



US Department of Transportation
Federal Aviation Administration

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

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

Electronic Tracking Number

For FAA Use Only

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

1. Aircraft	Nationality and Registration Mark N2471K	Serial No. 5198	
	Make Luscombe	Model 8E	Series
2. Owner	Name (As shown on registration certificate) Mainero Tanner R		Address (As shown on registration certificate)
			Address 315 Shahafka Circle
			City Kodiak State AK
			Zip 99615 Country USA

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 14 CFR 43.7

Signed: *Larry V. Steen* Date: *3/30/2015*
AAL-F8D0-05 Juneau, Alaska

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	AIRFRAME	_____	(As described in item 1 above)	_____
<input type="checkbox"/>	<input type="checkbox"/>	POWERPLANT			
<input type="checkbox"/>	<input type="checkbox"/>	PROPELLER			
<input type="checkbox"/>	<input type="checkbox"/>	APPLIANCE	Type		
			Manufacturer		

6. Conformity Statement

A. Agency's Name and Address		B. Kind of Agency		C. Certificate No.	
Name	Dan Dorman	<input checked="" type="checkbox"/>	U. S. Certificated Mechanic		Manufacturer
Address	P.O. Box 8984	<input type="checkbox"/>	Foreign Certificated Mechanic	3521505	
City	Kodiak State Alaska	<input type="checkbox"/>	Certificated Repair Station		
Zip	99615 Country USA	<input type="checkbox"/>	Certificated Maintenance Organization		

D. I certify that the repair and/or alteration made to the unit(s) identified in item 5 above and described on the reverse or attachments hereto have been made in accordance with the requirements of Part 43 of the U.S. Federal Aviation Regulations and that the information furnished herein is true and correct to the best of my knowledge.

Extended range fuel per 14 CFR Part 43 App. B <input type="checkbox"/>	Signature/Date of Authorized Individual
--	---

7. Approval for Return to Service

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

BY	FAA Fit. Standards Inspector	Manufacturer	Maintenance Organization	Persons Approved by Canadian Department of Transport
	FAA Designee	Repair Station	<input checked="" type="checkbox"/>	Inspection Authorization

Certificate or Designation No. 3521505	Signature/Date of Authorized Individual
---	---

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.)

N2471K

Nationality and Registration Mark

Date

1. Removed Goodyear wheel and mechanical brake assemblies from main gear axles, and all associated cables and pulleys for the mechanical brake system in accordance with Silvaire model 8 maintenance manual.

2. Installed Grove Aircraft Landing Gear Systems Inc. [Grove] 6.00X6 Wheel Assy 61-1001L and Brake Assy 29-1010C, See Wheel and Brake Assembly dwg., and Grove brake master cylinder assembly Model 677-6 (pull to actuate), See Master Cylinder dwg. & 667-6 Master Cylinder dwg., for each heel brake as follows:

A) Bolted p/n 020-130 torque plate assembly to existing torque flange, clocking it to the 3 o'clock position on the left side and the 9 o'clock position on the right side, as looking from the axle end, with five AN4-6A bolts, AN960-416 washers, and AN365-428 nuts on each side. Torque to 90 in. lbs.

B) Installed Grove axle spacer p/n 5736 on left & right axle.

C) Installed Grove wheel assembly p/n 61-1001L followed by grove spacer p/n 5733 on left & right axle and secured with existing axle nut and a MS24665-360 cotter pin. See Wheel & Brake Assy. drawing.

D) Installed Grove brake caliper assembly p/n 29-1010C to p/n 020-130 torque plate assembly on left & right side. Install caliper with bleeder nipple down and MS20822-4D elbow on top. Torqued brake caliper bolts to 90 in. lbs. and safety wire.

E) Mounted Grove hydraulic brake reservoir p/n 067-065 to engine side of fire wall with two AN3-3A bolts, AN960-10 washers and AN365-1032 nuts.

F) Drilled .250" hole through Luscombe 28509 Control Bearing Support 15.87" aft of fire wall.

G) Installed Grove master cylinders 677-6 to each side of left hand control bearing support p/n 28509: Use AN4-42 bolt, then right hand master cylinder, followed by 085-013 spacer. Then insert AN4-42 bolt and assembly through bearing support, followed by 085-012 spacer and left hand master cylinder. Secured with AN960-416 washer and AN310-4 nut and MS24665-360 cotter pin. See Master Cylinder Assembly dwg.

H) Installed Grove p/n 075-166 clevis to each master cylinder with AN316-4R nut. See Master Cylinder Assembly dwg.

I) Connect clevis of each master cylinder to existing eye of Luscombe part 285076-4 & 285076-5 with AN23-10 clevis bolt, AN960-10L washer, and AN320-3 nut, and cotter pin. See Master Cylinder Assembly dwg.

J) Installed MS20833 bulkhead elbow fitting in existing holes in the fuselage just forward of main gear leg where original brake cable exited. See Fitting Installation dwg. (C)

K) Installed MS20833 bulkhead elbow fitting through fire wall below reservoir. See Fitting Installation dwg. (A)

L) Fabricated and installed hydraulic lines and hoses in accordance with AC 43.13-1B Chapter 9, Section 2, Paragraph 9-30, to comply with hydraulic schematic. See Hydraulic Schematic dwg. & Fitting Installation dwg.

M) Secured hydraulic hoses to gear legs with two MS21919DG9 and MS21919DG26 Adel clamps using AN3-3A bolts, AN960-10 washers, AN365-1032 nuts on each side. See Fitting Installation dwg. (D)

N) Secured MS20824 tee to bottom of 28509 control bearing support with MS21919DG9 and MS21919DG20 Adel clamps and AN3-3A bolt, AN960-10 washer and AN365-1032 nut. See Fitting Installation dwg. (B)

3. Aircraft weight and Balance calculated prior to flight and new weight and balance recorded.

Instructions for continued airworthiness:

#1 Introduction: Removed Existing Good Year brake system and installed Grove Aircraft Landing Gear System hydraulic brakes with the following subsystems. 6.00X6 Wheel Assy 61-1001L and Brake Assy 29-1010C, Grove brake master cylinder assembly Model 677-6 and hydraulic brake reservoir p/n 067-065

#2 Description: See #8 description of work accomplished

#3 Control, Operation Information: The brakes will work as the original using the original brake pedals for braking action.

#4 Servicing information:

Original 6.00X6 tire and tube size to be used with new wheel assemblies. Torque wheel nuts to 150 in. lbs. Tire pressure to be maintained in accordance with original service manual.

New wheel bearing service/inspection intervals will follow original equipment intervals as outlined in service manual. Service bearings with Aeroshell 22 or equivalent grease.

Hydraulic system to be serviced with Mill-H-5606 hydraulic fluid. The reservoir is located on the engine side of the firewall.

Brake pads to be replaced when worn as indicated by wear markers with part 066-111 brake pads.

Inspect system at applicable intervals [Annual or 100 Hour] using Far, Part 43 Appendix D and applicable paragraphs of AC 43.13-1B, Chapter 9, Section 2, Paragraphs 9-29 & 9-30 Hydraulic Systems.

For repair and maintenance of master cylinders see Master Cylinder dwg., and 677-6 Master Cylinder dwg.

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.)

N2471K

Nationality and Registration Mark

Date

Instructions for continued airworthiness continued:

- #5 Maintenance Instruction: Complete maintenance instruction can be found in the Grove Aircraft Landing Gear Systems MASTER CYLINDER INSPECTION AND MAINTENANCE, BRAKE CALIPER INSPECTION AND MAINTENANCE and WHEEL ASSEMBLY INSPECTION AND MAINTENANCE Documents.
- #6 Troubleshooting Information: Complete Troubleshooting instruction can be found in the Grove Aircraft Landing Gear Systems TROUBLESHOOTING Document .
- #7 Removal and Replacement information: Removal and Replacement instruction can be found on the Grove Aircraft Landing Gear Systems MASTER CYLINDER INSPECTION AND MAINTENANCE, BRAKE CALIPER INSPECTION AND MAINTENANCE and WHEEL ASSEMBLY INSPECTION AND MAINTENANCE Documents.
- #8 Diagram: See attached wheel and Brake diagram and hydraulic schematic.
- #9 Special Inspection Requirements: None
- #10 Application of Protective Treatments: None
- #11 Data: N/A
- #12 List of special tools: None
- #13 For Commuter Category Aircraft: N/A
- #14 Recommended Overhaul Period: No additional overhaul time limitations
- #15 Airworthiness Limitation Section: Not Applicable
- #16 Revision: A letter will be submitted to the local FAA office with a copy of the revised FAA form 337 and revised ICA. The FAA inspector accepts the change by signing block 3 and including the following statement "The attached revised /new Instructions for Continued Airworthiness (date_) for the above aircraft or component major alteration have been accepted by the FAA, superseding the Instructions for Continued Airworthiness (date_). After the revision has been accepted, a maintenance record entry will be made, identifying the revision, its location and date on the FAA form 337.

Additional Sheets Are Attached