Black Lab Aviation Services LLC – Eagleneck 1GA0

Date: 12/06/2022 **Make:** Piper **Model:** PA32-260 **Reg:** N4887S **S/N:** 32-7100011
Tach: 6470.52 **Hobbs:** 2953.4

Installed new Knots 2U forward baggage door seal kit PN: ADS-ETA500-5 with reference to Document ADS-ETA500-5M and AC43.13-1B. Installed 2ea new Knots 2U wing root seals PNs K65773-00 Rev A at LH and RH wing roots with reference to AC43.13-1B.

Ronnie Pool A&P IA 2676066

Dated: 12/03/22 **Aircraft:** Piper PA32-260 **REG:** N4887S **S/N:** 32-7100011

TACH: 6470.52 **Hobbs:** 2953.4

Removed ADF Indicator from cockpit panel and Installed JPI Fuel Scan FS-450 system, see form 337 for full details. Installed Laminar flow systems Aileron gap seals and fuel tank fairings, see form 337 for full details. Repaired damaged door latch area and installed new latch plate with reference to AC43.13-1B section 4. Installed new main door and baggage door seals from Knots 2U, kit P/N: ADS1200-301-1 and ADS1200-304A-1 with reference to document ADS1200-301A and 304A.

Aircraft mechanically stripped, etched and applied Alodine followed by 2K primer. The following paint was applied: Diamond Silver 49065, Gloss Black P2333, Steel Blue Pearl 818101. Verified surfaces still in balance and re lubricated all hinge points and verified correct operation of controls. Verified weight and balance of the aircraft amendment not required. All work performed with reference to AC43.13-1B chapter 6 and 10. Aircraft registration marking reapplied to meet the requirements of CFR Part 45 subpart C.

Simon Reed A&P # 4227185 IA

17 Mar 2023 Piper PA32-260 N4887S 32-7100011
TA 16485.7
Removed GPS Model GPS600 SN: W02705
Installed Temperature Ind. Model ED-700/730/800/830
SN: 46498 PN: EGT-701-6. See 337. OPS Check good.

Keith E Simpson
Keith E Simpson
AP 3771158 IA

Engine

Propeller

Piper N4887S PA32-260 S/N 32-7100011
July 23, 2022. Aircraft tachometer reads 6457.2 hours. Hobbs reads 2953.4 hours. Airframe total time is 16457.2 hours. Completed an Annual Inspection this date in accordance with the Piper Cherokee Six Service Manual inspection checklist. Jacked aircraft. Torqued main gear trunnion mount bolts. Cleaned, inspected and lubricated torque links. Cleaned, inspected and repacked wheel bearings. Cleaned and resealed wheel brake cylinders. Replaced left brake linings with new. Cleaned and charged aircraft main battery. Checked and cleaned main fuel strainer. Small amount of contamination noted. Checked and cleaned electric fuel boost pump screen. Small amount of material on magnet, screen was clean at this time. Complied with the Instructions For Continued Airworthiness for the fuel pump installation in accordance with PMA Products, Inc Document No CA65628-800E-MAINT, Rev 1 dated 12-05-03. Inspected Emergency Locator Transmitter in accordance with FAR 91.207(d). Battery expires by September 2024, or in accordance with FAR 91.207(c). Repaired and adjusted cabin door upper latch mechanism. Repaired cracked aft fuselage skin/stringer at left, aft station 278 by fabricating and installing a doubler of .025 2024T3 specified in figure 4-3A. Repair was accomplished in accordance with the Piper Cherokee Six Service Manual, Section IV, paragraph 4-19, and Advisory Circular 43.13-1B, Section 4, Paragraph 4-58 (j). Retained original rivet size and spacing. Serviced tires to rated pressure. Lubricated airframe in accordance with the Piper Cherokee Six Service Manual lubrication chart. Replaced illegible required placards. Complied with the following Airworthiness Directives:

78-23-01 (11/01/78) by inspection per paragraph (b). No defects found at this time. Next due by tach 6557.2 hours.

77-12-01 (6/10/77) by inspection per paragraph (a), 1 thru 6. Fuel valve currently installed is P/N 1H26-4, S/N 5R. Fuel collected was within allowable limits at this time. Next due by tachometer 6507.2 hours.

75-24-02 (11/21/75) by inspection per Piper Service Letter 763. Pull test was within allowable limits at this time. Due again at next Annual Inspection.

Researched AD's through issue 2022-14-12.

I certify this aircraft has been inspected in accordance with an Annual Inspection, and was determined to be in airworthy condition for return to service as of this date. END

Russell R Bourgo AP2296175IA

6-19-2023 Tach 6492.47

Checked controls, cables, pulleys brackets & attachments Checked landing gear tires & wheels & brakes. Cleaned & lubed wheel bearings. Serviced tires with air & balanced. Serviced aircraft battery. Checked lights. Checked ELT per FAR 91-207 par D battery dated until September 2024. Checked fuel caps, vents, drains etc. Checked & cleaned fuel strainer. Replaced O ring for fuel bowl.
C/W A.D. 75-24-02 by insp. per Piper Service Letter 763 C/W A.D. 95-26-13 insp. of oil cooler hoses C/W A.D. 76-07-12 function check of mag switch. C/W A.D. 77-12-01 by visual inspection C/W A.D. 78-23-01 by inspection per paragraph b. I certify that this aircraft has been inspected in accordance with an annual inspection & is approved for return to service.

John E. Coulter 4022652-20 IA

1-12-22 6453.91 C/W 30 day [illegible] GLA GDM
C/W 30 day battery box inspection IAW PA32-260 AMM.
Aircraft approved for return to service.
Steven J Dutcher A&P3761408IA

MAKE: Piper
MODEL: Pa-32-260
S/N: 32-7100011
REG. NO: N4887S
WORK ORDER: 2286

North Country Aviation
1097 Beechcraft Blvd
Gaylord, MI 49735
Phone: (989) 732-6192

DATE: 5/19/2022
A/C TSN: 16456.3
TACH: 6456.3

Airframe Entries

. March 9, 2022. Hobbs reads 2953.4 hours. Tach reads 6456.3 hours . Airframe total time is 16456.3 hours.
. Removed engine M/N O-540-E4B5, S/N L-15310-40, and installed converted engine Lycoming M/N O-540-E4C5 , S/N L-22937-40EC See engine logbook for further details and See engine 337 for details on conversion.
Removed and reinstalled propeller to facilitate engine exchange. Propeller and spinner was reinstalled in accordance with the Piper PA32 Series maintenance manual 753-690, Section VII, Paragraph 7-8. Checked blade tracking. See airframe 337 for engine install details.
. Cleaned, inspected breather system. Reinstalled on engine and supported with new adel clamps.
. Installed Lycoming engine O-540-E4C5 wide flange, serial number L-22937-40E, converted to Lycoming O-540-E4B5. (field approval See engine 337 and airframe 337 for all details). Using same engine rubber mounts and mounting hardware installed in same position.
Engine serial number L-22937-40E was removed from Aircraft N881GL with total time at 5748.3 and time since overhaul at 1692.3 last overhauled date is 1/31/2009.
Performed the following changes to engine serial number L-22937-40E to convert model O-540-E4C5 wide flange to the same as O-540-E4B5 standard flange.
Removed four studs part number 31C-14 from serial number engine L-15310-40 and then installed on this engine model O-540-E4 C5 to convert this engine serial number L-22937-40E for prop governor installation. Installed previous removed Propeller governor P/N F-4-4A, S/N B1156U from engine serial number L-15310-40.
Removed fuel primer lines system and nozzles from O-540-E4B5 Serial number L-15310-40. Piper PA-32 -260 Airframe fuel primer system and installed on this O-540-E4C5 engine Capable of having priming system using Lycoming parts but not used or installed on engine Serial number RL-22264-40E for Aircraft BN-2A-26 serial number 84. Performed fuel primer cleaning and flow check.
Removed cover part number 60430 from engine serial number L-22937-40E model O-540-E4C5 and part number 68593 4 each spacers that cover vacuum gear accessory. The Mounting spot used for exhaust support bracket. Support bracket is a Britten Norman airframe part number B510981 then installed adapter vacuum assembly part number 67536 and Vacuum pump Rapco P/N 215CC, S/N 193693 removed from serial number engine L-15310-40 model O-540-E4B5
Removed Air intake including filter, carb heat shroud, scat ducts, baffling system, exhaust, oil cooler, alternator Chrysler P/N 4111810, including alternator belt off engine O-540-E4B5 and installed on this engine O-540-E4C5 without any changes.

Reconnected fuel supply line, fuel return line, vacuum in hose, vacuum out hose, oil breather system, oil pressure line, oil cooler lines, manifold pressure line, mixture cable, throttle cable, each cable, prop governor cable and carb heat cable using new Adel clamps as needed.
Reinstalled exhaust using 6 new exhaust gaskets p/n number 77511.
installed new engine rubber baffling seal from Brown Aircraft and reinstalled baffleing assemblies.
Reconnected electrical wiring for magneto P-leads, alternator, starter, oil temp, EGT probe and reinstalled EGT probe.
Propeller and spinner were reinstalled in accordance with the Piper PA32 Series maintenance manual 753-690, Section VII, Paragraph 7-8. Checked blade tracking.
Serviced engine with 12 quarts of Aeroshell 15W50 oil. Flushed carburetor float bowl. Ground ran and leak checked engine.
Adjusted engine idle speed and mixture. Reinstalled cowling and electrical wiring for landing light.

All maintenance was performed in accordance with the Piper PA32 Series maintenance manual 753-690, Section VII, Paragraph 7-16, Hartzell Owners manual 115N ,Textron Lycoming Direct Drive overhaul manual 540 series and Lycoming 0-540-B-E-G series parts catalog PC-115-2 standard flange / PC-515 wide flange.

Technicians Who Worked On The Items Listed Above:
Brian Renkiewicz, Erek Wikarski, Michael Gildner

All operational checks pass. In regard to the inspections and maintenance above, this aircraft is approved for return to service. Pertinent details of the repair are on file at North Country Aviation, Inc. under Work Order No. 2286, Dated 5/19/2022.

DATE: 5/19/2022 SIGNED: Work Order: 2286

Brian Renkiewicz, IA: AP3233383IA

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Checks & inspection. C/W AD 77-12-01 Through operational No defects noted.

Steven J. Daniel A&P3761408IA

6-21 6309.76 Tach C/W Safety inspection IAW GLA GOM and 30 day battery box inspection IAW PA32 AMM. Approved for return to service.

Steven J. Daniel A&P3761408IA

-21 6343.50 Tach C/W AD 77-12-01 by visual inspection and operational checks. No defects noted. next due at 6393.50. Aircraft approved for return to service

Steven J. Daniel A&P3761408IA

Great Circle Aviation Services

2144 Meridian St.

Sault Ste. Marie, MI 49793

Make: Piper Model: PA-32-260 S/N: 32-7100011 Reg.: N4887S

ACTT: 16371.6 Eng TSO: 1026.8 Prop TSO: 855.7 DATE: 01 OCT 21

Annual/100 Hr Inspection complied with IAW Piper S/M 230-210, Lycoming O/M 60297-10, and Hartzell O/M 115N-0000-A. Accomplished compliance with ADs 2017-14-04, 78-23-01, 75-24-02, and 76-07-12R1 (ignition switch failed). ADs current as of this date. Removed and replaced L/H and R/H FWD cockpit shoulder harnesses, P/N 110739-05, Alternator Drive Belt P/N 7380, vacuum regulator filter, and instrument air filter. ELT tested IAW FAR 91.207 (d), no discrepancy noted. Drained oil and replaced with Phillips XC 20W50, replaced oil filter, P/N AA 48110-2. A list of discrepancies has been provided to the owner. Aircraft found airworthy and returned to service.

David Waite, A&P/IA 522649606

12-10-21 6442.1 Tach C/W inspection requirements of AD 77-12-01 No defects noted. C/W 30 day safety inspection IAW GLA GOM. C/W 30 day battery box ~~inspect~~ inspection IAW PA32-260 AMM. Approved for return to service. Steven J. Daniel A&P3761408IA

1-12-22 6453.91 Tach C/W 90 day fuel filter inspection and cleaning. Aircraft approved for return to Service. Steven J. Daniel A&P3761408IA

6-23-21 6227.34 Tach.
Changed oil & filter. Serviced w/ 10 qts Phillips X/C and AA 48110-2 filter. Ground run & leak check good. Completed safety insp. IAW GLA GOM. Approved for return to service. Steven J Dufresne A&P3761408IA

7-8-21 6250.63 TACH

COMPLIED WITH AD 77-12-01. NO DEFECTS NOTED SEE AD LOG FOR WORK PERFORMED AND SIGN OFFS.

Alton Ford AP 3372366 IA

7-12-21 6256.7 TACH

REMOVED REGISTRATION NUMBERS FROM FUSELAGE AND REPLACED WITH NEW DUE TO IMPROPER SIZE AND SPACING. WORK DONE IAW AC 45-2E

Alton Ford AP 3372366 IA

7-15-21 6263.26 TACH

REMOVED STALL WARNING SWITCH PN 6-52207-4 SN 162760 AND REPLACED WITH NEW SWITCH PN CA450-742N SN 2541 IAW PIPER PA 32-260 AMM. OPERATIONAL CHECK GOOD. Alton Ford AP 3372366IA

wo: WO_66

Airframe · page 1 of 2

Great Lakes Air Inc.

Great Lakes Air Inc · 1593 Airport Rd · Alpena, MI 49707 · 9892554871

4887S **Piper, PA 32-260, S/N: 32-7100011** **July 18, 2021**
tach: 6272.84 ACTT: 16272.84

1. **100 hour / annual inspection** – Performed annual inspection on airframe IAW 14 CFR 43 appendix D, using Piper PA-32-260 AMM as a guide. Airframe found to be in airworthy condition. All applicable AD's up to date. See AD log for sign offs and work performed. Airframe post inspection operational check satisfactory. I certify that this aircraft has been inspected IAW an annual inspection and has been found airworthy.
2. **90 day fuel filter inspection** – Performed 90 day fuel filter cleaning and inspection. No defects noted. Operational and leak check performed satisfactory. Work performed IAW Piper PA-32-260 AMM.
3. **200 hour special inspection** – Performed 200 hour flap dissimilar metal corrosion inspection IAW Piper PA-32-260 AMM. No defects noted.
4. **AD 78-23-01** – Operationally checked fuel drain lever cover/door for proper operation. Door prevents lever actuation when the door is in the closed position. No defects noted.
5. **AD 75-24-02** – Grasped lower rear portion of seat with one hand and lifted up. The rear seat legs disengaged from the retention mechanism with a noticeable "Snap" when a 10-15 pound force was applied.

Great Lakes Air Inc · 1593 Airport Rd · Alpena, MI 49707 · 9892554871

6. **AD 76-07-12** – PERFORMED FUNCTIONAL CHECK IN ACCORDANCE WITH PAR 1.(A) AND (B) AND FOUND SWITCH TO OPERATE NORMALLY PER (C).
7. **30 day battery box inspection** – Complied with 30 day battery box inspection IAW PA 32-260 AMM. No defects noted.
8. **30 day safety inspection** – Complied with 30 day safety inspection per GLA GOM.

Alton Ford A&P, IA 3372366 Alton Ford

AIRCRAFT
INSPECTION SERVICES, INC.

4128 40th Street S.E. • Grand Rapids, MI 49512
Phone: 616-974-1100 • Fax: 616-974-1111
F.A.A. Repair Station N3DR341N

Aircraft Maintenance Entry

Model:	PA32-260	**Ser. No.:**	32-7100011	**Registration:**	N4887S
ACTT:	16143.32	**Hobbs:**	N/A	**Work Order:**	B24290

AIRWORTHINESS DIRECTIVE (AD) 2020-26-16

Complied with **AD 2020-26-16 paragraph (i)**; Performed **Eddy Current inspections** for cracks at the two lower outboard bolt hole locations of the left and right lower main wing spar cap as prescribed in the **Piper Aircraft Service, Inc. Mandatory Service Bulletin No. 1345 dated March 27, 2020 and SAE ARP 4402 (R 2013-06).**

EDDY CURRENT INSPECTION RESULTS

LEFT MAIN WING SPAR FWD:	**Cracks:**	NONE NOTED
	Other:	NONE NOTED
LEFT MAIN WING SPAR AFT:	**Cracks:**	NONE NOTED
	Other:	NONE NOTED
RIGHT MAIN WING SPAR FWD:	**Cracks:**	NONE NOTED
	Other:	NONE NOTED
RIGHT MAIN WING SPAR AFT:	**Cracks:**	NONE NOTED
	Other:	NONE NOTED

The above Eddy Current Inspections were performed in accordance with current Federal Aviation Regulations, AD 2020-26-16, Piper Aircraft Service Bulletin No. 1345 dated March 27, 2020 and SAE ARP 4402 (R 2013-06). Unless defects are noted above, only that work described herein shall be considered for an approval for return to service. Pertinent details of the inspection are on file at this Repair Station under Work Order: B24290

Certified Inspector: _____ **Date:** 15 Mar 2021
CRS Number: N3DR341N

8-26-21 Inserted to correct entry from previous page. Steven J. DeForest A&P 3761408 IA

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	Serial No.	
N4887S	32-7100011	
Make	**Model**	**Series**
PIPER AIRCRAFT, INC.	PA-32-260	

2. Owner

Name *(As shown on registration certificate)*: GREAT LAKES AIR, INC.

Address *(As shown on registration certificate)*
Address: 1220 N. STATE STREET
City: ST. IGNACE State: MI
Zip: 49781 Country: USA

3. For FAA Use Only

4. Type / 5. Unit Identification

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

6. Conformity Statement

A. Agency's Name and Address
Name: Glenn M. Schlak
Address: 1921 Hill Drive
City: Elmira State: MI
Zip: 49730 Country: USA

B. Kind of Agency

✔	U. S. Certificated Mechanic	☐ Manufacturer
☐	Foreign Certificated Mechanic	C. Certificate No.
☐	Certificated Repair Station	3192595
☐	Certificated Maintenance Organization	

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

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

Signature/Date of Authorized Individual
[signature] 20FEB13

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.: 3167756

Signature/Date of Authorized Individual
[signature] 02/20/13

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.)

Removed right & left flap, aileron & aileron control cable assemblies, Left & right Main landing gear assemblies, left and right main & aux fuel tanks.
Removed right & left hand wing assemblies from aircraft.

N4887$ — Nationality and Registration Mark
02 20 13 — Date

Removed and replaced following parts from wing assemblies:
P/N 95639-03 RIB-Wing nose, root, right
P/N 68113-201 SKIN ASSEMBLY-Leading Edge, Right
P/N 62086-01 SKIN ASSEMBLY-Bottom, inboard root, Right
P/N 66761-01 FITTING-Forward spar, Right
P/N 62061-02 WING WALK-Forward, right
P/N 62066-00 RIB- Wing walk, Sta. 36.22, Right
P/N 62061-04 SKIN ASSEMBLY-Wing walk, aft, right
P/N 62024-00 RIB-Wing nose, Sta. 172.05, left
P/N 62024-02 RIB-Wing nose, Sta. 147.70, left
P/N 66598-00 RIB-Sta. 86.03, left
P/N 66599-00 RIB-Sta. 64.59, left
Fabricated and installed following simple wing skins:
P/N 99039-00 SKIN ASSEMBLY-top, inboard, right
P/N 99040-01 SKIN ASSEMBLY-bottom, inboard, right
P/N 62084-00 SKIN- inboard wing (RH side)
P/N 62082-00 SKIN ASSEMBLY-Outboard, length 48.00, left
P/N 99040-00 SKIN ASSEMBLY-Bottom, inboard, left
All replacement parts installed using same type & size of fasteners removed. All fabricated wing skins were made using existing, removed skins as templates. Same material was used in all fabricated wing skins (.25" 2024T3 alclad aluminum). Riveted stringers were removed from existing skin assemblies and installed onto new, fabricated skin assemblies.
Reinstalled left & right hand wing assemblies to aircraft using new hardware. Reinstalled right & left hand flap, aileron, and aileron cable assemblies, main & aux fuel tanks to wing assemblies using new hardware. Reinstalled left & right main landing gear assemblies using new hardware. Reconnected all control cables & linkages and rigged flight controls.
All work performed IAW with:
Piper Aircraft, Inc. PA-32-260 Service Manual P/N 753-690
Section IV- 1E4, 1E5, 1E6
Section V- 1G14, 1G23, 1H1, 1H3, 1I3, 1I6
Section VI- 2A24, 2B2
Section VIII- 2J1
Piper Aircraft, Inc. PA-32-260 Parts Catalog P/N 753-689
Figure 3 & Figure 4
AC 43.13-1B Change 1
Paragraphs 4-53, 4-55, 4-57, 4-58,

Continued Airworthiness inspections of repaired areas are to be conducted IAW the published model specific service manual documents (Piper Aircraft, Inc. PA-32-260).

☐ Additional Sheets Are Attached

NOTICE

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

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

N4887$	02/20/13
Nationality and Registration Mark	Date

Performed repair of discrepant hole and crack damage right hand wing, main spar, lower cap at approximately wing station 30.00.

Inspected damaged area using fluorescent dye penetrant method. Blended area IAW Piper aircraft Engineering Order PA-32-260(7100011)/02 using a blend radius of .30" (minimum .25") and a blend depth of .26" (maximum .30"). Blended using approximately a 20:1 gradual transition between reworked area and non-reworked area.

Performed a fluorescent dye penetrant inspection of the reworked area.

Final polished reworked area with 320 & 400 grit sand paper.

Cleaned, Alodined, and epoxy primed all bare areas.

All work completed IAW attached Piper Aircraft EO PA-32-260(7100011)/02 And FAA Form 8100-9.

Continued airworthiness inspections of this repaired area are to be conducted IAW the published model specific service manual documents (Piper Aircraft, Inc. PA-32-260). No changes to the published inspection procedures or specific timing are required by the installation of this repair.

☒ Additional Sheets Are Attached

ODA-510620-CE APPROVED

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STATEMENT OF COMPLIANCE WITH AIRWORTHINESS STANDARDS

FAA Project No. NA

Piper Project No. Y12500

AIRCRAFT OR AIRCRAFT COMPONENT IDENTIFICATION

MAKE	MODEL NO.	TYPE (Aircraft, Engine, Propeller, etc.)	NAME OF APPLICANT/AUTHORIZATION NO.
Piper Aircraft, Inc.	PA-32-260	Aircraft	Piper Aircraft, Inc. ODA-510620-CE

LIST OF DATA

IDENTIFICATION	TITLE
	NOTE: This Data approval is in support of Organizational Designation Project No. Y12500 and is not valid for any other purpose or application.
REPAIR EO: PA-32-260(7100011)/02	REPAIR OF DISCREPANT HOLE AND CRACK DAMAGE RH WING, MAIN SPAR, LOWER CAP AT APPROX WING STATION 30.00

NOTE:

1) Only the structural engineering aspects of the above listed data are approved herein. This approval is only for the engineering data. It indicates the data listed above demonstrates compliance only with the regulations specified by paragraph and/or subparagraph listed below as "APPLICABLE REQUIREMENTS".
2) All aspects required for the repair are addressed.
3) Compatibility of this data with the aircraft configuration must be determined by the installer.
4) This approval is valid for aircraft model and serial number listed in the Propose of Data block below.
5) Continued airworthiness instructions are not affected by this repair and remain unchanged.
6) Aircraft Data at time of repair approval: 14,200 Hours, NA Landings.

PURPOSE OF DATA

To approve listed data for repair of a discrepant fastener hole common to the RH Wing Main Spar, Lower Cap, on Piper Aircraft Model PA-32-260, Registration Number N4887S (S/N 32-7100011).

APPLICABLE REQUIREMENTS (List specific sections)

CAR 3.171 3.172 3.173 3.174 3.292 3.293 3.294 3.295 3.301 3.307 3.317 thru amd. 3-8 TCDS A3SO, Rev. 32.

CERTIFICATION - As directed by the Administrator and in accordance with the conditions and limitations of authorization under 14 CFR, data listed above and on attached sheets numbered NA have been examined in accordance with established procedures and found to comply with applicable requirements of the Airworthiness Standards listed.

☐ **Recommend approval of these data**

I (~~We~~) Therefore: ☒ **Approve these data**

SIGNATURE(S) OF ENGINEERING ODA UNIT MEMBER(S)	NAME	CLASSIFICATION	DATE
	Jon B. Moore	Structures	1/10/2013

1/11/2013

FAA Form 8100-9

REPAIR ENGINEERING ORDER

Piper

TITLE	EO NUMBER
REPAIR OF DISCREPANT HOLE AND CRACK DAMAGE RH WING, MAIN SPAR, LOWER CAP AT APPROX WING STATION 30.00	PA-32-260(7100011)/02
DESCRIPTION	**MODEL NO**
During inspection of the RH Wing, Main Spar, a discrepant fastener hole and crack damage was noted on the Lower Cap at approximately WS 30. The discrepant hole and crack is to be blended out and polished smooth at the rework location.	PA-32-260
	SERIAL NO
	7100011

The following engineering data is FAA approved when accompanied by FAA form 8100-9 (showing Piper ODA approval) listing this Engineering Order and identifying the aircraft to be repair. Refer to Piper Aircraft model specific service documentation for additional information. All units of measure are in inches unless otherwise noted.

INSTRUCTIONS:

READ AND UNDERSTAND ALL INSTRUCTIONS PRIOR TO BEGINNING THE REPAIR. REPORT ANY DISCREPANCIES OR DIFFICULTIES OF INSTALLATION OF THE DESCRIBED PROCEDURE PRIOR TO START OF THE REPAIRS SHOWN

NOTES:

1. Alodine per MIL-C-5541, AMS-C-5541 or AMS-A-2473 and apply per manufacturer's instructions.
2. Epoxy prime per MIL-P-23377 or equivalent and apply per manufacturer's instructions.
3. Cleaning preparation for chemical film or epoxy prime per manufacturer's instructions for those products.
4. Continued airworthiness inspections of the repaired area are to be conducted in accordance with the published model procedures. No changes to the published inspection procedures or specific timing are required by the installation of this repair.
5. If hardware called out (including grip length) cannot be installed as described, contact Piper Engineering with part number(s) required.
6. If the location of damage/repair is not correct, contact Piper engineering with any corrections or deviations.
7. All units of measure are in inches unless otherwise noted.
8. Structural substantiation of this repair is maintained with Piper Aircraft, Repair Stress Notes PA-32-260 (7100011)/02.

	PRINTED	SIGNED	DATE
ENGINEER	A.Olson		1/10/12
CHECK	J. Moore		1/10/12
APPROVE	J. Moore		1/10/12

REPAIR ENGINEERING ORDER

Piper

TITLE	EO NUMBER
REPAIR OF DISCREPANT HOLE AND CRACK DAMAGE RH WING, MAIN SPAR, LOWER CAP AT APPROX WING STATIONS 30.00	PA-32-260(7100011)/02

1. Remove discrepant hole and crack damage from the P/N 62070-07 RH Main Spar Assembly as shown in Figure 1.

   a. Inspect for extent of cracking using fluorescent dye penetrant. Mark all crack indications.

   b. Use 180 grit sand paper or tool.

   c. Minimum blend radius is 0.25 inch perpendicular to the part surface.

   d. Maximum blend depth shall not exceed 0.30 inch deep into the part.

   e. The repair shall present a smooth and gradual transition between the reworked area and the non-reworked area (at an approximate 20:1 width to depth ratio).

   f. If rework will exceed the above conditions, discontinue repairs and report estimated required depth to Piper Engineering.

2. Fluorescent dye penetrant inspect the reworked area for cracks or other anomalies.

   a. If cracks or other anomalies are detected, discontinue repairs and report findings to Piper Engineering.

   b. If no cracks or other anomalies are detected, continue with repairs as described below.

3. Final polish the repair area (this operation shall remove a negligible amount of material, polish only).

   a. Use 320 grit sand paper or tool.

   b. Minimum blend radius is 0.25 inch perpendicular to the part surface.

   c. The repair shall present a smooth and gradual transition between the reworked area and the non-reworked area.

   d. The final surface finish is to be approximately RMS 63.

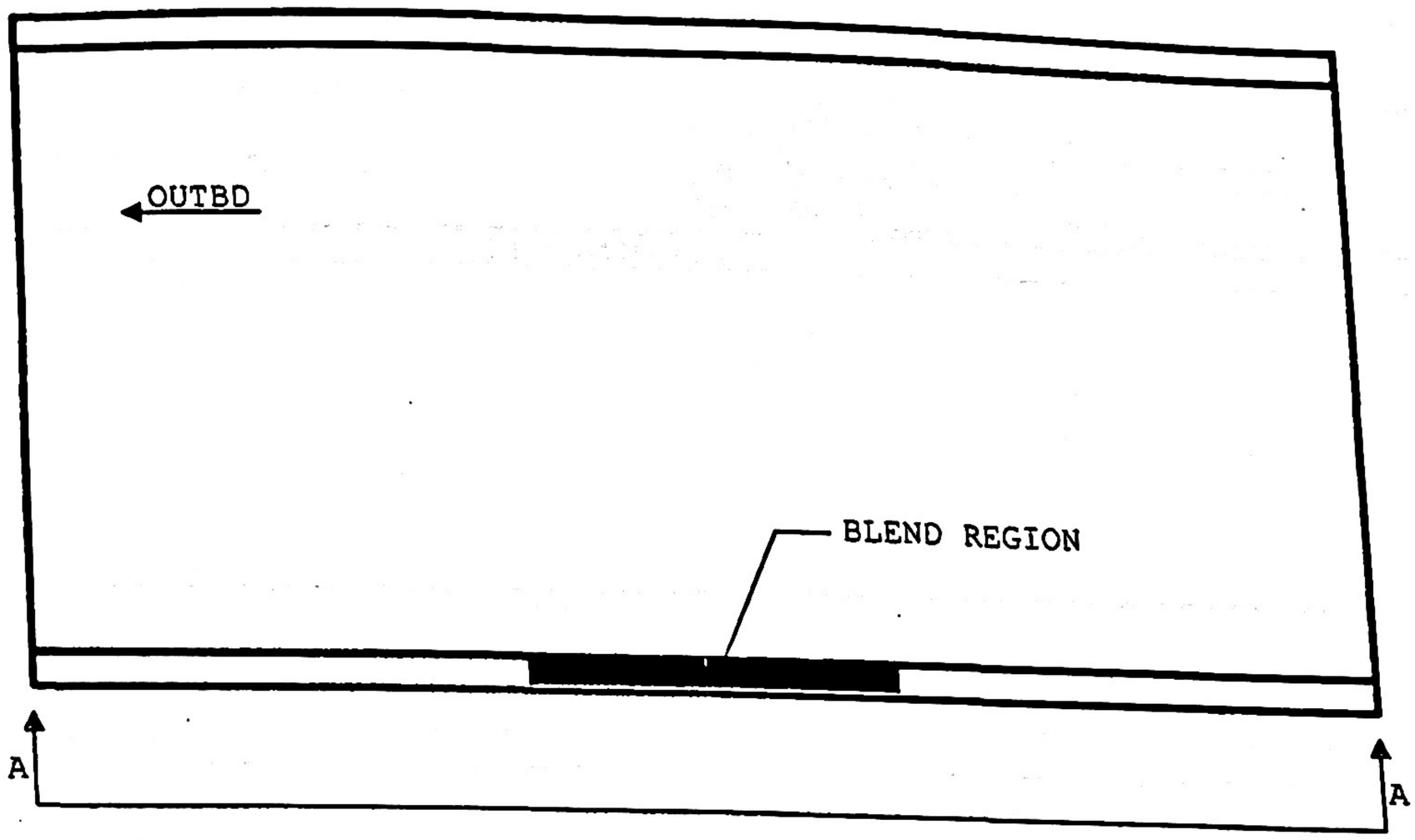
   e. If rework will exceed these depths discontinue repairs and report estimated required depth to Piper Engineering.

   f. Clean, Alodine and epoxy prime all bare areas.

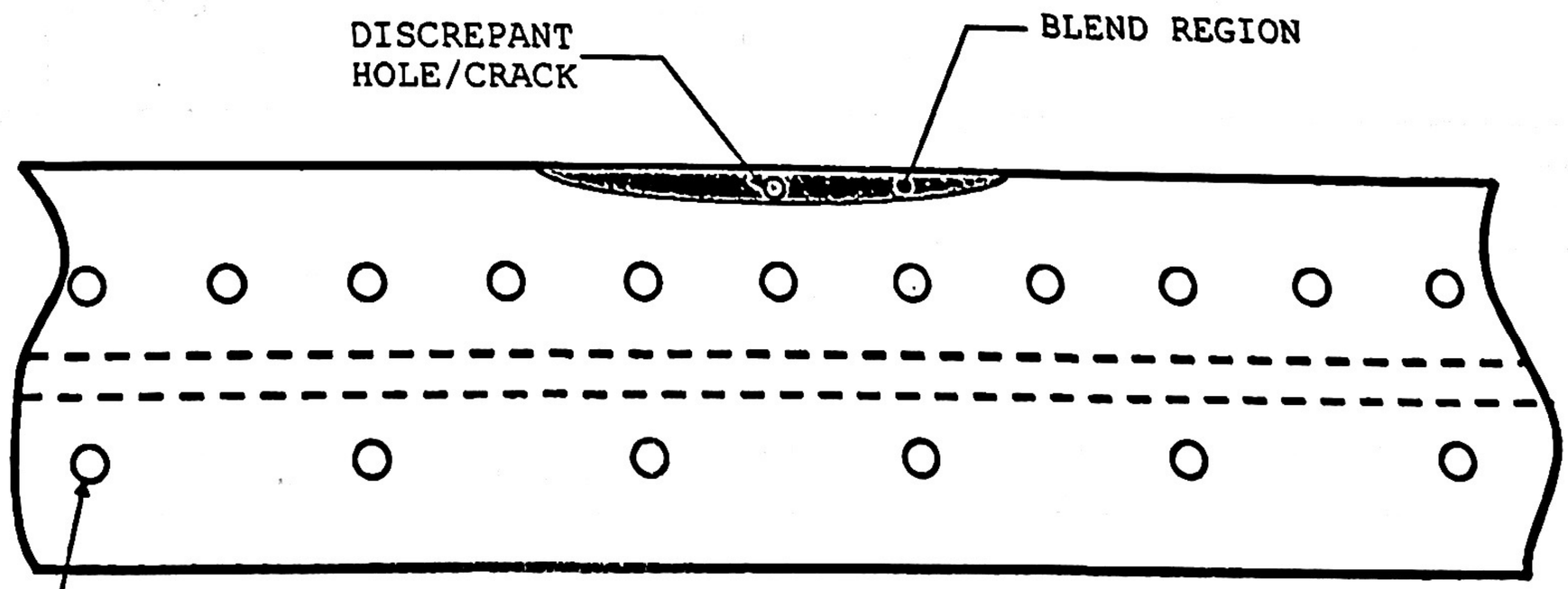
REPAIR ENGINEERING ORDER

Piper

TITLE	EO NUMBER
REPAIR OF DISCREPANT HOLE AND CRACK DAMAGE RH WING, MAIN SPAR, LOWER CAP AT APPROX WING STATIONS 30.00	PA-32-260(7100011)/02



VIEW LOOKING AFT



VIEW A-A

FIGURE 1: REPAIR SKETCH - BLEND

Aircraft Weight and Balance Report

Results of Aircraft Weighing

Make Piper Model PA-32-260

Serial # 32-7100011 N# 48875

Datum Location Prop – Front of Engine Cowling

Leveling Means _____

Scale Arms: Nose 14.0 Tail _____ Left Main 108.12 Right Main 108.12

Scale Weights: Nose 543 Tail _____ Left Main 776 Right Main 777

Tare Weights: Nose _____ Tail _____ Left Main _____ Right Main _____

Weight and Balance Calculation

Item	Scale (lb)	Tare Wt. (lb)	Net Wt. (lb)	Arm (inches)	Moment (in-lb)
Nose	543		543	14	7602
Tail					
Left Main	776		776	108.12	83,901.12
Right Main	777		777	108.12	84,009.24
Subtotal					
Fuel			-204	95	- 19380
Oil					
Misc.					
Total	2096		1892	82.52	156,132.36

Operating Weight

Aircraft Current Empty Weight: 1892

Aircraft Current Empty Weight CG: 82.52

Aircraft Maximum Weight: 3400 lbs.

Aircraft Useful Load: 1508 lbs

Computed By: Ron Fiehler (print name)

Ron Fiehler (signature)

Certificate #: AP3682463 (A&P, Repair Station, etc)

Date: 6-6-19