

Airworthiness  
Certificate

N 48954

AIRCRAFT LOG



## AIRCRAFT DESCRIPTION

MANUFACTURER Grumman American Aia. Corp. MODEL G-164A DATE OF MFG. 7-31-76  
SERIAL NUMBER 1677 REGISTRATION NUMBER N48594

REGISTERED OWNER

STREET ADDRESS

CITY, STATE, ZIP

## OPERATOR

STREET ADDRESS

CITY, STATE, ZIP

REGISTERED OWNER

STREET ADDRESS

CITY, STATE, ZIP\_

OPERATOR

STREET ADDRESS.

CITY, STATE, ZIP.

### Inspection Status

[Check one]

F.A.R. 91.169 ANNUAL/100 HOUR

F.A.R. 91.71 PROGRESSIVE

F.A.R. 91.217 SUBPART D

☐ F.A.R. 135.60 A.T.C.O.



DATE ENTERED

### MAINTENANCE RESPONSIBILITY

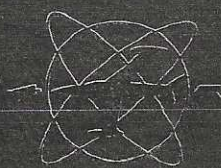


NO.	DATE OF COMPLETION	AIRCRAFT TIME IN SERVICE	DESCRIPTION OF WORK PERFORMED, OR APPROVED DATA USED	AGENCY & CERTIFICATE NO. WORK PERFORMED/RETURNED TO SERVICE
	July 31, 1976		<p>This Aircraft has been test flown and accepted by the manufacturer's inspection department.</p> <p><i>Raymond E. Hughes</i> Signed</p> <p>SCHWEIZER AIRCRAFT CORP.</p> <p>I have inspected this aircraft and issued a Special Airworthiness Certificate, FAA Form 8130-7, dated July 31, 1976.</p> <p>Classification: RESTRICTED (use: AGRICULTURE + PEST CONTROL)</p> <p><i>Raymond E. Hughes</i> SWISS AIRCRAFT CORP., INC. 101 DMR No. EA 1308</p>	



#2

N48594



The Standard  
**AIRCRAFT LOG**

ASL-88-2



YEAR 20 DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
				<p>Date: <u>Feb. 27-18</u> Total Time: <u>6952.4</u></p> <p>Hobbs Time: <u>5944.5</u></p> <p>I certify that this aircraft has been inspected in accordance with an annual inspection and was determined to be in airworthy condition.</p> <p style="text-align: center;">*</p> <p style="text-align: right;"><i>E. W. Smith</i> IA No. 434110457</p>

5-7-18

Tach 6044.5 TTAf 7057.4

Inspected wing attach, struts, wires, and flight controls. (CK,OK). Inspected cables, pulleys and hinges and lubricated as needed. Serviced master cylinders for breaks.

CW AD 78-23-11 (aileron balance cables) by inspection IAW SB # 63 next due 6544.5

CW AD 75-14-04 (rudder cables) by inspection IAW AD and SB #56 next due 6144.5

CW AD 78-26-03 (lower wing attachment fittings) by inspection IAW AD and SB #65 next due 6444.5  
Tach or 8-23-2018 whichever comes first.

CW AD 89-18-02 (elevator push-pull rods) by inspection & treatment next due 2-12-19 *cont.*



ons  
of  
es.

CW AD 2011-05-07 (rudder main spar corrosion) by inspection & treatment next due Feb. 2023. I certify  
this airframe has been inspected IAW 100 hr. inspection and is found to be in an airworthy condition  
approved for return to service. *Donald LeGros* Donald LeGros A&P 3171358

ins  
of  
(S.)

8-2-18

Tach 6144.5 TTAF 7157.4

Inspected wing attach, struts, wires, and flight controls. (CK,OK). Inspected cables, pulleys and  
hinges and lubricated as needed. Serviced master cylinders for breaks.

CW AD 78-23-11 (aileron balance cables) by inspection IAW SB # 63 next due 6544.5

CW AD 75-14-04 (rudder cables) by inspection IAW AD and SB #56 next due 6244.5

CW AD 78-26-03 (lower wing attachment fittings) by inspection IAW AD and SB #65 next due 6644.5  
Tach or 2-2-2018 whichever comes first.

CW AD 89-18-02 (elevator push-pull rods) by inspection & treatment next due 2-12-19

CW AD 2011-05-07 (rudder main spar corrosion) by inspection & treatment next due Feb. 2023. I certify  
this airframe has been inspected IAW 100 hr. inspection and is found to be in an airworthy condition  
approved for return to service. *Nicholas Sabelhaus* Nicholas Sabelhaus A&P 3898717



YEAR 20 DATE	RECORDING TACH TIME	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)
--------------------	---------------------------	-------------------	-----------------------------	---

– 2-22-19 Tach 6228 TTAF 7240.9

- Inspected wing attach, struts, wires, and flight controls. (CK,OK). Inspected cables, pulleys and
- hinges and lubricated as needed. Replaced main landing gear bushings in frame replaced frame bolts
- and all 4 long gear bolts. Replaced o-rings in brake calipers replaced flexible brake lines and all o-rings in
- master cylinders. Removed controls under floor spray and dry handle cleaned corrosion and primed and
- painted. Removed tail wheel cleaned blasted and painted replaced bearings and tension springs.
- CW AD 78-23-11 (aileron balance cables) by inspection IAW SB # 63 next due 6544.5
- CW AD 75-14-04 (rudder cables) by inspection IAW AD and SB #56 next due 6328
- CW AD 78-26-03 (lower wing attachment fittings) by inspection IAW AD and SB #65 next due 6728 Tach
- or 8-22-2020 whichever comes first.
- CW AD 89-18-02 (elevator push-pull rods) by inspection & treatment next due 2-22-20
- CW AD 2011-05-07 (rudder main spar corrosion) by inspection & treatment next due Feb. 2023. I certify
- this airframe has been inspected IAW 100 hr. inspection and is found to be in an airworthy condition
- approved for return to service. *Donald LeGros* Donald LeGros A&P 3171358




RECORDING  
TACH  
TIME

TODAY'S  
FLIGHT

TOTAL  
TIME IN  
SERVICE

**Description of Inspections, Tests, Repairs and Alterations**

Entries must be endorsed with Name, Rating and Certificate Number of Technician or Repair Facility. (See back pages for other specific entries.)

Date: 2-22-19

Total Time: 7240.9

Hobbs Time: 6228

I certify that this aircraft has been inspected in  
accordance with an annual inspection and was  
determined to be in airworthy condition.

\*



IA No. 434110457



YEAR 20	RECORDING TACH	TODAY'S FLIGHT	TOTAL TIME IN SERVICE	Description of Inspections, Tests, Repairs and Alterations Entries must be endorsed with Name, Rating and Certificate Number of
------------	-------------------	-------------------	-----------------------------	--

5-4-19 Tach 6678 TTAF 7340.9

Inspected wing attach, struts, wires, and flight controls. (CK,OK). Inspected cables, pulleys and hinges and lubricated as needed. Serviced master cylinders for breaks.

CW AD 78-23-11 (aileron balance cables) by inspection IAW SB # 63 next due 6878

CW AD 75-14-04 (rudder cables) by inspection IAW AD and SB #56 next due 6778

CW AD 78-26-03 (lower wing attachment fittings) by inspection IAW AD and SB #65 next due 7078 Tach or 8-22-2020 whichever comes first.

CW AD 89-18-02 (elevator push-pull rods) by inspection & treatment next due 2-22-20

CW AD 2011-05-07 (rudder main spar corrosion) by inspection & treatment next due Feb. 2023.

Removed engine installed engine ZP-101393 all connections same as original. Installed used electric tach tach time 6678.0 I certify this airframe has been inspected IAW 100 hr. inspection and is found to be in an airworthy condition approved for return to service. *Donald LeGros* Donald LeGros A&P 3171358




6-5-19

Tach 6778 TTAF 7440.9


Inspected wing attach, struts, wires, and flight controls. (CK,OK). Inspected cables, pulleys and hinges and lubricated as needed. Serviced master cylinders for breaks.

CW AD 78-23-11 (aileron balance cables) by inspection IAW SB # 63 next due 6878

CW AD 75-14-04 (rudder cables) by inspection IAW AD and SB #56 next due 6878

CW AD 78-26-03 (lower wing attachment fittings) by inspection IAW AD and SB #65 next due 7078 Tach or 8-22-2020 whichever comes first.

CW AD 89-18-02 (elevator push-pull rods) by inspection & treatment next due 2-22-20

CW AD 2011-05-07 (rudder main spar corrosion) by inspection & treatment next due Feb. 2023. I certify this airframe has been inspected IAW 100 hr. inspection and is found to be in an airworthy condition approved for return to service.  Donald LeGros A&P 3171358

7-15-19

Tach 6878 TTAF 7540.9

Inspected wing attach, struts, wires, and flight controls. (CK,OK). Inspected cables, pulleys and hinges and lubricated as needed. Serviced master cylinders for breaks.

CW AD 78-23-11 (aileron balance cables) by inspection IAW SB # 63 next due 7378

CW AD 75-14-04 (rudder cables) by inspection IAW AD and SB #56 next due 7978

Cont:



YEA CW AD 78-26-03 (lower wing attachment fittings) by inspection IAW AD and SB #65 next due 7078 Tach  
20 or 8-22-2020 whichever comes first.

DAT

CW AD 89-18-02 (elevator push-pull rods) by inspection & treatment next due 2-22-20

CW AD 2011-05-07 (rudder main spar corrosion) by inspection & treatment next due Feb. 2023. I certify  
this airframe has been inspected IAW 100 hr. inspection and is found to be in an airworthy condition  
approved for return to service.

Nicholas Sabelhaus A&P 3898717

*Nicholas Sabelhaus*

3-3-20

Tach 6928 TTAF 7590

Inspected wing attach, struts, wires, and flight controls. (CK,OK). Inspected cables, pulleys and  
hinges and lubricated as needed. Serviced Brakes and master cylinders.

CW AD 78-23-11 (aileron balance cables) by inspection IAW SB # 63 next due 7428

CW AD 75-14-04 (rudder cables) by inspection IAW AD and SB #56 next due 7028

CW AD 78-26-03 (lower wing attachment fittings) by inspection IAW AD and SB #65 next due 7428 Tach  
or 9-1-2020 whichever comes first.

CW AD 89-18-02 (elevator push-pull rods) by inspection & treatment next due 3-1-20 *Ns*

CW AD 2011-05-07 (rudder main spar corrosion) by inspection & treatment next due Feb. 2023. I certify  
this airframe has been inspected IAW 100 hr. inspection and is found to be in an airworthy condition  
approved for return to service. *Nicholas Sabelhaus* Nicholas Sabelhaus A&P 3898717



e 7078 Tach

RECORDING  
TACH  
TIME

TOD/  
FLIK

Date: 3-3-20

Total Time: 7590

Hobbs Time: 6928

**ts, Repairs and Alterations**

(ating and Certificate Number of  
pages for other specific entries.)

023. I certify  
condition

I certify that this aircraft has been inspected in  
accordance with an annual inspection and was  
determined to be in airworthy condition.  
\*

*Edgar P. ...*

A&P No. 434110457

keys and

7428 Tach

23. I certify  
condition





————— *ENGINE* —————  
————— *LOG BOOK* —————

**RADIAL DIVISION**

P.O. Box 1344  
Hwy. 75 N. & Airport Rd.  
Okmulgee, Oklahoma 74447

Ph: (918) 756-8320  
Fax: (918) 756-0923

**TURBINE DIVISION**

P.O. Box 1336  
201 E. Airport Rd. Hangar #600  
Okmulgee, Oklahoma 74447

Ph: (918) 756-7862  
Fax: (918) 756-3424

Repair Station No. CP2R75OK



## ENGINE RECORD

Manufacturer: Pratt & Whitney

Model: R-1340-AN-1

Serial No: ZP-101393

Type Certificate: 5E-2

This engine is currently installed in  
aircraft: \_\_\_\_\_

Min. Octane Fuel: 80/87 Aviation \* Spark Plug Gap: .015 - .018 in. \*

Oil Grade Summer: 120 wt.

Winter: 100 wt.

Magneto Time: 25° BTC

Point Setting: Bosch .008 - .010 in.

Firing Order: 1-3-5-7-9-2-4-6-8

Bendix N/A

Recommended Overhaul at \_\_\_\_\_ Hours. \*

Crankshaft Serial No.: 20-1518

Crankshaft Part No.: 375204

Cam Serial No.: OB1020

Cam Part No.: 11768

\* see Pratt & Whitney Maintenance Manual P/N 118611

## NOTES

### CAUTION

RUN THIS ENGINE WITH NON-DETERGENT OIL 100-120  
UNTIL RINGS COMPLETELY SEAT.

NONCOMPLIANCE NULLIFIES WARRANTY.



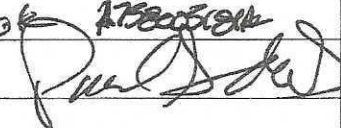
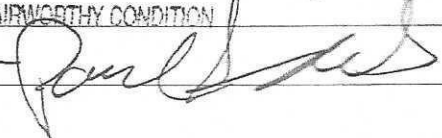
WARRANTY VOID, IF ENGINE IS RUN  
WITH AUTOMOTIVE FUEL.

In the absence of manufactures specific operating instructions please  
note the following recommendations:

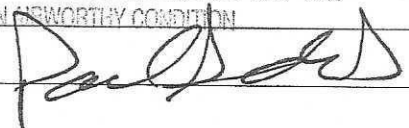
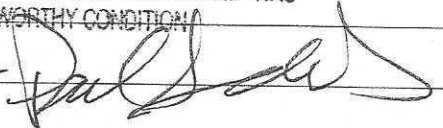
- 1) Avoid Idling engine at lower Manifold Pressures for extended  
periods of time, for a least 35 hrs of operation.
- 2) Use full power at take-off to Facilitate proper cylinder cooling.
- 3) Maintain a least 1" of manifold pressure for every 100-RPM  
on extended descents.
- 4) Cruise Power - Maximum spread of 10 or less on Manifold to  
RPM. i.e. 2000 RPM = 30" Hg., 1900 RPM = 29" Hg.
- 5) Avoid shock-cooling Cylinder before and during shut down.

COVINGTON AIRCRAFT ENGINES, INC.  
OKMULGEE OKLAHOMA 74447  
SHOP No. CP2R750K

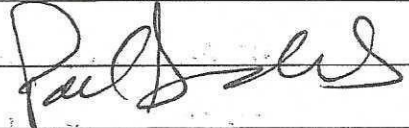

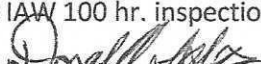
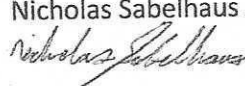


DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED - SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK					
<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;">           FAA Approved Repair Station No. CP2R750K EASA.145.4356            Hwy. 75 N. &amp; Airport Road / P.O. Box 1344            Okmulgee, Ok. 74447 Ph: 918-756-8320 Fax: 918-756-3424         </div> </div>									
Date:	September 23, 2008	Engine Model:	R-1340-AN-1	Engine S/N:	ZP-101393	TSOH:	0:00	EST. Total Time:	8750
Crankshaft S/N:	20-1518	Crankshaft P/N:	375204	Cam S/N:	OB1020	Cam P/N:	11768		
<p><b>OVERHAULED IN ACCORDANCE WITH PRATT &amp; WHITNEY OVERHAUL MANUAL P/N 123440 AND COVINGTON PROCESSES. A. D. NOTE 56-06-02 COMPLIED WITH. A.D. 96-15-02 NOT APPLICABLE BY PART NUMBER. A.D. NOTE 99-11-02 COMPLIED WITH IN ACCORDANCE WITH PW SB No. 1787 DATED SEP. 7, 1983. ENGINE TEST RUN - TEST OK. "NEW PISTONS WEDGE RING"</b></p>									
<p align="center"><b>MAINTENANCE RELEASE:</b></p> <p>This certifies that the work specified above was carried out in accordance with Federal Aviation Regulations and current manufacturer's specifications. In respect to the work performed, the <u>engine</u>/component is approved for return to service.</p>									
<p>Pertinent details of the repair are on file at this repair station under work order No: <b>10958</b></p>									
<p>Authorized Signature:  Date: September 23, 2008</p>									
<p>MAY 1, 2013 TACH TIME 1757.0 TOTAL TIME 8750.0 TSMOH 0.0</p> <p>INSTALLED THIS ENGINE IN Cessna 441B N8231K, Flushed oil system</p> <p>Reinstalled original Propeller: Prop Gov, secured with 100 WD oil seal</p> <p>Replaced A/R-11er, cleaned fuel strainer, Test Run OK </p>									
<p>NOV 16, 2013 TACH TIME 1897.0 TOTAL TIME 8890.0 TSMOH 140.0</p> <p>CHANGED OIL &amp; cleaned oil screen, cleaned Coped &amp; Rotated spark-plugs, serviced engine with Aero Shell 120W oil, checked cylinder compression, <math>\frac{4}{1} \frac{74}{80}</math> <math>\frac{4}{2} \frac{75}{80}</math> <math>\frac{4}{3} \frac{76}{80}</math> <math>\frac{4}{4} \frac{76}{80}</math> <math>\frac{4}{5} \frac{78}{80}</math> <math>\frac{4}{6} \frac{77}{80}</math> <math>\frac{4}{7} \frac{76}{80}</math> <math>\frac{4}{8} \frac{77}{80}</math> <math>\frac{4}{9} \frac{77}{80}</math></p> <p>Chw AD 99-11-02 eff 7/19/1999 by inspection of Cylinder heads next due AT TACH TIME 2147.0</p>									
<p>I CERTIFY THAT THIS AIRCRAFT ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL INSPECTION AND WAS DETERMINED TO BE IN AN AIRWORTHY CONDITION</p> <p align="right">21383351A - </p>									



DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED - SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
Nov 1,	2014	TACH TIME 2097.0	TOTAL TIME 9090.0	TSMOH 340.0
				CLW AD 99-11-02 EFF 7/19/99 by visual inspection of Cyls next due AT TACH TIME 2197.0, Replaced Fwd MAG HARNESS WITH O/H unit From Covington, cleaned Capped & Rotated spark plugs, CHANGED OIL & OIL Filter serviced with Aeroshell 120W OIL, checked compression #1 $\frac{72}{80}$ #2 $\frac{78}{80}$ #3 $\frac{75}{80}$ #4 $\frac{70}{80}$ #5 $\frac{79}{80}$ #6 $\frac{77}{80}$ #7 $\frac{78}{80}$ #8 $\frac{75}{80}$ #9 $\frac{79}{80}$ , Replaced Distrib, checked MAG timing. I CERTIFY THAT THIS AIRCRAFT ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL INSPECTION AND WAS DETERMINED TO BE IN AN AIRWORTHY CONDITION
				27383351A 
Nov 2,	2015	TACH TIME 2287.0	TOTAL TIME 9280.0	TSMOH 530.0
				CLW AD 99-11-02 EFF 7/19/99 by visual inspection of Cyls next due AT TACH TIME 2387.0 Replaced 3 Rear spark plugs with New Rem 406, checked compression #1 $\frac{79}{80}$ #2 $\frac{78}{80}$ #3 $\frac{79}{80}$ #4 $\frac{79}{80}$ #5 $\frac{79}{80}$ #6 $\frac{79}{80}$ #7 $\frac{78}{80}$ #8 $\frac{77}{80}$ #9 $\frac{78}{80}$ , Replaced Rocker Arm shaft Seal on Cyls #2, 7 and 9, cleaned Capped & Rotated spark plugs, CHANGED OIL & SERVED WITH Aeroshell 120W OIL
				I CERTIFY THAT THIS AIRCRAFT ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL INSPECTION AND WAS DETERMINED TO BE IN AN AIRWORTHY CONDITION
July 10,	2017	TACH TIME 2467.0	TOTAL TIME 9460.0	TSMOH 710.0
				CLW AD 99-11-02 EFF 7/19/99 by visual inspection of Cyls next due AT TACH TIME 2567.0, checked compression #1 $\frac{75}{80}$ #2 $\frac{76}{80}$ #3 $\frac{79}{80}$ #4 $\frac{75}{80}$ #5 $\frac{71}{80}$ #6 $\frac{76}{80}$ #7 $\frac{77}{80}$ #8 $\frac{79}{80}$ #9 $\frac{79}{80}$ cleaned Fuel strainer, checked oil screen,
				I CERTIFY THAT THIS AIRCRAFT ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL INSPECTION AND WAS DETERMINED TO BE IN AN AIRWORTHY CONDITION
				27383351A 



DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED - SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
Nov 15, 2017		Tach Time 2655.5		TOTAL TIME <del>2655.5</del> 9648.5 TSMOH 898.5
		Removed This Engine & Propeller From German AG-CAT N8231K		A&P 2738395 
5-4-19		Tach 6678	SMOH 898.5	
<p>Installed engine on to Ag cat N48594 replaced engine mount rubbers Replaced sparkplugs drained oil cleaned screen and replaced filter filled with 9 gal. Phillips 25/60 XC. Checked exhaust system for cracks (CK, OK). Checked both mags checked valve clearances IAW P&amp;W 1340 maintenance manual. Installed prop 12d40-221 sn. 928cpl on to engine torqued and safetyed. Ran engine (CK,OK) Greased prop. Lubricated all engine controls.</p> <p>CW AD 99-11-02 (Cylinder head cracking) by inspection IAW AD and SB #1757, next due 6778 I certify this engine has been inspected IAW 100 hr. inspection and found to be in an airworthy condition and approved for return to service.  Donald LeGros A&amp;P 3171358</p>				
6-5-19		Tach 6778	SMOH 998.5	
<p>Cleaned sparkplugs drained oil cleaned screen and replaced filter filled with 9 gal. Phillips 25/60 XC. Checked exhaust system for cracks (CK, OK). Checked both mags Greased prop. Lubricated all engine controls.</p> <p>CW AD 99-11-02 (Cylinder head cracking) by inspection IAW AD and SB #1757, next due 6878 I certify this engine has been inspected IAW 100 hr. inspection and found to be in an airworthy condition and approved for return to service.  Donald LeGros A&amp;P 3171358</p>				
7-15-19		Tach 6878	SMOH 1098.5	
<p>Cleaned sparkplugs drained oil cleaned screen and replaced filter filled with 9 gal. Phillips 25/60 XC. Checked exhaust system for cracks (CK, OK). Checked both mags Greased prop. Lubricated all engine controls.</p> <p>CW AD 99-11-02 (Cylinder head cracking) by inspection IAW AD and SB #1757, next due 6978 I certify this engine has been inspected IAW 100 hr. inspection and found to be in an airworthy condition and approved for return to service. Nicholas Sabelhaus A&amp;P 3898717 </p>				



Tach 6928 SMOH 1148.5

.K

Nicholas Sabelhaus A&P 3898717

[illegible]