



## Finefield Aviation Inc.

Lake in the Hills Airport  
8399 Pyott Road  
Lake in the Hills, IL 60156

Annual Date-7-13-16

| ANNUAL SERVICES DESCRIPTION |            |               | Bo Harper |        |        |        |
|-----------------------------|------------|---------------|-----------|--------|--------|--------|
| Aircraft No.                | Serial No. | Type Aircraft | Hobbs     | TTAF   | TSMOH  | TSPOH  |
| 167JW                       | D-8792     | Beech V35A    | 2128.4    | 4757.7 | 2110.2 | 1727.1 |

**Services Performed:**

**Engine**

1. Compression test: 1) 73/80, 2) 71/80, 3) 72/80, 4) 64/80, 5) 74/80, 6) 72/80.
2. Timed magnetos to specs.
3. Removed fuel controller fuel screen, cleaned, inspected, installed and safetied.
4. Replaced main induction air filter.
5. Changed oil and filter. Cut open old oil filter and found no contaminants. Serviced engine with 11qts. 100W Shell oil.
6. Tightened rocker cover screws.
7. Tightened induction tube clamps.
8. Replaced inline and inlet air filters.
9. Hoses on either side of inline vacuum air filter are aged. Installed new hoses and secured.
10. Removed spark plugs, cleaned, inspected, gapped, rotated, reinstalled and torqued.
11. Checked hydraulic fluid level, ok.
12. Inspected starter brushes to specs.
13. Dressed prop blades.
14. Flow divider support bracket is broken. Removed bracket, sent for weld repair and reinstalled.
15. Replaced inbound air filter on standby vacuum pump.
16. Washed down engine.
17. Ran up and checked for leaks found none.
18. Pressure checked engine fuel system and found no leaks.
19. Lubed engine controls and checked rigging.

**Services Performed:**

**Airframe**

1. Tested ELT I.A.W. F.A.R. 91.207(d). Installed new ELT batteries next due for replacement July 2017.
2. ELT remote switch battery is due May 2022.
3. Cleaned fuel strainer screen and installed a new gasket and safetied.
4. Upper landing light is inoperable. Found plug and pin in HID bulb burnt. Removed HID landing light and installed a new LED landing light bulb.
5. Light for fuel selector is inoperable. Installed a new lamp and tested, checked ok.
6. The nav light wire is chafing on rib just in front of aileron bellcrank inspection plate right wing. Inspected wire for damage and found none. Applied silicone to "j" channel to hold wire in place.
7. The right flap bulkhead is cracked 3/16 of an inch and has 1 crack at forward actuator bracket front nut plate.
8. The right flap actuator bracket forward screw is loose. Tightened screw.
9. Left and right rudder cable pullies in tail are not turning. Lubed and operated pullies.
10. Installed owner supplied left and right main tires and balanced.
11. Cleaned and greased all wheel bearings.
12. Greased landing gear fittings.
13. Checked landing gear rigging to Beech specs.
14. IFR certification is due May 2017.

15. Pilot seat arm rest pivots are loose. Removed bottom seat upholstery, tightened pivots and reinstalled seat upholstery.
16. Lubed controls.
17. The left aileron inboard static wick is broken. Installed a new static wick.
18. Washed aircraft.
19. Ran up and checked all systems operated normal.
20. Installed a new tail cone lense N/C.
21. Cabin door hinges are very worn. Removed glove box and glareshield to gain access to door hinges. Removed door hinge pins and removed door. Drilled door hinges and aircraft structure to ¼ inch from 3/16 inch. Reinstalled cabin door using new ¼ pins and lubed. Checked and adjusted cabin door. Reinstalled all removed to gain access to door hinges.
22. Wing root seal is coming loose below cabin door. Reglued seal.
23. Polished aircraft.

Services Performed: **A.D.'s**

1. C/W AD 76-07-12 Bendix switch by inspection. Due again in 100 hrs.
2. C/W AD 94-20-04 R2 Beech fuselage inspection of rear bulkheads at F.S. 256.9 and F.S. 272 and found no faults. Due again in 100 hrs.
3. C/W AD 97-14-15 Hawker cabin door handle inspection by operation. Due again at next handle removal.
4. C/W AD 2007-08-04 McCauley prop inspection I.A.W. McCauley ASB248 paragraphs 2D-2F. Due again in 100 hrs.
5. C/W AD 2007-08-08 Beech uplock roller and bolt inspection and lubrication. Due again in 100 hrs.
6. AD 95-04-03 Beech forward carry thru inspection is due in 371.1 hrs.
7. S/B 0546-359 Alternator bearing inspection is due in 128.4 hrs.



# Finefield Aviation Inc.

Lake in the Hills Airport  
8399 Pyott Road  
Lake in the Hills, IL 60156

Annual Date-6-3-15

| ANNUAL SERVICES DESCRIPTION |            |               | Bo Harper |        |        |        |
|-----------------------------|------------|---------------|-----------|--------|--------|--------|
| Aircraft No.                | Serial No. | Type Aircraft | Hobbs     | TTAF   | TSMOH  | TSPOH  |
| 167JW                       | D-8792     | Beech V35A    | 2060.4    | 4689.7 | 2042.2 | 1659.1 |

Services Performed:

**Engine**

1. Compression test: 1) 68/80, 2) 66/80, 3) 75/80, 4) 66/80, 5) 75/80, 6) 70/80.
2. Checked magneto timing to specs.
3. Air box is loose on left side. Installed a thin washer under the head of each camloc fastener.
4. Removed fuel controller screen, cleaned, reinstalled and safetied.
5. Tightened induction hose clamps.
6. Tightened valve cover screws.
7. Tightened nuts holding adel clamps for all 6 fuel injector lines.
8. Tightened vacuum system hose clamps.
9. Installed new vacuum system inlet and inline filters.
10. Tightened intake and exhaust flange nuts and bolts.
11. Installed a new induction air filter.
12. Removed, cleaned, gapped and inspected spark plugs.
13. Cleaned spark plug wire ends.
14. Changed oil and filter. Cut open old oil filter and found no contaminants. Serviced engine with 11 qts. 100W Shell oil.
15. Found loose nuts on landing light power supply. Removed three nuts and installed a thick washer and reinstalled nuts and tightened.
16. Dressed prop blades.
17. Preheater plug is loose by alternator. Tightened nut.
18. Spinner screws and screw holes are deteriorated. Cleaned holes, installed new stainless steel screws with nylon washers and thread lube.
19. Washed down engine.
20. Ran up and checked for leaks found none.
21. Pressure checked engine fuel system and found no leaks.
22. Lubed engine controls and checked rigging.

Services Performed:

**Airframe**

1. Tested and found both tail nav and strobe bulbs burnt out. Installed a new strobe and tail nav assembly. Operational checked is good.
2. Installed 8 new Duracell Pro cell "d" batteries in ELT. Tested ELT I.A.W. F.A.R. 91.207(d). ELT battery next due for replacement June 2016.
3. ELT remote battery is due May 2022.
4. Tightened loose screws in panel and around front two seats.
5. Removed fuel strainer screen, cleaned, reinstalled using a new gasket and safetied.
6. Cowl flap rod end at cross over arm right side is loose. Removed cotter pin, tightened and safetied.
7. Greased landing gear fittings with Aeroshell #5 grease.
8. Removed wheels, cleaned, inspected and greased wheel bearings.
9. Left brake caliper is leaking. Removed caliper, disassembled, cleaned, reassembled with new o-rings and installed.
10. Bled left and right brakes.

11. Down landing gear handcrank clearance is too great. Adjusted down hand crank clearance to specs.
12. Left and right main gear uplock roller clearances are too great. Adjusted roller clearances to specs.
13. Clevis pin on squat switch is worn. Installed a new clevis pin and safetied.
14. Performed gear rigging to Beech specs.
15. Removed left and right fuel caps, disassembled, cleaned, reassembled using new o-rings and safetied.
16. Seat 4 fresh air vent is loose, clip fell out. Removed panel, reassembled vent and reinstalled panel.
17. IFR certification is due. Performed IFR certification tests, next due May 2017.
18. Made high altitude Sandia blind encoder calibration adjustment.
19. Checked shimmy dampener and found reservoir filled to specs.
20. The lower right control column collar screw is missing. Installed a new screw and tightened.
21. The control column will move when leaned on. Tightened the lower left set screw and tightened the jam nut with the control column in the horizontal position.
22. OAT light lense is turned and blocking light. Turned lense, reinstalled and checked operation.
23. Pilot seat outboard seat back stop shaft is broken. Fabricated a pivot pin for the recline cam control shaft drilled and installed. Checked seat back stop operation, checked ok.
24. Right flap bulkhead is cracked 3/16 of an inch. (recorded for tracking progression)
25. The magnetic compass has air. Removed compass, disassembled, cleaned, resealed, serviced and reinstalled.
26. DC4d the cabin door seal to keep seal pliable.
27. Washed aircraft.
28. Ran up and checked all systems operated normal.

Services Performed: **A.D.'s**

1. C/W AD 76-07-12 Bendix switch by operation. Due again in 100 hrs.
2. C/W AD 94-20-04R2 Beech fuselage inspection of rear bulkheads at F.S. 256.9 and F.S. 272 and found no faults. Due again in 100 hrs.
3. C/W AD 97-14-15 Hawker cabin door handle inspection by operation. Due again at next handle removal.
4. C/W AD 2007-08-04 McCauley prop inspection I.A.W. McCauley AS/B248 paragraphs 2B-2F. Due again in 100 hrs.
5. C/W AD 2007-08-08 Beech uplock roller and bolt inspection and lubrication. Due again in 100 hrs.
6. AD 95-04-03 Beech forward carry thru spar inspection is due in 439.1 hrs.
7. S/B 0546-359 Alternator bearing inspection is due in 196.4 hrs.



## Finefield Aviation Inc.

Lake in the Hills Airport  
8399 Pyott Road  
Lake in the Hills, IL 60156

Annual Date-5-16-14

| ANNUAL SERVICES DESCRIPTION |            |               | Bo Harper |        |        |        |
|-----------------------------|------------|---------------|-----------|--------|--------|--------|
| Aircraft No.                | Serial No. | Type Aircraft | Hobbs     | TTAF   | TSMOH  | TSPOH  |
| 167JW                       | D-8792     | Beech V35A    | 1999.5    | 4628.8 | 1981.3 | 1598.2 |

**Services Performed:**

**Engine**

1. Compression test: 1) 71/80, 2) 52/80, 3) 76/80, 4) 70/80, 5) 78/80, 6) 77/80.
2. Cylinder #2 compression is low with excessive exhaust valve leaks. Boroscoped the cylinder finding the exhaust valve with an uneven burn pattern and deteriorated seat. Removed cylinder #2 and sent for repair. ~~Reinstalled after repair using new piston rings, gaskets, and seals.~~
3. Cylinder #2 fuel injector line adel clamp cushion is tore. Installed a new adel clamp.
4. Changed oil and filter. Cut open old oil filter and found no contaminants. Serviced engine with 11qts. 100W Shell oil.
5. Magnetos have 519.6 hrs since the 500 hr inspection. Removed the left magneto: S6RN-1201, 10-349220-5 s/n: 108923FR and right magneto; S6RN-1205, 10-349260-6 s/n; B289001FP, ~~sent for 500 hr inspection and reinstalled using new gaskets and drive rubbers, and timed to engine.~~
6. Engine hoses were installed in 1995. Deferred.
7. Cleaned the ~~fuel controller~~ inlet screen, reinstalled and safetied.
8. The propeller spinner forward bulkhead is split. Reinstalled the spinner with a serviceable forward bulkhead.
9. Tightened induction, breather and instrument air hose clamps.
10. Tightened rocker cover screws.
11. Installed a new induction ~~air filter~~ element.
12. Dressed propeller blade leading edges.
13. The left side baffle support plate between cylinder #2 & 4 rocker covers is deteriorated. Installed the side support with a serviceable plate.
14. The induction hose aft of cylinder #2 is too narrow. Installed a new induction hose.
15. Reinstall the left exhaust manifold ~~repaired Dec. 2013.~~ Reinstalled the exhaust manifold after repair with new gaskets.
16. Check starter brushes. Found one brush significantly worn and beginning to misalign with the holder. Removed the existing starter TCM Energizer, R-646238-2, s/n: K-029479. ~~Installed the owner supplied overhauled starter~~ TCM, 646238, s/n: X211948 with the included o-ring and checked operation.
17. The aft right baffle support at the upper starter mounting stud is cracked. Installed a serviceable support.
18. Cleaned, gapped and rotated the spark plugs.
19. The left magneto retard wire terminal is cracked. Installed a new electrical connector.
20. Outboard oil cooler flange is cracked in half. Stop drilled the crack at the outer frame plate and installed a stiffener strip on the flange.
21. Fuel inlet hose to engine and wiring at firewall door clamps are not attached to firewall. Secured the fuel supply hose and firewall bundle with existing adel clamps a phenolic standoff spacer and a new screw.
22. Washed down engine.
23. Ran up and checked for leaks found none.
24. Lubed controls and checked rigging.
25. Pressure checked engine fuel system and found no leaks.



Services Performed: **Airframe**

1. Tested ELT battery I.A.W. F.A.R. 91.207(d). ELT battery is due April 2014. Installed new batteries, next due May 2015.
2. Checked fuel cap o-rings and found ok.
3. Cleaned fuel strainer screen and installed a new gasket.
4. ELT remote switch battery is due Dec. 2014. Installed a new battery, ~~next due May 2022~~.
5. Installed new instrument air inlet and inline air filters.
6. Measured shimmy dampener fluid level, ok.
7. Serviced tires.
8. Cleaned, inspected and greased wheel bearings.
9. Greased landing gear fittings.
10. Landing gear down handcrank clearance is too small. Adjusted landing gear down limit switch to specs.
11. Right and left uplock cable tensions are too high. Adjusted cable tensions to specs and safetied.
12. Negative terminal grommets are deteriorated. Installed new grommets.
13. The aircraft battery was installed Sept. 2008. ~~Conducted a load test with satisfactory results.~~
14. The owner requests cleaning the pre oiler fuse. Checked the continuity of the fuse and cleaned the fuse and holder contacts.
15. Pre oil is not operating. Found the relay control circuit wire broken at the contactor terminal. Tightened the control terminal stud in the contactor housing. Installed a new terminal on the control circuit wire and reconnected. Operational check is good.
16. The flap position indicator is not operational. Checked the variable resistance of the sending unit. Found a broken wire at the printed circuit board. Removed potted silicone around the printed circuit board terminal, resoldered the wire and reinsulated. Rigged the sending unit for correct indication.
17. ~~Right flap actuator bulkhead is cracked 1/8 inch.~~
18. Right wing upper wing root seal is loose below door. Secured the seal with adhesive.
19. Left main gear has 1 inboard gear door rod end that is too tight. Found the inboard rod end very tight. Installed a new rod end, checked rigging and tightened the jam nut.
20. Check for possible crack in nose gear tunnel at rivets just below rear pre-oiler mounting doubler plate. Cleaned around 2 rivets and inspected with magnification finding no visible cracks.
21. Center phone jack between pilot and copilots seat is loose. Removed mounting plate, tightened jacks and reinstalled plate.
22. Upholstery on firewall is falling on to pilot's rudder pedals. Resecured the upholstery with adhesive.
23. ~~Electric noise filter under copilot's panel has a loose connection. Tightened connection.~~
24. Left pilot's master cylinder is starting to leak. Drained the left brake system and removed the master cylinder core. Disassembled core, cleaned, installed new master cylinder seals, reassembled, reinstalled and bled the left brake.
25. Pilot's seat arm rest pivot bolts are very loose. Tightened bolts.
26. Copilot seat has 4 deteriorated seat rollers. Replaced rollers.
27. Washed down the landing gear.
28. The magnetic compass has air. Removed compass, disassembled and cleaned the card. Reassembled the compass with a new gasket and seals and serviced with fluid and reinstalled.
29. The outside air temperature light is inoperative. Installed a new lamp and checked operation.
30. The right flap is loose in the up position. ~~Adjusted the right flap bumper to specs.~~
31. Firewall shut off control in not traveling far enough. Found outer housing pulled out of holder. Installed housing in holder and rerigged control.
32. Washed aircraft.
33. Ran up and checked all systems operated normal.

Services Performed: **A.D.'s**

1. C/W AD 76-07-12 Bendix switch by operation. Due again in 100 hrs.
2. C/W AD 94-20-04 R2 Beech fuselage inspection of rear bulkheads at FS 256.9 and FS 272 and found no faults. Due again in 100 hrs.
3. C/W AD 95-04-03 Beech forward carry thru spar inspection and found no cracks. Due again in 500 hrs.
4. C/W AD 97-14-15 Beech cabin door handle inspection by operation. Due again at next handle removal.
5. C/W AD 2007-08-04 McCauley prop inspection I.A.W. ASB248. Due again in 100 hrs.
6. C/W AD 2007-08-08 Beech uplock roller and bolt inspection and lubrication. Due again in 100 hrs.
7. S/B 0546-359 Alternator bearing inspection next due in 257.3 hrs.