

AIRCRAFT

1. Nationality and Registration N445DS
2. Manufacturer's Designation DA40
3. Manufacturer's Serial Number 40045
4. Type Approval or Specification Number A47CE
5. Date of Manufacture June 2001
6. Aircraft Inspection Cycle \_\_\_\_\_



# ENGINEERING RECORD

## INSPECTION, REPAIRS & REPLACEMENT

SIGNATURE

LICENCE NUMBER

IN SERIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

*FROM AUSTRIAN LOGS.*



I certify that the ATC Transponder & Altitude Reporting System(s) have been tested in Accordance with Chapter 571, Appendix F F.A.R. 91:217: & F.A.R. 91:413.

DATE

INSPECTOR

*Paul Arnold*

June 26, 2001(Complied with in Austria)



I certify that the Static Pressure system has been inspected and tested in accordance with Chapter 571, Appendix B of the Airworthiness Manual, and F.A.R. 91:411

DATE

INSPECTOR

September 12, 2001 *Paul Arnold*



The ELT was tested and inspected in Accordance with Chapter 571, Appendix G of the Airworthiness Manual and F.A.R. 91:207(d)

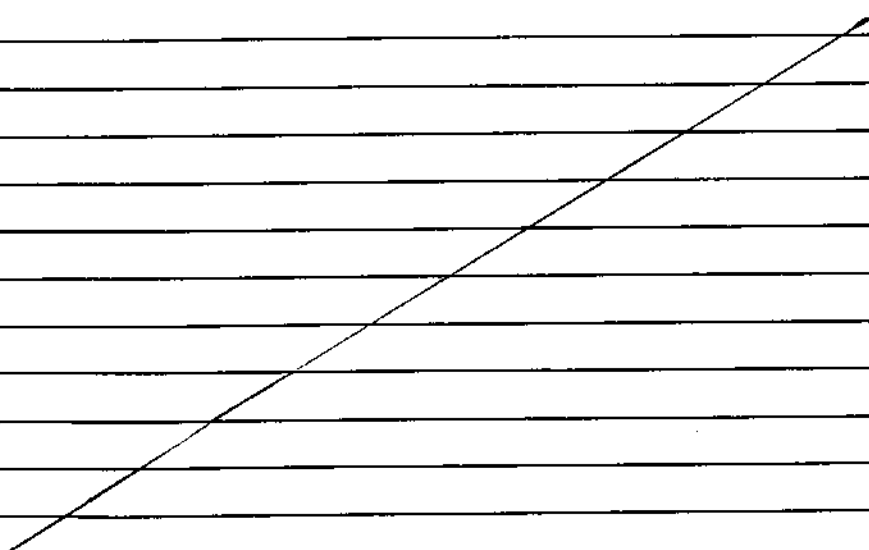
ANNUAL INSPECTION DUE: MARCH 2002

BATTERY DUE: MARCH 2005

DATE

INSPECTOR

September 12, 2001 *Paul Arnold*





# ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT  
DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE  
NUMBER

03/10/2002 - TACH 126.8 - C/W SERVICE BULLETIN  
 OSB40-05 - INSTALLED CANNON 5 DOOR LOCKS  
 11A/W WI-OAM-40-081.  
 -REPAIRED FLOOD LIGHT WIRE.

*Paul Antkowiak* SR 903801X  
 DIAMOND AIRCRAFT.



**Date:** 03/28/02 **N Number:** N445DS

**Tach:** 198.9 **TT Aircraft:** 198.9

**Description of Work Performed:**

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Gleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires March of 2005. Serviced brakes, tires, battery and hydraulic reservoir. Replaced Rt. brake linings. Secured dome lights. Repaired glare shield light wire. AD's reviewed and C/W up to this date, see aircraft records for compliance times. Dressed, inspected and painted propeller and returned aircraft to service.  
 I certify that this aircraft has been inspected in accordance with a 100 Hour inspection and has been determined to be in airworthy condition.

*Jason Bradley*  
 Jason A. Bradley AP 273904559



**Date:** 06/11/02 **N Number:** N445DS

**Tach:** 259.5

**Description of Work Performed:**

Removed and replaced Exhaust system P/N DA40 "B". Installed new mixture control cable P/N A-1510-0866. Ops. check good. Aircraft returned to service.

*Jason Bradley*  
 Jason A. Bradley AP 273904559

# AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		NOTE: USE ROT
	HRS.	MIN.	HRS.	MIN.	
BROUGHT					
PN <u>5934P2-3</u>	SN <u>417572</u>				
This <u>altimeter</u> has been tested and certified to <u>20,000</u> ft per FAR 91.411 in accordance with FAR 43 appendix "E".					
Next certification due: <u>July 2004</u> .					
Details on file under JO# <u>31696</u> .					
Sign <u>[Signature]</u> Date <u>7-26-02</u> .					
Denver Avionics FAA CRS PE5R116N					
PN <u>0120-P2-T</u>	SN <u>74964</u>				
This <u>encoder</u> has been tested and certified to <u>20,000</u> ft per FAR 91.411 in accordance with FAR 43 appendix "E".					
Next certification due: <u>July 2004</u> .					
Details on file under JO# <u>31696</u> .					
Sign <u>[Signature]</u> Date <u>7-26-02</u> .					
Denver Avionics FAA CRS PE5R116N					

SDSHAN

has been replaced.

OFF PN 0120-P2-T SN 77742

ON PN 0120-P2-T SN 74964

The encoder has been function tested in accordance with mfg specs. Details on file under JO# 31696.

Sign [Signature] Date 7-26-02.

Denver Avionics FAA CRS PE5R116N

SDSHAN

Static system tests and inspections required by 91.411 were performed and found to comply with FAR 43 apdx "E". The system was tested to 20,000 FT. Next cert due July 2004.

Details on file under JO# 31696.

Sign [Signature] Date 7-26-02.

Denver Avionics FAA CRS PE5R116N



**Date:** 08-23-02    **N Number:** N445DS

**Tach:** 297.9    **TT Aircraft:** 297.9

**Description of Work Performed:**

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Cleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires March of 2005. Serviced brakes, tires, and battery. Installed new left main tire. Installed new right main tire. Installed new battery vent hose. AD's reviewed and CAW up to this date, see aircraft records for compliance times. Dressed, inspected and painted propeller and returned aircraft to service.

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

[Signature]  
Jay C. Harper AP 607055663

[Signature]  
Gilbert C. Schoales Jr. AP 19643741 IA



**Date:** 09/11/02    **N Number:** N445DS

**Tach:** 321.1

**Description of Work Performed:**

Removed and replaced the attitude indicator P/N 504-0111-938 S/N 25050. Ops. check good.

[Signature]  
Jason A. Bradley AP 273904559

# ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT <small>DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.</small>	SIGNATURE	LICENCE NUMBER
<p>The <u>encoder</u> has been replaced:            OFF PN <u>D120-P2-T</u> SN <u>74964</u>            ON PN <u>D120-P2-T</u> SN <u>78005</u>            The <u>encoder</u> has been function tested in accordance with mfg specs.            Details on file under JO# <u>32001</u>            Sign <u>[Signature]</u> Date <u>10-7-02</u>            Denver Avionics FAA CRS PE5R116N</p>		
<p>PN <u>D120-P2-T</u> SN <u>78005</u>            This <u>encoder</u> has been tested and certified to <u>20,000</u> ft per FAR 91.411 in accordance with FAR 43 appendix "E"            Next certification due: <u>October 2004</u>            Details on file under JO# <u>32001</u>            Sign <u>[Signature]</u> Date <u>10-7-02</u>            Denver Avionics FAA CRS PE5R116N</p>		
<p>Static system tests and inspections required by 91.411 were performed and found to comply with FAR 43 apdx "E"            The system was tested to <u>20,000</u> FT.            Next cert due <u>October 2004</u>            Details on file under JO# <u>32001</u>            Sign <u>[Signature]</u> Date <u>10-7-02</u>            Denver Avionics FAA CRS PE5R116N</p>		
<p>The <u>GPS</u> has been replaced:            OFF PN <u>KLN94-0101</u> SN <u>3094</u>            ON PN <u>KLN94-0101</u> SN <u>X1847</u>            The <u>GPS</u> has been function tested in accordance with mfg specs.            Details on file under JO# <u>32030</u>            Sign <u>[Signature]</u> Date <u>10-7-02</u>            Denver Avionics FAA CRS PE5R116N</p>		
<p>The <u>audio panel</u> has been replaced:            OFF PN <u>KMA28-0101</u> SN <u>A01003</u>            ON PN <u>KMA28-0101</u> SN <u>XA01936</u>            The <u>audio panel</u> has been function tested in accordance with mfg specs.            Detail on file under JO# <u>32030</u>            Sign <u>[Signature]</u> Date <u>10-7-02</u>            Denver Avionics FAA CRS PE5R116N</p>		

N445DS

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# AIR TIME AND



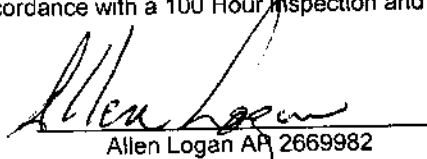
**Date:** 12/10/02 **N Number:** N445DS

**Tach:** 396.3 **TT Aircraft:** 396.3

**Description of Work Performed:**

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Cleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires March of 2005. Serviced brakes, tires, battery and hydraulic reservoir. Installed new brake pads on left main. Installed new rudder pedal adjuster cable on left pedals. Patched hole where baffling wore through oil cooler duct. AD's reviewed and C/W to this time, see aircraft records for compliance times. Dressed, inspected and painted propeller and returned aircraft to service.

I certify that this aircraft has been inspected in accordance with a 100 Hour inspection and has been determined to be in airworthy condition.

  
Allen Logan AP 2669982

RED FOR COMPLETE

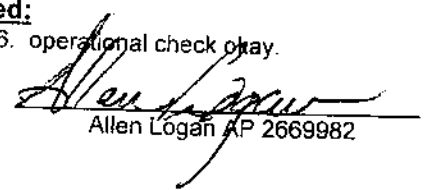


**Date:** 01/10/03 **N Number:** N445DS

**Tach:** 423.4

**Description of Work Performed:**

Replaced fuel pump with P.N. 5100-00-9, S.N. 4146. operational check okay.

  
Allen Logan AP 2669982



**Date:** 03/21/03 **N Number:** N445DS

**Tach:** 495.1 **TT Aircraft:** 495.1

**Description of Work Performed:**

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Cleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires March of 2005. Serviced brakes, tires, battery and hydraulic reservoir. Installed new right brake linings. AD's reviewed and C/W up to this date, see aircraft records for compliance times. Dressed, inspected and painted propeller and returned aircraft to service.

I certify that this aircraft has been inspected in accordance with a 100 Hour inspection and has been determined to be in airworthy condition.

  
Jay C. Harper AP 607055663

CARRIED FORWARD



ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER



**Date:** 06/12/03 **N Number:** N445DS

**Tach:** 595.9 **TT Aircraft:** 595.9

**Description of Work Performed:**

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Cleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires March of 2005. Serviced brakes, tires, battery and hydraulic reservoir. Installed new static wick - left wing tip. AD's reviewed and C/W up to this date, see aircraft log for date and time of compliance. Dressed, inspected and painted propeller and returned aircraft to service.

I certify that this aircraft has been inspected in accordance with a 100 Hour inspection and has been determined to be in airworthy condition.

*[Signature]*  
Daniel M. Evans AP 2734390

*[Signature]*

LOGBOOK ENTRY  
A/C N#445DS

07/23/03

Complied with Honeywell Service Bulletin number KC140.M1. Original P/N:065-00176-5402 S/N:5185 S/W: modulation 02/01. Revised P/N:065-00176-5402. Revised S/N: M5185 revised S/W:03/01. Details under job order number 33054.

SIGNED

*[Signature]*  
DENVER AVIONICS INCPE5R116N



**Date:** 08/29/03 **N Number:** 445DS

**Tach:** 693.1 **TT Aircraft:** 693.1

**Description of Work Performed:**

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Cleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires March of 2005. Serviced brakes, tires, and battery. Tightened Starter Wire Bolt. Repaired Lt & Rt Fuel Cap Ground Wire. Rt Main Tire-Installed new Tire, cleaned and repacked bearings. Safety Wire Horizontal Emergency Switch. Complied with AD 2002-26/01 Eff 01/31/03 per inspection of the fuel injector lines and hardware. All Ad's reviewed and complied with up to this date, refer to the maintenance logs for compliance dates. Dressed, inspected and painted propeller and returned aircraft to service.

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

*[Signature]*  
Christopher Gregg AP2739243

*[Signature]*  
Gilbert C. Schoales Jr. AP 19543741A

# AIR TIME AND

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BRO  
FOR



**Date:** 09/19/03 **N Number:** N445DS

FOR COMPLETE

**Tach:** 728.2

**Description of Work Performed:**

Removed old induction air filter. Installed new induction air filter. (P/N: FR-08504)

*Christopher Gregg*  
Christopher Gregg A92732946



**Key Lime Air**

13252 Control Tower Road, Englewood, Colorado 80112, (303) 768-8628

**N Number:** N445DS **Date:** 10/080/2003 **Tach Time:** 732.9

**Description of Work Performed:**

Removed and re-installed 2 altimeters and encoder, after they were certified by Centennial Instrument Inc. under WO# 3454, 3456 (see attached 8130-3 forms) Tested static system IAW FAR 43 App. 'e' to comply with FAR 91.411.

I Certify only the above, described maintenance was accomplished and inspected, in accordance with manufacturers specifications and current Federal Aviation Administration Regulations, is airworthy and is approved for return to service.

*Robert Hann*  
Robert Hann A524749906



N445DS  
Precision Aircraft

Diamond D-40  
40.045

October 8, 2003

Certify the transponder system IAW FAR 91.413.  
Tested and inspected the aircraft's Transponder system, including Data Correspondence in accordance with 14 CFR part 91.413, part 43, appendix F.

Transponder

PN: 066-01156-0101

MN: KT-76C

SN: 12787

I certify that only the above described maintenance was accomplished and inspected, in accordance with manufacturer's specifications and current Federal Aviation Administration regulations, is airworthy and is approved for return to service. Pertinent details of the work performed are on file at this Repair Station under Work Order MAPGA.

Inspected by: *[Signature]*  
CRS # JG7D076J

for Duncan Avionics; Englewood, CO 80112  
Total Time: 732.9 Total Landings:     

CARRIED FORWARD



**Date:** 12/30/03 **N Number:** N445DS

**Tach:** 792.9 **TT Aircraft:** 792.9

LICENCE  
NUMBER

**Description of Work Performed:**

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Cleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires August of 2005. Serviced brakes, tires, battery and hydraulic reservoir. Installed new tires and brake pads on left main; cleaned, inspected and repacked bearings. All AD's reviewed and C/W to this time, see aircraft records for compliance times. Dressed, inspected and painted propeller and returned aircraft to service.

I certify that this aircraft has been inspected in accordance with a 100 Hour inspection and has been determined to be in airworthy condition.

*Allen Logan*  
Allen Logan AP2669982



**Date:** 01/07/04 **N Number:** N445DS

**Tach:** 799.3

**Description of Work Performed:**

Installed new battery, P.N. G-241 S.N. G021113960.

*Allen Logan*  
Allen Logan AP 2669982



**Date:** 03/10/04 **N Number:** N445DS

**Tach:** 870.5

**Description of Work Performed:**

Changed out electric fuel pump, P.N. 5100-00-9, S.N. 4157. Operational check okay, returned to service.

*Allen Logan*  
Allen Logan AP 2669982



**Date:** 03/15/04 **N Number:** N445DS

**Tach:** ~~867.7~~ 870.6

**Description of Work Performed:**

Changed out electric fuel pump; P.N. 5100-00-9, S.N. 4965. Operational check okay.

*Allen Logan*  
Allen Logan AP 2669982

# AIR TIME AND



**Date:** 03/31/04    **N Number:** N445DS

**Tach:** 892.9    **TT Aircraft:** 892.9

**Description of Work Performed:**

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Cleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires August of 2005. Serviced brakes, tires, battery and hydraulic reservoir. Repaired wiring to flood light and compass light. Replaced brake pads, right main. AD's reviewed and C/W to this time, see aircraft records for compliance times. Dressed, and inspected propeller and returned aircraft to service.

I certify that this aircraft has been inspected in accordance with a 100 Hour inspection and has been determined to be in airworthy condition.

*Allen Logan*  
Allen Logan AP2669982

4/28/04	T.T.	926.	4	Removed + replaced stall warning horn. operational check ok. on ground. Steve E. Piety AP 524748243 IA
5/14/04	T.T.	936	9	Removed + replaced left wing tip. Steve E. Piety AP 524748243 IA
5/18/04	T.T.	944.	0	Completed 50 hr insp. as per Diamond Checklist Steve E. Piety AP 524748243 IA
6/3/04	T.T.	970.	0	Removed + replaced nose tire + tube. Cleaned + repacked wheel bearings. Steve E. Piety AP 524748243 IA

**DATE:** 6/18/2004    **N NUMBER:** N445DS

**S/N:** 40045

**TACH:** 991.5    **HOBBS:**

**TT:** 991.5

Completed 100 hr./Annual inspection this date. Complied with MSB 40-030/1 insp. of fuel selector "U" joints. Check ok. Checked ELT as per FAR 91.207 (d). Replace battery 8/05. Checked for new AD's thru 04-14. C/W AD 2002-26-01 by insp. of fuel nozzle lines and clamps. Complied with all other 100 hr. services at this time as per Diamond checklist and FAR 43 app. D. I certify this aircraft has been inspected in accordance with a 100 hr./Annual inspection and determined to be in airworthy condition at this time.

*Steve E. Piety*  
Steve E Piety AP 524748243 IA

CARRIED FORWARD

# ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT  
PLEASE DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE  
NUMBER

*7/23/04 TACH + TOTAL 1039.1  
 Complied with Diamond M&B 40-030/1  
 fuel selector "U" joint insp. Checked  
 OK. Steve E Piety A&P 524748243 IA.*

**DATE:** 8/26/2004    **N NUMBER:** 445DS    **S/N:** 40-045  
**TACH:** 1090.00    **HOBBS:**    **TT:** 1090.00

Completed 100 hr inspection this date. Checked for AD's thru 2004-17. Checked ELT as per FAR 91.207(d). Replace battery 8/05. Flipped tires on main wheels and repacked wheel bearings. Replaced brake linings. C/W AD 2002-26-01 fuel nozzle line insp. and clamp insp. Serviced and charged battery. Complied with DAI MSB 40-030/1 inspection of fuel selector "U" joint pins. Checked ok. Due every 50 hr intervals. Due again at tach time 1140.0 Complied with inspection and 100 hr services as per Diamond Aircraft checklist in chapter 5 section 05-10, and FAR 43 appendix D. I certify this aircraft has been inspected in accordance with a 100 hr inspection and determined to be in airworthy condition at this time.

*Steve E Piety*  
 Steve E Piety A&P 524748243 IA

*9/21/04 Tach + Total 1140.8 removed + replaced  
 main tires + tubes Packed wheel bearings.  
 Complied with M&B 40-030/1 fuel selector  
 "U" joint insp. Steve E Piety A&P 524748243 IA*

**DATE:** 11/02/04    **N NUMBER:** 445DS    **TT:** 1189.7  
**TACH TIME:** 1189.7    **HOBBS:** 1525.4

Completed 100 hr inspection this date. Checked for new AD's thru 04-21. Complied with DAI MSB 40-030/1 fuel selector "U" joint insp. Checked ok. Due again 1239.7. ELT battery was checked as per FAR 91.207 (d). Replace battery 8/05. Replaced brake fluid. Cleaned fuel screen. Serviced tires and battery. Complied with all other 100 hr services as per maint. manual checklist and FAR 43 app. D. I certify this aircraft has been inspected in accordance with a 100 hr Annual inspection and determined to be in airworthy condition at this time.

*Steve E Piety*  
 Steve E Piety AP524748243IA

# AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					
12/24/04			1239	40	C/W DAI, MSB 40-030/1 fuel selector insp. checked OK. Steve E. Piety AP 524748243
1/7/04			1251	70	R+R Brake pads. checked OK. Steve E. Piety AP 524748243

DATE: 2/24/2005      N NUMBER: 445DS      S/N: 40-045

TACH: 1289.1      HOBBS: 1655.3      T T: 1289.1

Completed 100 hr insp this date. Checked for new AD's thru 05-4. C/W DAI MSB 40-030/1 fuel selector "U" joint insp. Checked ok. Checked ELT as per FAR 91.207 (d). Replace battery 8/05. Complied with all other 100 hr services at this time as per maint. manual checklist and FAR 43 app. D. I certify this aircraft has been inspected IAW a 100 hr inspection and determined to be in airworthy condition at this time.

*Steve E. Piety*  
Steve E Piety AP 2840331

DATE: 3/1/2005      N NUMBER: N445DS      S/N: 40-045

TACH: 1294.0      HOBBS: 1656.1      T T: 1294.0

Removed and replaced defective starter relay with like P/N, S-1577A1. Op's check ok.

*Steve E. Piety*  
Steve E Piety AP 2840331 IA

CARRIED FORWARD

INSPECTION, REPAIRS & REPLACEMENT  
 TRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS. SIGNATURE LICENCE NUMBER

5/10/05 TACH + TOTAL 1341.4 C/W ~~AD 2003~~ DAI MSB 40-030/1  
 fuel selector "U" joint insp. checked OK  
 Steve E. Piety ACP 524748243 IA

DATE: 6/29/2005 N NUMBER: 445DS S/N: 40-045  
 TACH: 1380.3 HOBBS: 1773.0 T T: 1380.3

Removed and replaced tail fin. Removed and replaced main tires and serviced with air.

*Steve E. Piety*  
 Steve E Piety AP 2840331 IA

DATE: 7/13/2005 N NUMBER: 445DS S/N: 40-045  
 TACH: 1396.1 HOBBS: 1791.0 T T: 1396.1

Completed 100 hr/ANNUAL insp. this date. Checked for new AD's thru 05-14. C/W DAI MSB 40-030/1 fuel selector "U" joint insp. check ok. Checked ELT as per FAR 91.207 (d). Checked ok. Replace battery 8-05. Complied with all other 100 hr. services at this time as per FAR 43 App. D and DAI checklist. I certify this aircraft has been inspected IAW a 100 hr/ANNUAL insp. and determined to be in airworthy cond. at this time.

*Steve E. Piety*  
 Steve E Piety AP 2840331 IA

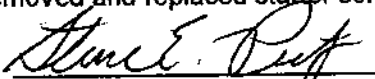
8/25/05 TACH 1433.2 HOBBS 1839.2  
 Replaced ELT Battery + checked as per FAR 91.207 (d).  
 Replace battery 3-2010.  
 Steve E. Piety ACP 2840331 IA

# AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					
9/2/05	TACH	TOTAL	1447.9		Replaced Brake pads. Complied with DAI, M&B 40-031/1 fuel selector "U" joint insp. Check OK. Steve E. Piety A&P 2840331 IA
	HOBBS		1857.5		

- DATE: 10/13/2005    N NUMBER: 445DS    S/N: 40-045  
 - TACH: 1479.8    HOBBS: 1896.9    T T: 1479.8

- Removed battery, charged, re-installed. Removed and replaced starter solenoid. Engine run-up ok.

  
 Steve E Piety AP 2840331 IA

PN 5934PD-3    SN 417572  
 This altimeter has been tested and certified to 20,000 ft per FAR 91.411 in accordance with FAR 43 appendix "E" Next certification due: October 2007. Details on file under JO# 35537. Sign Dennis Lamer Date 10-25-05. Denver Avionics    FAA CRS    PE5R116N

N445DS

PN D120-P2-T    SN 78005  
 This encoder has been tested and certified to 20,000 ft per FAR 91.411 in accordance with FAR 43 appendix "E" Next certification due: October 2007. Details on file under JO# 35537. Sign Dennis Lamer Date 10-25-05. Denver Avionics    FAA CRS    PE5R116N

N445DS

Static system tests and inspections required by 91.411 were performed and found to comply with FAR 43 apdx "E" The system was tested to 20,000 FT. Next cert due October 2007. Details on file under JO# 35537. Sign Dennis Lamer Date 10-25-05. Denver Avionics    FAA CRS    PE5R116N

N445DS

Transponder tests required by FAR 91.413 were performed this date and found to comply with FAR 43 apdx "F" Next certification due: October 2007. Make King model KT70A-001 SN 12787. Details on file under JO# 35537. Sign Dennis Lamer Date 10-25-05. Denver Avionics    FAA CRS    PE5R116N

N445DS

ALTIMETER CORRECTION			
-1000	+10	20,000	+25
0	-5	25,000	
500	-5	30,000	
1000	+5	35,000	
1500	0	40,000	
2000	+10	45,000	
4000	+10	50,000	
6000	0	53,000	
8000	-5	60,000	
10,000	-10	70,000	
15,000	0	80,000	
Date	<u>10-25-05</u>	SN	<u>417572</u>
			<u>5934PD-3</u>



# ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT  
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

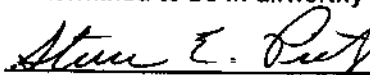
SIGNATURE

LICENCE  
NUMBER

DATE: 11/16/2005 N NUMBER: 445DS S/N: 40-045

TACH: 1493.3 HOBBS: 1914.2 T T: 1493.3


Completed 100 hr/Annual insp. this date. Checked for new AD's thru 2005-22. Complied with Diamond Service Bulletin 40-030/1 fuel selector "U" joint insp checked ok. Checked ELT as per FAR 91.207 (d). Check ok. Replace battery 3/2010. Complied with all other 100 hr services as per FAR 43 app. D and Diamond checklist. I certify this aircraft has been insp. in accordance with a 100 hr/Annual insp. and determined to be in airworthy cond. at this time.

  
Steve E Piety AP 2840331 IA

DATE: 11/16/2005 N NUMBER: 445DS S/N: 40-045

TACH: 1493.3 HOBBS: 1914.2 T T: 1493.3

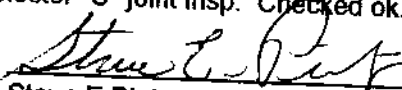
Removed and replaced tail fin with servicable fin.

  
Steve E Piety AP 2840331 IA

DATE: 2/15/2006 N NUMBER: 445DS S/N: 40-045

TACH: 1543.3 HOBBS: 1978.7 T T: 1543.3

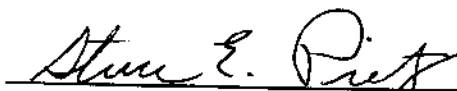
C/W DAI MSB 40-03/1 fuel selector "U" joint insp. Checked ok.

  
Steve E Piety AP 2840331 IA

DATE: 3/7/2006 N NUMBER: 445DS S/N: 40-045

TACH: 1561.3 HOBBS: 2001.1 T T: 1561.3

Removed and replaced brake disc's and linings and ran in as per instructions procedure. Ops check ok.

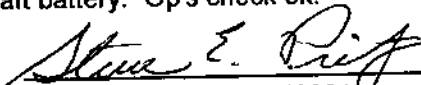
  
Steve E Piety AP 2840331 IA

# AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					

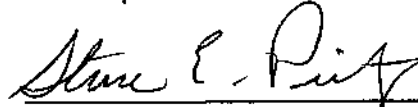
**DATE:** 3/28/2006      **N NUMBER:** 445DS      **S/N:** 40-045  
**TACH:** 1567.1      **HOBBS:** 2009.1      **T T:** 1567.1

Removed and replaced aircraft battery. Op's check ok.

  
 Steve E Piety AP 2840331

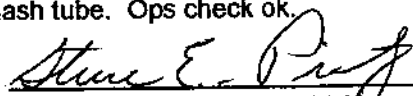
**DATE:** 5/23/2006      **N NUMBER:** 445DS      **S/N:** 40-045  
**TACH:** 1592.3      **HOBBS:** 2040.5      **T T:** 1592.3

100 hr/ Annual insp. completed this date. Checked for new AD's thru 2006-10. Complied with Diamond service bulletin 40-030/1 fuel selector "U" joint inspection. Checked ok. Checked ELT and battery as per FAR 91.207 d. Checked ok. Replace battery 3/2010. Completed all other 100 hr services at this time as per FAR 43 app. D. I Certify this aircraft has been inspected IAW a 100 hr/ Annual insp. and determined to be in airworthy condition at this time.

  
 Steve E Piety AP2840331 IA

**DATE:** 7/19/2006      **N NUMBER:** 445DS      **S/N:** 40-045  
**TACH:** 1624.5      **HOBBS:** 2080.7      **T T:** 1624.5

Removed and replaced left wing tip strobe flash tube. Ops check ok.

  
 Steve E Piety AP 2840331 IA

CARRIED FORWARD

# ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT  
DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE  
NUMBER

DATE: 8/15/2006      N NUMBER: 445DS      S/N: 40-045  
 TACH: 1641.8      HOBBS: 2103.6      T T: 1641.8

Complied with DAI MSB 40/030/1 fuel selector "U" joint inspection. Checked ok.

*Steve E. Piety*  
 Steve E Piety AP 2840331 IA

DATE: 11/24/2006      N NUMBER: 445DS      S/N: 40-045  
 TACH: 1691.3      HOBBS: 2166.8      T T: 1691.3

100 hr/Annual insp. completed this date. Checked for new AD's thru 2006- 23. C/W Diamond S.B. 40-030/1 fuel selector "U" joint insp. Checked ok. Checked ELT as per FAR 91.207 d. Checked ok. Replace ELT battery 3/2010. Serviced and charged main aircraft battery. Replaced ft. wing static wick. Replaced stall warning horn. Replaced main tires and brake linings. Complied with all other 100 hr services at this time as per checklist and FAR 43 app. D. I certify this aircraft has been inspected in accordance with a 100 hr/ANNUAL insp. and determined to be in airworthy condition at this time.

*Steve E. Piety*  
 Steve E Piety AP 2840331 IA

DATE: 4/18/2007      N NUMBER: 445DS      S/N: 40-045  
 TACH: 1750.6      HOBBS: 2240.3      T T: 1750.6

C/W DAI MSB 40/030/1 fuel selector "U" joint insp. Checked ok.

*Steve E. Piety*  
 Steve E Piety AP 2840331 IA

DATE: 7/1/2007      N NUMBER: 445DS      S/N: 40-045  
 TACH: 1790.8      HOBBS: 2292.4      T T: 1790.8

100 hr/ Annual insp. completed this date. Checked for new AD's thru 2007-12. C/W AD 07-11-21, as per S.B. 40-030/3, fuel selector "U" joint insp. Checked ok. Checked ELT as per FAR 91.207 d. Checked ok. Replace battery 3/2010. Complied with all other 100 hr. services at this time as per FAR 43 app.D. I certify this aircraft has been inspected in accordance with a 100 hr/ANNUAL insp. and determined to be in airworthy cond. at this time.

*Steve E. Piety*  
 Steve E Piety AP 2840331 IA

# AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					

**DATE:** 8/15/2007

**N NUMBER:** 445DS

**S/N:** 40-045

**TACH:** 1842.8

**HOBBS:** 2358.1

**TT:** 1842.8

C/W AD 07-11-21 as per MSB 40-030/3 fuel selector "U" joint insp. Checked ok

*Steve E. Piety*

Steve E. Piety AP 2840331 IA



**Date:** 09/12/07 **N Number:** N445DS

**Tach:** 1855.8

**Description of Work Performed:**

Removed and replaced alternate air cable and vent per maintenance manual. See 8130 tag. Operational check okay, returned to service.

*Allen Logan*

Allen Logan AP 2669982

CARRIED FORWARD

# ENGINEERING RECORD

**INSPECTION, REPAIRS & REPLACEMENT**

DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND T

**ALTIMETER CORRECTION**

-1000	+5	20,000	+35
0	+5	25,000	
500	+5	30,000	
1000	+15	35,000	
1500	+15	40,000	
2000	+15	45,000	
4000	+15	50,000	
6000	+5	53,000	
8000	-5	60,000	
10,000	-10	70,000	
15,000	0	80,000	
Date <u>10-30-07</u>		SN <u>417572</u>	

LICENCE  
NUMBER

5734PD-3 SN 417572  
altimeter has been tested and  
 certified to 20,000 ft per FAR 91.411  
 accordance with FAR 43 appendix "E"  
 certification due: October 2009.  
 Details on file under JO# 07-01979.  
 Date 10-30-07.  
 Denver Avionics FAA CRS PE5R116N

N445DS

0120-P2-T SN 78005  
encoder has been tested and  
 certified to 20,000 ft per FAR 91.411  
 accordance with FAR 43 appendix "E"  
 certification due: October 2009.  
 Details on file under JO# 07-01979.  
 Date 10-30-07.  
 Denver Avionics FAA CRS PE5R116N

N445DS

Static system tests and inspections  
 required by 91.411 were performed and  
 found to comply with FAR 43 apdx "E"  
 The system was tested to 20,000 FT.  
 Next cert due October 2009.  
 Details on file under JO# 07-01979.  
 Date 10-30-07.  
 Denver Avionics FAA CRS PE5R116N

N445DS

Transponder tests required by FAR  
 91.413 were performed this date and  
 found to comply with FAR 43 apdx "F"  
 Next certification due: October 2009.  
 Make King model KT70C-0101 SN 12787  
 Details on file under JO# 07-01979.  
 Date 10-30-07.  
 Denver Avionics FAA CRS PE5R116N

N445DS



**Key Lime Air**

13252 Control Tower Road, Englewood, Colorado 80112, (303) 768-9628

**N Number:** N445DS      **Date:** 11/15/07

Description of Work Performed:

Replaced Battery in ELT remote with a new Lithium cell as defined by the ACK service manual Revision  
 05/07/2002.  
 Next due date 11/2015

*Robert Hann*  
 Robert Hann KY7A882H

# AIR TIME AND



**Date:** 02/14/08 **N Number:** N445DS

**Tach:** 1885.2 **TT Aircraft:** 1886.2

### Description of Work Performed:

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Cleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires March of 2010. Serviced brakes, tires, and battery. Installed new tire on nose wheel with new wheel bearings and cups. Installed new landing light lens. Installed new brake pads on both main. Repaired wiring to flap indication lights, operational check okay. All AD's reviewed and complied with to this time, see AD compliance records for compliance times. Dressed, inspected and painted propeller and returned aircraft to service.

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

*Allen Logan*  
Allen Logan AP2669982IA



**Date:** 8-8-2008 **N Number:** N445DS

**Tach:** 1985.4 **TT Aircraft:** 1986.4

### Description of Work Performed:

Performed a 100 Hour inspection of aircraft in accordance with FAR Part 43, appendix D. Cleaned, inspected and lubed all aircraft components. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires March of 2014. Serviced brakes, tires, and battery. Replaced RH MLG tire, and tube, and installed new ELT battery. All AD's reviewed and complied with to date, see aircraft compliance records for compliance times. Dressed, inspected and painted propeller and returned aircraft to service.

I certify that this aircraft has been inspected in accordance with a 100 Hour inspection and has been determined to be in airworthy condition.

*Allen Logan*  
Allen Logan AP2669982IA

## Precision Aircraft and Engine Services Inc.

13252 E Control Tower Rd, Englewood, CO 80112

AIRFRAME

Date: 5/04/2009; Aircraft: N445DS; Type: DA-40; S/N: 40045; Hobbs: 2669.0; Tach: 0.0; Total Time: 2086.5

Perform an Annual inspect of aircraft in accordance with FAR Part 43, Appendix D.

Cleaned, inspected, and lubed aircraft. Cleaned & inspected / Replaced fuel strainer and reinstalled with new O-ring. Removed ship's battery, serviced as required, and reinstalled. Serviced brake master cylinders. Installed new batteries in ELT, batteries expire May of 2011. Tested ELT for proper operation in accordance with FAR 91.207 (d). "AutoPilot" placard replaced. Installed new static wick on rt wingtip. Left brake line, tightened fittings. Left brake caliper removed, cleaned and installed new packing. Back bled brake system. Straightened the elevator trim cover. Relaced all rudder cables with new; two PN) CA1-0406 two PN) CA1-1600-WIP two PN) CA1-2200-WIP two PN) CA1-1200 cables and rigged rudder system in accordance with Diamond Aircraft Manual, and in reference to AC43.13-1B. Checked system for proper operation. Airworthiness Limitation for day VFR satisfied at this time, for another 3000hrs/ 5yrs. Installed new batteries in Emergency power for artificial horizon and reinstalled pack in aircraft. New DPU memory back-up battery installed, this zeroed out tach. Installed new battery in LC2 clock. Sealed the cracks around the base of the upper and lower com antennas. Left rear seat latch removed and straightened. Reinstalled and checked for proper operation. Complied with AD 2007-17-06 Eff. 09/25/2007. Inspected nose gear leg per AD, found no defects at this time. All AD's reviewed and complied with at this time, see recurring AD compliance records for compliance times.

I certify this Aircraft has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition.

*Allen Logan*  
Allen Logan AP2669982IA

# ENGINEERING RECORD



7625 S. Peoria D-14  
Englewood, CO 80112

Maintenance Log Entry

N445DS

Diamond DA40

S/N: 40045

Removed United Altimeter 5934PD-3 S/N: 417572 and Trans-Cal Industries Encoder D120-P2-T for testing and certification. Tested altimeter and encoder to 20,000' in accordance with FAR 43 appendix E. Reinstalled certified equipment in aircraft. Tested aircraft static system to 1,000' above field elevation in accordance with FAR 91.411.

Removed King Transponder KT76C-0101 P/N: 066-01156-0101 S/N: 12787 from aircraft for test and certification. Reinstalled certified transponder in accordance with FAR 43 appendix F. Reinstalled certified equipment in aircraft. Contact details on DAI SO#09-03322. Recertification due October 2011.

The aircraft and/or component identified above was repaired and inspected in accordance with current Diamond DA40 manual and the maintenance rules of the Federal Aviation Regulation under which we are certificated to provide service as per those requirements.

Signed:

CRS PE5R116N

Denver Avionics Inc. Altimeter Correction Card			
Altitude	Correction	Altitude	Correction
-1000	-10	14000	-5
0	-5	16000	5
500	-5	18000	20
1000	5	20000	30
1500	0	22000	
2000	5	25000	
3000	10	30000	
4000	10	35000	
6000	0	40000	
8000	20	45000	
10000	-15	50000	
12000	-15	51000	
P/N: 5934PD-3		S/N: 417572	
Date: 10-27-09		CRS PE5R116N	

Sean R. Maccoomb

## Precision Aircraft and Engine Services Inc.

13252 E Control Tower Rd, Englewood, CO 80112  
AIRFRAME

Date: 1/13/2010; Aircraft: N445DS; Type: DA-40; S/N: 40045; Hobbs: 2773.1; Tach: 79.5; Total Time: 2166.0

Serviced and charged a G-241 battery S.N. G02475331. Installed in aircraft, ground ran and checked charging and starting systems.

Jeremy Roberts AP Pending

## Precision Aircraft and Engine Services Inc.

13252 E Control Tower Rd, Englewood, CO 80112  
AIRFRAME

Date: 5/20/2010; Aircraft: N445DS; Type: DA-40; S/N: 40045; Hobbs: 2800.3; Tach: 100.2; Total Time: 2186.7

Performed Annual inspection in accordance with FAR Part 43, appendix D. Cleaned, inspected, and lubed aircraft. Cleaned & inspected fuel strainer and reinstalled with new O-ring. Removed ship's battery, serviced as required, and reinstalled. Serviced brake master cylinders. Cleaned and inspected wheel bearings. Installed two new bearings P/N 13889 and races P/N 13836 in right main, and one bearing P/N 13889 and race P/N 13836 in left main. Installed two new bearings P/N 08125 and races P/N 08231 in nose wheel. Packed all wheel bearings. Installed new induction air filter element, P.N. FR08504. Checked ELT for proper operation in accordance with FAR 91.207. Battery expires March of 2016. Reglued canopy weatherstripping with 1300L. Installed rubber hose over brake lines as needed for chafing on pilot and co-pilot master cylinder lines. Secured wires away from rudder cables under pilot seat. Fabricated two new rubber washers and installed two new screws with washers on landing light lense. Removed both fuel caps and broken ground wires. Fabricated new ground wires and installed ring terminals. Attached to fuel caps and fuel cap grounding spot. Made fiberglass repairs to tail tiedown. Replaced elevator trim actuator arms attaching hardware as needed. Performed pivot nut friction test on nose wheel and adjusted as needed per Diamond maintenance manual. Installed new pads P/N 066-10600 with new rivets P/N 105-00200 on both mains. All ADs have been reviewed and complied with at this time, see recurring AD compliance records for compliance times.

I certify this Aircraft has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition. □□□

Allen Logan AP2669982IA

# AIR TIME AND



7625 S. Peoria D-14  
Englewood, CO 80112

Maintenance Log Entry

June 4, 2010

REQUIRED FOR COMPLETE

N445DS

Diamond DA40

S/N: 40045

-Removed failed autopilot disconnect switch and replaced with new part (1ea. 031-00428-0000).  
-Determine aircraft autopilot strap code (0b) and uploaded appropriate certification gains file (18770001.CER) to autopilot in accordance with Honeywell Flightline Maintenance Manual for Bendix/King KAP140 Flight Control System. Autopilot ops check normal.

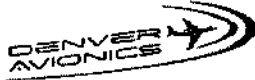
Details on DAI SO#10-03714

The aircraft and/or component identified above was repaired and inspected in accordance with current instructions contained in our manual and the maintenance rules of the Federal Aviation Regulation under which we are certificated and is approved for return to service as per those requirements.

Signed:

Sean R. Maccoomb

CRS PESR116N



7625 S. Peoria D-14  
Englewood, CO 80112

Maintenance Log Entry

June 17, 2010

N445DS

Diamond DA40

S/N: 40.045

Found missing switch cover and reinstalled as required, Autopilot disconnect op checks good.

Details on DAI SO#10-03755.

The aircraft and/or component identified above was repaired and inspected in accordance with current instructions contained in our manual and the maintenance rules of the Federal Aviation Regulation under which we are certificated and is approved for return to service as per those requirements.

Signed:

Sean R. Maccoomb

CRS PESR116N

CARRIED FORWARD



# ENGINEERING RECORD

INSPECTION, REPAIRS & REPLACEMENT  
 DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE  
NUMBER

**N# 411505 Transponder/Altimeter/Static Biennial Certification**

This aircraft's Altimeter system and Altitude Reporting Equipment have been inspected and tested in accordance with FAR 43 appendix E & F, To comply with 91.411.

PILOT ALT. P/N 5934PD-3 S/N 417572 Tested to 20000

C/P ALT. P/N \_\_\_\_\_ S/N \_\_\_\_\_ Tested to \_\_\_\_\_

Encoder P/N D120-P2-T S/N 78005 Tested to 20000

\_\_\_\_\_ P/N \_\_\_\_\_ S/N \_\_\_\_\_ Tested to \_\_\_\_\_

The Aircrafts ATC Transponder sys. Has been inspected and tested ICW FAR 43 Appendix F to Comply with 91.413.

Transponder: KING P/N KT76C S/N 12787

The Static system complies with CFR 23.1325. Leakage f/min: —45

Notes: Adjusted xpr Transmitter Freq & Pulse

W.O.# 1202093137 Date: 2/10/12 Hours 2923.7

INSPECTOR: Gene Rickes Hobbs

**Front Range Transponder Svc,**

395 Airport Dr., Erie, Co., 80516 303-808-9276 CRS F42R979Y

N of

452d

# AIR TIME AND

**Executive Air East**

Ph.303 261 4000 fax 303 261 4055

Date 02-10-2012 N445DS tach time 196.2 hobbs2923.7

Elt batt. Due 11-2013 remote elt batt. Due 11-2015 engine tsmo 2283.4

Propeller tsmo 2282.7 IFR xponder and static due 02-2014

Complied with an annual inspection iaw far 43 appendix D and a check list complied with routine servicing iaw da 40 service guide washed aircraft removed all required inspection panels / interior / engine cowlings and propeller spinner checked all required paperwork and placards all accounted for checked all controls for free movement and full travel to stops no defects noted checked all electrical items for operation no defects noted complied with far 91-207 d elt inspection operational checks ok unit turned on for 5 sec complied with AD 02-26-01 fuel injector lines by visual inspection iaw ad instruction see list for ad times and sign offs removed battery charged and serviced with distilled water replaced all brake pads on both main wheel assy. Cleaned and lubed push pull tube to prevent dragging on seal at wing root replaced parking brake control lever and adjusted operational check ok had pito static and transponder checked had transponder repaired by front range transponder all requirements meet for ifr and night operations iaw oam 40-064 and oam 40-067 drained oil removed filter cut filter open no abnormal particles found at this time installed new filter and added 6 qt's aeroshell 15/50 to sump removed all spark plugs cleaned gapped and tested replaced one plug failed go-no-go gauge no other defects noted preformed a differential compression test on all cylinders readings were 72-72-70-74 over 80 psi replaced gasket on oil filler tube tightened and safe tied replaced all valve cover gaskets with new silicon gaskets replaced missing screws in baffling cleaned induction filter checked propeller spinner and bulkhead for defects none noted no sign of fluid leaks noted checked all engine controls for travel to stops no defects noted checked weight of fire extinguisher and reading on gauge in the green reinstalled spinner / engine cowlings / interior and panels ran aircraft operational checks ok no sign of fluid leaks noted I certify that this aircraft has been inspected iaw an annual inspection and has been determined to be in airworthy condition at this time and is approved for return to service upon owners / operators acceptance Steven T Bush

A&P34036411A Steven T Bush

	Hobbs	Tach	TT	
5/21/12	2996.0	23.2	2582.4	Replaced R on 34-64251 ok for service
6/15/12	3020.4	38.2	2597.4	Replaced right Aero wheel with 186177 repacked left wing tip Operational Diamond DAYD MM. Aircraft ok for service J. Van der pod AP2817060 -END-
				CARRIED FORWARD

Attn: 5/8/12  
The Tach Rest  
itself at 231 to 0  
So the 100 hr is  
due at 65.6  
and the 50 Hr is  
due at 15.6

Tara

**DUNCAN AVIATION**

N445DS  
Aspen Flying Club

Diamond DA40  
S/N: 40045

June 21, 2012

ICE  
IER

- (1) Removed damaged section of wiring and reterminated pilot PTT wiring. System operational check normal.
- (2) Removed power/volume knob from audio panel. Retensioned retainer ring in power/volume knob and reinstalled on audio panel. Power switch functions normally after repair to knob. System operational check normal.

All work performed IAW best maintenance practices.

The above described repair or maintenance is approved for return to service. A detailed record is on file under Work Order #1JCBA.

Signed: *[Signature]* **DUNCAN QI1111** for Duncan Avionics; Englewood, CO 80112  
 For Duncan Aviation CRS # JG7D076J Phone: 303-649-1790 Total Time: Total Landings: \_\_\_\_\_



### LOG ENTRY

REPAIR STATION #: OMKR399L  
 E.A.S.A. 145.5994  
 13251 E. CONTROL TOWER RD., BOX K-12  
 ENGLEWOOD, CO 80112  
 (303) 799-8906

20 July 2012

TTAC: 2434.3

Tach: 65.1

(N445DS) - Straight Flight, Inc. has performed a 100 Hour on the Airframe by using Diamond DA40 Series MM Chapter 05-28-50 checklist as a guide. The following has been accomplished: 1) Checked ELT per FAR Part 91.207 (d) and found satisfactory. Battery due: March 2016. 2) Replaced stall warning horn with new P/N: 0713348-1. 3) Replaced all brake linings with(4) new P/N: 066-14100 using (12) 105-00200 rivets. 4) Installed new chromometer bulb P/N: GE1819 and AAA battery. Ops check satisfactory. 5) Repaired small hole in Leading Edge Horizontal Stabilizer.

A.D. 2009-10-04 "Nose Gear Pivot Axle" - C/W by inspecting NLG Pivot Axle IAW MSB40-046/3. No discrepancies found.

A.D. 2010-25-01 "Rear Passenger Door Latch Upgrade" - C/W by installation of MSB 40-070 Kit.

A.D. 2011-26-04 "Fuel Injection Lines" - C/W by inspecting fuel injection lines per SB342F. No discrepancies found.

**Release Statement:**

Straight Flight, Inc. hereby certifies that all the above maintenance and inspections have been accomplished in accordance with Straight Flight Inspection Procedure Manual, FAR's governing the operation of this equipment, referencing the standard practices in AC43.13 1B (current revision), and using Diamond DA 40 Series maintenance manuals. I certify that this aircraft has been inspected IAW a 100 Hour and has been determined to be in an airworthy condition. Information on these repairs is on file at Straight Flight facility under project #6475.

*[Signature]*  
**John L. Saar, Inspector, Straight Flight, Inc., FAA CRS #OMKR399L**

**DUNCAN AVIATION**

N445DS  
Aspen Flying Club

Diamond DA40  
S/N: 40045

August 7, 2012

Removed King Slaving Accessory KA51B-01 P/N: 071-1242-01 S/N: unreadable from aircraft for repair. Reinstalled repaired unit in aircraft. System operational check normal. All work performed IAW Honeywell Maintenance Manual KA51B Slaving Accessory.

The above described repair or maintenance is approved for return to service. A detailed record is on file under Work Order #1M36A.

Signed: *[Signature]* **DUNCAN QI1111** for Duncan Avionics; Englewood, CO 80112  
 For Duncan Aviation CRS # JG7D076J Phone: 303-649-1790 Total Time: Total Landings: \_\_\_\_\_

# Aspen Flying Club

13000 E. Control Tower Rd. Box K-16 Englewood, CO 80112

*Tach  
Reset*

DATE 09/13/12 Diamond DA40 SN: 40045  
 N445DS Tach: 2.1 Hobbs: 3123 AFTT: 2475.7  
 Replaced alternate air lever mounting bracket with new p/n D41-7163-31-00, s/r MS0719508-10000. Adjusted alternate air control cable. Operational check good ok for service.

R COMPLETE

BROUGHT FORWARD

Josh Vanterpool AP2817060

Tach	16.4				10-15-12
------	------	--	--	--	----------

Tach 16.4 FAA - PMA 10-15-12

This tag certifies that Sky-Tec Model No. **149-24LS**  
 Serial No. **F4L-441128** was manufactured new on 10 Nov 2011  
 by Sky-Tec under the authority of FAA PMA No. PQ0852SW Supplement  
 No. 1 per CFR14 Part 21 in accordance with Sky-Tec's  
 FAA-Approved Fabrication Inspection System (CFR14 Part 21 §21.303) and  
 conforms to the relevant FAA-approved drawings. This part has been  
 determined to be airworthy.

For installation eligibility see [www.skytecair.com/eligibility.htm](http://www.skytecair.com/eligibility.htm)

Starter Installed on **N 445DS** by **J. Vanterpool**  
 (Aircraft) (Mechanic)  
 SN: **40045** AP **2817060**

Form CC1108-1

## Aspen Flying Club

13000 E. Control Tower Rd. Englewood, CO 80112

N445DS DA40 SN: 40045  
 12/11/12 Tach: 49.8 Hobbs: 3183.8

**100 Hour Inspection** completed on this date using the DA40 MM 100 Hour Inspection Check List. Tested ELT per FAR 91.207(d), no defects noted. ELT battery due Nov. 2013. Replaced vacuum regulator filter with new p/n RAB3-5-1. Replaced all fuel hoses behind the firewall and fuel hoses in engine compartment per DA40 MM Replacement Requirements. Replaced all oil hoses per DA40 MM Replacement Requirements. Ref. attached TSO cert. for fuel and oil hoses replaced. Replaced emergency battery with 28 AA batteries next due March 2019. Repaired grounding straps on flap control horn. Replaced left and right front map lights with new p/n DA1-99033-00-01. Replaced aircraft battery with new p/n G-241 s/n G02694181. AD's check through bi-weekly 2012-22. Operational and leak checks good. **I certify that this airframe has been inspected IAW a 100 hour inspection and was determined to be in airworthy condition.**

Jonathan Coupal A&P3427289

CARRIED FORWARD



**Straight Flight**

A SUBSIDIARY OF SIERRA NEVADA CORPORATION

**LOG ENTRY**

REPAIR STATION #: OMKR399L  
E.A.S.A. 145.5994  
13251 E. CONTROL TOWER RD., BOX K-12  
ENGLEWOOD, CO 80112  
(303) 799-8906

E  
R

18 January 2013

TACH: 68.9

Hobbs: 3184.0

(N445DS) - Straight Flight, Inc. has accomplished the following: 1) Inspected Hobbs meter wiring and replaced fuse with new P/N AGC-3 IAW DA40-1800 Wiring Diagram Chart 90. Operational check satisfactory.

**Release Statement:**

Straight Flight, Inc. hereby certifies that all the above maintenance and/or inspections has been accomplished in accordance with Straight Flight Inspection Procedure Manual, FAR's governing the operation of this equipment, referencing the standard practices in AC43.13 1B (current revision). Information on these repairs is on file at Straight Flight facility under project #6713.

*John L. Saar*  
John L. Saar, Inspector, Straight Flight, Inc., FAA CRS #OMKR399L

**Aspen Flying Club  
13000 E. Control Tower Rd. Englewood, CO 80112**

N445DS                      DA40                      SN: 40045  
03/01/13                      Tach: 104.1                      ACTT: 2535.7                      Hobbs: 3231.9

Annual inspection completed on this date using the DA40 MM 100 Hour Inspection Check List. Tested ELT per FAR 91.207(d), no defects noted. ELT battery due March 2016. Replaced vacuum regulator filter with new p/n RAB3-5-1. Replaced main landing gear brake discs with new p/n 164-24400 (2 ea.). Replace brake lining with new p/n 066-10600 (4 ea.). Replaced pilot side three point seatbelt with new p/n 5-01-1C0701-LH. C.W. AD 09-10-04 Nose Gear Pivot Axle by inspection of the NLG Pivot Axle IAW MSB40-046/3. No defects noted next due tach: 304.1. AD's check through bi-weekly 2013-04. Operational and leak checks good. I certify that this airframe has been inspected IAW an Annual inspection and was determined to be in airworthy condition.

Joshua Vanterpool A&P28170601A

**Aspen Flying Club  
13000 E. Control Tower Rd. Englewood, CO 80112**

N445DS                      DA40                      SN: 40045  
03/12/13                      Tach: 111.7                      Hobbs: 3242

Replaced left nav light with new p/n 34-0428020-65. Operational check good. Aircraft ok for service.

Josh Vanterpool AP2817060

**Aspen Flying Club  
13000 E. Control Tower Rd. Englewood, CO 80112**

N445DS                      DA40                      SN: 40045  
04/03/13                      Tach: 142.8                      Hobbs: 3279.8

Replaced parking brake cable w/new p/n DA1-9032-40-02 s/n RC1200597. Operational check good. Aircraft ok for service.

Jon Coupal A&P3427289



# ENGINEERING RECORD

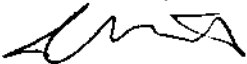
INSPECTION, REPAIRS & REPLACEMENT  
 ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

**Aspen Flying Club**  
**13000 E. Control Tower Rd. Englewood, CO 80112**

N445DS                      DA40                      SN: 40045  
 05/07/13                      Tach: 162.6                      Hobbs: 3304.5

Installed overhauled electric fuel pump p/n 5100-00-9, s/n 10416B by Quality Aircraft Accessories Inc. Cert# QY1R334Y, W.O. # W01770006532.001 dated 01/17/13. Operational and leak checks good. Aircraft ok for service.

Josh Vanterpool A&P2817060 

**Aspen Flying Club**  
**13000 E. Control Tower Rd. Englewood, CO 80112**

N445DS                      DA40                      SN: 40045  
 06/06/12                      Tach: 203.8                      Hobbs: 3355.4

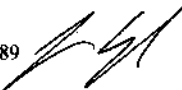
**100 Hour Inspection** completed on this date using the DA40 MM 100 Hour Inspection Check List. Tested ELT per FAR 91.207(d), no defects noted. ELT battery due March, 2016. Replaced vacuum regulator filter with new p/n RAB3-5-1. AD's check through bi-weekly 2013-10. Operational and leak checks good. **I certify that this airframe has been inspected IAW a 100 hour inspection and was determined to be in airworthy condition.**

Jonathan Coupal A&P3427289 

**Aspen Flying Club**  
**13000 E. Control Tower Rd. Englewood, CO 80112**

N445DS                      MTV-12-B/180-17f                      SN: 03044                      TSN: 956.9  
 07/18/13                      Tach: 241.5                      Hobbs: 3401.1

Replaced aircraft propeller with overhaul p/n MTV-12-B/180-17f, s/n 03044 by MT-Propeller USA, Inc., Cert# Q4MR908Y, WO# 10-443MT, dated 09/06/12. Operational and leak checks good. Aircraft ok for service.

Jonathan Coupal A&P3427289 

**Aspen Flying Club**  
**13000 E. Control Tower Rd. Englewood, CO 80112**

N445DS                      DA40                      SN: 40045  
 08/20/13                      Tach: 272.9                      Hobbs: 3439.3

Replaced taxi light with new p/n 01-0770346-03. Operational check good. Aircraft ok for service.

Jeremy Vigil A&P3696983 

# AIR TIME AND

**DUNCAN N445DS**  
**AVIATION.. Aspen Flying Club**

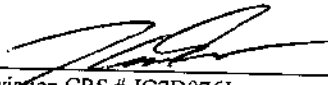
**Diamond DA40**  
**S/N: 40045**

**September 11, 2013**

MPLETE

Reinstalled repaired No.2 KX155A Communication/Navigation unit into aircraft (P/N: 069-01032-0201, S/N: 16927). Basic ground checks of both Com and Nav functions demonstrate as good. All work completed in accordance with acceptable maintenance practices.

The above described repair or maintenance is approved for return to service. A detailed record is on file under Work Order # 2CQCA.

Signed:   
 Duncan Aviation CRS # JG7D0761

**DUNCAN**  
**CR 1473**  
 Phone: 303-649-1790

for Duncan Avionics; Englewood, CO 80112  
 Total Time: Total Landings:

**Aspen Flying Club**  
**13000 E. Control Tower Rd. Englewood, CO 80112**

**N445DS**      **DA40**      **SN: 40045**  
 09/12/12      Tach: 296.0      Hobbs: 3466.3

**100 Hour Inspection** completed on this date using the DA40 MM 100 Hour Inspection Check List. Tested ELT per FAR 91.207(d), no defects noted. ELT battery due March, 2016. Replaced vacuum regulator filter with new p/n RAB3-5-1. Replaced left and right brake linings with new p/n RA66-106 (4 ea.) Replaced right tire with overhauled p/n 606C61-6, s/n 92970314R1 by Aero Wheel and Brake Service Corp. Cert# U8SR971J, WO# 198694 dated 11/10/12. Reused serviceable inner tube. C.W. AD 09-10-04 Nose Gear Pivot Axle by inspection of the nose landing gear pivot axle IAW MSB40-046/3. No defects noted. Next due tach: 469.0. AD's check through bi-weekly 2013-18. Operational and leak checks good. I certify that this airframe has been inspected IAW a 100 hour inspection and was determined to be in airworthy condition.

Jonathan Coupal A&P3427289



**Aspen Flying Club**  
 13000 E. Control Tower Rd. Englewood, CO 80112

**N445DS**      **DA40**      **SN: 40045**  
 10/24/13      Tach: 332.8      Hobbs: 3513

Re-torqued nose gear pivot fork IAW DA40 MM. Replaced nose tire with overhauled Michelin 5.00-5 6 ply p/n 071-311-0, s/n 9292W00202R1 by Aero Wheel and Brake Service Corp. Cert# U8SR917J, W.O. 217134 dated 10/10/2013. Replaced inner tube with new 5.00-5 inner tube. Operational and leak checks good. Aircraft ok for service.

Josh Vanterpool A&P2817060



CARRIED FORWARD





FAA - PMA


This tag certifies that Sky-Tec Model No. **149-24LS**  
 Serial No. **F4L-441124** was manufactured new on 10 Nov 2011  
 by Sky-Tec under the authority of FAA PMA No. PQ0852SW Supplement  
 No. 1 per CFR14 Part 21 in accordance with Sky-Tec's  
 FAA-Approved Fabrication Inspection System (CFR14 Part 21 §21.303) and  
 conforms to the relevant FAA-approved drawings. This part has been  
 determined to be airworthy.

For installation eligibility see [www.skytecair.com/eligibility.htm](http://www.skytecair.com/eligibility.htm)  
 Starter Installed on **N 44505** by [Signature]  
 (Aircraft) (Mechanic)

G RECORD  
 LINES AS REQUIRED FOR COMPLETE

DATE	HF
BROUGHT FORWARD	

Form CC1108-1



**Aspen Flying Club**  
 13000 E. Control Tower Rd. Englewood, CO 80112

N445DS 02/19/14	Diamond DA40 Tach: 394.6	SN: 40045 Hobbs: 3587.6
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100 Hour Inspection completed on this date using the DA40 MM 100 Hour Inspection Check List. Tested ELT per FAR 91.207(d), no defects noted. ELT battery due Mar 2016. AD's check through bi-weekly 2014-2. Operational and leak checks good. I certify that this airframe has been inspected IAW a 100 hour inspection and was determined to be in airworthy condition.

[Signature]

Precision Aircraft & Engine Service Inc.  
 Altimeter Correction Card

Altitude	Correction	Altitude	Correction
-1000	0	14000	20
0	0	16000	20
500	0	18000	20
1000	10	20000	20
1500	0	22000	N/A
2000	15	25000	N/A
3000	20	30000	N/A
4000	15	35000	N/A
6000	15	40000	N/A
8000	10	45000	N/A
10000	5	50000	N/A
12000	5	51000	N/A

Peoria D-14  
 d, CO 80112 Maintenance Log Entry 03/03/14

Diamond DA40-180	S/N: 40045	Hobbs: <b>3598.9</b>
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under 24 month tests and inspections IAW 14 CFR 91.411/91.413 and


PD-3 S/N 417572 Tested to: 20,000 feet.  
0156-01m S/N 12787 Tested to: 20,000 feet.

Repair station under Work Order No.: AY01673

Gary P. Walker

number PESR116N

P/N: 5934PD-3      S/N: 417572  
 Signature: [Signature]  
 3/3/2014      CRS# PESR116N



**Aspen Flying Club**  
 13000 E. Control Tower Rd. Englewood, CO 80112

N445DS 02/05/2014	DA40 Tach: 391.4	SN: 40045 Hobbs: 3583.4
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Removed and discarded old battery. Build up and charged new battery p/n: G-241 using Pink Power Gill battery acid. Tested and installed new battery. Operational check good.

[Signature]

Jon Coupal A&P 3427289



Aspen Flying Club  
13000 E. Control Tower Rd. Englewood, CO 80112

N445DS  
03/26/14

DA40  
Tach: 408.6

SN: 40045  
Hobbs: 3607.0

Replaced left main tire w/ new Goodyear Flight Special II 6.00x6 6 ply S/N: 32247584, Material number: 186404. Reused serviceable inner tube. Removed and replaced left and right brake rotors w/ new p/n: 164-24400 (2 ea.) Removed and replaced left and right brake linings w/ new p/n: RA66-106. Operational and leak checks good.

Jon Coupal A&P 3427289

ENCE  
IBER



**Straight Flight**  
A DIVISION OF SIERRA NEVADA CORPORATION

### LOG ENTRY

REPAIR STATION #: OMKR399L  
E.A.S.A. 145.5994  
13251 E. CONTROL TOWER RD., BOX K-12  
ENGLEWOOD, CO 80112  
(303) 799-8906

2014

TTAC: 2845.5 Tach: 413.9

2014 Straight Flight, Inc. has performed the following: 1) Performed Annual/100hr inspection by following FAR part 43 Appendix D as a guide. 2) Replaced engine induction alternate air valve and installed the following new factory parts gasket P/N 77504, flange P/N D41-7166-20-33, inlet duct P/N 7166-20-31, set screw P/N RC1401045, and o-ring P/N AS-568-042. 3) Replaced LH wheel cylinder bleed port P/N 079-00300. Bled LH brake. 4) Resealed RH brake master cylinders. Bled RH brake system, serviced to full level. Leak check was satisfactory. 5) Resealed glareshield lamp in fixture. Installed new glareshield power supply P/N APVL 328-8-3-L-18 QF. Operational check was satisfactory. 6) Performed minor repair to pilots RH rudder pedal. 7) Checked ELT per FAR part 91.207(d), found satisfactory, battery due March 2016. 8) C/W Ads biweekly

2013-24-14 "Center wing AFT spar structural integrity" - AD 2013-24-14 is due at next major structural inspection (MSI) or 114 months after Jan. 7, 2014 effective date of this AD.

2009-10-04 "NLG leg pivot axle" - C/W AD 2009-10-04 para. F1. Performed Florescent dye penetrant inspection of nose gear leg in accordance with Aircraft mandatory Service Bulletin No. M & B 40-04613, dated 11/17/08. Next due 12 month/200hrs.

2011-26-04 "Fuel Injection lines" - C/W AD 2011-26-04 by inspecting fuel injection lines in accordance with Textron/Lycoming fuel injection line inspection. No discrepancies found.

**Statement:**

Straight Flight, Inc. hereby certifies that all the above maintenance and/or inspections has been accomplished in accordance with Straight Flight Inspection Manual, FAR's governing the operation of this equipment, referencing the standard practices in AC43.13 1B (current revision), and Diamond Aircraft Maintenance Manuals. I certify this aircraft has been inspected IAW an Annual/100hr inspection and determined to be in airworthy condition and has been approved for return of service. Information on this repair is on file at Straight Flight facility under project #7347.

John L. Saar, Inspector, Straight Flight, Inc., FAA CRS #OMKR399L

**BRUNGARD AVIATION** BOULDER, COLORADO

4-11-2014 3613.8 HOBBS N445DS DIAMOND DA40

TROUBLE SHOOT INOP ALTERNATOR SYSTEM, REPAIR BROKEN

GROUND WIRE AT ALTERNATOR, RUN UP CHECK OK

STEVE HALL A&P 3435597IA

# AIR TIME AND

## Precision Aircraft and Engine Services Inc.

7625 S Peoria St D14, Englewood, CO 80112

AIRFRAME

DATE

BROUGHT  
FORWARD



Date: 5/02/2014; Aircraft: N445DS; Type: DA-40; S/N: 40045; Hobbs: 3637.4; Tach: 433.8; Total Time: 2520.3


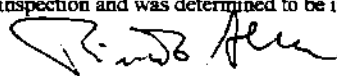
Per Diamond SI 40-135, issued June 17, 2013, 1.3 if the rudder cables have been changed out to stainless steel, they are to be changed out "on condition" in future. We have verified with Diamond Aircraft that the cables we purchased from them and installed in N445DS in 2009 were stainless steel and meet the criteria of SI 40-135.



*Allen Logan*

Allen Logan AP 2669982

COMPLETE

	<b>Aspen Flying Club</b> 13000 E. Control Tower Rd. Englewood, CO 80112	
N445DS 7-17-15	Diamond DA-40 Tach: 3746.7	SN: 40045 Hobbs: 3528.9
1. C/W this inspection per the DA40 MM and FAR 43 apdx d Check List. 2. Tested ELT per FAR 91.207(d), no defects noted. ELT battery due Mar 2016. 3. AD's check through bi-weekly 15-14. 4. AD 09-10-04 NLG pivot axle found good at this time. 5. Replaced all brake pads(RA66-106) 6. Replaced aircraft battery with new G243 s/nG02867440. I certify that this aircraft has been inspected in accordance with an Annual inspection and was determined to be in airworthy condition.		
Ronald Dobbs LA3506064 		

	<b>Aspen Flying Club</b> 13000 E. Control Tower Rd. Englewood, CO 80112	
N445DS 10-17-16	Diamond DA-40 Tach: 532.4	SN: 40045 Hobbs: 3760.8
100 Hour Inspection completed on this date using the DA-40 MM 100 Hour Inspection Check List. Tested ELT per FAR 91.207(d), no defects noted. ELT battery due Dec. 2025. AD's check through bi-weekly 2016-20. Complied with AD09-10-04 by dye penetrant inspection of nose gear pivot. Replaced battery with new Concorde RG24-11M. SN: 40832849. Removed and replaced all 5 nose gear shock absorbers. Part Numbers: DA4-9032-23-01. Resealed windows with RTV. Resealed right brake cylinder with a new MS28775-224 o-ring. Operational and leak checks good. I certify that this airframe has been inspected IAW a 100 hour inspection and was determined to be in airworthy condition.		
Alberto Pizzato A&P 2522916 		

	<b>Aspen Flying Club</b> 13000 E. Control Tower Rd. Englewood, CO 80112	
N445DS 10-17-16	Diamond DA-40 Tach: 532.4	SN: 40045 Hobbs: 3760.8
Complied with a 100 Hour Inspection per FAR 43 apdx d using the DA-40 MM 100 Hour Inspection Check List as a guide. I certify that this Aircraft has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition.		
Ronald Dobbs LA3506064 		


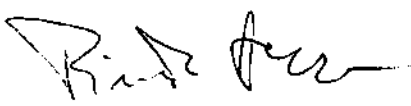
T.O.T. - SN: 2955 HRS

CARRIED FORWARD

INSPECTION, REPAIRS & REPLACEMENT  
 ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER

	<b>Aspen Flying Club</b> 13000 E. Control Tower Rd. Englewood, CO 80112	
	N445DS 10-18-16	Diamond DA-40 Tach: 532.4
Complied with AD2007-11-21 by visual inspection of the fuel selector universal joint. no defects noted. next due at tach: 1532.4		
Alberto Pizzato A&P 2522916 		

**N#445DS Transponder/Altimeter/Static Biennial Certification**

This aircraft's Altimeter system and Altitude Reporting Equipment have been inspected and tested in accordance with FAR 43 appendix E & F, To comply with 91.411.

PILOT ALT. P/N 5934PD-3 S/N 412572 Tested to 22,000

Encoder P/N D120-P2-T S/N 78005 Tested to 22,000

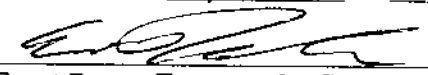
The Aircrafts ATC Transponder sys. Has been inspected and tested ICW FAR 43 Appendix F to Comply with 91.413.

Transponder: King P/N KT-76C S/N 12787



\*The Static system complies with CFR 23.1325. Leakage ft/min. 10

Notes: NONE

W.O.# 1610204020 Date: 10/20/16 Hours 532.5

INSPECTOR: 

**Front Range Transponder Svc.**  
 11750 Airport Way Broomfield, CO 80021 303-469-1380 CRS F42R979Y

	<b>Aspen Flying Club</b> 13000 E. Control Tower Rd. Englewood, CO 80112	
	N445DS 11-15-16	Diamond DA-40 Tach: 532.4 Total time: 2955.0
This aircraft has been inspected and has been found safe for intended flight in accordance with Special Flight Permit dated November 15, 2016. All AD's complide with thru bi weekly 2016-23 with the exception of AD 2014-13-08 eff. Aug 27, 2014.		
Jeffrey S Rice A&P 3224419 		



ENGINEERING RECORD

**RAS**

ROCKY MOUNTAIN  
AVIONICS SERVICES LLC

Date: 7/25/2017  
Aircraft Reg: N445DS  
Tach Time: NA  
Hobbs Time: 3838.5  
**AIRFRAME**

LICENCE  
NUMBER

ENTRIES.

11915 Airport Way  
Broomfield CO, 80021

**REMOVED:**

KLN94 069-0103-0101 SN 2508, MD41-52N SN 16996, KX165A 069-01033-0101 SN 1310, DME KN62A 066-1068-01 SN 30305, ADF KR87 066-01072-0004 SN 73705, ADF Indicator 066-3063-01 SN 49080 and KA92 Antenna 071-01553-0200 SN 34091. Removal of above equipment includes trays, backplates, connectors and also unused circuit breakers.

**INSTALLED:**

GNS530W per MFG Installation Instructions 190-00357-02 and STC SA01933LA-D using GA35 WAAS antenna. GNS interfaced to original HSI per above listed manual.  
Aircrafts original radio mounting structures retained for this installation.  
Circuit breakers for new GNS530W are 1 each 5 AMP for GPS/NAV and 1 each 5 AMP for COMM1. All circuit breaker labeling updated.  
Weight and Balance Revision performed and is contained in aircrafts logbooks.  
This aircraft is approved for return to service for the above accomplished work —END—

Steve Odean

*Steve Odean*

A&P522399048

**RAS**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger F  
Broomfield CO, 80021

**RAS**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

8/18/2017

Removed and replaced hobbs meter with new meter P/N 85094. Ops check is satisfactory at this time.  
END—

Date: 08-22-2017  
Acft Reg: N445DS  
Flight Tach: 627.3  
**AIRFRAME**

Removed left wingtip strobe  
check is satisfactory at this time.

Daniel R Ruley

A&P 3574007

Clinton Cook

*Clinton Cook*

*Daniel R Ruley*

**RAS**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

Date: 8/30/2017  
Acft Reg: N445DS  
Flight Tach: 632.5  
ACTT: 3055.1  
**AIRFRAME**

A&P 3918566

Performed a 100HR/Annual inspection in accordance with FAR 43 App (D) and Diamond DA40 checklist. Removed interior and all inspection panels. Inspected and lubed as required all flight control surfaces, rod ends, chains and pulleys. C/W FAR 91.207 sub (D) ELT inspection. Operational check was satisfactory at this time, replaced batteries with (8) new D Batteries. **Battery next due for replacement September 2019.** Replaced static wick on right aileron P/N 16630 with new. Repaired top cowling air deflector by regluing using fiberglass resin. Troubleshoot faulty hobbs meter by tracing wires, found removed ground. Reinstalled interior and inspection panels. Degreased and washed aircraft. Ground Run/Ops/Leak check all satisfactory at this time. I certify that this Airframe has been inspected in IAW a 100HR/Annual inspection and has been found to be in airworthy condition and is approved for return to service at this time. —END—

Justin C Parrow

*Justin C Parrow*

A&P30835861A

Tach: 632.5 N445DS

C/w AD 09-10-04 By Dye Pen inspection of Nose gear  
Pivot Axle. No Defects Found — End —

*Justin C Parrow*  
A&P 30835861A

**R M A S**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

**A I D T I M E A N D**

Date: 8/30/2017  
Acft Reg: N445DS  
Flight Tach: 632.5  
**AIRFRAME**

RECORD  
LINES AS REQUIRED FOR COMPLETE

C/W AD 84-26-02 by installing new P/N FR-08504 induction filter. Next due for replacement at tach: 1132.5. Operational check of all systems is satisfactory at this time. This aircraft is approved for return to service for the above accomplished work. ---END---

Justin Parrow *Justin Parrow* A&P3083586

**R M A S**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

Date: 10/19/2017  
Acft Reg: N445DS  
Flight Tach: ~~640.1~~  
**Airframe**

Removed and replaced right main and left main brake linings with new linings P/N 66-106. Ops check is satisfactory at this time.

Daniel Ruley *Daniel Ruley* A&P 3918566

**R M A S**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

Date: 12/12/2017  
Acft Reg: N445DS  
Flight Tach: 117.2  
**AIRFRAME**

Removed right main tire and replaced inner tube with 6.00-6 and tire with 6.00-6 retred tire. Replaced left main landing gear tire with 6.00-6 retred tire. Ground run/ops/leak check is satisfactory at this time. This aircraft is approved for return to service for the above accomplished work. ---END---

Justin Parrow *Justin Parrow* A&P3083586

**R M A S**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

Date: 12/21/2017  
AcftReg: N445DS  
Flight Tach: 730.5  
**Airframe**

Performed a 100hr inspection in accordance with FAR 43 App (D) and Diamond checklist. Inspected and lubed all flight control surfaces, rod ends, chains and pulleys. C/W FAR 91.207 sub (D) ELT Inspection, operational check is satisfactory at this time. ELT battery next due for replacement Sept 2019. C/W AD 09-10-04 Nose gear pivot by dye pen inspection of nose gear, No defects noted. Next Due Tach: 830.5 Ground run/Ops/Leak check all satisfactory at this time. This Airframe has been inspected IAW a 100hr inspection and has been found to be in airworthy condition and is approved for return to service at this time. ---End---

Clinton Cook *Clinton Cook* A&P 3574567

CARRIED FORWARD





**RAS**

Date: 6/22/2018  
Acft Reg: N445DS  
Flight Tach: 927.5  
ACTT: 3350.1  
**AIRFRAME**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

REQUIRED FOR COMPLETE

Performed a 100HR inspection in accordance with FAR 43 App (D) and Diamond DA40 checklist. Removed interior and all inspection panels. Inspected and lubed as required all flight control surfaces, rod ends, chains and pulleys. C/W FAR 91.207 sub (D) ELT inspection. Operational check was satisfactory at this time. **Battery next due for replacement September 2019.** Rotated left and right tires on rims to accommodate for uneven wear. Replaced landing light assembly with new P/N 7034603 lamp. Glued headliner back into position. Replaced right brake linings with (2) 66-106 linings. C/W AD 09-10-04 by inspecting nose landing gear, no defects found. **Next due at tach: 1027.5.** C/W AD 84-26-02 by replacing induction filter with new FR-08504 filter. **Next due for replacement at tach: 1427.5.** Degreased belly and washed aircraft. Ground Run/Ops/Leak check all satisfactory at this time. I certify that this **AIRFRAME** has been inspected in IAW a 100HR inspection and has been found to be in airworthy condition and is approved for return to service at this time.-----END-----

Justin C Parrow *Justin C Parrow* A&P3083586IA

**RAS**

Date: 6/8/2018  
Acft Reg: N455DS  
Flight Tach: 900.8  
**AIRFRAME**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

Replaced left strobe light P/N 02-0250276-00 with new. Operational check is satisfactory. This aircraft is approved for return to service for the above accomplished work.---END---

Justin C Parrow *Justin C Parrow* A&P3083586

**RAS**

Date: 6/11/2018  
Acft Reg: N445DS  
Flight Tach: 907.1  
**AIRFRAME**

ROCKY MOUNTAIN  
AIRCRAFT SERVICES LLC  
11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

Replaced left and right rudder pedal adjustment cables, springs and knobs with (1) each of the following part numbers. 2-293-309 knob, 20-2700-21-00 cables and 20-2700-20-04 springs. Operational check is satisfactory at this time. This aircraft is approved for return to service for the above accomplished work.-----END-----

Justin C Parrow *Justin C Parrow* A&P3083586

CARRIED FORWARD



ROCKY MOUNTAIN  
AIRCRAFT SERVICES

11750 Airport Way Hanger B-12A  
Broomfield CO, 80021

Date: 08/08/2018  
AcftReg: N445DS  
Flight Tach: 1026.8  
Airframe

INSPEC

ENTRIES. DRAW A DIAGONAL LINE

Performed a 100hr inspection in accordance with FAR 43 App (D) and Diamond checklist. Inspected and lubed all flight control surfaces, rod ends, chains and pulleys. C/W FAR 91.207 sub (D) ELT Inspection, operational check is satisfactory at this time. **ELT battery next due for replacement Sept 2019.** Removed and replaced both left and right main tires with new 6.00-6 Retread tires. Installed new lens cover on left nav light P/N 11-03207. C/W AD 84-26-02 Paper Induction filter by cleaning and re-oiling. **Next Due Tach: 1126.8** C/W AD 09-10-04 Nose gear pivot by inspection of nose gear, No defects noted. **Next Due Tach: 1126.8** Ground run/Ops/Leak check all satisfactory at this time. This Airframe has been inspected IAW a 100hr inspection and has been found to be in airworthy condition and is approved for return to service at this time.  
-End-

Clinton Cook *Clinton Cook* A&P 3574567

Date: 12/12/2018 Tach: 1086.9 Hobbs: 569.8  
Diamond DA-40 Reg. No.: N445DS

Servo and gascolator screens checked and cleaned. Replaced starter contactor P/N:8781-8. Functional and leak tests satisfactory. Aircraft test flown. This aircraft is approved for return to service. Reference W.O.# 10862. End

James E. Crisman  
A&P3220001

*James E. Crisman*

The New Firewall Forward  
Loveland, CO 80538

**Crest Aviation, LLC - Repair Station 4JKR099D**

11915 Airport Way Suite 1 Broomfield CO 80021 303.466.5000

A/C: DA40 N# 445DS AC TOTAL TIME: 1087.4 HOBBS: 570.5 DATE: 12/21/18

Work Accomplished: 91.411, 91.413

Altimeter Make/Model: United 5934PD-3 Serial No.: 417572

Static System and Altimeter have been tested to 20000 ft with reference to 14 CFR 91.411 and found to comply with the specifications of 14 CFR 43 Appendix E.

Transponder Make/Model: King KT76C Serial No.: 12787

Encoder Make/Model: D120-P2-T Serial No.: 78005

ATC Transponder System has been inspected with reference to 14 CFR 91.413 and found to comply with the specifications of 14 CFR Appendix F.

Tested by: *Her Oden*

Details on file under W.O.# 1036

FORM# CA032



### Aspen Flying Club

13000 E. Control Tower Rd. Englewood, CO 80112

N445DS  
02-14-19

Diamond DA40  
Tach: 1106.4

SN: 40045  
ACTT: 1106.4

Deactivated and placarded KAP140 autopilot as INOP IAW FAR 91.213 (d)(3)(ii).

All work accomplished referencing Diamond DA40 maintenance manual and AC 43.13 1b.

Bryan Bodjanac A&P 4151726

PIPED FOR COMPLETE

DATE

BROUGHT FORWARD



### Aspen Flying Club

13000 E. Control Tower Rd. Englewood, CO 80112

N445DS  
05-17-2019

Diamond DA40  
Tach: 1127.1 ACTT: 3561.4

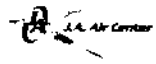
SN: 40045  
Hobbs: 624.6

Completed 100hr/Annual inspection in accordance with FAR 43 appendix D using CAM's checklist as guide. Cleaned and inspected fuel strainer. Cleaned and inspected landing gear assemblies. Cleaned induction air filter. Tested and inspected ELT in accordance with FAR 91.207 (d). Battery expires Sept 2019. C/W AD 2009-10-04 eff. June 17, 2009 by inspection of nose gear IAW Diamond MSB 40-0463. Next due Tach 2327.1 or 12 months. Operational and leak checks satisfactory. AD's complied with through bi-weekly 2019-10.

I certify that this Aircraft has been inspected in accordance with an Annual Inspection and has been determined to be in airworthy condition.

John Saar 36855671A

MAKE: Diamond Aircraft Ind  
MODEL: Da 40  
S/N: 40045  
REG. NO: N445DS  
WORK ORDER: 8311-06-2019



### J.A. Air Center

Repair Station No. NF2R029L  
43W730 US RT 30  
Sugar Grove, Illinois 60554  
Phone 630 564.3200

DATE 21 June, 2019  
A/C TSN.  
TACH: 1156

#### Airframe Entries

- 1 Installed new oil pressure switch p/n 0-344-101-041 on the upper accessory case.

#### Maintenance Release

The aircraft, engine, appliance or component identified was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and was found Airworthy for return to service. Pertinent details of the repair are on file at this repair station CRS NF2R029L and EASA 145.5424 under Work Order No. 8311-06-2019. Dated 21 June, 2019.

DATE: 21 June, 2019

SIGNED:

Don Morgan  
Certified Repair Station No. NF2R029L

Work Order: 8311-06-2019

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### Michiana Aircraft Service, Inc

### Airframe Log Entry

4323 West Progress Drive South Bend IN 46626 Phone 574-287-4667 Fax 574-287-7753

Diamond DA40

N445DS

Hobbs: 664.0

#### Maintenance:

- Removed resistor and complied with SB MSB 40-058 by installation of circuit board P/N WI-MSB-40-058.

This aircraft was repaired in accordance with the manufactures maintenance manual. All systems interrupted have been tested and/ or leak checked as necessary. This aircraft is airworthy and is approved for return to service with respect to the work performed.

Signature:

Date: 7-1-19

Steve Purvis C.R.S. Q6MR956Y

Work Order #14112



# AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE

## Michiana Aircraft Service, Inc      Airframe Log Entry

4323 West Progress Drive South Bend IN 46628 Phone 574-287-4687 Fax 574-287-7753

Diamond DA40      N445DS

Hobbs: 693.2

Maintenance:

- Installed customer supplied Reiff engine heater. Considered a minor alteration.
- Installed customer supplied Davtron flight timer. Considered a minor alteration.
- Ran wires from IFD550 to audio panel for audible alerts on autopilot.
- Ran optional wires from APX 340 to audio panel for ADS-B.

This aircraft was repaired in accordance with the manufactures maintenance manual. All systems interrupted have been tested and/ or leak checked as necessary. This aircraft is airworthy and is approved for return to service with respect to the work performed.

Signature: Steve Purvis C.R.S. Q6MR956Y  
 Date: 10-23-19      Work Order #144406

### SYNERGY

2823 E. Empire St  
Bloomington IL, 61704      Tel: (309) 828-4448  
Fax: (309) 282-4458

Registration #: N445D      W.O#: R784  
Serial #: 40.045      Date: 13 Mar 2020  
Tach Time: 3669.8

this aircraft's pitot/static system, and altitude reporting equipment listed below has been inspected and tested in accordance with Far 91.411 and FAR 43 appendix E and F. Pertinent details of this work are filed under W.O.# R784  
 Certified up to 20,000FT

- Altimeter: United Model: 5934PD-3 SN: 417572
- Encoder: TransCal PN/Model: D120-P2-T SN: 78005

### ALTIMETER SCALE ERROR

CUSTOMER: Dominic Zastarkis

N# N445DS

SGR199C

DATE: 13 Mar 2020

ALTIMETER TYPE: Primary

### Airframe Log Entry

Test Point	Indicated	Test Point	Indicated	Test Point	Indicated
(FT)	(FT)	(FT)	(FT)	(FT)	(FT)
-1000	-1020	6000	5990	22000	X
0	-20	8000	7980	25000	X
500	500	10000	9975	30000	X
1000	985	12000	11970	35000	X
1500	1490	14000	13980	40000	X
2000	1990	16000	15990	45000	X
3000	3000	18000	18000	50000	X
4000	3990	20000	20000		X

4687 Fax 574-287-7753

ity sending units P/N 3010011-  
ce with Diamond DA40 AMM 28-

ufacturers installation manuals  
ormance specifications. No  
isting systems in the aircraft.

C.R.S. Q6MR956Y

Date: 9-19-19

Airframe Log Entry

**SYNERGY**  
2823 E. Empire St  
Bloomington IL, 61704

Tel: (309) 828-4448  
Fax: (309) 282-4458

Start  
Pilot  
(24m)

ENTRIES. DRAW A DI

Registration #: N445D  
Serial #: 40.045  
Tach Time: 3669.8

W.O#: R784  
Date: 13 Mar 2020

LICENCE  
NUMBER

this aircraft's transponder, encoding system and altimeter, listed below, has been inspected and tested in accordance with FAR 91.413 and FAR 43 appendix F and appendix E(c). Details of this work are filed under W.O.# R784

Certified up to 20,000FT

- Transponder: Avidyne Model AXP340 PN: 200-00247-000 SN: 01570
- Altimeter: United Model: 5934PD-3 SN: 417572
- Encoder: TransCat PN/Model: D120-P2-T SN: 78005

DATE: 13 Mar 2020 SIGNED: *[Signature]*

Synergy Flight Center, LLC for CRS 8SGRI99C

MAKE Diamond Aircraft Ind  
MODEL: Da 40  
S/N: 40045  
REG. NO: N65LY  
WORK ORDER: 8852-06-2020



**J.A. Air Center**

Repair Station No. NF2R029L  
43W730 US RT 30  
Sugar Grove, Illinois 60554  
Phone: 630.584.3200

DATE: 02 June, 2020  
A/C TSN: 3720.1  
TACH: 3720.1

**Airframe Entries**

- 2 Removed Turn Coordinator P/N1394T100-10RA S/N F04-10075
- Installed Serviceable Turn Coordinator P/N 1394T100-12RZ S/N 2104-298
- Tested Serviceable by J.A. Air Center CSR#NF2R029L RO#234390-06-2020 Dated 6/2/2020.
- All work performed in accordance with Diamond AMM 6.02.01 Date December 12, 2017.

**Maintenance Release**

The aircraft, engine, appliance or component identified was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and was found Airworthy for return to service. Pertinent details of the repair are on file at this repair station CRS#NF2R029L and EASA.145.5424 under Work Order No. 8852-06-2020, Dated 02 June, 2020.

DATE: 02 June, 2020

SIGNED: *[Signature]*  
Don Morgan  
Certified Repair Station No. NF2R029L

Work Order: 8852-06-2020

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# AIR TIME AND

2823 East Empire Street  
Bloomington, Illinois 61704  
United States  
Telephone: (309)828-4448  
Fax: (309)828-4458  
info@synergyfbo.com

**SYNERGY**  
**FLIGHT CENTER**

## Log Book Entry

March 30, 2020  
FAACRS 8SGR199C  
www.synergyfbo.com

### Airframe Log Entry

Registration #: N445DS	Total AC Time: 3,669.8	Total AC Cycles:
Manufacturer: Diamond Aircraft	Aircraft Serial Number: 40045	Date: 03/30/2020
Part/Model number: DA-40-180		
Work Order No: R794		

#### Squawk

1.1

INSPECTED AND SERVICED THIS AIRCRAFT IAW THE DIAMOND DA 40 MAINTENANCE MANUAL, C/W THE ELT INSPECTION AND FUNCTIONAL CHECK IAW FAR 91.207. A.D.'S CHECKED THRU 2020-06. I CERTIFY THAT THIS WORK DESCRIBED HAS BEEN INSPECTED AND IS DETERMINED TO BE IN AN AIRWORTHY CONDITION WITH RESPECT TO THE WORK PERFORMED AND THAT THIS AIRCRAFT HAS BEEN INSPECTED IN ACCORDANCE WITH AN ANNUAL INSPECTION AND IS DETERMINED TO BE IN AN AIRWORTHY CONDITION.

1.2

INSTALLED A POWER FLOW SYSTEMS, INC. EXHAUST SYSTEM APPROVED UNDER STC SA03281AT. INSTALLED KIT NO. PFS-15102 IAW REPORT NO. PFS-15250-00, REV. E, DATED 6/10/2010. CHECKED DYNAMIC BALANCING OF PROPELLER. CHECKS GOOD AT .121 IN/S AT 2006 RPM. THE EXHAUST SYSTEM WILL BE MAINTAINED IN ACCORDANCE WITH THE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS. SEE 337 THIS DATE.

1.3

RESEALED LEFT AND RIGHT FLAP AND AILERON FUSELAGE SEALS. ALL WORK PERFORMED IAW DIAMOND DA40-180 AMM 06.02.01 SEC 21-00-00.

1.4

CHECKED AMMETER WIRING AT CONNECTOR J5 TO SHUNT. NO DEFECTS NOTED.

1.5

INSPECTED ESSENTIAL BUS IAW DA40 MM. INSPECTION NEXT DUE: 4680.10

1.6

FABRICATED AND INSTALLED A BONDING WIRE ON: LEFT HAND UPPER COWL SUPPORT TO FIREWALL, LEFT HAND CANOPY HINGE TO FUSELAGE HINGE. REMOVED LEFT AND RIGHT HAND WINGS, REMOVED ELEVATOR. REMOVED RIGHT FUEL TANKS AND INSTALLED BONDING WIRE ON OUTER FUEL TANK AND REINSTALLED RIGHT FUEL TANKS AND ATTACHED BONDING WIRE TO BONDING STRIP IN WING. USED NEW O RINGS FOR FUEL TANK CAP. CLEANED CONNECTIONS IN THE LEFT HAND WING BONDING SYSTEM AND LEFT WINGTIP ASSEMBLY. CLEANED BONDING CONNECTIONS IN RIGHT HAND WINGTIP ASSEMBLY. CLEANED CONNECTIONS ON STEP BONDING ASSEMBLY. REMOVED AND REPLACED LEFT AND RIGHT WING TO FUSELAGE BONDING COUPLERS. REPLACED BOTH BONDING STRAPS ON RIGHT HAND FLAP PUSHROD. RE-INSTALLED BOTH WINGS. REPLACED LEFT NAV AFT LIGHT, P/N: 34-0428070-64. CHECKED LIGHTS, CHECKS NORMAL. PERFORMED PITOT/STATIC LEAK TEST, CHECKS GOOD AT 150 KNOTS AND 2000 FEET. CHECKED FLAP AND AILERON TRAVELS, CHECKS GOOD. REMOVED RIGHT WING (SECOND TIME) AND CLEANED ALL CONNECTIONS FOR FUEL QUANTITY UP TO JPI EDM 900, CHECKED OPERATION OF FUEL QUANTITY (OPERATION ONLY, NOT CALIBRATION) CHECKS NORMAL. RE-INSTALLED RIGHT HAND WING. DISCONNECTED FLAP PUSHRODS FROM MOTOR BELLCRANK AND CLEANED BONDING CONNECTIONS. DISCONNECTED FLAP PUSHROD ROD END AT INSPECTION PANEL IN RH INSPECTION PANEL INBOARD OF THE WING BREAK AND CLEANED BONDING CONNECTIONS. REMOVED RH FLAP PUSHROD AT RIGHT HAND FLAP AND CLEANED BONDING CONNECTIONS AND RE-INSTALLED. REMOVED AND REPLACED LEFT AND RIGHT LOWER ENGINE MOUNT BONDING STRAPS. PARTIALLY RESEALED AFT RIGHT PASSENGER WINDOW DUE TO BACKSEAT PUSHING OUT ON WINDOW DURING REMOVAL. ALL WORK PERFORMED IAW DIAMOND DA40-180 AMM 06.02.01 SECTIONS 27, 28, 31, 33, 51 AND 57. THIS AIRCRAFT BONDING SYSTEM HAS BEEN INSPECTED IAW DIAMOND DA40-180 AMM 6.02.01 SEC 51-80-00 AND PASSES ALL TEST POINTS. INSPECTION NEXT DUE: 4680.10 TACH TIME.

1.7

REMOVED AND REPLACED EMERGENCY BATTERY PACK BATTERIES, P/N MN1500AA. ALL WORK PERFORMED IAW DIAMOND DA 40-180 AMM 06.02.01 SEC 24-32-00. REPLACEMENT NEXT DUE 3/2022 OR AFTER USE, WHICHEVER OCCURS FIRST.

1.8

COMPLIED WITH A.D. 93-05-06, APR 29, 1993 BY REPLACING THE IGNITION SWITCH, P/N A-510-2K. ALL WORK PERFORMED IAW A.D. 93-05-06 AND ACS SERVICE BULLETIN S892-01. A.D. NEXT DUE AT 5680.1. NEW KEY CODE #190.

1.11

REMOVED AN AIR HAWK 6.00 X 6, 6 PLY, S/N B3E40504 FROM THE LEFT MAIN WHEEL. INSTALLED A CONDOR 6.00 X 6, 6 PLY, S/N 5132S00095. INSTALLED A NEW GOODYEAR BUTYL RUBBER TUBE, P/N 302246401. WORK PERFORMED IAW THE DA40 MM.

1.12

REMOVED AN AIRHAWK 6.00 X 6, 6 PLY, S/N B3E41307 FROM THE RIGHT MAIN WHEEL. INSTALLED A CONDOR 6.00 X 6, 6 PLY, S/N 7254W00223. INSTALLED A NEW GOODYEAR BUTYL RUBBER TUBE, P/N 302246401. WORK PERFORMED IAW THE DA 40 MM.



# ENGINEERING RECORD

Next  
change  
2/2022

2823 East Empire Street  
Bloomington, Illinois 61704  
United States  
Telephone: (309)828-4448  
Fax: (309)828-4458  
Info@synergyfbo.com

## SYNERGY FLIGHT CENTER

### Airframe Log Entry

### Log Book Entry

March 30, 2020  
FAACRS 8SGR199C  
www.synergyfbo.com

ELT  
↓

- 1.13 INSTALLED RUBBER SEAL ON THE LEADING EXTERIOR EDGE OF CANOPY. ALL WORK IAW AC43.13-1B.
- 1.15 REPLACED LEFT AND RIGHT WING SEALS. ALL WORK PERFORMED IAW AC43.13-1B.
- 1.17 REMOVED AND REPLACED PILOTS SIDE LEFT AND RIGHT RUDDER PEDAL "S" TUBES AND FORWARD LEFT AND RIGHT RUDDER CABLES. CHECKED RUDDER TRAVEL, OPS CHECK GOOD. ALL WORK PERFORMED IAW DIAMOND DA40-180 AMM 06.02.01 SEC 27-20-00.  
PARTS:  
MS171530, ROLL PIN (2)  
MS171532, ROLL PIN (2)  
DA4-2723-33-00\_02, RUDDER PEDAL, LH  
DA4-2723-34-00\_02, RUDDER PEDAL, RH  
DS-TH1-32-12, STIFFENER (4)  
SF12579, CABLE, STAINLESS STEEL, PRE STRETCHED  
SL2-4P, SWAGE SLEEVE (4)
- 1.18 INSTALLED NEW OIL COOLER COWL SEAL. ALL WORK PERFORMED IAW DIAMOND DA40-180 AMM 6.02.01 REV 7 SECTION 71-10-00.  
PARTS:  
10.2508.8961 EDGE PROTECTION
- 1.19 C/W AD 2009-10-04, 6/17/09, BY INSPECTING THE NOSE GEAR PIVOT POINT IAW MSB40-046/3. NEXT DUE AT ATT 3869.1 OR 3/2021.
- 1.20 REROUTED CLOCK POWER WIRE AWAY FROM CANOPY HINGES.
- 1.21 REPLACED CONNECTOR ON PASSENGER MAP LIGHT ASSEMBLY. CHECKED OPERATION, WORKS NORMALLY. ALL WORK PERFORMED IAW DIAMOND DA40-180 AMM 06.02.01 REV 7 SECTION 33-10-00.
- 1.22 REPLACED REAR DOOR WARNING SWITCH, P/N 159-4629. OPS CHECK GOOD. WORK PERFORMED IAW DA40 MM.
- 1.28 REPLACED RIGHT HORIZONTAL STAB STATIC WICK AND THE LEFT WING INBOARD STATIC WICK, P/N DG-16630.
- 1.29 TIGHTENED RIGHT ENTRANCE STEP BOLTS.
- 1.30 INSTALLED NEW HARDWARE ON REAR SEAT HOLD DOWNS (BELOW CUSHIONS)  
PARTS:  
DIN9021B-M6 WASHER  
DIN9021B-M8 WASHER  
LN29987-M6 WASHER  
DA4-2510-00-61 PLATE, REINFORCING
- 1.31 REMOVED AND REPLACED BOTH THE LH AND RH FUEL CAP RETAINING CABLES (PN: D67-2817-31-00) IAW DIAMOND DA-40 AMM CHAPTER 28-11-00.
- 1.32 REPLACED BONDING WIRES, P/N BW1-B14-RB6-RB8-080 ON LEFT AND RIGHT FLAP PUSHRODS AT CENTER LEVER. WORK PERFORMED IAW THE DA40 AMM.
- 1.33 INSTALLED A NEW ELT REMOTE DURACELL BATTERY, P/N PX28A. NEXT DUE CHANGE 02/2024. OPS CHECK GOOD.
- 1.34 REPLACED THE LEFT AND RIGHT BRAKE LININGS, P/N 066-14100.
- 1.35 PERFORMED IFR CHECK. NEXT DUE: 31 MAR 2022
- 1.36 REPAIRED GLARESHIELD WIRING IAW DIAMOND DA40-180 AMM SECTION 92. CHECKED FOR OPERATION, CHECKS GOOD.
- 1.37 ADJUSTED IDLE AND MIXTURE IAW DIAMOND DA40-180 AMM 06.02.01 SEC 73.
- 1.38 REMOVED RIGHT WING, RESEALED FUEL QUANTITY INDICATOR SENDER. RE-INSTALLED RIGHT WING. ADDED FUEL TO RIGHT WING, LEAK CHECK GOOD. FUEL INDICATION NORMAL. ALL WORK PERFORMED IAW DIAMOND DA40-180 AMM 06.02.15 SEC 28-40-00.
- 1.39 #2 EGT INDICATION INTERMITTANT. TROUBLESHOT BY SWAPPING #2 AND #4 PROBES. FOUND BAD PROBE. INSTALLED NEW PROBE, P/N M-111 IN #4 EXHAUST. OPS CHECK GOOD.
- 1.40 REMOVED AKC MODEL E04 AND REINSTALLED AFTER REPAIR BY ACK TECHNOLOGIES INC.

These items identified above were repaired and/or inspected in accordance with current Federal Aviation Regulations and the repairs are approved for return to service. Pertinent details of these repairs are on file at the repair station under Work Order Number R784.

Signature: Michael J. Jelis

Date: 3/30/2020

# AIR TIME AND

DATE	DAILY TOTAL		TOTAL AIR TIME SINCE MFG.		ENGINEERING RECORD <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	

## Burlington Air Center

703 Airport Rd. Burlington, WI, 53105  
(262) 763-9500 Fax (262) 763-2910

8/5/2020 N65LY Hobbs: 893.4 Tach: 3793.4

**Removed:** existing King KI525A HSI SN) 26536, KG102A Directional Gyro SN) 47023, KA51B Slaving Accessory SN) 30050, KMT112 Fluxgate SN) 61996, and KC140 Autopilot Computer SN) M5185.

**Installed, programmed, and tested:** Serviceable KC140 Autopilot Computer PN) 065-00176-7703, SN) M5765, new Stratus Power USB Outlet PN) 153510-000040, SN) 067914, Davtron 655 OAT Probe, and Aspen EFD1000 ES Electronic Flight Instrument PN) 910-00101-001, SN) 29117 with Analog Converter Unit PN) 910-00004-101, SN) 2542, and Remote Sensor Module PN) 910-00003-002, SN) 650542 interfaced to existing autopilot and GPS, in accordance with Stratus Power Installation Instructions Doc# 600840-000041, Rev. 1.0, dated 12/15/16 and Aspen EFD1000 ES IM Doc# 900-00041-001, Rev. E, dated Oct. 2019 per STC# SA10822SC.

**Inserted:** FAA Approved AFMS for STC# SA10822SC Aspen Doc# 900-000 8-001, Rev. AH, dated 6/28/19 in Aircraft Flight Manual.

**Instructions for Continued Airworthiness per:** Aspen Doc# 900-00012-001, Rev. AA or later.

Updated Weight & Balance, and Equipment List, see FAA form 337 dated 8/5/2020 for details.

**Repairs as listed:** installed new DIN985-1.75 nut on NLG Pivot Pin, Michelin 5.00X5 6PLY nose tire PN) 070-312-0 with 097-908-0 tube, fabricated angled bracket for Ram iPad mount, repaired fuel probe wiring and re-calibrated fuel level probes per JPI installation report. Systems ramp checked and found satisfactory at this time.

I certify that the work described above has been accomplished and inspected in accordance with current regulations and is approved for return to service.

*CC TAA SA3446658*

## Burlington Air Center

703 Airport Rd. Burlington, WI, 53105  
(262) 763-9500 Fax (262) 763-2910

8/5/2020 Hobbs: 893.4 N65LY Tach: 3793.4 TTAF: 3838.9

**Reviewed Logbooks:** found in-continuity in record keeping of Aircraft Total Time vs Tach time and Hobbs.

**Findings as follows:**

June 2001 Aircraft New, 0.0 Tach = 0.0 TTAF

5/4/09 Tach reset to 0.0 @ 2086.5 TTAF, documented in log entry that date.

10/29/10 Tach = 195.8, TTAF = 2282.3, Hobbs = 2922.6 per log entry that date.

Multiple Tach resets and documentation errors and discrepancies between 10/29/10 and 9/6/12.

9/6/12 Tach = 0.1 @ 3120.2 Hobbs = 2479.9 TTAF

5/17/19 Tach = 1127.1, ACTUAL TTAF = 3606.9 (TTAF Incorrectly recorded as 3561.4), Hobbs = 624.6

No continuity of times between 5/17/19 and 9/19/19 except Hobbs.

9/19/19 JPI installed @ 673.8 Hobbs = 3656.1 TTAF, Tach set to 3610.6

8/5/20 Tach = 3793.4, Hobbs = 893.4, ACTUAL TTAF = 3838.9

I certify that the work described above has been accomplished and inspected in accordance with current regulations and is approved for return to service.

*CC TAA SA3446658*

REG. NO.	N65LY
MAKE	DIAMOND
MODEL	DA40
S/N	40.045

MIDWEST AVTECH INC.  
I.V. REGIONAL AIRPORT  
4241 ED URBAN DR.  
PERU, IL 61354

DATE	05/15/20
TACH	3699.4
AFTT	

INSTALLED 18MM LANDING GEAR STRUTS IAW OSB 40-025 - INSTALLED TAKE-OFF MASS INCREASE IAW OSB 40-057 - INSTALLED BAGGAGE EXTENSION IAW OSB 40-028 - WEIGHED AIRCRAFT; NEW EMPTY WEIGHT = 1709.8 NEW EMPTY WEIGHT C.G. = 96.95  
THE AIRCRAFT OR ENGINE IDENTIFIED ABOVE WAS REPAIRED AND INSPECTED IAW CURRENT FARs - ONLY THE WORK DESCRIBED ABOVE IS APPROVED FOR RETURN TO SERVICE





AMO 161-93

	Manufacturer	Model	SN	
Airframe	Diamond	DA40	40.045	TTAF: 3962.9 Hrs.
Engine	Lycoming	IO-360-M1A	L-29856-51A	TSOH: 905.4 Hrs.
Prop	MT	MTV-12-B	01016	TSOH: 893.7 Hrs.

Details of work performed:

- Aircraft reassembled IAW DA 40 AMM Doc. 6.02.01 Rev. 7, following shipment to Diamond Aircraft by customer.
- 2000 hr inspection carried out IAW AMM Doc. 6.02.01 Rev. 7 Chapter 04-00-00, & Chapter 05-00-00.
- MSI inspection completed IAW AMM Doc. 6.02.01 Rev. 7 Chapter 04-00-00, & Chapter 05-00-00 (using the checklist in chapter 05-28-00) Next due at 7962.9 hrs or July 2033
- 100 hr engine inspection completed I.A.W. Lycoming MM
- Powerflow exhaust inspection carried out IAW PFS-15250-00 Rev. E. Found serviceable.
- Engine oil change completed, 8L Aeroshell 15W50 oil installed with new filter PN: CH48110-1.
- Induction air filter PN: FR-08504 replaced.
- 100 hr propeller inspection carried out IAW MT MM.
- Annual ELT inspection carried out IAW FAR 91.207. ELT PN: E-04 SN: 029242 Battery expiry Date: Sept 3, 2024.
- Annual autopilot system mechanical check carried out.
- Annual battery capacitance test carried out. Found serviceable.
- New aircraft stripe package installed.

The following discrepancies have been rectified during aircraft inspection/reassembly:

Fuselage:

- PAX window removed, polished, rebonded and sealed.
- Electric fuel pump wiring secured as required, pump drain moved to correct location.
- Secured wire harnesses under pilot/copilot seats.
- Added chafe protection to RH control stick wiring.
- Flight control bonding straps repaired/replaced as required.
- Elevator trim tab RH Outboard hinge broken. Trim tab repaired IAW DA 40 AMM Ch. 51.
- Replaced Pitot/static hoses behind I-panel and under pilot seat as required. Leak check carried out. Found serviceable.
- Replaced all elevator long rod rollers in fuselage.
- PAX door gas strut replaced with new. PN: DAI-9052-00-11.
- PAX door FWD composite hinge replaced IAW DA 40 AMM Ch. 51.
- Replaced LH/RH Aft rudder cables at this time.
- Replaced PAX door emergency handle PN: DA4-5200-71-00.
- Prop control lever in center console adjusted for proper clearance.
- Replaced fire extinguisher with new PN: A620T. MFG Date: 2021
- Instrument wire routing and connectors repaired behind I-Panel as required.
- Composite luggage compartment frame repaired IAW DA 40 AMM Ch. 51.
- Parking brake cable adjusted as required.
- Replaced SCAT hose on LH I-Panel vent.
- Glair shield wiring and connector repaired as required.
- Replaced parking brake face plate PN: D41-1133-20-21.
- Rear seat foam supports rebonded and aft seat flange repaired IAW DA 40 AMM Ch. 51.
- LH inboard rudder cable from firewall to bellcrank replaced at this time.
- Rudder Cable attaching hardware at rudder bellcrank installed incorrectly. Removed and reassembled in correct orientation. Aft cable bushings on bellcrank replaced at this time.
- Missing/Damaged placards replaced at this time IAW DA 40 AMM Ch. 11.
- Replaced RH H-stab tip static wick and base.
- PAX door aft aluminum hinge replaced.
- RH foot step painted and reinstalled with grounding tab PN: DA4-5300-00-01.
- Fuselage camlock receptacles for lower cowl replaced.
- Limitations placard for 1200 Kg MTOW PN: D41-1131-20-21\_1 installed.

Wings:

- Replaced LH inboard fuel tank PN: DA4-2817-10-00\_1.
- Replaced LH fuel probe PN: 3010011-WIP.
- Removed and reinstalled RH fuel probe in correct position.
- Wing root seals replaced with new.
- Replaced fuel probe and low level switch connectors in LH/RH wings.
- Replaced LH/RH wing inboard rollers for aileron/flap push rods. LH wing center roller also replaced.
- Replaced LH fuel tank quick drain PN: DA4-9028-17-01.
- Fuel tank cap hardware replaced as required.
- Fuel tank vent hoses and drain hoses replaced with new at this time.



AMO 161-93

Aircraft Reg: N65LY  
Work Order: SO072908

Date: July 5, 2021

	Manufacturer	Model	SN	
Airframe	Diamond	DA40	40.045	TTAF: 3962.9 Hrs. TSOH: 905.4 Hrs. TSOH: 893.7 Hrs.
Engine	Lycoming	IO-360-M1A	L-29856-51A	
Prop	MT	MTV-12-B	01016	

**Engine:**

- Replaced center firewall engine mount insert PN: DA4-5312-21-01. Stainless steel firewall and heat blanket removed and replaced with new to facilitate replacement of insert. Replacement carried out IAW DA 40 AMM Ch. 51 and Diamond approved DWG # D41-5312-21-00\_02 Rev.B.
- New engine mount PN: D41-7126-10-00 installed.
- Engine isolation mounts and hardware replaced with new at this time.
- All engine SCAT and CAT hoses replaced at this time.
- Engine relay box start circuit diode PN: 1N4007 and 3 amp fuse replaced.
- Composite engine baffle repaired as required IAW DA 40 AMM Ch. 51.
- Throttle cable PN: A-1550-0440 replaced with new.
- Air inlet assembly PN: D41-2146-10-00 replaced.
- Oil pressure hose PN: D41-7906-10-00 replaced with new.

**Landing gear:**

- New NLG damper assembly installed PN: D41-3223-20-00\_1.
- Replaced NLG pivot with used serviceable PN: D41-3223-00-31 removed from 40.577 (N634AT).
- RH MLG brake hose clip replaced.
- NLG bonding strap PN: D4D-2406-23-00 replaced with new.
- Replaced NLG stop plate PN: D41-3223-00-51
- Removed and reinstalled RH brake caliper torque plate in correct orientation.
- NLG bushings cleaned and rebonded into fuselage IAW DA 40 AMM Ch.51.
- All brake linings replaced.
- Bled LH/RH brakes.

**Aircraft re-weighed and AFM section 6 updated with revised weight and Balance and equipment list:**

New Empty Weight:	780.2 kg	OR	1720.0 lbs
New EW C of G:	2.446 m	OR	96.29 in
New EW Moments:	1908.37 kg m	OR	165618.8 in-lbs
Max. Gross Weight:	1200 kg	OR	2646 lbs
New Useful Load :	419.8 kg	OR	926.0 lbs

**The Following FAA AWDs' checked & C/W as applicable:**

- AWD 2009-10-04 - MSB 40-046/3, MSB 40-091 - Dye penetrant inspection carried out on NLG leg PN: D41-3223-10-00. Found serviceable.
- AWD 2020-14-06 - MSB 40-087/3 - Fuel tank interconnect hoses replaced at this time.
- AWD 2007-26-13 - Visual inspection of propeller blades and erosion sheaths carried out. No Defects noted.
- AWD 2015-19-07 - Visual inspection of fuel injector lines carried out. Found serviceable.
- BI-Weekly AWD Checked through 2021-13

I have carried out an independent inspection of the Flight controls/power plant controls affected by the work accomplished.

Signature: \_\_\_\_\_

ACA: \_\_\_\_\_



The maintenance described above has been performed in accordance with the applicable standards of airworthiness.

Signature: \_\_\_\_\_

ACA: \_\_\_\_\_





ENTR

**AIRFRAME LOG**

4-26-2021

Reg: **N65LY**

Make: Diamond

Hobbs: 1044.6



S/N: 40.043

Model: DA40

Tach: 3825.7

DATE AND TIME COLUMNS.

SIGNATURE

LICENCE NUMBER

1. Troubleshoot hour meter being inoperative. Found fuse missing from hot buss F6. Replaced fuse, ops check good.
2. Cleaned dirty/corroded connections at pilot and copilot reading light lamp holders.
3. Replaced broken switch at rear seat reading light

Kevin Pierron A&P 33431891A