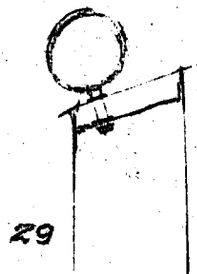
9347.30	217.07	202.81

Forward and aft C.G. limits are 15% to ~~25%~~ 26½% of M.A.C. or 216.35 to 226.29 inches aft of Reference Datum Line.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83



POSITION OF FIXED LOOP

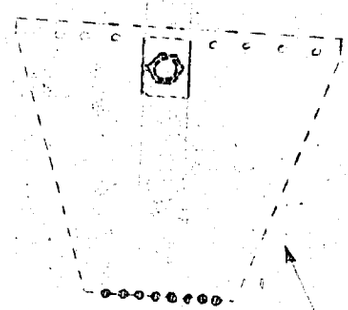


STA 29

STA 41

RANGE RECIEVER

TOP VIEW



LOOP

SKIN

SPACER

5/32" RIVETS

24ST .064 THICK

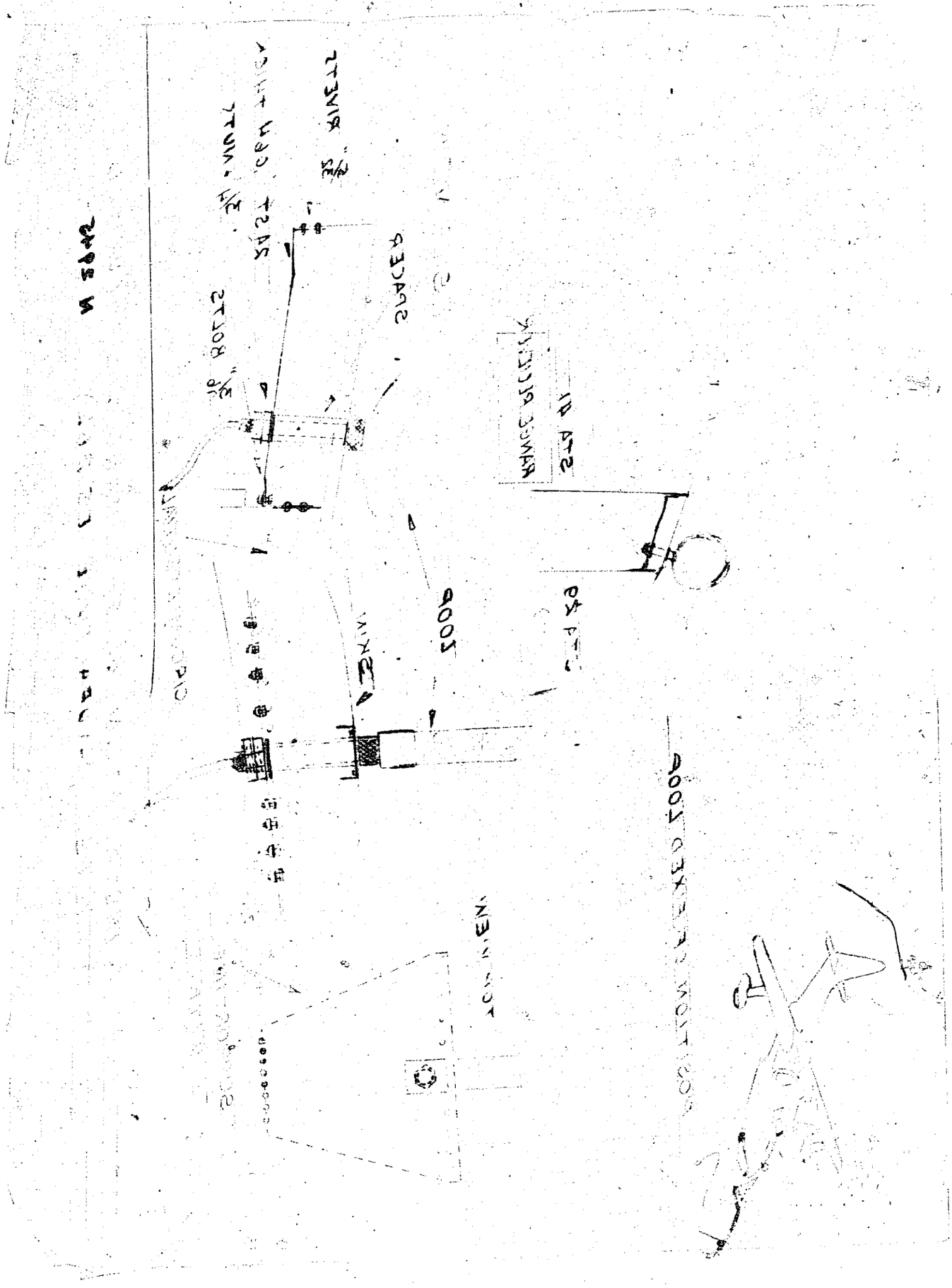
3/16" BOLTS

3/4 NUTS

CIRCUMFERENTIAL

N 2945

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83



N 2945

DESCRIPTION OF FIXED LOOP
(E.S. 262) INSTALLATION

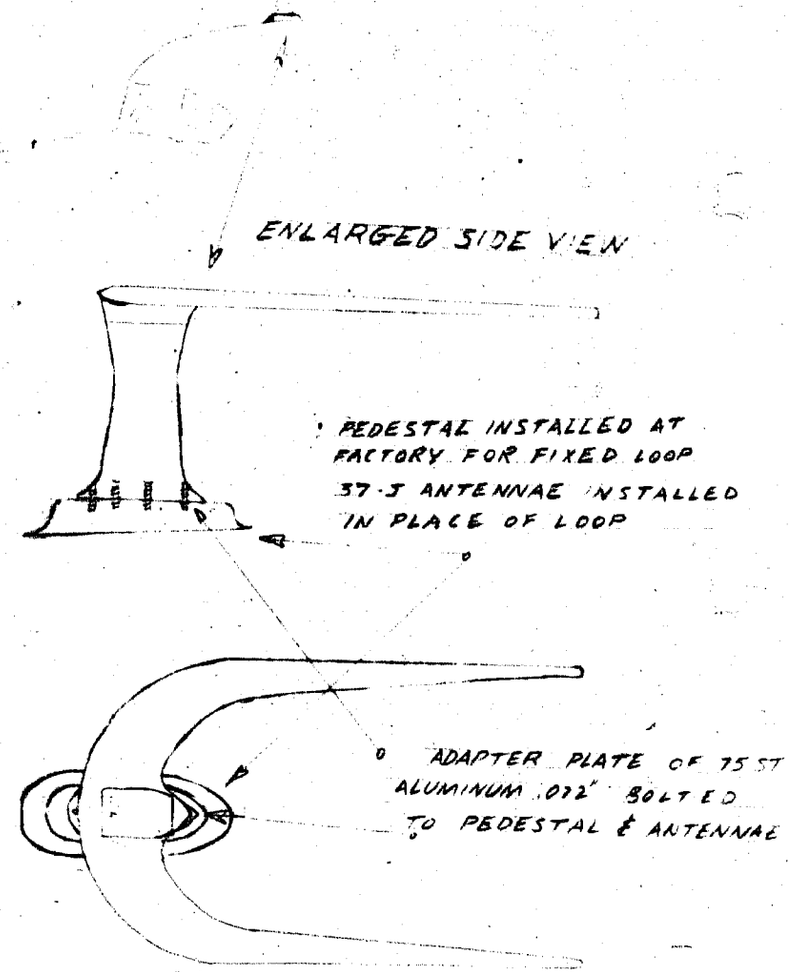
When the original fixed loop was removed to install the VOR antennae on its pedestal another fixed loop (United Airlines manufacture, E. S. 262) was in stalled forward of the bow hatch, 2" aft of station 29. This spot was chosen because the loop will be in an ideal location to receive signals from stations we are approaching, other advantages are the fact that it is an easily accessable place to service and inspect the installation and riveting and drilling the supporting plate was a simple matter because of the ample room.

The supporting plate was made of 24ST aluminum .064" thick, bolted to the circumferential at station 29, bent 90 degrees and riveted to the circumferential at station 41 with 5/32" rivets. A 3/4" hole was drilled through the skin and through the plate for the shaft of the loop, which has a large spacer on it to hold the plate and the skin apart, and two 3/4" nuts, which are on the bottom side of the plate. A short length of co-ax cable runs from the loop to the range receiver which is located between stations 41 and 53.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 24 DATE: 11-2-83

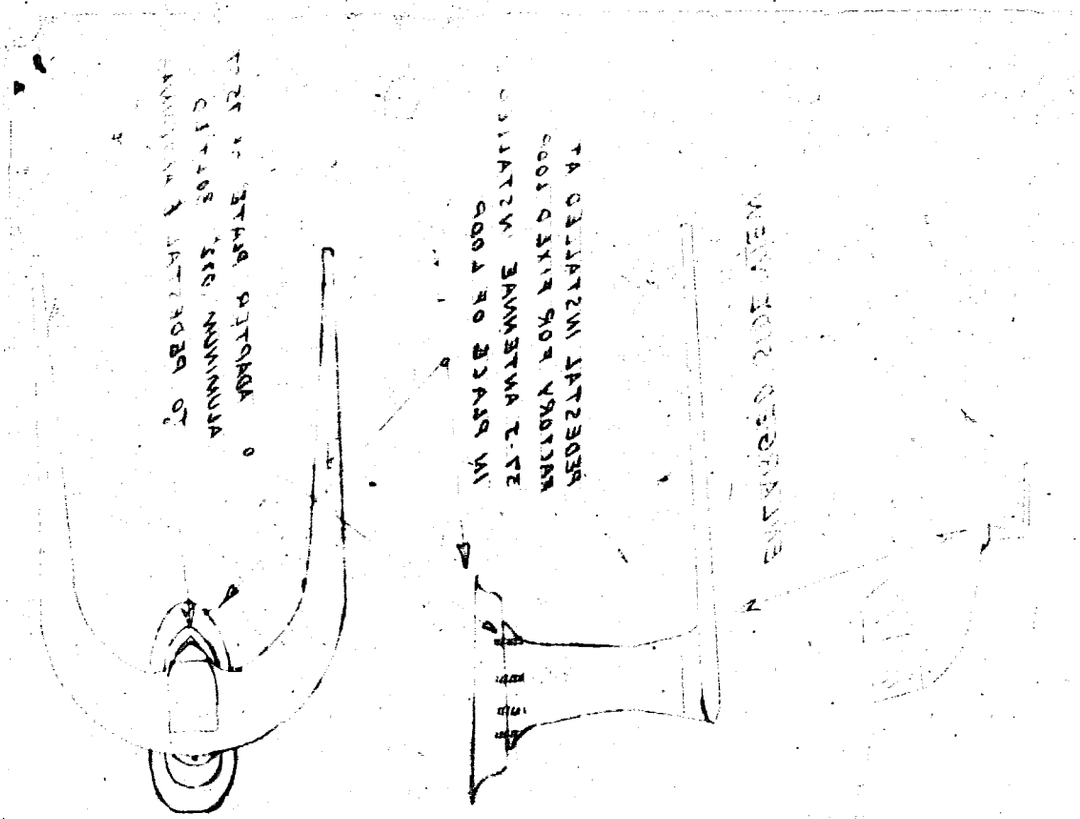
LOCATION OF VOR ANTENNAE



INSTALLATION OF VOR ANTENNAE TYPE [illegible]
[illegible] WAS INSTALLED ON [illegible]
ORIGINALLY INTEN[illegible]

N [illegible]

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

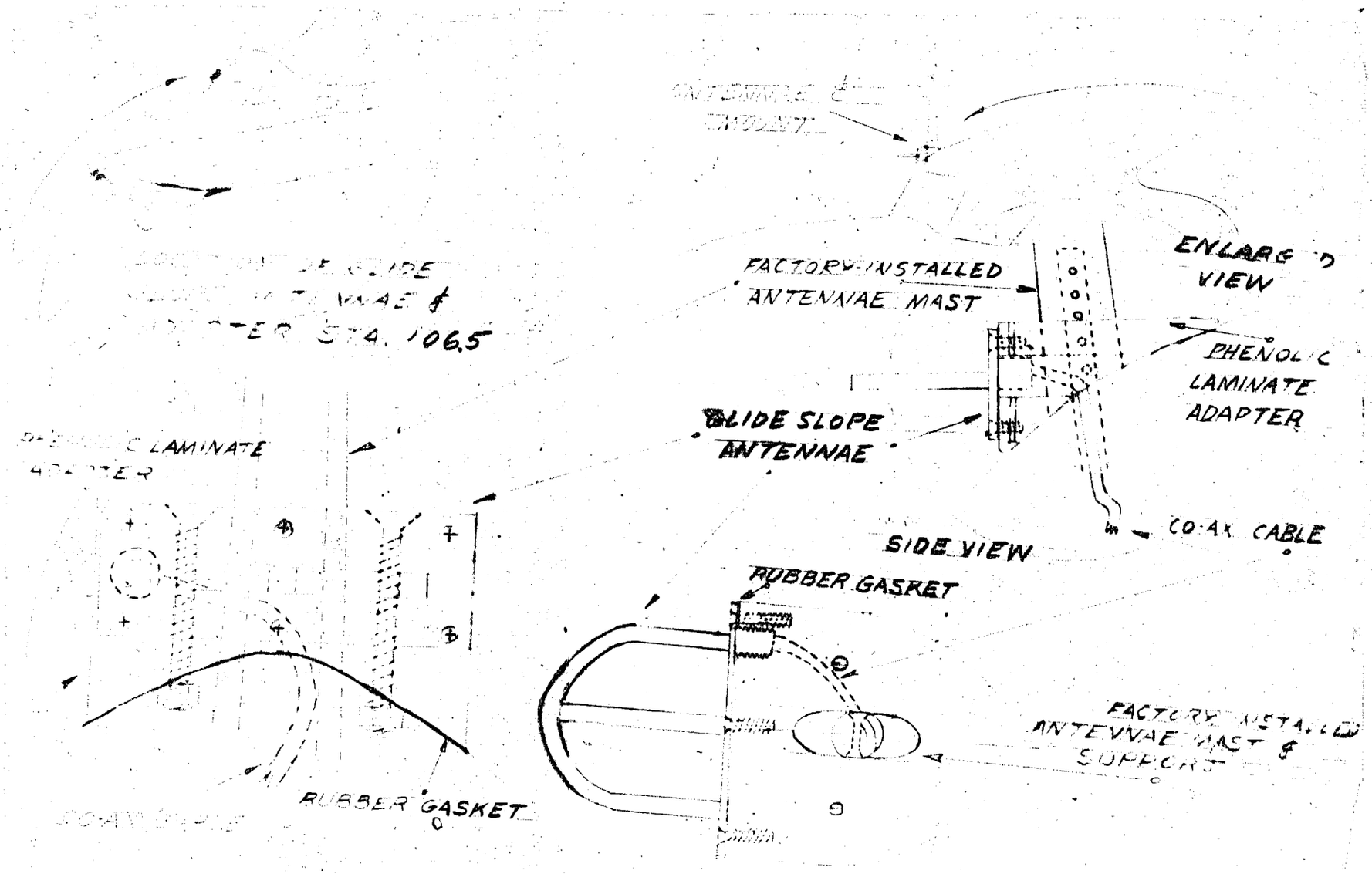


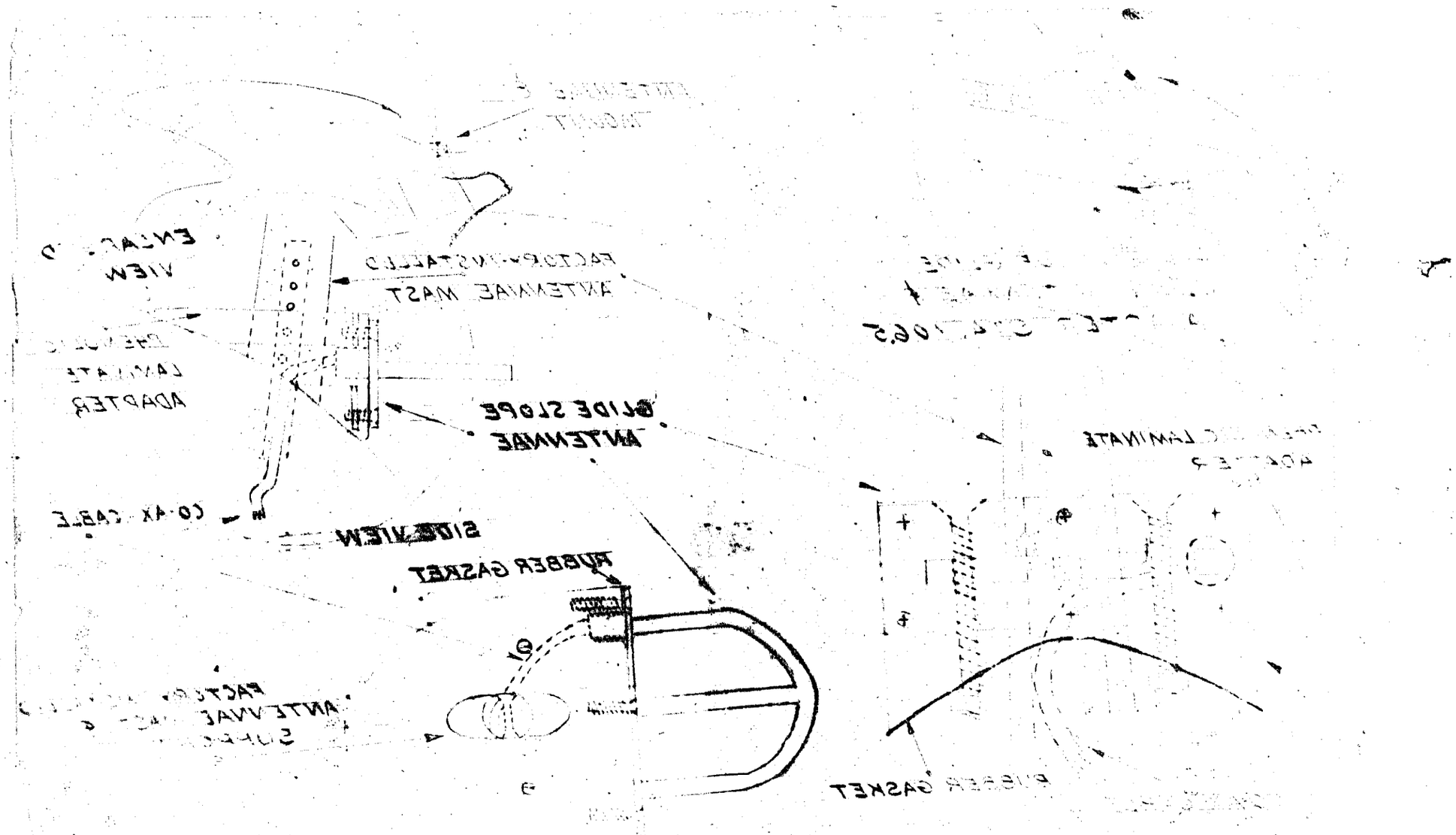
N 2945

DESCRIPTION OF VOR ANTENNAE
TYPE 37 J INSTALLATION

The VOR antennae was installed on a pedestal plate installed on the Grumman Mallard at the time of manufacture for the fixed loop (weight 5.8 lbs.). The fixed loop is now installed at station 41. The original loop has been discarded and replaced by a new antennae, lighter and easier to install. The mounting of the VOR antennae was accomplished by bolting a plate of 75 ST aluminum .072" thick to the pedestal and then bolting the 37 J Antennae to the adapter plate.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83


ENLARGED VIEW
FACTORY-INSTALLED ANTENNAE MAST
PHENOLIC LAMINATE ADAPTER
GLIDE SLOPE ANTENNAE
CO-AX CABLE
SIDE VIEW
RUBBER GASKET
FACTORY INSTALLED ANTENNAE MAST & SUPPORT
LAMINATE
RUBBER GASKET
STA. 106.5
N 2945



FAA AIRCRAFT REGISTRY
CAMERA NO. 24 DATE: 11-2-83

N 2945

DESCRIPTION OF THE GLIDE PATH
ANTENNAE (TYPE37P) INSTALLATION

The 37P antennae was mounted on the Grumman Mallard at station106.5 by using a three section laminated adapter made of three 1"thick flat pieces of Phenolic Laminate , glued and bolted together , curved to fit the contour of the fuselage above the windshield, and bolted to the skin. The adapter has a rubber gasket and a fillet of waterproof sealant around it for sealing purposes. The adapter is held from sideways movement by the factory installed antennae mast which goes through the middle of it, and by two bolts which go through the skin. The 37P antennae is bolted to the adapter and has a gasket under it. The Co-axial cable goes from the antennae to the glide path receiver through a drilled hole in the adapter. The adapter does not have to be removed to change antennaes.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

SIDE VIEW.

N2945

FAA AIRCRAFT REGISTRY
CAMERA NO. 24 DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

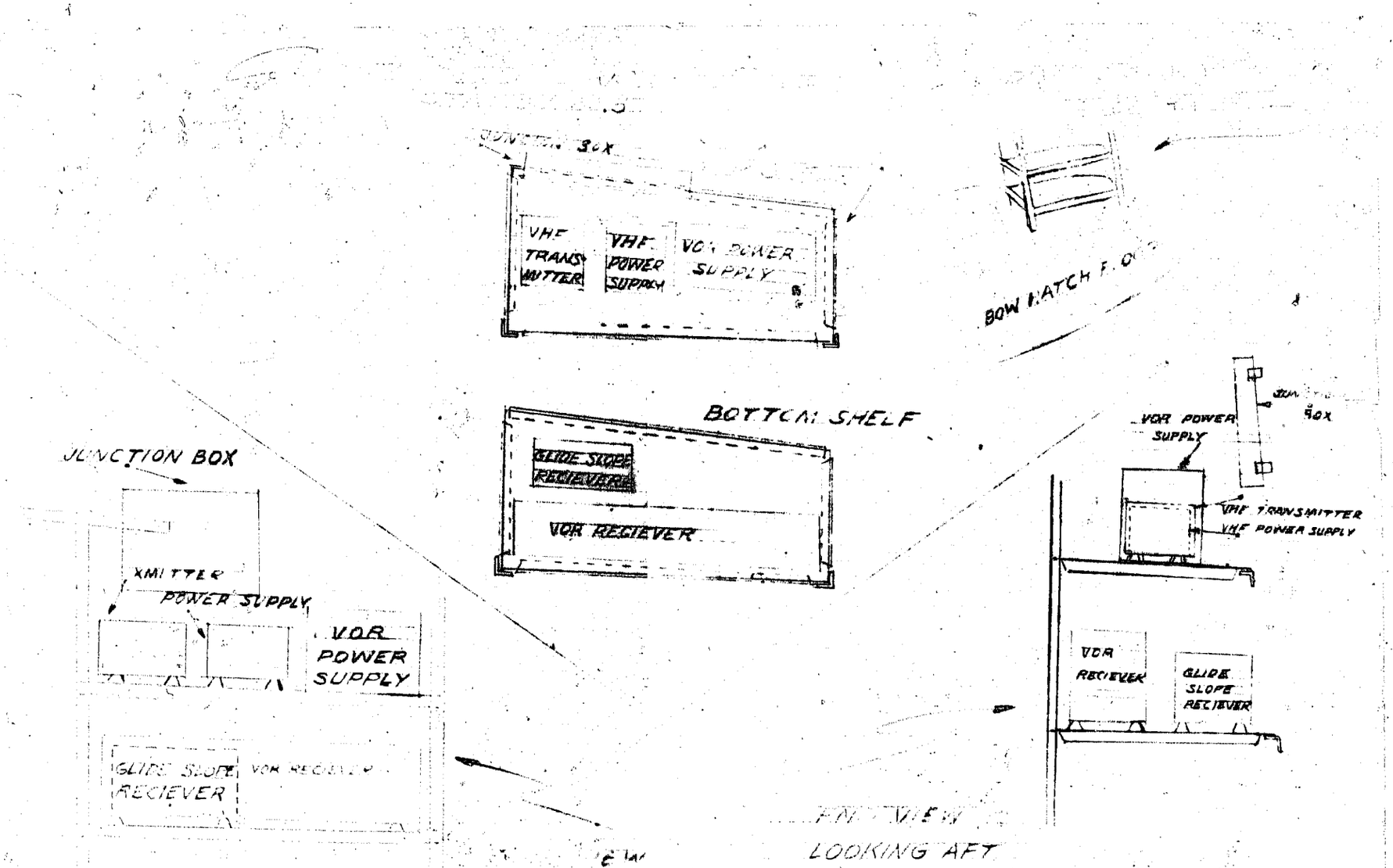
N 29 5

DESCRIPTION OF THE VHF TRANSMITTER
ANTENNAE (TYPE AN 104-B, INSTALLATION

The AN 104-B antennae is installed on the Grumman Mallard at station 386, 4" to the right of the center line. Where it goes through the skin a doubler plate is riveted. Two pairs of split Phenolic Laminate clamps are bolted firmly around the antennae and through the bulkhead at station 384. A Co-axial cable goes to the VHF transmitter through an already existing factory-strung bundle of wires.

FAA AIRCRAFT REGISTRY
CAMERA NO. 24 DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2W DATE: 11-2-83



N 1945

FAA AIRCRAFT REGISTRY
CAMERA NO. 21 DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

N 29

DESCRIPTION OF NEW RADIO
RACK FOR VHF EQUIPMENT

A radio rack has been added to the Grumman Mallard which contains the VOR receiver (type 51-R-2, Collins), Glide Path Receiver(type R-89/ARN-5), VHF transmitter (Aircraft Radio Corporation type 18), Power Supply Units for The VOR receiver and VHF transmitter, and a junction box for the VHF equipt- has been mounted on two circumferentials at station 73.5. The radio rack is constructed of 1/1 inch aluminum angle which is used for legs and supports for the two shelves (24st .064" 25"long and 15" wide). The rack is attached to the Bow Compt.floor and circumferentials at stations 53 and 79 with 5/32" rivets and number 10 bolts. The entire inboard face of the rack is covered with a single sheet of 3/16" waterproof plywood to prevent water and baggage from getting on the equiptment.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

10/27/49 L807 1-583

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)
- [ ] ORIGINAL AIRWORTHINESS CERTIFICATE
- [x] 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.
2945	J8

ENGINE

MAKE	MODEL
Pratt & Whitney	S3H1

OWNER'S NAME: Frank W. Fuller, Jr.

PERMANENT ADDRESS (Street and number, city, zone, and State): 301 Mission St. San Francisco, Calif.

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.

Marion Loughlin
Owner or authorized agent.

10/27/49 (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- Spec. 783 AD'S thru 49-42 (Specify)

FORM ACA-1362, CERTIFICATE OF AIRWORTHINESS, ISSUED
- [ ] ORIGINAL
- [x] ANNUAL INSPECTION

(Check whether)
- [ ] OPERATION LIMITATIONS FORM ACA-309 WAS ISSUED, OR
- [x] APPROVED AIRPLANE FLIGHT MANUAL IS IN THE AIRCRAFT

FINDINGS

- [x] AIRWORTHY
- [ ] UNAIRWORTHY

DESIGNEE'S SIGNATURE AND NO. Edwin Lovejoy DMIR 1009 — DATE 10/27/49 AEF

CAA INSPECTOR'S SIGNATURE Edwin W. Schwoebli — [x] ACCEPTED [ ] REINSPECTED — DATE 10/27/49

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

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

OCT 11 RECD

FORM ACA-305 (3-5-47)

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)
- [ ] ORIGINAL AIRWORTHINESS CERTIF.
- [x] ANNUAL INSPECTION

CAA IDENTIFICATION
- [x] NC
- [ ] NR
- [ ] OTHER (Specify)
- [ ] NX
- [ ] NL

AIRCRAFT

MAKE	MODEL		
Grumman	Mallard G-73		
REGISTRATION NO.	MANUFACTURER'S SERIAL NO.	DATE MANUFACTURED	TYPE CERTIFICATE NO.
2945	J-8	11-23-46	783

ENGINE

MAKE	MODEL
Pratt & Whitney	(2) Wasp S3H1

OWNER'S NAME	PERMANENT ADDRESS (Street and number, City, Zone and State)
Frank W. Fuller Jr.	301 Mission Street San Francisco, Calif.

ATTACHMENTS (Check which)
- [ ] ACA-319
- [x] WEIGHT AND BALANCE REPORT
- [ ] ACA-337
- [ ] SPECIAL APPROVALS
- [ ] ACA-805
- [ ] DATA, DRAWINGS, ETC.
- [ ] ACA-317
- [ ] UNAPPROVED DEVIATION DATA

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE.

F W Fuller Jr.
OWNER OR AUTHORIZED AGENT

Oct. 4, 1948
DATE

Owner by SRK
TITLE

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

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

ALL APPLICABLE MANDATORY NOTES, INSTRUMENT MARKINGS AND PLACARDING REQUIREMENTS HAVE BEEN COMPLIED WITH [x] YES [ ] NO

(AIRCRAFT SPECIFICATION - AIRWORTHINESS DIRECTIVE, NO(S). A- 783-2 ADS Thru 48-39
(SPECIFY)

AUTHORITY FOR EXCEPTIONS (If any)
None

FORM ACA-1362, CERTIFICATE OF AIRWORTHINESS, ISSUED [ ] ORIGINAL [x] ANNUAL INSPECTION

(Check whether)
- [ ] OPERATION LIMITATIONS FORM ACA-309 WAS ISSUED, OR
- [x] APPROVED AIRPLANE FLIGHT MANUAL IS IN THE AIRCRAFT

FINDINGS

[x] AIRWORTHY [ ] UNAIRWORTHY	DESIGNEE'S SIGNATURE AND NO. Charles J. Farina Charles J. Farina DMIR 1038		DATE Oct. 6, 1948
	CAA INSPECTOR'S SIGNATURE Edwin W. Schwaebli	[x] ACCEPTED [ ] REINSPECTED	DATE Oct 7, 1948

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

Condition of this airplane denotes good care and maintenance. Airplane was clean and in good running order.

11-9-48

22669

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

Form ACA 308-A
(Rev. 10-15-40)

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION
WASHINGTON

THIS CERTIFICATE MUST BE CARRIED IN THE AIRCRAFT AT ALL TIMES

AIRCRAFT AIRWORTHINESS CERTIFICATE NO. 2945

This Certifies that GRUMMAN G73

manufacturer's serial No. J8 ; has been inspected and this day found to be in condition for safe operation when operated and maintained in accordance with the regulations and practices prescribed by the Civil Aeronautics Board.

The aircraft for which this certificate is issued (a) shall not be operated unless there is attached hereto the currently effective Aircraft Operation Record issued by the Administrator of Civil Aeronautics for the aircraft, and (b) shall not be operated in flight unless a pilot possessed of a currently effective and appropriate pilot certificate is in command.

This certificate is of 60 days' duration and, unless the holder hereof is otherwise notified within such period, shall continue in effect indefinitely thereafter, unless suspended, revoked, or cancelled by the Civil Aeronautics Board, except that it shall immediately expire (1) at the end of after the date of issuance of this certificate or after the date of last endorsement hereof, whichever is later, if within such period this aircraft is not examined or inspected by an authorized Civil Aeronautics inspector, or (2) at any time an authorized Civil Aeronautics inspector shall refuse to endorse this certificate after examination or inspection.

By direction of the Administrator of Civil Aeronautics:

Refused to endorse: _____ Civil Aeronautics Inspector

Harry M. Jones
Civil Aeronautics Inspector

Date _____

12/6/46
Date of Issuance

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

FAA AIRCRAFT REGISTRY
CAMERA NO. 21 DATE: 11-2-83

Inspector's Endorsement	Date

If this certificate is lost or destroyed, a duplicate may be obtained from the Certificate Division Civil Aeronautics Administration, Washington, D. C., for $1.00 per page. (Money order or chec should be made payable to the Treasurer of the United States.)

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

OCT 7 RECD 1734

FORM ACA-905
(3-5-47)

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)
☐ ORIGINAL AIRWORTHINESS CERTIF.
☒ ANNUAL INSPECTION

CAA IDENTIFICATION
☒ NC ☐ NR ☐ OTHER (Specify)
☐ NX ☐ NL

AIRCRAFT

MAKE	MODEL		
GRUMMAN	G-73 (MALLARD)		
REGISTRATION NO.	MANUFACTURER'S SERIAL NO.	DATE MANUFACTURED	TYPE CERTIFICATE NO.
NC 2945	J-8	NOV. 1946	A-783

ENGINE

MAKE	MODEL
PRATT & WHITNEY	R1340-S3H1 (600HP ea.)

OWNER'S NAME: FRANK W, FULLER, JR.

PERMANENT ADDRESS (Street and number, City, Zone and State): 301 MISSION STREET, SAN FRANCISCO, CAL.

ATTACHMENTS (Check which)
☒ ACA-319 ☐ WEIGHT AND BALANCE REPORT
☐ ACA-337 ☐ SPECIAL APPROVALS
☐ ACA-805 ☐ DATA, DRAWINGS, ETC.
☐ ACA-317 ☐ UNAPPROVED DEVIATION DATA

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE.

Frank W. Fuller, Jr.
OWNER OR (AUTHORIZED AGENT)

9-17-47
DATE

by J.R. Killman AGENT
TITLE

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

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

ALL APPLICABLE MANDATORY NOTES, INSTRUMENT MARKINGS AND PLACARDING REQUIREMENTS HAVE BEEN COMPLIED WITH ☒ YES ☐ NO

(AIRCRAFT SPECIFICATION – AIRWORTHINESS DIRECTIVE, NO(S). A- 783-1 (Tentative) (SPECIFY)

AUTHORITY FOR EXCEPTIONS (If any)
None

FORM ACA-1362, CERTIFICATE OF AIRWORTHINESS, ISSUED ☐ ORIGINAL ☒ ANNUAL INSPECTION

(Check whether)
☐ OPERATION LIMITATIONS FORM ACA-309 WAS ISSUED, OR
☒ APPROVED AIRPLANE FLIGHT MANUAL IS IN THE AIRCRAFT

FINDINGS

☒ AIRWORTHY
☐ UNAIRWORTHY

DESIGNEE'S SIGNATURE AND NO.: Fred R. Armstrong DMIR 1008
DATE: 10-2-47

CAA INSPECTOR'S SIGNATURE: Harry M. Jones
☒ ACCEPTED ☐ REINSPECTED
DATE: 10-2-47

REASON FOR DISAPPROVAL, OR REMARKS (Indicate if you have used the reverse to continue this or other item ☐ Yes ☒ No): Picked up old ACA 308-A upon issuance of new ACA 1362, also the old ACA 309-A which is no longer required, since CAA approved airplane flight manual is in the plane. This manual is revised to take care of new authorized gross weight 12750 lbs.
The main gas tank suction line has been changed in accordance with Grumman drawing #109081-A, thereby changing the none useable fuel quantity from a previous 100lbs. to 18lbs as approved by T343A-1

22665

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

Form ACA-309a—Page 1 (2-46)

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

OPERATION LIMITATIONS

DENT. MARK: 62545

ENGINE MAKE	ENGINE MODEL	AIRCRAFT MAKE	AIRCRAFT MODEL	DATE MFRD.	SERIAL NO.	DESIGNATION	TYPE CERT.
P & W	S3H1	Grumman	G73	11/23/46	J8	11PCAmM	785

ENGINE AND AIR SPEED LIMITS NOT TO BE EXCEEDED

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

ENGINE LIMITS

	MINUTES	ALTITUDE	IN. HG.	R. P. M.	H. P.	FUEL OCT.
TAKE-OFF 1 min.	one	SL	36	2250	600	91
TAKE-OFF						
MAXIMUM EXCEPT TAKE-OFF: SEA LEVEL		TO SL	34	2200	550	91
SEA LEVEL						
ALTITUDE	FROM	5000	32.5	2200	550	91
ALTITUDE						
LOW IMP.						
LOW IMP.						
HIGH IMP.						
HIGH IMP.						

TRUE INDICATED AIR SPEED

	WEIGHT	M. P. H.	KNOTS
CLIMB OR LEVEL FLIGHT	12500	220	
GLIDE OR DIVE (Smooth Air Only)	12500	270	
FLAPS EXTENDED	12500	125	
CLIMB OR LEVEL FLIGHT			
GLIDE OR DIVE (Smooth Air Only)			
FLAPS EXTENDED			

DATUM

Rear face of main wing beam at hull Sta. 233.65

USEABLE CEILINGS AND ADDITIONAL CONDITIONS*

CEILINGS (FT.)	WEIGHT	R. P. M.	M'FOLD PRESS.	FUEL OCT.	T. I. A. S.	PROP. DEICER	WING DEICER
SEE CAA APPROVED OPERATING MANUAL.							

*Standard air, any engine inoperative, inoperative propeller fully feathered, carburetor air intake on "cold air."

MAXIMUM TAKE-OFF WEIGHT		MAXIMUM LANDING WEIGHT	
LAND 12,500	SEA 12,500	LAND 12,500	SEA 12,500

OPERATIONS AUTHORIZED

Instrument flight rules, night.
This aircraft to be operated in accordance with the CAA Approved Operating Manual for G-73 aircraft which is to be carried in the pilots compartment at all times.

INSPECTOR'S SIGNATURE: Harry M. Jones

DATE: 12/6/46

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

THIS PLACARD MUST BE DISPLAYED IN VIEW OF THE PILOT

FOLD HERE

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

ADDITIONAL OPERATIONS AUTHORIZED

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

Form ACA 309a PAGE 2

UNITED STATES OF AMERICA DEPARTMENT OF COMMERCE CIVIL AERONAUTICS ADMINISTRATION	SPECIFICATION NO. A-783-I Tentative	DENT. NO. (Only) 2945

EQUIPMENT No.				SPECIAL EQUIPMENT		
NUMBER	NUMBER	NUMBER	NUMBER	ITEM (Description)	WGT.	ARM
SEE APPROVED OPERATING MANUAL DATED 12-6-46 FOR CURRENT LIST OF STANDARD AND SPECIAL EQUIPMENT, EMPTY WEIGHT, EMPTY C.G., AND USEFUL LOAD						
E.W.		9147				
Useful Load		3353				
E.C.G.		11.68" Fwd.of Datum				

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMIN.
R 5 9 38 AM '47
MAIL ROOM-2
WASHINGTON

(LAND)	C. G. LIMITS	(SEA)
NORMAL -17.25 to -7.37 inches		NORMAL -17.25 to -7.37 inches
IN FLIGHT		IN FLIGHT
DATE 12/6/46	INSPECTOR'S SIGNATURE Harry H. Jones	

10—46122-1

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

REVERSE OF PAGE 2—Form ACA-309a

REPAIR AND ALTERATION RECORD

REPAIR AND ALTERATION FORM DATED	BY (*Agency name and number*)
LOCATION AND BRIEF DESCRIPTION OF REPAIR	
REPAIR AND ALTERATION FORM DATED	BY (*Agency name and number*)
LOCATION AND BRIEF DESCRIPTION OF REPAIR	
REPAIR AND ALTERATION FORM DATED	BY (*Agency name and number*)
LOCATION AND BRIEF DESCRIPTION OF REPAIR	
REPAIR AND ALTERATION FORM DATED	BY (*Agency name and number*)
LOCATION AND BRIEF DESCRIPTION OF REPAIR	
REPAIR AND ALTERATION FORM DATED	BY (*Agency name and number*)
LOCATION AND BRIEF DESCRIPTION OF REPAIR	
REPAIR AND ALTERATION FORM DATED	BY (*Agency name and number*)
LOCATION AND BRIEF DESCRIPTION OF REPAIR	
REPAIR AND ALTERATION FORM DATED	BY (*Agency name and number*)
LOCATION AND BRIEF DESCRIPTION OF REPAIR	
REPAIR AND ALTERATION FORM DATED	BY (*Agency name and number*)
LOCATION AND BRIEF DESCRIPTION OF REPAIR	

SUPPLEMENTAL PAGE NO.	ISSUED (*Date*)	BY	TITLE

"MALLARD"

11 PLACE AMPHIBIAN

WEIGHT AND BALANCE REPORT

AND

LOADING CHART

MODEL G-73

SERIAL NO. J8

CERTIFICATE NO. NC 2945

Date: November 18, 1946

Prepared by: William Flato
William Flato

Checked by: Joseph F. Conlin
Joseph F. Conlin

Approved by: Robert J. Trimborn
ROBERT J. TRIMBORN

REPORT NO. G73-8

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

TABLE OF CONTENTS

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

INTRODUCTION

The Civil Aeronautics Administration requires that a loading chart or device be prepared and made a part of the Weight and Balance Report for each individual airplane. This is done by Grumman for every new airplane and also for any airplanes altered at the factory. When the airplane is altered in the field the Loading Chart must be altered accordingly. A method for keeping a running log of the airplane "Basic Weight and Index" is provided on page 9 where all changes may be entered.

In an attempt to provide a more usable Loading Chart, a tabular type chart has been prepared rather than a graph type. Although this method is not quite as accurate as the coordinate graph, it is satisfactory. With this type chart the operator is able to determine take-off and landing weight, center of gravity location to the nearest percent of the M.A.C., and ascertain if these C.G. locations fall within the airplane operational limits. These limits are more conservative than the absolute C.G. limits (15% to 26½%) in that they have been brought in to take into account C.G. travel during flight due to fuel and oil consumption and landing gear retraction.

For simplicity, and in order to agree with all the drawings on the airplane, Hull Station "0", which is 250 inches forward of the Main Step and 10 inches forward of the nose of the airplane, has been selected as the zero datum point for preparing the loading chart.

To simplify the method of depicting moments of the airplane, the term "Index Unit" is used. The "Index Unit" for an item is computed by substituting in the following expression:

$$\text{Index Unit} = \frac{A \times W}{10000}$$

where: A = arm to C.G. of item in inches aft of datum (Hull Sta. 0)
W = weight of item in pounds.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

If the engine, oil coolers, oil tank are changed, and the airplane is reweighed before the engine is run, the following weights of residual fuel and oil must be added to obtain the weight empty on page 7. (Add only the ones which apply).

TRAPPED FUEL & OIL

	Weight	Arm	Moment	Index Unit
Fuel & Oil Trapped in:				
- Oil Cooler (10" Dia.) (Trapped Oil)	20.0	193	3860	.4
- Oil Tanks (Trapped Oil)	4.0	212	848	.1
- Engines (Trapped Oil)	46.3	178	8241	.8
- Propeller Syst.Lines (Trapped Oil)	6.1	190.6	1163	.1
- Oil Lines	7.0	197	1379	.1
- Fuel Tanks-3 Pt. Position	26.0	220	5720	.6
- Fuel Lines	3.0	215	645	.1
- Carburetor	1.0	190	190	.0
Trapped Fuel & Oil - 3 Pt. Pos.	113.4	194.4	22046	2.2
Additional Fuel Trapped in Tanks in Flight. (Glide 125 mph flaps and L.G. Down)	~~30~~ 100.	220	~~4400~~ 22000	~~.3~~ 2.2
Total Non-Usable Fuel & Oil	~~113.4~~ 213.4	~~199.8~~ 206.3	~~22646~~ 44046	~~2.2~~ 4.4

The airplane selected as an example includes two three place divans in the forward cabin and four passenger chairs in the rear cabin arranged as indicated on the plan-view outline of the standard airplane on page 8 of the Loading Chart. The passenger locations are numbered according to type of seat and rows reading from front to rear, e.g. D-1, Divan, forward seat. Page 8 shows standard and alternate arrangements, but the positions not applicable to this airplane have been blocked out. The Index unit noted is for one passenger per location. This Index unit is calculated by substituting in the Index Unit Formula, using 170# for each passenger and the arm for each individual chair or place as in the case of the divan. Since the weight of the pilot and co-pilot are added to the empty weight to obtain a basic weight and index unit (on p.8), the index unit is not shown for their position on the diagram.

The next step is to determine the index unit for the Basic airplane. Referring to the Basic Loading Calculation on p.8, the Basic weight is carried forward to the Basic Weight Log on p.9. The "Moment" is then divided by 10,000 and entered under "Index Unit", because

$$\text{"Index Unit"} = \frac{W \times A}{10000} \quad \text{and } W \times A = \text{Moment}$$

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

To clarify the use of the loading chart, the following sample loading will be discussed in detail:

SAMPLE LOADING

Item	Weight	Index Unit
Basic Weight (Sample Only)	9000	195.4
Plus items of Useful Load:		
Fuel (180 Gals.)	1080	23.7
Oil (20 Gals.)	150	3.2
Passengers:		
Position D-1 (1)	170	2.8
D-2 (2)	340	6.4
D-3 (1)	170	3.6
RC-1 (2)	340	9.4
RC-2 (2)	340	10.8
Baggage:		
Compt. A	50	.4
Compt. I	20	.7
Compt. J	220	8.8
Take-Off Gross Weight	11880	265.2

The basic weight and index unit is obtained from the Log on p.9. For loading 180 gals. of fuel in the wing tanks, refer to fuel chart on p.10, and follow down the gallon column until 180 is reached, then read across to the right for the weight in the next column and the index unit in the third column. The weight and index unit for the oil and cargo are determined in a similar manner by referring to the appropriate chart on the same page.

The take-off gross weight and index unit is totaled, (the Gross Weight must not exceed the maximum allowable), and by referring to the Center of Gravity Limit Chart (p.11), it is possible to determine the airplane C.G. to the nearest percent of the M.A.C. The index unit will appear on line with the gross weight used only if C.G. is within allowable limits. Since the take-off gross weight for the sample above is 11880 lbs. it is well within the gross weight limitations (p.8). The index unit for

FAA AIRCRAFT REGISTRY
CAMERA NO. 24 DATE: 11-2-83

MALLARD

LOADING CHART

this weight is 265.2. Now run your pencil point down the "Gross Weight" side of the chart to 11900# which is closest to 11880#. Then follow across to the right until you reach 265.7 (Reading vertically upward shows a C.G. of 23% M.A.C.). However the index unit representing 11900# at 22% M.A.C. is 264.7, and 265.2 is exactly halfway between. The take-off C.G. then is at approximately 22.5% M.A.C. Since the loading condition falls within the loading limits, the loading is satisfactory. If the C.G. should fall outside the maximum indicated loading limits, the loading must be revised by shifting either passengers or cargo, or both, so that these maximum limits are not exceeded.

It should be noted that cargo or baggage can be substituted for a passenger at the passenger position at any time.

FAA AIRCRAFT REGISTRY
CAMERA NO. 21 DATE: 11-2-83

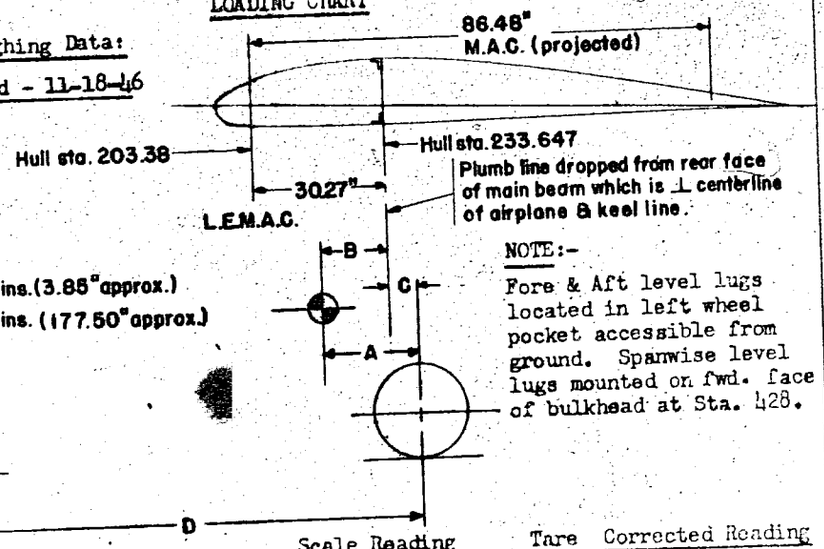
FAA AIRCRAFT REGISTRY
CAMERA NO. 24 DATE: 11-2-83

MALLARD

LOADING CHART

Airplane Weighing Data:

Date Weighed - 11-18-46



C = 3.88 ins. (3.85" approx.)
D = 177.25 ins. (177.50" approx.)

NOTE:-
Fore & Aft level lugs located in left wheel pocket accessible from ground. Spanwise level lugs mounted on fwd. face of bulkhead at Sta. 428.

Reactions	Scale Reading	Tare	Corrected Reading
Right Wheel - W_R	4153		4153
Left Wheel - W_L	4052		4052
Nose Wheel - W_N	823		823
	9028		9028

A = C.G. (ins.) forward of centerline Main Wheels = $\frac{W_N \times D}{W_R + W_L + W_N \text{(Corrected)}} = \frac{823 \times 177.25}{9028} = 16.16$

B = C.G. (ins.) fwd. of Rear Face Main Beam = A-C = 16.16 - 3.88 = 12.28
C.G. inches aft of Reference Datum = 233.65 - B = 233.65 - 12.28 = 221.37

CORRECTION FOR MISSING ITEMS

	Weight	Arm	Moment
Airplane as Weighed	9028	221.37	1998528
Add'l Trapped Fuel in Flight	+100	220	12000
Remove - Slip Covers	-18.5	222.8	-4122
Add - Wash Water	+33.3	390	12987
- Window Shades	+4.0	246.5	986
	9147	221.97	2030379

Empty Weight 221.97

Empty Wt. C.G. = $\frac{221.97 - 203.38}{86.48} \times 100 = 21.50$ %M.A.C. 11.68"

Witnessed: Harry M. Jones
C.A.A. Inspector

9-3-46

C103-5000-12-45

24

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

PASSENGER AND CARGO LOADING DIAGRAM

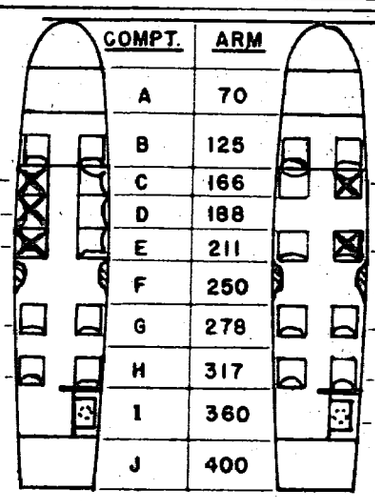
Maximum Allowable Take-Off Gross Weight 12500
Maximum Allowable Landing Gross Weight 12500

STANDARD **ALTERNATE**

LOADING CHART DATUM - HULL STATION "0"

Passenger at 170# Each

INDEX UNITS 1 PASS.	INDEX UNITS 2 PASS.	ROW
2.8	~~[illegible]~~	D-1
3.2	~~[illegible]~~	D-2
3.6	~~[illegible]~~	D-3
4.7		RC-1
5.4		RC-2



COMPT.	ARM
A	70
B	125
C	166
D	188
E	211
F	250
G	278
H	317
I	360
J	400

ROW	INDEX UNITS 1 PASS.	INDEX UNITS 2 PASS.
FC-1	2.9	~~[illegible]~~
FC-2	3.5	~~[illegible]~~
RC-1	4.7	
RC-2	5.4	
T-1	6.1	

Basic Loading

The following values apply to this airplane as Licensed:

Item	Weight	Arm	Moment	Index Unit
Empty Weight (p.7)	~~[illegible]~~ 9147	~~[illegible]~~ 221.97	~~[illegible]~~ 2030379	~~[illegible]~~ 203.04
Pilot & Co-Pilot	340	125	42500	4.25
Basic Weight & Index Unit*	~~[illegible]~~ 9487	~~[illegible]~~ 218.51	~~[illegible]~~ 2072979	~~[illegible]~~ 207.29

* See p.9 for latest Basic Weight & Index Unit.

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 11. Basic Weight and Index Units for the empty airplane plus Pilot & Co-Pilot are given above or on page 9. Index Units for Fuel, Oil, Cargo or Baggage, and Miscellaneous items (Incl. Wash Water) are obtained from their respective tables, and Index Units for Passengers from diagram above.

2. Before adding, removing, or relocating any items of equipment, contact an Inspector of the Civil Aeronautics Administration. See pages 12 to 15 of this report for items of equipment included in the Weight Empty.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

LOG - BASIC WEIGHT & INDEX UNIT
(List all changes made subsequent to weighing)

Item	Weight	Arm	Index Unit
Basic Weight & Index Unit as Weighed at Factory	~~9487~~	~~218.18~~	~~207.78~~
	9487	218.51	207.29

9-3-46

G103-5000-12-45

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

Fuel (6 Lb./Gal.)
(Arm 219.7)

Gal.	Lbs.	Index Units
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

Oil (7.5 Lb./Gal.)
(Arm 212.0)

Gal.	Lbs.	Index Units
5	37.5	.8
10	75	1.6
15	112.5	2.4
20	150	3.2

Note: 1. Maximum Fuel-Oil Ratio 25 to 1

Baggage or Cargo ***

Lbs.	Section Letter * & Index Units									
	A	B	C	D	E	F	G	H	** I	J
30	.2	.4	.5	.6	.6	.8	.8	1.0	1.1	1.2
60	.4	.8	1.0	1.1	1.3	1.5	1.7	1.9	2.2	2.4
90	.6	1.1	1.5	1.7	1.9	2.2	2.5	2.9	3.2	3.6
120	.8	1.5	2.0	2.3	2.5	3.0	3.3	3.8	4.3	4.8
150	1.0	1.9	2.5	2.8	3.2	3.8	4.2	4.8	5.4	6.0
180	1.3	2.2	3.0	3.4	3.8	4.5	5.0	5.7	6.5	7.2
210	1.5	2.6	3.5	4.0	4.4	5.2	5.8	6.7	7.6	8.4
240	1.7	3.0	4.0	4.5	5.1	6.0	6.7	7.6	8.6	9.6
270	1.9	3.4	4.5	5.1	5.7	6.8	7.5	8.6	9.7	10.8
300	2.1	3.8	5.0	5.6	6.3	7.5	8.3	9.5	10.8	12.0
330	2.3	4.1	5.5	6.2	7.0	8.2	9.2	10.5	11.9	13.2
360	2.5	4.5	6.0	6.8	7.6	9.0	10.0	11.4	13.0	14.4
390	2.7	4.9	6.5	7.3	8.2	9.8	10.8	12.4	14.0	
420	2.9	5.2	7.0	7.9	8.9	10.5	11.7	13.3	15.1	
450	3.2	5.6	7.5	8.5	9.5	11.2	12.5	14.3	16.2	
480		6.0	8.0	9.0	10.1	12.0		15.2	17.3	
510		6.4	8.5	9.6	10.8	12.8		16.2	18.4	
540		6.8	9.0			13.5		17.1	19.4	
570		7.1	9.5			14.2		18.1	20.5	
600		7.5	10.0			15.0		19.0	21.6	
630			10.5			15.7		20.0	22.7	
660			11.0			16.5		20.9	23.8	
690			11.5			17.2		21.9	24.8	
720			12.0					22.8	25.9	
750								23.8		
780								24.7		
810								25.7		
840								26.6		
870								27.6		
900								28.5		
930								29.5		
960								30.4		
990								31.4		
1020								32.3		
1050								33.3		
1080								34.2		
1110								35.2		

*** Floor Loading must not exceed 50 lbs. per sq. foot.

* See diagram on page 8.
** Includes Wash Water.

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

CENTER OF GRAVITY LIMIT CHART

Gross Weight	Center of Gravity in Percent of M.A.C.												
	15%	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	26%	26.5%
10000	216.4	217.2	218.1	219.0	219.8	220.7	221.5	222.4	223.3	224.1	225.0	225.9	226.4
10050	217.4	218.3	219.2	220.0	220.9	221.8	222.6	223.5	224.4	225.3	226.1	227.0	227.5
10100	218.5	219.4	220.3	221.1	222.0	222.9	223.8	224.6	225.5	226.4	227.3	228.1	228.6
10150	219.6	220.5	221.4	222.2	223.1	224.0	224.9	225.7	226.6	227.5	228.4	229.2	229.7
10200	220.7	221.6	222.4	223.3	224.2	225.1	226.0	226.9	227.7	228.6	229.5	230.4	230.9
10250	221.8	222.7	223.5	224.4	225.3	226.2	227.1	228.0	228.9	229.7	230.6	231.5	232.0
10300	222.8	223.7	224.6	225.5	226.4	227.3	228.2	229.1	230.0	230.9	231.8	232.6	233.1
10350	223.9	224.8	225.7	226.6	227.5	228.4	229.3	230.2	231.1	232.0	232.9	233.8	234.3
10400	225.0	225.9	226.8	227.7	228.6	229.5	230.4	231.3	232.2	233.1	234.0	234.9	235.4
10450	226.1	227.0	227.9	228.8	229.7	230.6	231.5	232.4	233.3	234.2	235.1	236.0	236.5
10500	227.2	228.1	229.0	229.9	230.8	231.7	232.6	233.5	234.4	235.3	236.3	237.2	237.7
10550	228.2	229.2	230.1	231.0	231.9	232.8	233.7	234.6	235.5	236.5	237.4	238.3	238.8
10600	229.3	230.3	231.2	232.1	233.0	233.9	234.8	235.8	236.7	237.6	238.5	239.4	239.9
10650	230.4	231.3	232.3	233.2	234.1	235.0	235.9	236.9	237.8	238.7	239.6	240.5	241.0
10700	231.5	232.4	233.3	234.3	235.2	236.1	237.0	238.0	238.9	239.8	240.8	241.7	242.2
10750	232.6	233.5	234.4	235.4	236.3	237.2	238.2	239.1	240.0	241.0	241.9	242.8	
10800	233.6	234.6	235.5	236.5	237.4	238.3	239.3	240.2	241.1	242.1	243.0	243.9	
10850	234.7	235.7	236.6	237.6	238.5	239.4	240.4	241.3	242.2	243.2	244.1	245.1	
10900	235.8	236.8	237.7	238.7	239.6	240.5	241.5	242.4	243.4	244.3	245.3	246.2	
10950	236.9	237.9	238.8	239.8	240.7	241.6	242.6	243.5	244.5	245.4	246.4	247.3	
11000	238.0	238.9	239.9	240.8	241.8	242.7	243.7	244.7	245.6	246.6	247.5	248.4	
11050	239.1	240.0	241.0	241.9	242.9	243.9	244.8	245.8	246.7	247.7	248.6	249.6	
11100	240.1	241.1	242.1	243.0	244.0	245.0	245.9	246.9	247.8	248.8	249.8	250.7	
11150	241.2	242.2	243.2	244.1	245.1	246.1	247.0	248.0	248.9	249.9	250.9	251.8	
11200	242.3	243.3	244.2	245.2	246.2	247.2	248.1	249.1	250.1	251.0	252.0	253.0	
11250	243.4	244.4	245.3	246.3	247.3	248.3	249.2	250.2	251.2	252.2	253.1	254.1	
11300	244.5	245.5	246.4	247.4	248.4	249.4	250.3	251.3	252.3	253.3	254.3	255.2	
11350	245.6	246.5	247.5	248.5	249.5	250.5	251.4	252.4	253.4	254.4	255.4	256.4	
11400	246.6	247.6	248.6	249.6	250.6	251.6	252.6	253.5	254.5	255.5	256.5	257.5	
11450	247.7	248.7	249.7	250.7	251.7	252.7	253.7	254.7	255.6	256.6	257.6	258.6	
11500	248.8	249.8	250.8	251.8	252.8	253.8	254.8	255.8	256.8	257.8	258.8	259.7	
11550	249.9	250.9	251.9	252.9	253.9	254.9	255.9	256.9	257.9	258.9	259.9	260.9	
11600	251.0	252.0	253.0	254.0	255.0	256.0	257.0	258.0	259.0	260.0	261.0	262.0	
11650	252.0	253.1	254.1	255.1	256.1	257.1	258.1	259.1	260.1	261.1	262.1	263.1	
11700	253.1	254.1	255.2	256.2	257.2	258.2	259.2	260.2	261.2	262.2	263.3	264.3	
11750	254.2	255.2	256.2	257.3	258.3	259.3	260.3	261.3	262.3	263.4	264.4	265.4	
11800	255.3	256.3	257.3	258.4	259.4	260.4	261.4	262.4	263.5	264.5	265.5	266.5	
11850	256.4	257.4	258.4	259.5	260.5	261.5	262.5	263.6	264.6	265.6	266.6	267.6	
11900	257.5	258.5	259.5	260.6	261.6	262.6	263.6	264.7	265.7	266.7	267.8	268.8	
11950	258.5	259.6	260.6	261.6	262.7	263.7	264.7	265.8	266.8	267.8	268.9	269.9	
12000	259.6	260.7	261.7	262.7	263.8	264.8	265.8	266.9	267.9	269.0	270.0	271.0	
12050	260.7	261.8	262.8	263.8	264.9	265.9	267.0	268.0	269.0	270.1	271.1	272.2	
12100	261.8	262.8	263.9	264.9	266.0	267.0	268.1	269.1	270.2	271.2	272.3	273.3	
12150	262.9	263.9	265.0	266.0	267.1	268.1	269.2	270.2	271.3	272.3	273.4	274.4	
12200	263.9	265.0	266.1	267.1	268.2	269.2	270.3	271.3	272.4	273.5	274.5	275.5	
12250	265.0	266.1	267.1	268.2	269.3	270.3	271.4	272.5	273.5	274.6	275.6	276.7	
12300	266.1	267.2	268.2	269.3	270.4	271.4	272.5	273.6	274.6	275.7	276.8	277.8	
12350	267.2	268.3	269.3	270.4	271.5	272.5	273.6	274.7	275.7	276.8	277.9	278.9	
12400	268.3	269.4	270.4	271.5	272.6	273.6	274.7	275.8	776.9	277.9	279.0	280.1	
12450	269.4	270.4	271.5	272.6	273.7	274.7	275.8	276.9	278.0	279.1	280.1	281.2	
12500	270.4	271.5	272.6	273.7	274.8	275.9	276.9	278.0	279.1	280.2	281.3	282.3	

9-3-46

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD
LOADING CHART

STANDARD EQUIPMENT

(Installed items are checked "x")

Installed	Item No.	Item	Weight Each	Arm	Index Unit Each
		Propellers & Propeller Accessories (Except De-Icing Equipment)			
x		Two Hamilton Std.Propellers - 8'7" Dia. 3 Blade #6533A-18, Hub 23D40-51	252	155	3.91
x		Two Ham.Std. Propeller Governors #4K11-T4T	5.8	163	.09
x		Two Ham.Std. Prop.Feathering Motor Relays #62730-1	1.9	197	.04
x		Two Ham.Std. Prop.Feathering Motors #59664-11	11.9	197	.23
x		Two Ham.Std. Prop.Feathering Switches #54267	.3	120	-
		Engines & Engine Accessories - Fuel & Oil Systems			
x		Two Pratt & Whitney #R-1340-S3H1 Engines	858	172.1	14.77
x		Two Sets Stainless Steel Exhaust Collectors (GAEC 109025 Manifold assembly 109004 Exhaust System Instal.)	41.2	190	.78
x		Two Ten Gal. Oil Tanks (GAEC 109126, 109002 Oil System Instal.)	9.9	212	.21
x		Two Aluminum Oil Coolers (Clifford 10" Dia.x9" Long #B-36690 with UAP 4 Port Valve #UD4785)	18.0	193	.35
x		Two Eclipse Starters #1416-15	26.7	192	.51
x		One Engine Compt. Fire Control System Using Walter Kidde Cylinders #80939 & #82499 Valves	66	225	1.48
x		Residual Fuel & Oil in Drained System			
		Fuel -	30.0	218.5	.66
		Oil -	83.4	185.7	1.55
		Landing Gear			
x		Two Main Landing Shock Struts Bendix #69629 LH - 69630 RH	88	237.5	2.09
x		One Nose Wheel Shock Strut Bendix #69631	50	57	.28
x		Two Alum. Wheel Assemblies - Goodyear 9.50x16 (Incl. Brakes, 6-Ply Nylon Tires and Tubes)	120	237.5	2.85
x		One Nose Wheel-Bendix #145308 19x6.80-10 (Incl. Fairing 6-Ply Goodrich Rayon Tire and Tube)	37	60	.22
x		Two Auxiliary Wing Floats GAEC #108201	35	225	.79

9-3-46

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD
LOADING CHART

STANDARD EQUIPMENT (Cont.)
(Installed items are checked "x")

Installed	Item No.	Item	Weight Each	Arm	Index Unit Each
		Electrical & Radio Equipment			
x		Two Generators Type 1273-3 Eclipse (J-1, J-2, J-3, only)	31.9	175.5	.56
x		One Battery AN3150 34 AH (12-Ts-9L)	72.6	230	1.67
x		Two Landing Lights #G-3801-1 Grimes	6.5	220	.14
		Misc. Radio Instal. Bow Compt.	93.3	60	.56
		Rear Compt.	94.5	414	3.91
		Misc.	69.3	140	.97
		Interior Equipment			
		Miscellaneous Cabin Furnishings			
x		(a) Four Passenger Chairs(Rear Cabin)	35	297	1.04
		(b) Passenger Chair Leather Upholstery(each)	35	188	
		(c) ~~xxxx~~ 2, ~~xxxxx~~ Passenger Chairs (Forward Cabin)	92	188	
x		(d) ~~xx~~ 1 ~~xxxx~~ Divan (Forward Cabin)		188	
		(e) Divan Leather Upholstery (Each)	2.4	240	.06
x		(f) Two End Tables GAEC #111350	5.8	425	.25
x		(g) One Revolving Table GAEC #111046(Stowed)			
x		(h) Four Storage Cabinets			
x		(i) One Toilet Compt. (Incl.Wash Basin & Tank)	6.0	244	.15
x		(j) Thermos Jug Instal.(Incl. 9 Glasses) (2 Qt.)	17.0	238	.40
x		(k) Carpet Floor Covering			
x		(l) One Cabin Heating & Ventilating System Using Surface Combustion Heater #ADS-100N-PL1C	7	225	.16
x		(m) Two Hand Operated Fire Extinguishers 1 Qt. Pyrene	15.9	110	.17
x		Control Column with Throw-Over Wheel & Auxiliary Arm	70.5	100	.70
x		Instruments - As listed in Mallard Engineering Spec. #3.1			
		Heavier Exterior Finish (White Maximum)			
		Miscellaneous (Not Listed Above)			
x		One Windshield Wiper Instal.(Kearfott)	3.25	102	.33
x		One MK IV Danforth Anchor with 100 Ft. 1/2" Nylon Rope	19	60	.11
x		One First Aid Kit	3	345	.10
x		Literature (2 Engine Log Books,1 Airplane Log Book and 1 Loading Schedule)	2.6	93	.02
x		One Map Case	23.2	455	1.06
x		Two Parachute Flares - 3 Min.	8.6	41	.04
x		One Bilge Pump - Perko			

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

STANDARD EQUIPMENT (Cont.)

(Installed items are checked "x")

Installed	Item No.	Item	Weight Each	Arm	Index Unit Each
		Miscellaneous (Cont.)			
x		One Boarding Ladder	4.7	390	.18
		The following items are Not included in Weight Empty:-			
		One Erection & Maintenance Manual			
		One Engine Manual			
		One Propeller Manual			
		One Set of Engine & Propeller Tools			

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83

MALLARD

LOADING CHART

SPECIAL EQUIPMENT

(Installed items are marked "X")

Installed	Item No.	Item	Weight Each	Arm	Index Unit Each
		1 Ea. Automatic Pilot - Sperry Type A-12	150		
		1 Ea. Wing & Tail Deicer Installation - Goodrich	125		
		1 Ea. Propeller Anti-icer Installation	60		
		1 Ea. "Ship to Shore" Radio Telephone - Avidmeter Corp.	4.5	220	.10
		1 Ea. Very's Pistol			
		1 Ea. Hoisting Sling GAEC #106224 Jacking Points #GT-109, 112342 & 112343	12.5		
		1 Ea. Fuel Gas Analyzer - Dual Type			
		1 Ea. Towing Bar GAEC #SP2052			
		1 Ea. Engine Work Platform			
		Life Preservers			
		Collapsible 4 Man Life Raft-MK IV	50.0	400	2.00
		Chest Type Parachutes-SWITLIK Q.B.	19.0	405	.77
x		1 Ea. Add'l Sensitive Altimeter - Instrument Operation Only	2.0	90	.02
		1 Ea. Set of Wheel Brakes for Co-Pilot			
		1 Ea. Bird Proof Windshield GAEC #107469 (In Lieu of Std.)	9.7	107	.10
		1 Ea. Position Light Flasher	2.1		
		2 Ea. Tail Light-Model C-Grimes - 1 Red - 1 White 32CP			
		20 Ea. Fire Detectors - Engine Compt. - A4981 Wilcolator	.15		
		4 Ea. Solenoid Shut-Off Valves for Fuel & Oil Gages General Controls #40R342			
		1 Ea. Vacuum Syst. Instal. GAEC #109009 in Lieu of #109006			
		1 Ea. Altitude Recording Device - For Recording of Altitude & Use of Radio Transmitter			
		1 Ea. Add'l. Airspeed Indicator-Instrument Operation Only	1.2	120	.01
		1 Ea. Electrically Heated Pitot for Add'l Airspeed Indicator.			
		Oxygen Provision for Crew. Operation above 10000 ft. for more than 30 min. or above 12000 ft. for any time.			
		Oxygen provision for passengers separate from crew. Operation above 12000 ft.			
		2 Ea. Flashlights Accessible to both Pilots			
		1 Ea. Signs "Fasten Seat Belt", "No Smoking" "Use Oxygen Equipment", operable by either pilot or copilot			
		1 Ea. Fuel Pressure Warning Indicator	1.7		
		1 Ea. Oil Pressure Warning Indicator	1.7		

FAA AIRCRAFT REGISTRY
CAMERA NO. 2N DATE: 11-2-83