US Department of Transportation
Federal Aviation Administration

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

OMB No. 2120-0020
Exp. 5/31/2018

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: N50227	Serial No.: 77-143	
	Make: Stinson	Model: V-77	Series:
2. Owner	Name *(As shown on registration certificate)*: Hanus, David, S	Address *(As shown on registration certificate)*: Address: 2715 Halstead Lane; City: Mound; State: MN; Zip: 55364; Country: USA	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☒	AIRFRAME	Stinson	*(As described in Item 1 above)*	77-143
☐	☐	POWERPLANT			
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address
Name: David S Hanus
Address: 2715 Halstead Lane
City: Mound State: MN
Zip: 55364 Country: USA

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

C. Certificate No.: 2676877

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

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

Signature/Date of Authorized Individual

7. Approval for Return to Service

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

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

Certificate or Designation No.: IA 3179543

Signature/Date of Authorized Individual: 5-1-2018

FAA Form 337 (10/06)

NOTICE

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

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

N50227 — Nationality and Registration Mark

MAY 01-2018 — Date

Installed a Garmin SL-40 VHF Comm radio. P/N 430-6040-201. S/N 6003424 in radio rack at station 50.0 using supplied tray and hardware.

Installation was done IAW Garmin installation manual 560-0956-03 rev C and IAW AC 43.13B para 1-2, 11-31, 11-32, 11-36, 11-136, 11-137, 11-187, and AC43.13-2B chapters1 and 3.

The power input to the SL-40 is protected by a Klixon 7277-2-5 circuit breaker labeled "SL-40" located in the instrument sub panel. The power is supplied by the avionics bus.

A Commant C-121 Comm antenna was installed on the top of the aircraft at station 80.0 and connected to the SL-40 by RG-400 cable.

The SL-40 was connected to the existing Garmin GMA 340 audio panel and is designated "Comm 2".

Total continuous electrical load does not exceed 80% of alternator capacity.

Post installation tests were performed to show proper operation and no interference with any other aircraft systems.

The aircraft equipment list was revised.

See revised weight and balance report dated May 01-2018.

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

☐ Additional Sheets Are Attached

UNITED STATES OF AMERICA

DEPARTMENT OF TRANSPORTATION–FEDERAL AVIATION ADMINISTRATION

STANDARD AIRWORTHINESS CERTIFICATE

1. NATIONALITY AND REGISTRATION MARKS	2. MANUFACTURER AND MODEL	3. AIRCRAFT SERIAL NUMBER	4. CATEGORY
N50227	STINSON CONSOLATED VULTEE	77-143	NORMAL

5. AUTHORITY AND BASIS FOR ISSUANCE

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

Exceptions:

NONE

6. TERMS AND CONDITIONS

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

DATE OF ISSUANCE	FAA REPRESENTATIVE	DESIGNATION NUMBER
"R"7-30-56	Scot E. Thompson	MSP FSDO GL15

Any alteration, reproduction, or misuse of this certificate may be punishable by a fine not exceeding $1,000, or imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE FEDERAL AVIATION REGULATIONS.

U.S. Government Printing Office — 1978-675-526

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE—CIVIL AERONAUTICS ADMINISTRATION

CERTIFICATE OF AIRWORTHINESS

1. NATIONALITY AND REGISTRATION MARKS	2. AIRCRAFT AIRWORTHINESS CLASSIFICATION
N 50227	STANDARD

3. This Certificate of Airworthiness is issued pursuant to the Civil Aeronautics Act of 1938 as amended. The aircraft identified hereon is considered airworthy when maintained and operated in accordance with the Civil Air Regulations and applicable aircraft Operation Limitations.

4. UNLESS SOONER SURRENDERED, SUSPENDED, REVOKED, OR A TERMINATION DATE IS OTHERWISE ESTABLISHED BY THE CIVIL AERONAUTICS BOARD THIS CERTIFICATE WILL ~~EXPIRE~~

REMAIN IN EFFECT AS LONG AS THE AIRCRAFT IS MAINTAINED IN ACCORDANCE WITH CIVIL AIR REGULATIONS PART 43.

5. DATE OF ISSUANCE OR RENEWAL	6. CAA REPRESENTATIVE	7. DESIGNATION NO.
7-30-56	HAROLD G. LANE	Reg. 4 LA ASDO 22

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

Form ACA-1002 (12-50)

GPO 16—CITY-1


ONSOLATED VULTEE AIRCRAFT CORP
STINSON DIVISION, WAYNE MICHIGAN
TYPE CERTIFICATION
774
MODEL
V77
SERIAL NUMBER
77-145
OF MANUFACTURE
CONVERSION

	AVS Quality Management System	QPM # AFS-AGL-MSP-F024	Revision 0
Title: Request for Replacement Airworthiness Certificate		Date: May 29, 2009	Page 1 of 1

Date: 12-7-2017

I David S Hanus. 2715 Halstead Lane. Mound. MN. 55364

Print name Address

Certify that I am the owner of:

N 50227 Make Stinson Model V-77

S/N 77-143, and hereby request a replacement airworthiness certificate.

The replacement certificate is requested because: Old certificate is on an obsolete form.

Signature

Replacement

(1) The FAA may issue a replacement airworthiness certificate when a certificate is declared lost, has been mutilated, or is no longer legible. The replacement airworthiness certificate shall carry the original issue date of the certificate being replaced, preceded by a capital "R" in the date block of the certificate. Additionally, replacement certificates will be issued when the aircraft registration number has been changed. In this case a new application for airworthiness certification is not required.

(2) Request for a replacement certificate will be made by a certified statement from the registered owner or certificate operator to the applicable certification office. The certifying statement should include the registration (N) number, serial, and make/model of the aircraft. Replacement of airworthiness certificates shall not be accomplished by verbal agreement with the assigned inspectors or through procedures contained in air carrier's manuals that allow the continued operation of an aircraft without an airworthiness certificate. Such actions are contrary to δδ 91.203 121.153(a)(1), and CFR part 135, Operating Requirements: Commuter and On Demand Operations (part 135), δ 135.25(a).

(3) A replacement airworthiness certificate may be issued without supporting documentation from AFS-750 if the date of issuance and the airworthiness classification and/or category of the lost or mutilated certificate can be positively established form the aircraft records, or from the remains of the certificate, the FAA inspector will request copies of the appropriate data (such as the application form or previously issued airworthiness certificate) from AFS-750

(4) Before issuing a replacement certificate, the FAA shall review the aircraft records, and if necessary, inspect the aircraft to ensure the applicant's request is justified, and the aircraft is eligible for the airworthiness certificate requested.

(5) A copy of the replacement certificate must be forwarded to AFS-750.

O/W 12/12/17
SET

US Department of Transportation
Federal Aviation Administration

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

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

Electronic Tracking Number

For FAA Use Only

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

1. Aircraft	Nationality and Registration Mark: USA N50227	Serial No.: 77143	
	Make: Stinson	Model: Vultee V-77	Series:
2. Owner	Name *(As shown on registration certificate)*: Hanus, David S	Address *(As shown on registration certificate)*: Address 2715 Halstead Ln; City Mound; State MN; Zip 55364-9404; Country USA	

3. For FAA Use Only

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

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	
Name: Wipaire, Inc.	☐ U. S. Certificated Mechanic	☐ Manufacturer
Address: 1700 Henry Ave.	☐ Foreign Certificated Mechanic	C. Certificate No.
City: South Saint Paul; State: MN	✓ Certificated Repair Station	
Zip: 55075; Country: USA	☐ Certificated Maintenance Organization	RJWR390K

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

Extended range fuel per 14 CFR Part 43 App. B ☐	Signature/Date of Authorized Individual: 11-3-2017

7. Approval for Return to Service

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

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

Certificate or Designation No.: RJWR390K	Signature/Date of Authorized Individual: 11-3-2017

NOTICE

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

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

USA N50227	11-3-2017
Nationality and Registration Mark	Date

Removed a Garmin GTX-327 transponder.

Installed a Garmin GTX-335 Mode S Transponder with ADS-B Out in accordance with the Garmin GTX-335 installation manual, P/N 190-00734-10, Rev 8, and STC# SA01714WI. The Stinson Vultee V-77 is not included in the STC Approved Model List. STC# SA01714WI is the basis for this follow-on approval in accordance with FAA Memorandum dated March 2, 2016.

The installed ADS-B OUT system was shown to meet the equipment performance requirements of 14 CFR section 91.227.

The GTX-335 was mounted in the radio panel using the supplied mounting tray and hardware.

The power input for the GTX-335 is protected by a Klixon 7277-2-3 circuit breaker labeled "GTX 335" located in the instrument sub panel. Power is supplied by the avionics bus.

This system was installed in accordance with the manufacturer's installation manuals, AC 43.13-1B, paragraphs 11-2, 11-31, 11-32, 11-36, 11-136, 11-187, and AC 43.13-2B, chapters 1 and 3.

Post-installation ground tests were performed in accordance with the GTX-335 installation manual, P/N 190-00734-11, Rev. 5. The system operated normally.

The FAA Approved Airplane Flight Manual Supplement, P/N 190-00734-15, Rev 2, was inserted into the Airplane Flight Manual.

The Garmin GTX Pilot's Guide, P/N 190-01499-00, Rev. C, was placed in the aircraft.

The total continuous electrical load does not exceed 80% of the total alternator capacity.

Refer to Garmin Document Number 190-00734-11, Rev 5, for instructions for continued airworthiness.

The aircraft weight & balance, equipment list and logs were revised.

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

☐ Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

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

Electronic Tracking Number

For FAA Use Only

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

1. Aircraft	Nationality and Registration Mark: N50227	Serial No.: 77-143	
	Make: Stinson	Model: V-77	Series: 77
2. Owner	Name *(As shown on registration certificate)*: Bailey, James H.	Address *(As shown on registration certificate)*: Address 409 20th Ave; City Brookings; State SD; Zip 57006; Country	

3. For FAA Use Only

THE TECHNICAL DATA IDENTIFIED HEREIN HAS BEEN FOUND TO COMPLY WITH APPLICABLE AIRWORTHINESS REQUIREMENTS AND IS HEREBY APPROVED FOR USE ONLY ON THE ABOVE DESCRIBED AIRCRAFT, SUBJECT TO CONFORMITY INSPECTION BY A PERSON AUTHORIZED IN §43.7.

APPROVING FAA INSPECTOR — DATE: JUL 01 2010 — DISTRICT OFFICE: RAP FSDO

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

6. Conformity Statement

A. Agency's Name and Address
Name: William R. Ebbinga
Address: 58071 Richland Rd.
City: Griswold State: IA
Zip: 51535 Country:

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

C. Certificate No.: 001828527

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

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

Signature/Date of Authorized Individual: William R. Ebbinga June 27, 2010

7: Approval for Return to Service

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

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

Certificate or Designation No.: 001828527

Signature/Date of Authorized Individual: William R. Ebbinga July 10, 2010

FAA Form 337 (10-06)

NOTICE

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

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

N50227	June 27, 2010
Nationality and Registration Mark	Date

1. Introduction: Installed Brackett Aero filter for the engine induction filter in place of the original Airmaze filter P/N 77-52012.

2. Description: Remove original air filter and install Brackett Aero filter in accordance with kit rework instructions part BA-169

3. Control: N/A

4. Servicing information: in accordance with the I-194 document

5. Maintenance Instructions: in accordance with the I-194 document

6. Trouble shooting information: in accordance with the I-194 document

7. Removal and replacement information: in accordance with the I-194 document

8. Diagrams: N/A

9. Special inspection requirements: N/A

10. Application of protective treatments: N/A.

11. Data: Kit part no. BA-169.

12. List of special tools: None required.

13. For commuter category aircraft: N/A.

14. Recommended overhaul periods: N/A

15. Airworthiness Limitation Section: in accordance with the I-194 document

16. Revision: Any revisions to this FAA form 337/field approval must be accepted by the FAA.

Attached: Brackett Aero Filters, Inc. kit instructions BA-169 and Brackett Aero Filters, Inc. air filter document I-194.

☑ Additional Sheets Are Attached

BRACKETT AERO FILTERS

FILTER REWORK KIT INSTRUCTIONS

KIT PART NO. BA-169

AIRCRAFT MODELS: STINSON V-77; FILTER No. 77-52012
APPROVAL: FAA FIELD APPROVAL REQUIRED.

Your new polyurethane air filter element has been designed to provide maximum dust collecting efficiency, good air flow, lightweight and economical replacement. The element has been treated with a special treatment called a wetted agent and is approximately 98% efficient. The special wetted agent is the secret to the efficiency of capturing dust and repelling water. The element has also been treated with a fire retardant. For the above reasons, replace the element each 200 hours of use or every 12 months or when 50% covered with foreign material. DO NOT WASH AND REUSE.

KIT CONTENTS

1 EA	12 3/8 X 7 7/8 #4 MESH SS SCREEN	1 EA	BA-169E ELEMENT
1 EA	169-1 GRILL	6 EA	AN500-8-6 FL HD SCREWS
A/R	3M #2216 ADHESIVE OR EQUIVALENT	A/R	.020 SAFETY WIRE
6 EA	ATS2-832 NUTCERTS(Opt:MS21059L08K)	3 EA	99836 CROSS PIN-Airloc
1 EA	BA-169-3 DECAL	1 EA	I-194 CONTINUED AIR

REWORK INSTRUCTIONS

Step 1. Remove existing filter media (screen w/ flock) from Airmaze filter No. 77-52012.

Step 2. Clean airfilter frame, inspect, and correct any abnormalities prior to refinishing.

Step 3. Bond screen #4 mesh into frame upstream face (common to the airlocks on the filter frame), use 3M #2216 or equivalent. Follow adhesive manufacturing instructions. (Slight bending and restraightening of the screen is necessary for installation into the frame)

Step 4. Center grill and back mark nutcert locations. Drill .250 dia. hole and install nutcerts p/n ATS2-832.

Step 5. Install service decal p/n BA-169-3 on inside of filter frame surface.

Step 6. A) Install polyurethane element BA-169E with the dense foam stenciled "Engine Side" towards the removable grill.

B) Install screws AN500-8-6 with safety wire.

C) Reinstall filter frame to scoop and complete installation as original.

Step 7. Complete and submit 337 field approval form.

Servicing: Under normal conditions, replace filter element, PN BA-169E, after 200 hours use or one year intervals. Under severely dusty conditions, check daily and replace when element is 50% covered with foreign material.

For continued airworthiness reference Form I-194.

Brackett Aero Filters., Inc.
Kingman, AZ 86401

BRACKETT AIR FILTER DOCUMENT I-194

PLACE IN AIRCRAFT RECORDS

CONTINUED AIRWORTHINESS INSPECTION
REQUIREMENTS AS PER FAR 23.1529
AND GENERAL PROCEDURES OF PART 43

INSPECTION INTERVALS: Pre-flight inspections, engine backfire inspection, 100 hour inspections, annual inspections, filter element replacements.

INSPECTION PROCEDURES

A. Pre-flight inspection: Per Pilots Operating Handbook, check filter assembly for security, damage or 50% contamination of element face. If found report to maintenance personnel prior to flight.

B. Engine start-up backfire inspection: Prior to flight, check the entire intake system for security or damage. If a fire was present, the downstream face of the foam element will show erosion. If any irregularities are found see Chart I and also refer to the Aircraft Maintenance Manual for the intake system.

C. At element replacement intervals: With the element removed, inspect the filter grill, filter frame, filter mountings and entire intake system for security, wear and any deformation. Note: On filter assemblies with gaskets, visually inspect inside and outside of frame for any signs of gasket looseness, movement or deterioration. If found refer to Chart I or the proper maintenance manual for your aircraft or component.

PART	REPLACE	REWORK	INSTRUCTIONS
FRAME	X		COMPLETE NEW ASSEMBLY
GASKET	X		ON FILTER FRAME, REMOVE OLD NEOPRENE GASKET AND ALL TRACES OF ADHESIVE DOWN TO A CLEAN ANODIZED FRAME SURFACE. USE ADHESIVE 3M#847 OR DOW CORNING RTV-732. COAT ENTIRE MATING SURFACE (GASKET TO FRAME). APPLY ADHESIVE FOLLOWING MANUFACTURER'S LABEL DIRECTIONS. WHEN FRAME AND GASKET ARE PLACED TOGETHER, CLAMP OR WEIGHT DOWN AT .75 LB./SQ. IN. OF CONTACT AREA. ALLOW TO CURE 24 HOURS PRIOR TO INSTALLATION. PRIOR TO REINSTALLATION OF FILTER, CHECK AIRBOX MATING SURFACE FOR IRREGULARITIES. IF FOUND, CORRECT PER MANUFACTURER'S REQUIREMENTS. UPON REINSTALLATION CHECK THAT THE GASKET MAKES 100% CONTACT. THE GASKET SHOULD BE COMPRESSED 50% FOR OPTIMUM SEAL.
GRILL	X		REPLACE WITH NEW GRILL
HARDWARE	X		REPLACE UNSERVICEABLE WITH NEW
SCREEN	X		COMPLETE NEW ASSEMBLY
SCREEN/GASKET	X		COMPLETE NEW ASSEMBLY (ASSEMBLIES USING SCREEN GASKETS PRE 1981; BA-4106, BA-5110 AND BA-8110.)
ELEMENT	X		REPLACE ELEMENT

DATE: 3-16-94

CHART 1

US Department of Transportation
Federal Aviation Administration

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

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

Electronic Tracking Number

For FAA Use Only

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

1. Aircraft	Nationality and Registration Mark: N50227	Serial No.: 77-143	
	Make: Stinson	Model: V-77	Series: 77
2. Owner	Name *(As shown on registration certificate)*: Bailey, James H.	Address *(As shown on registration certificate)*: Address 409 20th Ave; City Brookings; State SD; Zip 57006; Country	

3. For FAA Use Only

THE TECHNICAL DATA IDENTIFIED HEREIN HAS BEEN FOUND TO COMPLY WITH APPLICABLE AIRWORTHINESS REQUIREMENTS AND IS HEREBY APPROVED FOR USE ONLY ON THE ABOVE DESCRIBED AIRCRAFT, SUBJECT TO CONFORMITY INSPECTION BY A PERSON AUTHORIZED IN §43.7.

Amy Noldewine — JUL 01 2010 — RAP FSDO

APPROVING FAA INSPECTOR — DATE — DISTRICT OFFICE

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

6. Conformity Statement

A. Agency's Name and Address
Name: William R. Ebbinga
Address: 58071 Richland Rd.
City: Griswold State: IA
Zip: 51535 Country:

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

C. Certificate No.: 001828527

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

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

Signature/Date of Authorized Individual: William R. Ebbinga June 27, 2010

7. Approval for Return to Service

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

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

Certificate or Designation No.: 001828527

Signature/Date of Authorized Individual: William R. Ebbinga July 10, 2010

FAA Form 337 (10-06)

NOTICE

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

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

N50227	June 27, 2010
Nationality and Registration Mark	Date

1. Introduction: Install an alternator system in place of the original generator system.

2. Description: Removed the original equipment Eclipse Generator and voltage regulator from the Lycoming R-680-13 engine. Installed a JASCO alternator model 6565T and JASCO voltage regulator model J12M20 in accordance with a follow along approval to STC SA1809SW. Electrical wiring completed in accordance with wiring diagram Skytronics, Inc. P1001.

3. Control: No change to control of the alternator system.

4. Servicing information: See Skytronics, Inc. 6555-1 kit instructions.

5. Maintenance Instructions: See Skytronics, Inc. 6555-1 kit instructions.

6. Trouble shooting information: See Skytronics, Inc. 6555-1 kit instructions.

7. Removal and replacement information: See Skytronics, Inc. 6555-1 kit instructions.

8. Diagrams:Wiring diagram Skytronics, Inc. P1001.

9. Special inspection requirements: See Skytronics, Inc. 6555-1 kit instructions.

10. Application of protective treatments: N/A.

11. Data: Reference Skytronics, Inc. Top Installation Drawings.

12. List of special tools: None required.

13. For commuter category aircraft: N/A.

14. Recommended overhaul periods: A recommended overhaul period of 1000 hours.

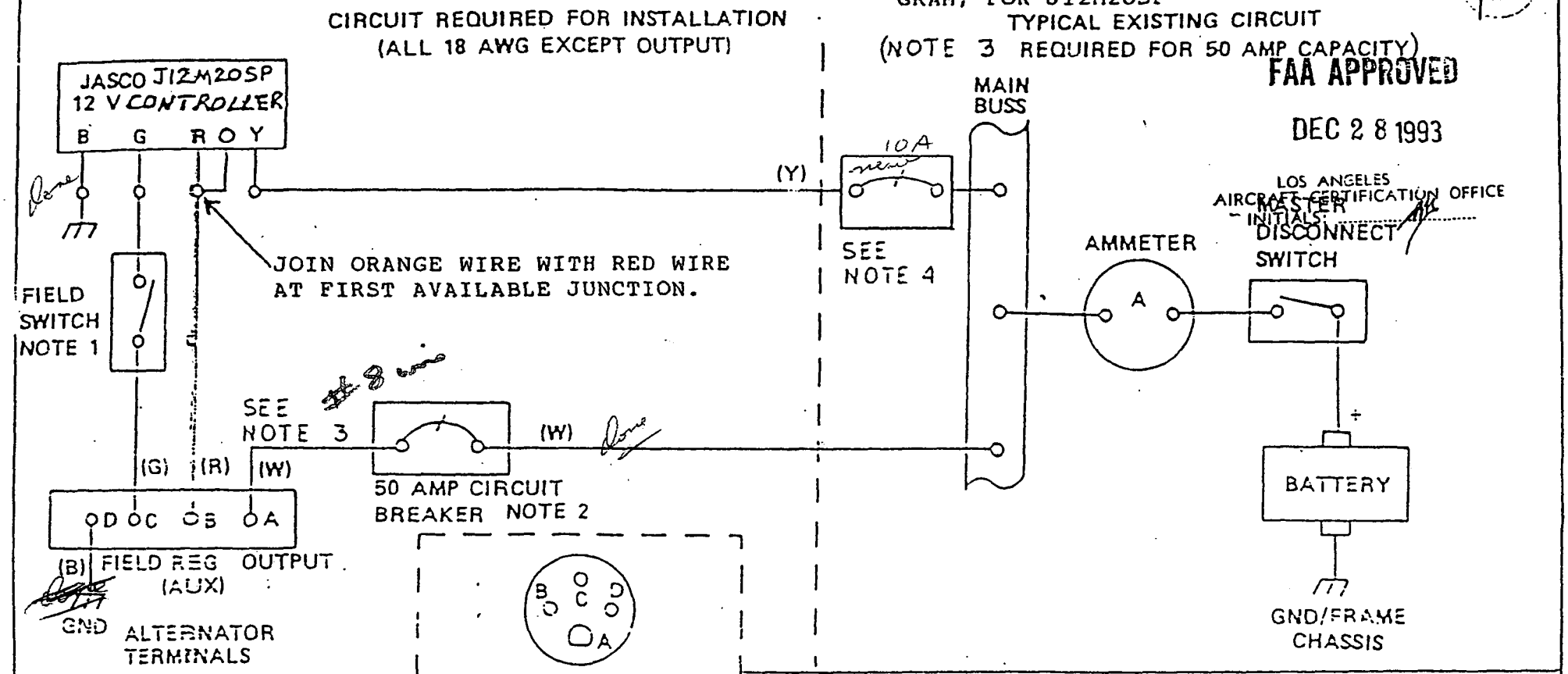
15. Airworthiness Limitation Section: the Alternator limitation is "On Condition".

16. Revision: Any revisions to this FAA form 337/field approval must be accepted by the FAA.

Attached: copy of previously approved 337 for N18285 dated May 17, 1994, copy of previously approved 337 for N15117 dated October 16, 2008, copy of previously approved 337 for N67070 dated February 20, 2003. STCSA2015WE and kit instructions including wiring diagrams.

☑ Additional Sheets Are Attached

REVISIONS			
LTR	DESCRIPTION	DATE	APPR
A	CLARIFICATION OF WIRING DIAGRAM, FOR J12M20SP	12-21-93	



FAA APPROVED

DEC 28 1993

LOS ANGELES AIRCRAFT CERTIFICATION OFFICE
INITIALS:

NOTES:

1. COMBINATION FIELD SW & 5 AMP CIRCUIT BREAKER NOT SUPPLIED. POTTER-BRUMFIELD P/N W31X2M16-5 RECOMMEDED.

SKYTRONICS, INC.
EL SEGUNDO, CALIF.

MATERIAL	DATE 12-21-93	DWN. BY
SPEC.	SCALE	APPR BY
FINISH	DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED	

INSTALLATION WIRING FOR 12 V. 50 A. NEG GND ALTERNATOR

P1001 SHEET 1 of 2

REVISIONS			
LTR	DESCRIPTION	DATE	APPR
A	CLARIFICATION OF WIRING DIAGRAM, FOR J12M20SP	12-21-93	

2. 50 AMP CIRCUIT BREAKER NOT SUPPLIED. POTTER-BRUMFIELD P/N W23X1A1G-50 RECOMMENDED.

3. FOR SINGLE WIRE ROUTING USE 8 AWG PER MIL-W-5086. FOR CONDUIT OR BUNDLE ROUTING USE 6 AWG, MIL-W-5086 OR EQUAL AIRCRAFT QUALITY WIRE.

4. IN COMPLIANCE WITH FAA REGULATIONS, REGULATOR CIRCUIT IS TO BE PROTECTED WITH CIRCUIT BREAKER OR FUSE LOCATED IN CLOSE PROXIMITY TO BUSS. FUSE OR BREAKER SIZE IN ACCORDANCE WITH THE FOLLOWING:

WIRE SIZE	CKT BKT	FUSE
22 GA	5 AMP	5 AMP
20 GA	7.5 AMP	5 AMP
18 GA	10 AMP	10 AMP
16 GA	15 AMP (new yellow 16 ga)	10 AMP

CIRCUIT BREAKER OR FUSE ASSEMBLY NOT SUPPLIED.

5. NEW VOLTAGE REGULATOR P/N J12M20SP INCORPORATES THE VOLTAGE PROTECTOR SVP-3. THUS, THE J12M20SP SUPERCEEDS AND OBSOLETES BOTH THE J12M20 AND THE SVP-3 UNITS.

FAA APPROVED

DEC 28 1993

LOS ANGELES
AIRCRAFT CERTIFICATION OFFICE
INITIALS: .....

SKYTRONICS, INC.
EL SEGUNDO, CALIF.

MATERIAL	DATE 12-21-93	DWN. BY C. P.
SPEC.	SCALE	APPR. BY
FINISH	DIMENSION TOLERANCE UNLESS OTHERWISE SPECIFIED	

INSTALLATION WIRING FOR 12V. 50A. NEG GND ALTERNATOR

P1001 SHEET 2 of 2

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

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act 1958).

1. Aircraft	Make: Stinson	Model: SR-6B
	Serial No.: 9808	Nationality and Registration Mark: NC15117
2. Owner	Name (As shown on registration certificate): Wilson Charles F Wilson Todd B	Address (As shown on registration certificate): 151 Loretta Lane Luthersville, GA 30251

3. For FAA Use Only

THE DATA IDENTIFIED HEREIN CONFORMS WITH APPLICABLE [illegible] REQUIREMENTS AND IS APPROVED ONLY FOR THE [illegible] SUBJECT TO CONFORMITY INSPECTION [illegible]

10/16/2008
DATE

FAA INSPECTOR [illegible]

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

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in item 1 above)				X
POWERPLANT	Lycoming	R-680-E3A	41 1260		X
PROPELLER	Type		ATTACHMENT		
APPLIANCE	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
Howard Kron 3010 90th Ave SE Clara City, MN 56222	☒ U.S. Certified Mechanic ☐ Foreign Certified Mechanic ☐ Certified Repair Station ☐ Manufacturer	2060899 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
10-16-2008	[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

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
10-16-2008	2060899	[signature]

FAA Form 337 (12-88)

712-769-2426

NOTICE

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

8. Description of Work Accomplished

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

1 Installed Jasco Alternator System

2 Installed a Jasco Alternator model 6565T and J12M20SF Voltage Regulator System as per STC SA 1809SW supplied by Page Industries of Oklahoma Inc. PO Box 191, Yukon, Oklahoma, 73099, using drawing # 5032, Rev C,dated March 15, 1974, supplied by manufacturer

System has a 50 AMP rating

Calculated load is:

FLD	5 Amp.
Radio	6 Amp
TXP	3 Amp.
Nav Lt	10 Amp.
Land Lite	20 Amp
Max Cont Load	43 Amp

3 N/A
4 N/A
5 Ref to Manufacturer Instruction.
6 Ref to Manufacturer Instruction
7 Ref to Manufacturer Instruction
8 N/A
9 N/A
10 N/A
11 N/A
12 N/A
13 N/A
14. No additional overhaul time limitations
15. N/A
16 N/A
17. N/A
18. Recorded in Aircraft Log Book

The End

☒ Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020
For FAA Use Only
Office Identification
FAA-AAL-FSDO-03
BMR

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: Stinson Serial No.: 8776	Model: JR SR Nationality and Registration Mark: N18285
2. Owner	Name (As shown on registration certificate): Columbia Mara Lee	Address (As shown on registration certificate): HC 32 Box 6657-A1 Wasilla AK 99654

The data/alteration 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 Part 43.

MAY 17 1994
Date

Signature
FAA-AAL-FSDO-3

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			ATTACHMENT		
PROPELLER					
APPLIANCE	Type Manufacturer				

6. Conformity Statement

A. Agency's Name and Address: Grant W. Chapman, PO Box 873769, Wasilla AK 99687

B. Kind of Agency:
- [X] U.S. Certificated Mechanic
- [ ] Foreign Certificated Mechanic
- [ ] Certificated Repair Station
- [ ] Manufacturer

C. Certificate No.: 574245828

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: 04/09/94

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 [X] APPROVED [ ] REJECTED

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

Date of Approval or Rejection	Certificate or Designation No.	Signature of Authorized Individual
05/17/94	574245828	Grant W. Chapman

FAA Form 337 (7/88)

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 Skytronics 50 Amp Alt.
all work Done per Skytronics Drawing
P1001. For Reference Refer to Drawing
Pervided. wt-N-Bal. and equip list
Revised

☒ Additional Sheets Are Attached

P/W 985

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in a civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: STINSON	Model: V-77
	Serial No.: V-77-13	Nationality and Registration Mark: N 67070
2. Owner	Name *(As shown on registration certificate)*: GUY BUSHMAN	Address *(As shown on registration certificate)*: 8411 KITTYHAWK AVE. LOS ANGELES, CA 90045

3. For FAA Use Only

[illegible] airworthiness [illegible] subject to [illegible] by a person authorized in FAR 43.7.

2/20/03 Signature SAC FSDO

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

Unit	Make	Model	Serial No.	Repair	Alteration
AIRFRAME	(As described in Item 1 above)				XXXX
POWERPLANT					
PROPELLER			ATTACHMENT		
APPLIANCE	Type				
	Manufacturer				

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	C. Certificate No.
J. HERRON 12651 TUNSTAIL GARDEN GROVE CA 92845	XXX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	1421203

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

Date	Signature of Authorized Individual
2/20/03	J. B Herron

7. Approval for Return To Service

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

BY							
		FAA Flt. Standards Inspector		Manufacturer	XXX	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
2/20/03	1421203	J. B Herron

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.)

ALTERNATOR INSTALLATION

1) **Eclipse Generator, Model 11, Type 309, Weight 24 pounds, REMOVED.**

2) **Jasco Alternator, Model 6555-1, S/N 785-15833, 50 Amp, 14 Volt, Weight 11 pounds, INSTALLED.**

3) **Jasco Regulator, P/N J12M-20, INSTALLED.**

4) **50 Amp Circuit Breaker, supplied by Potter Brumfield, and 5 Amp Field Breaker, P/N 5-48-205-17 INSTALLED.**

5) **Wiring Diagram, Drawing #P1001, Dated 10/10/78, USED FOR INSTALLATION.**

6) **Instructions for continued Airworthiness, Alternator & Wiring to be Inspected for Security & Operations each 100 Hours per 14CFR Part 43, Appendix D.**

7) **Weight & Balance and Equipment List REVISED.**

END

☐ Additional Sheets Are Attached

☆U.S. GOVERNMENT PRINTING OFFICE: 1992-769-012/60187

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Stinson	Model: V-77
	Serial No.: 77-143	Nationality and Registration Mark: N50227
2. Owner	Name *(As shown on registration certificate)*: Bailey James H.	Address *(As shown on registration certificate)*: 409 20th Ave, Brookings SD 57006

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.
William R Ebbinga 58071 Richland Rd Griswold IA 51535	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	1828527

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 herin is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
June 27, 2010	William R Ebbinga

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
June 27, 2010	A&P1828527 AI	William R Ebbinga

NOTICE

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

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

N 50227	June 27, 2010
Nationality and Registration Mark	Date

1. Model AK-450 ELT EMERGANCY LOCATOR TRASMITTER Installed.
2. Installation I/A/W Document no. IM -450 for Model AK-450 ELT EMERGENCY LOCATOR TRANSMITTER Per TSO-C91a DO-160c Requirements.
3. n/a
4. Access by rear baggage door, located on upper right side of baggage compartment.
5. See manufactures instructions.
6. See manufactures instructions.
7 See manufactures instructions.
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. n/a

Included in new weight and balance June 27 2010 New Empty weight 2745 CG 86.65 Moment 237858.15
//END//

☑ Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

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

Electronic Tracking Number

For FAA Use Only

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

1. Aircraft	Nationality and Registration Mark: N 50227	Serial No.: 77-143	
	Make: Stinson	Model: V-77	Series:
2. Owner	Name *(As shown on registration certificate)*: Bailey James H.	Address *(As shown on registration certificate)*: Address 409 20th Ave; City Brookings; State SD; Zip 57006; Country USA	

3. For FAA Use Only

4. Type		5. Unit Identification			
Repair	Alteration	Unit	Make	Model	Serial No.
☐	☐	AIRFRAME	—	*(As described in Item 1 above)*	—
☐	☑	POWERPLANT	LYCOMING	R-680-13	11383
☐	☐	PROPELLER			
☐	☐	APPLIANCE	Type / Manufacturer		

6. Conformity Statement

A. Agency's Name and Address	B. Kind of Agency	
Name: William R Ebbinga	☑ U. S. Certificated Mechanic	☐ Manufacturer
Address: 58071 Richland RD	☐ Foreign Certificated Mechanic	C. Certificate No.
City: Griswold; State: IA	☐ Certificated Repair Station	
Zip: 51535; Country:	☐ Certificated Maintenance Organization	1828527

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

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

Signature/Date of Authorized Individual: William R Ebbinga June 27, 2010

7. Approval for Return to Service

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

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

Certificate or Designation No.: A&P 1828527 AI

Signature/Date of Authorized Individual: William R Ebbinga June 27, 2010

FAA Form 337 (10-06)

NOTICE

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

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

N 50227	June 27, 2010
Nationality and Registration Mark	Date

1. AIRWOLF remote oil filters have no moving parts.
2. Installed AIRWOLF remote mounted oil filter kit AFC-K007 on R-680-13 Lycoming Engine of 300 hp. SN 11383 Installation I/A/W AFC-K007-M1 Airwolf Maintenance Instructions and AML for STC SA00024NY page 7 dated May 23 1997..
3. n/a
4. Access by opening left engine cowl.
5. See manufactures instructions.
6. See manufactures instructions.
7. See manufactures instructions.
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. n/a

Included in new weight and balance June 27 2010 New Empty weight 2745 CG 86.65 Moment 237858.15
//END//

☑ Additional Sheets Are Attached

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA00024NY

This certificate, issued to Airwolf Filter Corp.
15369 Madison Road
Middlefield, Ohio 44062

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of Part 3/23 *of the* Civil Air/Federal Aviation *Regulations.*

Original Product — Type Certificate Number: *(See attached FAA Approved Model List
Make: *(AML) No. SA00024NY for list of approved
Model: *airplane models and applicable installation
*instructions)

Description of Type Design Change:

Installation of Airwolf remote mounted engine oil filter kit AFC-K007 on single and multi engine fixed wing light aircraft incorporating Lycoming reciprocating engines of 450 horsepower or less.

Limitations and Conditions:

1) Engine compartment firewall for mounting oil filter shall be of .021 inch minimum thickness ASTM A527 galvanized steel or equivalent (Ref. CAR 3.624 (b), FAR 23.1191(h).

2) Airwolf Maintenance Instructions AFC-K007-MI dated March 30, 1993 are required with this installation.
(See STC Continuation Sheet, Page 2)

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

Date of application: June 8, 1993

Date of issuance: July 22, 1993

Date reissued:

Date amended: 11/11/93, 2/3/94, 5/12/94, 11/22/94 5/25/95, 2/5/96, 5/23/97

By direction of the Administrator

Anthony Socias *(Signature)*
Manager, Airframe and Propulsion Branch
New York Aircraft Certification Office

(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA00024NY

Date of Amendment: May 23, 1997

3. This approval should not be extended to aircraft of this model on which other previously approved modifications are incorpora unless it is determined that the relationship between this change and any of those other previously approved modifications, includ changes in type design, will introduce no adverse effect upon the airworthiness of the aircraft. A copy of this Certificate must be maintained as part of the permanent records for the modified aircraft.

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

FAA FORM 8110-2-1 (10-69)

This certificate may be transferred in accordance with FAR 21.47.

Approved Model (AML) SA00024NY
Airwolf Filter Corp.
For
Installation Of Remote Mount Oil Filter

Original Issue Date July 22, 1993

Item	Aircraft Make	Aircraft Model	Original Type Certificate No.	Installation Instructions	AML Amendment
22	Piper	PA-16, PA-16S	1A1	Airwolf Filter Corp. Remote Mounted Oil Filter Kit AFC-K007, Dated June 8, 1993	February 5, 1996
23	Bellanca	17-31A, 17-31ATC	A18CE	Airwolf Filter Corp. Remote Mounted Oil Filter Kit AFC-K007, Dated June 8, 1993	February 5, 1996
24	Stinson	V-77 (Army AT-19)	A-774	Airwolf Filter Corp. Remote Mounted Oil Filter Kit AFC-K007, Dated June 8, 1993	February 5, 1996
25	Piper	PA-20, PA-20S, PA-20 115", PA-20S" 115" PA-20"135", PA-20S"135"	1A4	Airwolf Filter Corp. Remote Mounted Oil Filter Kit AFC-K007, Dated June 8, 1993	February 5, 1996
26	Grumman	AA-5, AA-5A, AA-5B, AG-5B	A16EA	Airwolf Filter Corp. Remote Mounted Oil Filter Kit AFC-K007, Dated June 8, 1993	February 5, 1996
27	Taylorcraft	F21, F21A, F21B, F22, F22A, F22B, F22C, 19, F19	1A9	Airwolf Filter Corp. Remote Mounted Oil Filter Kit AFC-K007, Dated June 8, 1993	February 5, 1996

FAA Approved: Anthony Socias
Anthony Socias
Manager, Airframe and Propulsion Branch
Aircraft Certification Office

Amended: May 23, 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

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: Stinson	Model: V-77
	Serial No.: 77-143	Nationality and Registration Mark: N50227
2. Owner	Name *(As shown on registration certificate)*: Bailey James H.	Address *(As shown on registration certificate)*: 409 20th Ave, Brookings SD 57006

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.
William R Ebbinga 58071 Richland Rd Griswold IA 51535	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	1828527

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 herin is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
June 27 2010	William R Ebbinga

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
June 27, 2010	A&P1828527 AI	William R Ebbinga

NOTICE

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

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

N 50227	June 27, 2010
Nationality and Registration Mark	Date

1.Removed both right and left master brake assemblies and main wheel expander brake and drum assemblies. Dismounted Tires and tubes

2. Installed new master brake assemblies and wheel assemblies with Cleveland Brake, Conversion Kit No. 199-167 in accordance with Redline Corporation Drawing No. H119 Dated Sept. 14,1989 in Accordance with STC SA2691SO and FAA MEL No 199-167 Dated Mar 18 2004. Reinstalled tires and tubes , torqued wheel bolts, inflated to proper pressure according to TO 01-50KA-2

3. n/a

4. Service master brake reservoir with 5606 fluid located on left upper fire wall access thru left engine cowl.

5. Refer to Manufactures Instructions for Cleveland Brakes

6. n/a

7. Refer to Manufactures Instructions for Cleveland Brakes

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. n/a

Weight and Balance June 27 2010 EW 2745 CG 86.65 MOMENT 237858.15

//END//

☑ Additional Sheets Are Attached

United States of America

Department of Transportation -- Federal Aviation Administration

Supplemental Type Certificate

Number SA2691SO

This certificate issued to Springer Aerospace LTD.
9353 S.E. 72nd Avenue
Ocala, FL 34472

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

Original Product - Type Certificate Number *See attached eligibility list number

Make: 199-167 for approved airplane models

Model: and airworthiness regulations

Description of Type Design Change: Replacement of Goodyear Brakes with Cleveland Brake Conversion Kit No. 199-167 in accordance with Redline Corporation Drawing No. H119, dated September 14, 1989, or later FAA approved revision.

Limitations and Conditions: This approval should not be extended to other airplanes of this model on which other previously approved modifications are incorporated unless it is determined by the installer that the interrelationship between this change and any of those other previously approved modifications will produce no adverse effect upon the airworthiness of that airplane. This determination should include consideration of significant changes in weight distribution such as an increase in the fixed disposable weight in the fuselage. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

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

Date of application: September 22, 1988

Date reissued: March 18, 2004

Date of issuance: February 14, 1990

Date amended: May 2, 1994

By direction of the Administrator

Robert Capparito
(Signature)

for Melvin D. Taylor
Manager, Atlanta Aircraft
Certification Office

(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

(Continuation Sheet)

Number SA2691SO

* FAA Approved Master Eligibility List (MEL) No. 199-167, Installation of Cleveland Hydraulic Brake Conversion Kit No. 199-167.

Airplane Make	Airplane Model	Original Type Certification Number	Certification Basis
Beechcraft	B17L	ATC 560	CAR 4a
	C17L	ATC 602	CAR 4a
	D17S	ATC 649	CAR 4a
	E17L	ATC 641	CAR 4a
	F17D	ATC 689	CAR 4a
	G17S	ATC 779	CAR 4a
Howard	DGA-15 Series	A-717	CAR 4a
Stinson Aircraft	SR6	ATC 580	CAR 4a
	SR7	ATC 594	CAR 4a
	SR8	ATC 608	CAR 4a
	SR9	ATC 625	CAR 4a
	SR10	ATC 679	CAR 4a
	V77	ATC 774	CAR 4a
Spartin Aircraft	7W	ATC 646	CAR 4a

MAR 1 8 2004

Date

for Robert Carpenter
Manager, Atlanta Aircraft
Certification Office

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

FAA FORM 8110-2-1 (10-69)

This certificate may be transferred in accordance with FAR 21.47.

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Stinson	Model: V-77
	Serial No.: 77-143	Nationality and Registration Mark: N50227
2. Owner	Name *(As shown on registration certificate)*: Bailey James H.	Address *(As shown on registration certificate)*: 409 20th Ave, Brookings SD 57006

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.
William R Ebbinga 58071 Richland Rd Griswold IA 51535	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	1828527

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 herin is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
June 27, 2010	William R Ebbinga

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
June 27, 2010	A&P1828527 AI	William R Ebbinga

NOTICE

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

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

N 50227	June 27, 2010
Nationality and Registration Mark	Date

1. Removed rotating beacon assembly.
2. Installed Aeroflash Model 156-0017 Strobe light system in accordance with PMA under FAR 23.1401,27.1401 and 91.33(c)3 as amended by Federal Docket 10129, Dated 10 July 1971 and Instruction Sheet 130-0071 dated 12-1-88 and AC 43.13-1A .
3. Power requirement 1.5 amps
4. Access thru rear baggage door , upper right side.
5. See manufactures instructions.
6. See manufactures instructions.
7 See manufactures instructions.
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. n/a

Included in new weight and balance June 27 2010 New Empty weight 2745 CG 86.65 Moment 237858.15
//END//

☑ Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only

Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Stinson	Model: V-77
	Serial No.: 77-143	Nationality and Registration Mark: N50227
2. Owner	Name *(As shown on registration certificate)*: Bailey James H.	Address *(As shown on registration certificate)*: 409 20th Ave, Brookings SD 57006

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.
William R Ebbinga 58071 Richland Rd Griswold IA 51535	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	1828527

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 herin is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
June 27, 2010	William R Ebbinga

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
June 27, 2010	A&P1828527 AI	William R Ebbinga

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.)

N50227	June 27 2010
Nationality and Registration Mark	Date

The following equipment was not found installed in N50227. SN 77-143

Bendix Radio	at 61.05 aft of cg	wt 7.5 lbs
Mag-Sig	61.0	1.0
GE Radio	75.0	10.5
ADF Control	74.0	10.0
ADF REC.	147.5	65.0
ADF INV.	185.2	

According to a 337 dated 8-3-1954 this equipment was installed at that date.
Was not installed when aircraft was inspected .

// END //

☐ Additional Sheets Are Attached

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Stinson	Model: V-77
	Serial No.: 77-143	Nationality and Registration Mark: N50227
2. Owner	Name *(As shown on registration certificate)*: Bailey James H.	Address *(As shown on registration certificate)*: 409 20th Ave, Brookings SD 57006

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.
William R Ebbinga 58071 Richland Rd Griswold IA 51535	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	1828527

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 herin is true and correct to the best of my knowledge.

Date	Signature of Authorized Individual
June 27, 2010	William R Ebbinga

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
June 27, 2010	A&P1828527 AI	William R Ebbinga

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.)

N50227	June 27 2010
Nationality and Registration Mark	Date

AIRWOLF OIL-AIR SEPERATER installed into engine breather system I/A/W STC SA02268CH
Drawing AFC-W360 Rev C Date 08-28-06

AIRWOLF OIL-AIR SEPERATER located forward of fire wall on upper left side . Included in new empty weight.

See attachment for continued airworthiness.

//END//

☑ Additional Sheets Are Attached

AIRWOLF AIRSEP INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA)

A/C Make : STINSON Model: U-77

Serial#: 77-143 N#: 50227

This Instructions for Continued Airworthiness (ICA) meets the requirements of 14 CFR Part 23 Appendix G.

AIRWORTHINESS LIMITATIONS

1.0 The Airworthiness Limitations Section is FAA approved and specifies maintenance required under 43.16 and 91.403 of the Federal Aviation Regulations unless an alternate program has been FAA approved.

2.0 An STC incorporated in a larger field approval major alteration may have an airworthiness limitation. The FAA inspector should not establish, alter, or cancel an airwothiness limitation without coordinating with the appropriate FAA Type Certificate Holding Office.

SECTION	DESCRIPTION
1.	Introduction: The Airwolf AirSep system is a passive oil recovery system. There are no moving parts within the AirSep.
2.	Description: The AirSep is a device through which the process of coolescense, allows the oil that is normally expelled out the engine breather tube into the atmosphere, to be collected within the device for recovery at which time it is then returned back into the engine for reuse.
3.	Servicing information: N/A
4.	Maintenance Instructions: Clean inside of AirSep and oil return line to engine with Stoddard Solvent, Mineral Spirits or other suitable solvent, at each annual or 100 hr. inspection. In the event of a vacuum pump failure, disassemble Air/Oil Separator, thoroughly clean it and all lines, hoses and fittings and remove any traces of vacuum pump debris. Reassemble and lightly torque top nut only enough to prevent top and bottom can from rotating and center gasket to seal to prevent any leakage.
5.	Trouble shooting information: If any oil is seeping out of center seam of AirSep can, replace center gasket and lightly torque top nut only enough to prevent further leakage which in most cases is 12 in/lb. If breather oil is found on the belly of the aircraft, check that outlet duct is located as per the above installation instructions and is not located in or near the high velocity airstream.
6.	Removal and replacement information: Refer to the above Approved Installation Instructions for the AirSep kit.
7.	Diagrams: N/A
8.	Special inspection requirements: None
9.	Application of protective treatments: N/A
10.	List of special tools: N/A
11.	Recomended overhaul periods: N/A
12.	Revision: The latest revision of this ICA can be found at www.airwolf.com

United States of America

Department of Transportation — Federal Aviation Administration

Supplemental Type Certificate

Number SA02268CH

This certificate issued to Airwolf Filter Corp.
15369 Madison Road
Middlefield, OH 44062-8404

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

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

*See attached FAA Approved Model List (AML) No. SA02268CH for list of approved airplane and engine models and applicable airworthiness regulations.

Description of Type Design Change:
Installation of Airwolf Filter Corp. Air Oil Separator, in accordance with Airwolf Filter Corp. Installation Instructions as listed on AML No. SA02268CH, or later FAA approved revision.

Limitations and Conditions:
1. Compatibility of the design change with previously approved modifications must be determined by the installer.
2. A copy of this Certificate and FAA Approved Model List (AML) No. SA02268CH, Revision None, dated March 30, 2006, or later FAA approved revision, must be maintained as part of the permanent records for the modified aircraft.
3. If the holder agrees to permit another person to use this certificate to alter the product, the holder shall give the other person written evidence of that permission.

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

Date of application: June 24, 2004

Date reissued:

Date of issuance: March 30, 2006

Date amended:

By direction of the Administrator

(Signature)

For Charles L. Smalley
Manager, Systems & Flight Test Branch
Chicago Aircraft Certification Office

(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

FAA APPROVED MODEL LIST (AML) NO. SA02268CH

AIRWOLF FILTER CORP

FOR INSTALLING

AIR OIL SEPARATOR KIT

Issue Date: March 30, 2006

AIRCRAFT MAKE	AIRCRAFT MODEL	ORIGINAL TYPE CERTIFICATE NUMBER	CERTIFICATION BASIS FOR ALTERATION	INSTALLATION INSTRUCTIONS		AML AMENDMENT DATE
				NUMBER	REVISION NO. AND DATE	
CESSNA AIRCRAFT COMPANY	337, 337A (USAF O2B), 337B, 337C, 337D, 337E, 337F, 337G, 337H, T337B, T337C, T337D, T337E, T337F, T337G, T337H, T337H-SP, P337H, M337B (USAF O2A)	A6CE	CAR 3, FAR 23	AFC-W360	C 08/28/2006*	08/28/2006
CESSNA AIRCRAFT COMPANY	401, 401A, 401B, 402, 402A, 402B, 402C, 411, 411A, 414, 414A, 421, 421A, 421B, 421C, 425	A7CE	CAR 3	AFC-W360	C 08/28/2006*	08/28/2006
CIRRUS DESIGN CORP	SR20, SR22	A00009CH	FAR 23	AFC-W360	C 08/28/2006*	08/28/2006
COLUMBIA AIRCRAFT MANUFACTURING	LC40-550FG, LC42-550FG, LC41-550FG	A00003SE	FAR 23	AFC-W360	C 08/28/2006*	08/28/2006
COMMANDER AIRCRAFT COMPANY	112, 112TC, 112B, 112TCA, 114, 114A, 114B, 114TC	A12SO	FAR 23	AFC-W360	C 08/28/2006*	08/28/2006
CONSOLIDATED-VULTEE AIRCRAFT CORP, STINSON DIVISION	L-5, L-5B, L-5C, L-5D, L-5E, L-5E-1, L-5G	A-764	CAR 4a	AFC-W360	C 08/28/2006*	08/28/2006
CONSOLIDATED-VULTEE AIRCRAFT CORP, STINSON DIVISION	V-77	A-774	CAR 4a	AFC-W360	C 08/28/2006*	08/28/2006
CONSOLIDATED-VULTEE AIRCRAFT CORP, STINSON DIVISION	L-1, L-1A, L-1B, L-1C, L-1D, L-1E, L-1F	LTC-26	CAR 9	AFC-W360	C 08/28/2006*	08/28/2006

US Department of Transportation
Federal Aviation Administration

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

Form Approved
OMB No. 2120-0020

For FAA Use Only
Office Identification

INSTRUCTIONS: Print or type all entries. See FAR 43.9, FAR 43 Appendix B, and AC 43.9-1 (or subsequent revision thereof) for instructions and disposition of this form. This report is required by law (49 U.S.C. 1421). Failure to report can result in civil penalty not to exceed $1,000 for each such violation (Section 901 Federal Aviation Act of 1958).

1. Aircraft	Make: Stinson	Model: V-77
	Serial No.: 77-143	Nationality and Registration Mark: N50227
2. Owner	Name *(As shown on registration certificate)*: Bailey James H.	Address *(As shown on registration certificate)*: 409 20th Ave, Brookings SD 57006

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.
William R Ebbinga 58071 Richland Rd Griswold IA 51535	XX U.S. Certificated Mechanic Foreign Certificated Mechanic Certificated Repair Station Manufacturer	1828527

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 herin is true and correct to the best of my knowledge.

Date: June 27, 2010
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
June 27, 2010	~~AP~~ 1828527A	[signature]

NOTICE

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

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

1. Removed all fabric from covered assemblies. Cleaned and inspected all uncovered assemblies. Made minor repairs as needed. Inspected all assemblies for corrosion and treated as necessary I/A/W AC 43-13-1A Chapter 1 Section 2 , Chapter 3, Section 1, Chapter 6 and applicable sections of 43-4A for "Corrosion Control for Aircraft"

Complete pre-covering inspection of all assemblies and found satisfactory for recover;

Recovered all assemblies with STITS POLY-FIBER 3.4 OZ. Fabric I/A/W STITS POLY-FIBER COVERING & PAINTING MANUAL dated February 1993 .. All work I/A/W procedure manual No. 1, Revision fifteen ,Seventh Edition , February 1993..

Painted I/A/W STITS-POLYFIBER MANUEL using STITS POLY-TONE . Base color #125 Tucson Cream with trim color of # 187 Christen Eagle Red

2. This alteration is approved under FAA STC SA1008WE dated July 26,1965.
3. n/a
4. Any repairs to dope& fabric to be I/A/W/ STITS POLY-FIBER PROCEDURE MANUEL # 1.
5. Normal maintenance and inspection I/A/W Stinson Erection and Maintenance Instructions TO 01-50KA-2
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. n/a

Fabric and paint in new empty weight of June 27,2010..

//END//

☑ Additional Sheets Are Attached

United States of America

Department of Transportation—Federal Aviation Administration

Supplemental Type Certificate

Number SA1008WE

This certificate, issued to STITS AIRCRAFT CORPORATION

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

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

*See attached Master Eligibility List Number 1008 for list of approved airplane models and applicable airworthiness regulations.

Description of Type Design Change: Remove original cloth covering and install Poly-Fiber covering material in accordance with Poly-Fiber Covering Kit No. 1 consisting of Pages 2, 3 and 4, dated November 1975, of the Poly-Fiber Procedures Manual No. 1 or later FAA approved revision thereto, Poly-Fiber Source of Materials and Poly-Dope Products Process Specification No. 50.

Limitations and Conditions: The approvals of this change in type design applies basically to those aircraft models listed on the attached sealed FAA Approved Master Eligibility Application List No. 1008. This approval should not be extended to other specific airplanes of those models on which previously approved modifications are incorporated unless it is determined that the inter-relationship between this change and any of those other previously approved modifications will introduce no adverse effects upon the airworthiness of those airplanes.

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

Date of application: May 20, 1965

Date of issuance: July 26, 1965

Date reissued:

Date amended: March 18, 1966; March 22, 1976

By direction of the Administrator

Louis Lippis
(Signature)

Acting Chief, Aircraft Engineering Division
(Title)

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

This certificate may be transferred in accordance with FAR 21.47.

FAA Form 8110-2 (10-68)

F.A.A. APPROVED MASTER ELIGIBILITY APPLICATION LIST NO. SA1008WE DATED JULY 26, 1965. Aircraft models eligible for the installation of POLY-FIBER per Manual No. 1.

Aircraft Make & Model	T.C. No.	Components Covered
Aeronca C-3, PC-3	ATC-396	Complete Aircraft
Aeronca (Trytek) K, KS	ATC-634	Complete Aircraft
Aeronca LC, LCS	ATC-614	Complete Aircraft
Aeronca O-58A (Army L-3A), O-58B (Army L-3B, L-3C), SO-58B	TC A-751	Complete Aircraft
Aeronca (Trytek) 50-C, 65-C, 65-CA (Army L-3F), S-50-C, S-65-C, S-65-CA, KCA	TC-675	Complete Aircraft
Aeronca 50-TC, 60-TF, 65-TC (Army L-3J), 65-TF, 50-TL 65-TL, 65-TAC (Army L-3E), 65-TAF (Army L-3D), 65-TAL, YO-58 (Army L-3)	A-728	Complete Aircraft
Aeronca (Bellanca) (Trytek) 11AC, S11AC, 11BC, S11BC	TC A-761	Complete Aircraft
Aeronca 15AC, S15AC	TC A-802	Fuselage & Empennage
Aeronca (Champion) (Bellanca) 7AC, 7ACA, S7AC, (L-16A) 7BCM, (L-16B) 7CCM, S7CCM, 7DC, S7DC, 7EC, S7EC, 7ECA, 7FC, 7GC, 7GCA, 7FCAA, 7GCB, 7GCBA, 7GCBC, 7HC, 7JC, 7KC, 7KCAB	TC A-759	Complete Aircraft
Aeronca (Bellanca) 8KCAB, 8GCBC	TC A21CE	Complete Aircraft
Aetna Aerocraft 25A	733	Complete Aircraft
Air Tractor Inc. AT300, AT301, AT302, AT400, AT400A	A9SW	Elevators & Rudder
American Eaglet B-31	ATC-450	Complete Aircraft
Beechcraft D17S (Army UC-43, -43B; Navy GB-1, -2) SD17S	TC-649	Complete Aircraft
Beech C18S (Army C-45, -45A 45F, UC-45B, -45F, AT-7, -7A, -7B, -7C; Navy JRB-1, -2, -3, -4, SNB-2, -2C)	TC-757	All Fabric Covered Components
Bellanca 14-13, 14-13-2, -3, -3W	TC-773	Complete Aircraft
Bellanca Cruse Master 14-19, -19-2, -3, -3A, 17-30, 17-31, 17-31 TC	TC-1A3	Complete Aircraft
Blanik L-13 LET, n.p.	TC-G24EU	All Control Surfaces
Boeing A75L3, 75 (Army PT-13), A75 (Army PT-13A, -13B, -13C), B75 (Navy N2S -2), E75 (Army PT-13D; Navy N2S-5; PT-13D/N2S-5), A75J1 (Army PT-18), A75L300, A75N1 (Army PT17, -17A; Navy N2S-1, -4), B75N1 (Navy N2S-3), D75N1 (Army PT-27), IB75A, E75N1	TC-743	Complete Aircraft
Brewster Fleet 7, 7-C 7 Deluxe, 10	ATC-374	Complete Aircraft
Callair A, A-2, A-3, A-4 A-5, A-5T, A-6, A-7, A-7T A-9, A-9B	TC A-758	Complete Aircraft
Callair, B-1A	TC-A8WE	Both Wings
Cessna 120, 140	TC-768	Both Wings
Cessna 170	TC-799	Both Wings
Commonwealth *(see Rearwin)*		
Consolidated PBY-5 (Army OA-10), PBY-5A (Army OA-10A)	TC 2-548	Right Aileron
Culver V, V2	TC-778	Complete Aircraft
Culver, Army PQ-14A, -14B YPC-14A, -14B; Navy TD2C-1	LTC-28	Complete Aircraft
Curtiss P-40L, P-40N	LTC-18	R & L Elevators
Curtiss-Wright Jr. CW-1	TC-397	Fuselage & Empennage
deHavilland, Cliff Robertson, DH 82A	TC A8EU	Complete Aircraft
deHavilland 104 Dove Series 1A, 2A, 5A, 5BA, 6A, 6BA, 7A, 7AXC, 8A, 8AXC	TC-807	All Fabric Covered Components
Douglas DC3-G102, DC3-G102A (Army C-49E, -50, -50A, -50B, -50C, -50D, -51), DC3-G103A, DC3-G202A (Army C-49, -49A, -49B, -49C, -49D, -49J, -49K; Navy R4D-2)	TC-618	Ailerons, Elevators & Rudder
Douglas DC3A-SCG, -SC3G, -S1CG, -S1C3G (Army C-41, C-41A, C-48, -48A, -52, -52A, -52B, -52C, -53, -53B, -53C, -53D, -68; Navy R4D-3, -4), DC3A-S4C4G; DC3C-SC3G, -S1C3G, -S4C4G (Army C-47, -47A; Navy R4D-1, -5; DC3C-R-1830-90C (Army C-47B; Navy R4D-6); DC3D-R-1830-90C (Army C-117A)	TC-A669	Ailerons, Elevators & Rudder
Douglas A-26B, A-26C	LTC-3	Ailerons, Elevators & Tabs, Rudder & Tabs
Douglas C-54-DC (Army C-54; Navy R5D), C54A-DC (Army C-54A, Navy R5D-1), C54B-DC (Army C-54B, Navy R5D-2), C54D-DC (Army C-54D, Navy R5D-3), C54E-DC (Army C-54E, Navy R5D-4), C54G-DC (Army C-54G, Navy R5D-5), DC-4	TC 762	Rudder, Elevators & Ailerons
McDonnell Douglas DC-6A, (Navy R6D-1, USAF C-118A)	TC 6A3	Rudder
McDonnell Douglas DC-6B, (Navy R6D-1Z)	TC 6A4	Rudder
Emair MA-1, MA--1B	TC A6PC	Complete Aircraft
Ercoupe (Univair) 415-C, CD	TC A-718	Both Wings
Ercoupe (Univair) 415-D, -E, -G	TC A-787	Both Wings
Fairchild M-62A (Army PT-19, -19A, -19A-AE, -19A-SL, -19B, -19B-AE), M-62A-3 or -4 (Army PT-26, -26A, -26B), M-62B, -62C (Army PT-23, -23-AE, -23-HO -23-SL, -23A, -23A-SL)	TC-724	Complete Aircraft
Fairchild 24 C8	ATC-475	Wings
Fairchild 24 C8C, C8CS	ATC 534	Complete Aircraft
Fairchild 24 C8E & 24 C8ES	ATC-600	L & R Elevators & Top of Horiz. Stab
Fairchild 24R9 (Army UC-61C), 9S, 40 (Army UC-86, 40S, 46, 46A (Army UC-61K), 46S	TC-706	Complete Aircraft
Fleetwing F-401	2-540	L & R Wing Panels
Fleet 16B (RCAF Finch II)	2-566	Complete Aircraft
Frankfort (Corcoran) B Glider (Army XTG-1, -TG-1A, -1C)	GTC-7	Complete Aircraft
Franklin "A" S/N 8	ATC 2-246	Fuselage
Funk (McClish) B, B75L (Army UC-92), B85C	TC-715	Complete Aircraft
General Dynamics Corp. Vultee BT-13, -13A (Navy SNV-1), -13B (Navy SNV-2) -15	2-571	All Control Surfaces
Great Lakes Aircraft Co.	TC	Complete Aircraft
2T-1A, 2T-1A-1, 2T-1A-2	A18EA	
Grumman AG-CAT, G-164, -164A	TC 1A16	All Fabric Covered Components
Grumman FM-2	LTC-25	Ailerons Elev. & Rudder
Grumann G21, -21A (Army OA-9 Navy JRF-1, -2, -3, -4, -5, -6B)	TC 654	All Fabric Covered Surfaces
Grumman G-44 (Army OA-14; Navy J4F-2) -44A, Scan Type 30	TC A-734	Aft Section of Wings
Grumman G-73	A-783	Rudder
Grumman Navy F8F-1	LTC-23	Both Elevators & Ailerons
Grumman Navy TBF & TBM Series	LTC-8	Ailerons, Elevators & Rudder
Grumman HU-16A, HU-16B	A83350	Ailerons Rudder & Elevators
Harlow (Peacock) PJC-1, -2 (Army UC-80)	TC-659	Rudder
Helio H-250, H-295 (USAF U-10D), H-391 (USAF YL-24) H39AB, H395 (USAF L-28A) H395A	TC-1A8	L & R Ailerons
Helton (McBemas) Lark 95	TC-748	Complete Aircraft
Howard DGA-15J (Army UC-70B), DGA-15P (Army UC-70; Navy GH-1, -2, -3, NH-1), DGA-15W	TC-717	Complete Aircraft
Inland W-500	ATC-315	Both Wings & Rudder
Interstate and/or Callair S-1A, S-1A-65F, -85F, -90F	TC-737	Complete Aircraft
Interstate and/or Callair S-1B1 (Army L-6, XL-6)	TC-754	Complete Aircraft

[illegible]

Aircraft Make & Model	T.C. No.	Components Covered
Intrepriderea De Contructii Aeronautice Brasov 1S-28B2	G40EU	Aileron, Rudder & Elevator
Laister-Kauffman LK-10A (Army TG-4AO, LK-10B)	TCG-15	Complete Aircraft
Luscombe 8, 8A, 8B, 8C, 8D, 8E, 8F, T-8F	TC-694	Both Wings
Maule Bee Dee M-4, M-4, -4C, -4S, -4T, M-4-210, -210C, -210S, -210T, -220C, -220S, -220T, -180C, -180S, -180T, M-4-220, M-5-180C, -200, M-5-210C, -210TC, -220C, -235C, M-6-180, M-6-235, M-7-235, MX-7-235, -180.	TC-3A23	Fuselage & Empennage
McKinnon G-21G	TC 4A24	Rudder
Meyers OTW, -KR, -145, -160	TC-A736	All Fabric Covered Components
Mooney M20, M20A, M20B M20C, M20D, M20E, M20F M20G	TC-2A3	Complete Aircraft
Mooney Mite M-18C-18C55, -18L, -18LA	TC-803	Complete Aircraft
Monocoupe 90, 90A, 90AF, 90AF-100, 90AL-115	TC-306	Complete Aircraft
Moth 60-GM, -GMW	ATC-197	Complete Aircraft
Naval Aircraft Factory Navy N3N-3	2-569	Complete Aircraft
North American BC-1A, AT-6 (SNJ-2), -6A (SNJ-3), -6B, -6C (SNJ-4), -6D (SNJ-5), -6F (SNJ-6, -7), T-6G	2-575	All Fabric Covered Components
North American RB-25, B-25C, GH, J; B-25N, TB-25N	LTC-2	Rudder
North American (Cavalier) Army P-51C, D, K	LTC-11	Rudder
Nelson BB-1 Glider	GTC-19	Fuselage
Pasped W-1	ATC 2-546	Complete Aircraft
Perth-Amboy Bird BW	ATC-382	Complete Aircraft
Perth-Amboy Bird CK	ATC 388	Complete Aircraft
Piaggio P136-L, -L1, -L2	TC 813	All Control Surfaces
Piper E-2	ATC 455	Complete Aircraft
Piper J-2	ATC-595	Complete Aircraft
Piper J3F-50, -50S, -60, -60S, -65 (Army L-4D) -65S	TC-692	Fuselage & Wings
Piper J3C-40, -50, -50S, 065 (Army L-4, -4A, -4B, -4J, Navy NE-1, -1), -65S, PA-11, PA-11S	TC-691	Complete Aircraft
Piper J3L, -S, -65 (Army L-4C) -65S	TC698	Complete Aircraft
Piper J4, J4A, J4A-S	TC-703	Complete Aircraft
Piper J5A (Army L-4F), J5A-80, J5B (Army L-4G), J5C, AE-1, HE-1	TC-725	L & R Wings & Fuselage
Piper PA-12, PA-12S	TC-780	Complete Aircraft
Piper PA-15	TC-800	Complete Aircraft
Piper PA-16, PA-16S	TC-1A1	Complete Aircraft
Piper PA-18, PA-18S, PA-18 "105" (Special), PA-18S "105" (Special), PA-18A, PA-18 "125" (Army L-21A), PA-18S "125", PA-18AS "125", PA-18 "135" (Army L-21B), PA-18A "135", PA-18S "135", PA-18AS "135", PA-18 "150", PA-18A "150", PA-18S "150", PA-18AS "150", PA-19 (Army L-18C), PA-19S	TC-1A2	Complete Aircraft
Piper PA-20, -20S, -20-115 -20S-115, -20-135, -20S-135	TC-1A4	Complete Aircraft
Piper PA-22, -22-108, -22-135, -22S-135, -22-150, -22S-150, -22-160, -22S-160	TC-1A6	Complete Aircraft
Piper PA-25, 25-235 -25-260	TC-2A8	Complete Aircraft
Pitcarin PA-5	ATC-18	Fuselage & Empennage
Pitts S-1S, S-1T, S-2, S-2A, S-2S, S-2B	TC-A8S0	Complete Aircraft
Porterfield CP-50	TC-690	Fuselage & Empennage
Porterfield CP-55, -65, CS-65, FP-65, LP-65	TC-720	Complete Aircraft
Pratt, Read PR-G1 (Army TG-32; Navy LNE-1)	GTC-12	Complete Aircraft
Rearwin, Commonwealth, 175 180, 180F, 185, 190F	TC-729	Complete Aircraft
Rearwin (Pigman) 8090, 8125, 8135 (Army UC-102A), 8135T	TC 711	Complete Aircraft
Rockwell Commander 600 S-2D, S-2R	TC-A4SW	Hori. & Vertical Stabilizers & Rudder

Aircraft Make & Model	T.C. No.	Components Covered
Ryan Aeronautical ST-3KR (Army PT-22, -22A)	TC-749	All Fabric Covered Components
Ryan Aeronautical ST-A	ATC-571	All Fabric Covered Components
Ryan SCW-145	TC 658	Wings & Empennage
Scheibe Bergfalke-II/55 -III	TC-7G9	Both Wings
Schempp-Hirth SHK1	G9EU	Wings & Empennage
Schleicher Ka 6, Ka 6B, KA 6B Ka 6C, Ka 6CR, Ka 6CR-Pe, KA 6E	TC 7G1	Wings & Empennage
Schleicher K7, Ka2b	TC7G3	Fuselage
Schleicher K8, K8B	TC-7G4	Complete Aircraft
Schleicher Zugvogel-111B	TC G4EU	Fuselage, Empennage
Schleicher ASK13	G15EU	Both Wings, Elevators & Ailerons
Schweizer SGU-1-19, -19A	TCG-17	Complete Aircraft
Schweizer SGU2-22, -22A -22B, -22C, -22CK, -22E, -22EK	TCG-18	Complete Aircraft
Schweizer SGC 1-26, -26A -26B, -26C, -26D, -26E	TC-1G10	Complete Aircraft
Schweizer SGS 2-8, SGS 2-8A	GTC 5	All Fabric Covered Components
Schweizer SGS 2-32	TC G1EA	L & R Aileron & Rudder
Schweizer SGS 2-33, -33A, -33AK	TC-G2EA	All Fabric Covered Components
Schweizer SGS1-34, -34R	G3EA	Rudder
Stearman-Hammond, Y1S	TC-644	L & R Wings & Center Section
Stearman 4E	ATC-292	Complete Aircraft
Stearman C3-B	ATC-55	Complete Aircraft
Stinson SR-5, -5A, (Army L-12), -5B, -5C, -5E	ATC 530	Complete Aircraft
Stinson SR-7A, -7B, -7C	ATC 594	Fuselage
Stinson SM-8A	ATC-295	Complete Aircraft
Stinson SM-8B, -8BT	ATC 294	Complete Aircraft
Stinson 10A (Army L-9B) 10B	TC-738	Rudder
Stinson HW-75, 10	TC-709	Complete Aircraft
Stinson L-5, -5B, -5C, -5D, -5E, -5E-1, -5G	TC-764	Complete Aircraft
Stinson 108, 108-1, -2, -3, -5	TC-A767	Complete Aircraft
Stinson V-77 (Army AT-19)	TC-774	Complete Aircraft
Taylorcraft Model A	TC-643	Complete Aircraft
Taylorcraft DC-65 (Army L-2, -2C), DCO-65 (Army L-2A, -2B, -2M), DF-65 (Army L-2E), DL-65 (Army L-2D)	TC-746	Complete Aircraft
Taylorcraft BC, BCS, BC-65, TCS-65, BC12-65 (Army L-2H), BCS12-65, BC12-D, BDS12-D, BC12-D1, BCS12-D1, BC12D-85, BCS12D-85, BC12D-4-85, BCS12D-4-85	TC-A696	Complete Aircraft
Taylorcraft-19, F-19, F-21, F21A, F21B, F22, F22A.	TC1A9	Complete Aircraft
Travel Air 4000	ATC-32	Complete Aircraft
Vultee *(See General Dynamics Corporation)*		
Waco ASO	ATC-41	Complete Aircraft
Waco CSO	ATC 240	Complete Aircraft
Waco GXE	ATC 13	Fuselage, R & L Horiz. Stab, L & R Elevator
Waco UBF-2	ATC 473	Complete Aircraft
Waco UPF-7, VPV-7	TC-642	Complete Aircraft
Waco QCF-2	TC-416	Complete Aircraft
Waco CUC-1, CUC-2	ATC 575	Complete Aircraft
WACO UIC	ATC 499	Complete Aircraft

When one model of a series of models has been covered and approved all aircraft models manufactured under the same Type Certificate number, civilian or military, are also included in our STC. Thus, our STC for an Aeronca (Champion, Bellanca) 7AC model is also applicable to the approximately 22 (and growing) models of aircraft manufactured as Series 7 under the same TC #759.

When a design is changed to metal skin and manufactured under the same TC number, e.g. the Luscombe Model 8, all models optional fabric or metal covered wing, our STC is applicable only to those models with fabric covered components. Check the aircraft nameplate for the TC number or check with the local FAA-GADO office.

AIRCRAFT OPERATION LIMITATIONS WITH DOOR REMOVED

AIRCRAFT STINSON V-77 (Make and Model) 4713 77-143 (Serial No.) N 50227 (Registration No.)

1. This aircraft may be flown with not more than one cabin door removed, provided the aircraft is operated in accordance with the applicable Civil Air Regulations and the following limitations:

   a. Maximum speed not to exceed any of the following:

      The approved maneuvering speed
      70 percent maximum level flight speed
      70 percent maximum structural cruising speed

   b. No acrobatic maneuvers are permitted.

   c. Maximum yaw angle 10°; maximum bank angle 15°.

   d. An FAA (CAA) approved safety belt installation must be provided for each occupant.

   e. No smoking permitted.

   f. When operations other than parachute jumping are conducted, a suitable guardrail or equivalent safety device must be provided for the doorway.

   g. All loose articles must be tied down or stowed.

   h. No baggage may be carried.

   i. Jumpers' static lines must be kept free of pilot's controls and control surfaces.

   j. Operations limited to VFR conditions.

2. The following placard must be placed on the instrument panel in full view of the pilot:

   For flight with door removed, see
   "Aircraft Operating Limitations with Door Removed."

3. A copy of these limitations must be carried in the aircraft when flight operations are conducted with the door removed.

   Note: When parachute jumping operations are being conducted, it is recommended that all occupants wear parachutes.

Date December 18, 1963

W. O. Vandewark
W.O. Vandewark
General Maintenance Inspector
WE-GADO-10, Portland, Oregon

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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.
Stinson CONS. VULTEE	V-77	77-143

d. ENGINE MAKE	e. ENGINE MODEL
LYCOMING	R-680-E3A

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

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
MERCY FLIGHTS INC.	BOX 522 MEDFORD. OREGON	N-50227

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 8-25-1954
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

George E. Milligan, Agent
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

8-11-55 (DATE)
AGENT (TITLE)

16—60837-2

Form ACA-305 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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-774 THROUGH SHEET REVISION NO. _____
b. ☐ AIRCRAFT LISTING PAGE NO. _____
c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 1954 (YEAR) THROUGH CARD NO. 55-15
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 760:00 HOURS
d. ☒ ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
SERIAL NO. 4713 TOTAL HOURS 520:00
SERIAL NO. _____ TOTAL HOURS _____
SERIAL NO. _____ TOTAL HOURS _____
SERIAL NO. _____ TOTAL HOURS _____

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

a. LAST AIRWORTHINESS INSPECTION CONDUCTED 8-9-55 (DATE)
☐ BY AIRCRAFT MANUFACTURER
☐ BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
☒ BY MECHANIC, CERTIFICATE NO. A&P M-9083 A&P 544869
b. ☒ PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

RECEIVED SEP 6 10 27 AM '55 ADMINISTRATIVE RECORDS BRANCH W-300

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED

a. ☐ OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
b. ☒ CURRENT OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
c. ☐ CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT
d. ☒ CURRENT WEIGHT AND BALANCE INFORMATION IS AVAILABLE IN AIRCRAFT
e. ☒ THIS INSPECTION HAS BEEN RECORDED IN THE AIRCRAFT RECORDS
f. ☒ CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISSUED TO EXPIRE 8-11-55 (DATE)
g. ☒ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 8-9-55 (DATE)
BY J.C. HAMAKER (NAME OF ISSUING REPRESENTATIVE) 7341 (DESIGNATION NO.)

5. CAA APPROVED REPAIR STATION CERTIFICATION

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

☐ AIRWORTHY
☐ UNAIRWORTHY

(REPAIR STATION AUTHORIZED SIGNATURE) _____ (DATE) _____

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
AVIATION SAFETY AGENT'S SIGNATURE Harold J. Lane	CAA DESIGNATION NO. LA4-257-22	DATE 8-10-55	☐ ACCEPTED ☐ REINSPECTED ☐ SPOT CHECKED

☐ ATTACHMENT

Reg. 4 LA
ASDO 22

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

Form ACA-305a (11-51)

OCDIW

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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
	Stinson	V-77	77-143	N50227

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone and State)
	Al Larson	2804 E 27 st Vancouver Wash

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 8 above)			XXX	
b. POWERPLANT					
c. PROPELLER					
d. APPLIANCE	TYPE AND MANUFACTURER				

RECEIVED AUG 9 1962 PORTLAND ASDO

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)*
Std.	2560	85.58"	1440

5. CONFORMITY STATEMENT (Complete and check)

a. AGENCY'S NAME AND ADDRESS	b. KIND OF AGENCY	c. CERTIFICATE NO.
Albert R Larson 2804 E 27 St Vancouver Wash	☒ U. S. Certificated Mechanic. ☐ Foreign Certificated Mechanic. ☐ Certificated Repair Station. ☐ Manufacturer. ☐ (Check if repair or alteration was made under delegation option procedures.)	AP 1433562

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 3.62
(Date repair and/or alteration completed)

Albert R Larson
(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.

8-9-62
(Date of approval or rejection)

Herman O. Wilke A&P 346592
(Signature of authorized individual; title or identification number)

7. TO BE COMPLETED ONLY BY CAA PERSONNEL

a. ☐ Forwarded for engineering comment ☐ See attached memorandum

b. ☒ Accepted 8-10-62 (Date) ☐ Reinspected _____ (Date) ☐ Spot Checked DEC 4 1962 (Date)

WE-GADO-4
(CAA designation number)

Keith M. Bancroft
(Signature Aviation Safety Agent)

16—54010-4

Form ACA-337 (4-52)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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.*

Fuselage, Left wing and all controls recovered Irish Linen. DTD 540 complies with
Right wing recovered with Grade A Cotton TSO-C15. FAA TSO-C15

Clear Butarate Dope 4 coats
Aluminum Dope 5 coats
pigment Dope 8 coats

Aircraft weighed with following items installed I,3,101,102,103,105,201
202,301,302,304,401
Right scale reading:1210 Left scale:1170: Tail scale: 180
Distance from main Wheel to tail wheel,228.75 "
Distance from Main wheel to Datum line , 69.5"
Empty weight C.G. 180x228.75/2560 16.08 +69.5 =85.58" from Datum line

MOST FOWARD POSITION C.G.-

Basic aircraft	2560	85.58	219084.80
Pilot	170	84	14280
Oil 4.25 Gal	31.87	37	-1179.19
Gas 25 gal Min	150	103.5	15525.0
	2911.87		247710.61

Most foward C.G. 247710.61/ 2911.87= 85" Aft Datum line

MOST REARWARD C.G. LOCATION

Basic aircraft	2560	85.58	219084.80
Oil 4.25 Gal	31.87	37	-1179.19
Pilot, Pass	340	84	28560
Pass three(3)	510	120	61200
Gass 70Gal	420	103.5	43470
	3861.87		351135.71

Most rearward C.G. 351135.71/3861.87 =90.9" Aft datum line

Items Bendix Radio,ADF control ADF Receiver ADF Inverter removed by persons unknown and were not in aircraft at time of weighing

Recovered accordance CAM 18 Ref. Sect.18.30(b) (5) (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. ☐

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

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

8/24/54 [illegible]

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-R011.3

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.
Stinson Consolidated Vultee	V-77	77-143

d. ENGINE MAKE	e. ENGINE MODEL
Lycoming	R-680-E3B

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

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
Mercy Flights Incorporated	Box 522 Medford, Oregon	N 50227

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

a. ☐ CERTIFICATE OF REGISTRATION, FORM ACA-500 (PART A). DATE OF ISSUE _____
b. ☒ APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B). FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON Nov. 24, 1953 See note. (DATE)
c. ☐ DEALER'S REGISTRATION CERTIFICATE, FORM ACA-1707, DATED _____

Copy of request for duplicate Reg. Cert. Attached.

*In order to be eligible for registration an aircraft must be owned by a citizen of the United States, as defined by Section 1 (19) of the Civil Aeronautics Act of 1938, as amended.

ATTACHMENTS (*Check which*)
☒ ACA-319
☒ ACA-337
☐ ACA-317
☒ WEIGHT AND BALANCE REPORT
☐ DATA, DRAWINGS, ETC.
☐ UNAPPROVED DEVIATION DATA

Paul R. Smith
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

8-9-54 (DATE)
Agent (TITLE)

16—60887-2

Form ACA-305 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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-774 THROUGH SHEET REVISION NO. 0
b. ☐ AIRCRAFT LISTING PAGE NO. _____
c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 1954 (YEAR) THROUGH CARD NO. 16
d. ☐ CIVIL AIR REGULATION PART 8 (MODIFIED TYPE CERTIFICATE)

2. AIRCRAFT AND ENGINE OPERATING RECORDS

a. ☐ AIRCRAFT NEW—NO PREVIOUS OPERATION OR MAINTENANCE HISTORY
b. ☒ COMPLIANCE WITH APPLICABLE AIRWORTHINESS DIRECTIVES RECORDED
c. ☒ AIRCRAFT RECORDS INDICATE THE AIRFRAME HAS BEEN OPERATED A TOTAL OF 583:59 HOURS
d. ☒ ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:

SERIAL NO. 4713 TOTAL HOURS 344:39
SERIAL NO. _____ TOTAL HOURS _____
SERIAL NO. _____ TOTAL HOURS _____
SERIAL NO. _____ TOTAL HOURS _____

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

a. LAST AIRWORTHINESS INSPECTION CONDUCTED Aug 3, 1954 (DATE)
☐ BY AIRCRAFT MANUFACTURER
☐ BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
☒ BY MECHANIC, CERTIFICATE NO. E349275 A&E1004460
b. ☒ PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

RECEIVED SEP 7 1 37 PM '54 ADMIN. & RECORDS BRANCH W-300

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED

a. ☐ OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
b. ☒ CURRENT OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
c. ☐ CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT
d. ☒ CURRENT WEIGHT AND BALANCE INFORMATION IS AVAILABLE IN AIRCRAFT
e. ☒ THIS INSPECTION HAS BEEN RECORDED IN THE AIRCRAFT RECORDS
f. ☒ CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISSUED TO EXPIRE 8-9-55 (DATE)
g. ☒ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 8-5-54 (DATE)
BY Harold G. Lane (NAME OF ISSUING REPRESENTATIVE) 4-257-22 (DESIGNATION NO.)

5. CAA APPROVED REPAIR STATION CERTIFICATION

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

☐ AIRWORTHY
☐ UNAIRWORTHY

(REPAIR STATION AUTHORIZED SIGNATURE) (DATE)

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
J. O. Hammer	7341	8-9-54	
AVIATION SAFETY AGENT'S SIGNATURE	CAA DESIGNATION NO.	DATE	☐ ACCEPTED
Harold G. Lane	LA4-257-22	8-25-54	☐ REINSPECTED ☒ SPOT CHECKED

☐ ATTACHMENT

AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

10C

Form ACA-337 (11-2-46)

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
	Stinson	V-77	77-143	N50227

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone, and State)
	Mercy Flights, Inc.	Box 522, Medford, Oregon

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)*
	2757.125	89.94	1243

* 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
	Smith Aircraft Ser.	Medford, Oregon	8-3-54

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.)

The following equipment installed. See reverse of this form for weights and locations of each piece. Bendix radio with Max-Sig, G. E. Radio, ADF control, ADF receiver, ADF inverter and Battery moved from forward of fire wall to aft of baggage compartment.

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

George R. Bellah	A&E 1004460	8-3-54
Geo. R. Bellah (Signature of supervising mechanic)	(Certificate number and rating)	(Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED ☐ REJECTED ☐ FORWARDED FOR ENGINEERING APPROVAL	SIGNATURE OF DESIGNEE J. O. Hamaker	NO. 7341	DATE 8-9-54
	SIGNATURE OF INSPECTOR LA4-257-22 Harold G. Lane	☐ ACCEPTED ☒ REINSPECTED	DATE 8-25-54

U. S. GOVERNMENT PRINTING OFFICE 16—84619-1

7

Item	Weight	Arm	Moment
Aircraft empty	2638.125	85.5	225559.688
Battery	41.000	185.375	7599.375
Battery	-41.000	38.000	-1558.000
Bendix radio	7.500	61.050	460.875
Max-Sig	1.000	61.000	61.000
G. E. Radio	10.500	75.000	787.500
ADF Control	10.000	74.000	740.000
ADF Receiver	65.000	147.500	9587.500
ADF Inverter	25.000	185.200	4630.000
	2757.125		247967.938

New empty Weight 2757.125 New empty C. G. 89.94

FAA AIRCRAFT REGISTRY
CAMERA NO. 5.N DATE: 4-15-85

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-R011.5.

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.
Consolidated Vultee	V-77	50227 77-143

d. ENGINE MAKE	e. ENGINE MODEL
Lycoming 300 hp.	R-680-E3B

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

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
Merle Wayne Hall	1630 Grant St. North Bend, Ore.	U.S. N-50227

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 Aug. 5, 1953
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 (18) 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

Merle W Hall
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

Aug. 5, 1953 (DATE)
Owner (TITLE)

12-42
E3B
8-25-3

SE—00847-2
Form ACA-305 (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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-774 THROUGH SHEET REVISION NO. —
   - b. ☐ AIRCRAFT LISTING PAGE NO. _____
   - c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 1952 (YEAR) THROUGH CARD NO. 53-15
   - 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 445:45 HOURS
   - d. ☒ ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
     - SERIAL NO. 4713 TOTAL HOURS 197:10
     - SERIAL NO. _____ TOTAL HOURS _____
     - SERIAL NO. _____ TOTAL HOURS _____
     - SERIAL NO. _____ TOTAL HOURS _____

3. PREVIOUS INSPECTION RECORD (INSPECTION RECORDED ON FORM ACA-319)
   - a. LAST AIRWORTHINESS INSPECTION CONDUCTED 7-9-53 (DATE)
     - ☐ BY AIRCRAFT MANUFACTURER
     - ☐ BY APPROVED REPAIR STATION, CERTIFICATE NO. _____
     - ☒ BY MECHANIC, CERTIFICATE NO. A&E 1021032
   - 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 8-5-53 (DATE)
   - g. ☒ PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE 8-22-53 (DATE) BY T. W. HOHLEN (NAME OF ISSUING REPRESENTATIVE) 3608 (DESIGNATION NO.)

RECEIVED AUG 17 12 16 PM '53 ADMIN. & RECORDS BRANCH W-300

5. CAA APPROVED REPAIR STATION CERTIFICATION

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

   (REPAIR STATION AUTHORIZED SIGNATURE) _____ (DATE) _____

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
AVIATION SAFETY AGENT'S SIGNATURE: Harold J. Lane	CAA DESIGNATION NO.: 4-257-22	DATE: 8-5-53	☒ ACCEPTED ☐ REINSPECTED ☐ SPOT CHECKED

☐ ATTACHMENT

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

Form ACA-305a (11-51)

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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.A.

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.
Cons. Vultee	V-77	77-143

d. ENGINE MAKE	e. ENGINE MODEL
Lycoming	R-680E3B

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

a. REGISTERED OWNER'S FULL NAME	b. PERMANENT MAILING ADDRESS	c. AIRCRAFT NATIONALITY AND REGISTRATION MARK
Walden B. Leitz	636 Mitchell Ave. Billings, Montana	N-50227

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

a. ☐ CERTIFICATE OF REGISTRATION, FORM ACA-500 (PART A), DATE OF ISSUE _____
b. ☒ APPLICATION FOR REGISTRATION, FORM ACA-500 (PART B), FORM ACA-500, PART A, FORWARDED TO CAA AIRCRAFT RECORDS BRANCH, W-300 ON August 22, 1952 (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

Walden B. Leitz
(SIGNATURE OF REGISTERED OWNER OR AUTHORIZED AGENT)

August 22, 1952 (DATE) Owner (TITLE)

16—60837-2

Form ACA-305 (11-51)

Acc 11-4-2 6-1

082

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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-774 THROUGH SHEET REVISION NO. —
b. [ ] AIRCRAFT LISTING PAGE NO. ____
c. [X] AIRWORTHINESS DIRECTIVE SUMMARY 1952 (YEAR) THROUGH CARD NO. 19
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 347:50 HOURS
d. [X] ENGINE RECORDS INDICATE THE FOLLOWING OPERATION:
SERIAL NO. 4713 TOTAL HOURS 95:50
SERIAL NO. ____ TOTAL HOURS ____
SERIAL NO. ____ TOTAL HOURS ____
SERIAL NO. ____ TOTAL HOURS ____

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

a. LAST AIRWORTHINESS INSPECTION CONDUCTED August 22, 1952 (DATE)
[ ] BY AIRCRAFT MANUFACTURER
[ ] BY APPROVED REPAIR STATION, CERTIFICATE NO. ____
[X] BY MECHANIC, CERTIFICATE NO. A&E 209539
b. [X] PERIODIC AIRCRAFT INSPECTION REPORT, FORM ACA-319, WAS RETURNED TO OWNER

4. AIRWORTHINESS DOCUMENTS ISSUED OR REVIEWED

a. [ ] OPERATION LIMITATIONS, FORM ACA-309, WAS ISSUED (COPY ATTACHED)
b. [X] CURRENT OPERATION LIMITATIONS, FORM ACA-309, IS AVAILABLE IN AIRCRAFT
c. [ ] CURRENT APPROVED AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT
d. [X] CURRENT WEIGHT AND BALANCE INFORMATION IS AVAILABLE IN AIRCRAFT
e. [X] THIS INSPECTION HAS BEEN RECORDED IN THE AIRCRAFT RECORDS
f. [X] CERTIFICATE OF AIRWORTHINESS, FORM ACA-1362, ISSUED TO EXPIRE August 22, 1953 (DATE)
g. [ ] PREVIOUS FORM ACA-1362 WAS ISSUED TO EXPIRE June 12, 1952 (DATE)
BY Lloyd C. McGrahin (NAME OF ISSUING REPRESENTATIVE) 5242 (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:

[X] AIRWORTHY
[ ] UNAIRWORTHY

(REPAIR STATION AUTHORIZED SIGNATURE) (DATE)

6. CAA REPRESENTATIVE CERTIFICATION

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

DESIGNEE'S SIGNATURE	DESIGNATION NO.	DATE	
T.W.HOHLEN T. W. Hohlen	3608	8-22-52	[X] ACCEPTED
AVIATION SAFETY AGENT'S SIGNATURE	CAA DESIGNATION NO.	DATE	[ ] REINSPECTED
C J Walther	3-579M-2	9-5-52	[ ] SPOT CHECKED

[ ] ATTACHMENT

Form ACA-305a (11-51)

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

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

W-300

Form ACA-305 (11-49)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

Form Approved
Budget Bureau No. 41-R041.4

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

INSTRUCTIONS
Please submit this form to the Civil Aeronautics Administration Aviation Safety Field Representative

1. APPLICATION (CHECK WHETHER)
- ☐ ORIGINAL AIRWORTHINESS CERTIFICATE
- ☒ ANNUAL INSPECTION

2. AIRWORTHINESS CLASSIFICATION
- ☒ STANDARD ☐ RESTRICTED
- ☐ EXPERIMENTAL ☐ LIMITED ☐ OTHER

AIRCRAFT

3. MAKE: Stinson
4. MODEL: V-77
5. NATIONALITY AND REGISTRATION MARK: N50237
6. MANUFACTURER'S SERIAL NO.: 77-143

ENGINE

7. MAKE: Lycoming
8. MODEL: E-680E3B
9. OWNER'S NAME: Kampeska Air Service, Inc.
10. (GIVE ADDRESS ONLY IF IT HAS BEEN CHANGED FROM THAT GIVEN ON YOUR CERTIFICATE OF REGISTRATION, FORM ACA-500): Watertown, South Dakota

12-42

11. ATTACHMENTS (CHECK WHICH)
- ☒ ACA-319 ☐ WEIGHT AND BALANCE REPORT
- ☐ ACA-337 ☐ DATA, DRAWINGS, ETC.
- ☐ ACA-317 ☐ UNAPPROVED DEVIATION DATA

12. I CERTIFY that the above statements are true.

Lloyd C. McCrehin (OWNER OR AUTHORIZED AGENT)

June 12, 1951 (DATE) Agent (TITLE)

Form ACA-305a (11-49)

AIRCRAFT INSPECTION REPORT
(To be completed by CAA representatives)

13. It has been determined that the aircraft described in 305 above is in conformity with the following: (CHECK AND COMPLETE APPLICABLE ITEMS)
- a. ☒ AIRCRAFT SPECIFICATION NO. A-774 THROUGH SHEET REVISION NO. 1
- b. ☐ AIRCRAFT LISTING PAGE NO.
- c. ☒ AIRWORTHINESS DIRECTIVE SUMMARY 1951 (YEAR) THROUGH CARD NO. 14
- d. ☐ OPERATIONS LIMITATIONS FORM ACA-309 ISSUED.
- e. ☒ OPERATIONS LIMITATIONS FORM ACA-309 IS AVAILABLE IN AIRCRAFT.
- f. ☐ CURRENT, APPROVED, AIRPLANE FLIGHT MANUAL IS AVAILABLE IN AIRCRAFT.
- g. ☒ ALL APPLICABLE NOTES, INSTRUMENT MARKINGS, AND PLACARDS HAVE BEEN COMPLIED WITH.
- h. ☒ CERTIFICATE OF AIRWORTHINESS FORM ACA-1362 WAS ISSUED.

FINDINGS

14. ☒ AIRWORTHY ☐ UNAIRWORTHY

15. DESIGNEE'S SIGNATURE: Lloyd C. McCrehin — Lloyd C. McCrehin
16. DESIGNATION NO.: 5243
17. DATE: June 12, 1951
18. AVIATION SAFETY AGENT'S SIGNATURE: Roman B. Mueller
19. ☒ ACCEPTED ☐ REINSPECTED
20. DATE: June 29, 1951

21. 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. 5N DATE: 4-15-85

774 5-283

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.
Stinson	V-77	774

REGISTRATION NO.	MANUFACTURER'S SERIAL NO.
50227	77-143

ENGINE

MAKE	MODEL
Lycoming	R-680-E3A

OWNER'S NAME	PERMANENT ADDRESS (Street and number, city, zone, and State)
Kampeska Air Service	Watertown, South Dakota

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.

Lloyd C. McCrehin
Owner or authorized agent.

June 17, 1950 (DATE) — Agent (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-774-1 June 10, 1949 ADs 1950, Thru 50-23 (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

✓ Available in aircraft

FINDINGS

- [x] AIRWORTHY
- [ ] UNAIRWORTHY

DESIGNEE'S SIGNATURE AND NO. Lloyd C. McCrehin 5242

DATE June 17, 1950

CAA INSPECTOR'S SIGNATURE Norman B. Mueller

- [x] ACCEPTED
- [ ] REINSPECTED

DATE June 19, 1950

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

acr 7-26-50 NWX

AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

774

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

AIRCRAFT

MAKE	MODEL		
Consolidated Vultee	V-77		
REGISTRATION NO.	MANUFACTURER'S SERIAL NO.	DATE MANUFACTURED	TYPE CERTIFICATE NO.
50227	77-143	9-24-43	774

ENGINE

MAKE	MODEL
Lycoming	R-680E3A

OWNER'S NAME: Kampeska Air Service

PERMANENT ADDRESS (Street and number, City, Zone and State): Watertown, South Dakota

ATTACHMENTS (Check which)
- [ ] ACA-319
- [x] ACA-337
- [ ] ACA-805
- [ ] ACA-337
- [ ] WEIGHT AND BALANCE REPORT
- [ ] SPECIAL APPROVALS
- [ ] DATA, DRAWINGS, ETC.
- [ ] UNAPPROVED DEVIATION DATA

I CERTIFY THAT THE ABOVE STATEMENTS ARE TRUE.

Marvin R. Long
OWNER OR AUTHORIZED AGENT

May 7, 1949
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-774-3 ADS thru 49-17 (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
- [ ] APPROVED AIRPLANE FLIGHT MANUAL IS IN THE AIRCRAFT

FINDINGS

[x] AIRWORTHY [ ] UNAIRWORTHY	OFFICIAL SIGNATURE AND NO. Lloyd G. McCrehin	5242	DATE May 7, 1949
	CAA INSPECTOR'S SIGNATURE Fritz Rieger	[x] ACCEPTED [ ] REINSPECTED	DATE 5-16-49

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

aw 6-16-49

22665

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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 every 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
	Consolidated Vultee	V-77	77-143	NC50227

2. OWNER	NAME (First, middle, last)	ADDRESS (Street and number, city, zone, and State)
	Kampeska Air Service, Inc.	Watertown, South Dakota

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					X
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)*
	2638.125	85.5	1362

* 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
	Lloyd C. McCrehin	Watertown, South Dakota	May 7, 1949

7. DESCRIPTION OF WORK ACCOMPLISHED IN ACCORDANCE WITH PART 18 OF THE CIVIL AIR REGULATIONS AND ITS ASSOCIATED CIVIL AERONAUTICS MANUAL 18. (IF MORE SPACE IS NEEDED, CONTINUE ON REVERSE OR ATTACH SEPARATE SHEETS BEARING AIRCRAFT IDENTIFICATION MARK.)

Empty Weight	2668.125	Arm	84.96	Mom.	226689.17
Removed Lycoming engine R-680-E3B	565.000	Arm	36.00	Mom.	20340.00
Installed Lycoming Engine R-680-E3A	535.000	Arm	36.00	Mom.	19260.00

(See Reverse Side)

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

Lloyd C. McCrehin (Signature of supervising mechanic) A&E 57875-41 (Certificate number and rating) May 7, 1949 (Date)

TO BE COMPLETED BY CAA REPRESENTATIVES

☒ APPROVED ☐ REJECTED ☐ FORWARDED FOR ENGINEERING APPROVAL

SIGNATURE OF ENGINEER: Lloyd C. McCrehin
SIGNATURE OF INSPECTOR: Fritz Prieger

NO. 5242 ☒ ACCEPTED ☐ REINSPECTED

DATE May 7, 1949 DATE 5-16-49

U. S. GOVERNMENT PRINTING OFFICE 16—54010-1

New Empty Weight 2638.125 New Mom. 225609.17
225609.17 - 2638.125 = 85.5 = New C. G. Empty

	Most Rearward			Most Forward		
	Weight	Arm	Mom.	Weight	Arm	Mom.
Aircraft Empty	2638.125	85.5	225609.17	2368.125	85.5	225609.17
Pilot	170.000	84.0	14280.00	170.000	84.0	14280.00
Passenger	170.000	84.0	14280.00	170.000	84.0	14280.00
Passenger	510.000	121.125	61773.75			
Fuel (Max. 76 gal.)	456.000	103.500	47196.00			
Fuel (Min. 23.75 gal)				142.500	103.5	14748.75
Oil (17 Qts.)	31.875	37.000	-1179.37	31.875	37.0	-1179.37
Baggage	24.000	137.125	3291.00			
	4000.000	91.3	365250.55	3152.500	84.9	267738.55

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

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 CIVIL AIRCRAFT

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

APPLICATION (Check whether)
- [ ] ORIGINAL AIRWORTHINESS CERTIF.
- [x] ANNUAL INSPECTION

CAA IDENTIFICATION
- [ ] NR
- [ ] NL

- [ ] OTHER (Specify)

AIRCRAFT

MAKE	MODEL		
Consolidated Vultee	V-77		
REGISTRATION NO.	MANUFACTURER'S SERIAL NO.	DATE MANUFACTURED	TYPE CERTIFICATE NO.
50227	77-143	9-24-43	774

ENGINE

MAKE	MODEL
Lycoming	R680-13

OWNER'S NAME	PERMANENT ADDRESS (Street and number, City, Zone and State)
Wampeska Air Service	Watertown, South Dakota

ATTACHMENTS (Check which)
- [x] ACA-319
- [ ] 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.

Marion L. Long
OWNER OR AUTHORIZED AGENT

March 23, 1948 — 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-774-2 (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
- [ ] APPROVED AIRPLANE FLIGHT MANUAL IS IN THE AIRCRAFT

FINDINGS

- [x] AIRWORTHY
- [ ] UNAIRWORTHY

DESIGNEE'S SIGNATURE AND NO. Lloyd Calvin McCrehin 5242 — DATE March 23, 1948

CAA INSPECTOR'S SIGNATURE Roy P. Williams
- [ ] ACCEPTED
- [ ] REINSPECTED

DATE 3-30-48

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

22665

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

RPW 3-300

FORM ACA-305
(3-7-46)

DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

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

RECEIVED JUL 6 1947

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

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

APPLICATION (Check)
[X] AIRWORTHINESS CERTIFICATE
[ ] ANNUAL INSPECTION

CAA IDENTIFICATION
[X] NC [ ] NX [ ] NR [ ] OTHER (Specify)

AIRCRAFT

MAKE	MODEL	
Consolidated Vultee	V-77	(Army AT-19)

REGISTRATION NO.	MANUFACTURER'S SERIAL NO.	DATE MANUFACTURED
50227	77-143	December 1942

ENGINE

MAKE	MODEL	RATED H.P.
Lycoming	R680E2B R680-13 (Army)	285

(Check whether)	IF OVERHAULED, STATE BY WHOM	DATE OF OVERHAUL
[ ] NEW [X] USED [ ] OVERHAULED	--------	-------

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

OWNER'S NAME	PERMANENT ADDRESS (Street and No., City, Zone, State)
Kampeska Air Service, Inc.	Box 863, Watertown, South Dakota

ATTACHMENTS (Check which)
[X] 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

Ralph L. Kolbinger
OWNER OR AUTHORIZED AGENT

1/14/47 — DATE
Pres. — TITLE

FORM ACA-305a (FORMERLY ACA-307)

AIRCRAFT INSPECTION REPORT

(To be completed by a CAA inspector or a designated inspector or representative)

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

LISTING IN INSPECTOR'S HANDBOOK, CHAP. XVIII		AIRCRAFT SPECIFICATION		AIRWORTHINESS DIRECTIVE	
PAGE NO.	T.C. NO.	SERIAL NO.	EFFECTIVE NOTES	NO.	EFFECTIVE NOTES
		A-774-1	All applicable		None

OTHER (Describe)

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

	APPROVED BY	MECH. CERTIF. AND RATING NO.	DATED
[X] FORM ACA-319 (Return to owner)	Lloyd Calvin McCrehin	A&E M57875-41	March 15, 1947
[X] FORM ACA-1362 ISSUED	CERTIFICATE VALID TO (Specify date) --	--	

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

FINDINGS

	DESIGNEE'S SIGNATURE AND NO.		DATE
[X] AIRWORTHY	William J. McCall	5240	March 17, 1947
[ ] UNAIRWORTHY	CAA INSPECTOR'S SIGNATURE Roy P. Williams	[X] ACCEPTED [ ] REINSPECTED	DATE 7-9-47

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

ACA 309, Operation Limitations was issued.

21666

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

Form ACA-309—Page 1 (12-45)

UNITED STATES OF AMERICA
DEPARTMENT OF COMMERCE
CIVIL AERONAUTICS ADMINISTRATION

OPERATION LIMITATIONS

CAA IDENT. MARK NC 50227

ENGINE MAKE	ENGINE MODEL	AIRCRAFT MAKE	AIRCRAFT MODEL	DATE MFRD.	SERIAL NO.	DESIGNATION	TYPE CERT.
Lycoming	R-680E3B	Cons. Vultee	V-77	Dec. 1942	77-143	Land	774

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.	TRUE INDICATED AIR SPEED	M. P. H. LAND	KNOTS SEA
TAKE-OFF	One	Any	28.0	2300	300	87	CLIMB OR LEVEL FLIGHT	155	--
METO* SEA LEVEL	X	TO Any	28.0	2200	285	87	GLIDE OR DIVE (Smooth Air Only)	198	--
METO* ALTITUDE	FROM --	Any	28.0	2200	285	87	FLAPS EXTENDED	108	--

*METO—MAXIMUM EXCEPT TAKE-OFF

TAKE-OFF WEIGHT LAND	TAKE-OFF WEIGHT SEA	LANDING WEIGHT LAND	LANDING WEIGHT SEA
4000 lbs.	-- --	4000 lbs.	-- --

OPERATIONS AUTHORIZED

C.G.Range is +90.6 to +92.1 at 4000 lbs.
C.G.Range is +84.4 to +92.1 at 3178 lbs. with straight line varation between.
Datum is 70 in. fwd. of wing L.E.
most forward point.
See weight and balance data section
for loading information.

INSPECTOR'S SIGNATURE William J. McCall
William J. McCall 5240
DATE March 17,1947

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

THIS PLACARD MUST BE DISPLAYED IN VIEW OF THE PILOT

(FOLD HERE)

16—45710-2

FAA AIRCRAFT REGISTRY
CAMERA NO. 5N DATE: 4-15-85

ADDITIONAL OPERATIONS AUTHORIZED

The Airworthiness Certificate for this aircraft is based on a tetative approval of the aircraft model and is subject to revision at the time of final approval. In addition further modification of the aircraft may be required at that time. It will be the owners responsibility to comply with all pertinent provisions of the final AIRCRAFT SPECIFICATION AND AIRWORTHINESS DIRECTIVE.

IF THIS FORM IS LOST OR DESTROYED, A DUPLICATE MAY BE OBTAINED FROM THE CERTIFICATION AND RECORDATION SECTION, AIRCRAFT AND COMPONENTS SERVICE, CIVIL AERONAUTICS ADMINISTRATION, WASHINGTON, D. C., FOR $2.00. (MONEY ORDER OR CHECK SHOULD BE MADE PAYABLE TO THE TREASURER OF THE UNITED STATES.)

16—45710-2