

# **RAM**

**AIRCRAFT CORPORATION**

## **AIRFRAME MAINTENANCE RECORDS**

Registration No. N6815T

Serial No. 41A0645 <sup>Lot</sup> BOOK #3



# AIRFRAME MAINTENANCE RECORDS

Log No. 3

Aircraft Registration No.   N6815T  

Model   Cessna 414A  

Serial No.   414A 0645  

817/752-8381

Waco Regional Airport • P.O. Box 5219 • Waco, Texas 76708  
FAX 817-752-3307

1-800-445-9713

"LOGBOOK FORMAT REPRINTED WITH THE PERMISSION OF AEROTECH PUBLICATIONS, INC.  
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DATE	<p>J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P-1  Repair Station #NF2R029L AIRFRAME LOG  Type CESSNA 414A TT 2620  N # 6815T TOTALS brought forward from previous page  S/N 414A0645 REC. HR. METER 2620</p>	WORK
	<p>At this time this aircraft was opened, cleaned, inspected &amp; serviced per Cessna service manual for an Annual Inspection All flight controls were checked for proper travels, cable tensions, condition &amp; lubricated as required. Lubricated control labyrinth seals. The electrical &amp; lighting systems were checked for proper operation &amp; condition. Electrical de-ice &amp; anti-ice systems were checked for condition &amp; operation. Surface deice systems were tested and serviced as required. Serviced the aircraft battery. Functionally tested the ELT and inspected as per FAR91.201. Battery exp date is 8 of 96. The vacuum system was checked for condition and serviced as required. The fuel system was inspected for security, leaks, and condition. Fuel filters and sumps were cleaned and serviced. The aircraft was jacked and landing gear was cleaned, lubricated, and operational checks were performed. Hydraulic systems were inspected for condition and leaks and filters were serviced as required. The brake system was serviced as required. Brake wear limits were checked. Cleaned, inspected, and greased the wheel bearings. The pressurization system was tested. Cleaned the outflow and safety valves. Fire, blowdown, and oxygen bottles were checked for security, condition and proper markings. External markings and placards were checked. These items were repaired, replaced, or corrected:</p> <p>Touch up paint and restrip the Nose. Restripped Radome using 44449U DK Chestnut Gold Metallic 5242U Las Vegas Gold Metallic. Restripped the RH Winglet using the same colors. Restripped the vertical stabilizer using the same colors. Feathered in the Inboard Wing Roots using 680021 Alumigrip and installed clear Radome Cover.</p> <p>IFR Certification 7/29/94. Next due 7/29/96.  Hydrotested blow down bottle 5 years 6/01/92. Next due 05/97.  Hydrotested oxygen bottle 5 years 06/01/92. Next due 05/97.</p> <p>Loose screw in pilots side window. Retorqued screw.  Lower aft fairing on left nacelle is cracked.  Repaired crack with fiberglass patch and painted fairing.  Nose Door Support on RH side is bent. Swapped with the front. Installed one new door support rod on the left rear nose and swapped left front to right rear.  Prop Governor Rod End is worn. Installed new Rod End and Thru Bolt on RH Prop Control Cable at the governor.  Flap scissors links on both sides need shimming and retorquing. Retorqued scissors on flaps.  Flaps need to be washed. Washed the inside of the flaps.  The nose wheel steering cable tension is low.  Adjusted nose wheel steering cable tension as per Service Manual.</p> <p>De-ice light inoperable. Installed new GE1385 bulb.  LH Cowl light inoperable. Light was not plugged in. Reconnected the socket. TOTALS brought forward from previous page  Check courtesy light. Installed CM-5 cabin breaker and tested system.</p> <p>5 Static Wings are missing, DG16305. Installed the missing Static Wicks.</p>	

DATE	WORK	TIME
	<p>J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P 4</p> <p>Repair Station #NF2R029L AIRFRAME LOG</p> <p>Type CESSNA 414A TT 2620</p> <p>N # 6815T TOTALS brought forward from previous page</p> <p>S/N 414A0645 REC. HR. METER 2620</p> <p>Aft Nav Light is inoperable. Installed a new bulb.</p> <p>Sealed Stall Vane with B.F. Goodrich Cement.</p> <p>Lip de-ice boots are inoperable. De-ice boots tested to be ok after repairing the defective connectors.</p> <p>Cover for relay box has fallen off the nose.</p> <p>Reglued re-lay box cover.</p> <p>The battery needs to be charged and the battery box needs to be cleaned.</p> <p>Removed battery and battery box; cleaned and serviced the battery and installed new hardware.</p> <p>Battery vent is broken, 5118419-2.</p> <p>Installed new battery vent and painted.</p> <p>Central vacuum filter every 500 hours. Next due 2859.0.</p> <p>Both Vacuum Regulators need changing. Installed 2 new B3-5-1 filters. Next replacement is due in 100 hours by 2720.9 total time.</p> <p>Surface de-ice valves need cleaning.</p> <p>Removed and cleaned de-ice valves, made new de-ice line on left engine. Next cleaning is due in 150 hours by 2770.7</p> <p>Left Fuel Pump very noisy, 2BT-29 Pump. Removed the LH Fuel Pump S/N 11F843AD and installed the overhauled Fuel Pump P/N 2B7-29-OH S/N 10AF168.</p> <p>Fuel cap o-rings need to be replaced.</p> <p>Installed two new O-rings to fuel filter caps.</p> <p>Airconditioning door on cowl won't close all the way. Fabricated doubler and installed on the inside of the aircraft door and nacelle.</p> <p>Aircraft hydraulic light inoperable.</p> <p>Removed switch and tested. Installed a new switch and serviced the system with 5606.</p> <p>LH heat exchange control inoperable. Installed new LH heat exchange control cable.</p> <p>Defroster control stiff. Cable was jammed in nose. Adjusted the cable and lubricated.</p> <p>Oxygen needs servicing. Serviced oxygen to 1900 PSI.</p> <p>Airconditioning Hydraulic leaks from the top of the filler. Washed filler neck and retorqued.</p> <p>Hose on the nose ram air duck is starting to split.</p> <p>Installed new hose from nose to heater.</p> <p>The outflow and safety valves need cleaning.</p> <p>Cleaned outflow and safety valves.</p> <p>Washed the oxygen masks.</p> <p>Lower Door Extend Strut missing.</p> <p>Removed the door brackets for the strut.</p> <p>Left Main Gear has play in Rear Trunnion. Removed and Reshimmed the Trunnion and Strut.</p> <p>Left Main Gear Scissors need retorquing. Reshimmed the scissors.</p> <p>Right main tire needs replacing.</p> <p>Installed new Flight Custom II 6.50-10-8PR on right main.</p> <p>Right main gear has play in rear trunnion. Removed right strut. Cleaned, checked trunnion bearings and reshimmed.</p> <p>Both main gear door rod ends need replacing.</p> <p>Installed two new tubes assy to main gear doors.</p> <p>Both hydraulic filters need changing every 400 hours. Installed 2 new AN6235-2A filters. Next replacement is due</p>	

DATE	TO TIME SER	<p>J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P 7  Repair Station #NF2R029L AIRFRAME LOG  Type CESSNA 414A TT 2620  N # 6815T  S/N 414A0645 REC. HR. METER 2620  by 3020.9 hours total time.</p>	DRK
		<p>Play in the nose gear between the actuator A frame.  Adjusted nose gear activator as per service manual.  Uplock Mount cracked on Left Gear. Installed a new Uplock  Mount and Brackett and checked the Gear Retraction and rigg-  ing.  Both Brake Calipers are starting to leak. Installed new  Caliper Housings on the left side with new "O" Rings. In-  stalled new "O" Ring on the right side.  Wrong Brake Caliper Bolt installed, 103-118. Installed a  AN4-21 Bolt and retorqued.  Wrong Nose Wheel Axle Nut Installed. Installed correct  Nut on the Nose Wheel Thru Bolt and saftied.  The nose wheel bearing is water marked.  Installed new bearings and races and felts in nose wheel.  Outboard bearing and race is corroded on LH gear.  Installed new ourboard bearing and race in LH main wheel.  The Dust Cap on LH Gear Axle Nut is worn through. In-  stalled Wheel and new Dust Cap.  Left Main Landing Support; FWD and AFT Bearings are loose  in supports. Installed Bearings with 10 min. fast weld #10  cement. Parts on order.  LH Engine Outboard Exhaust Risor Assy is deformed. In-  stalled new Inboard and Outboard Exhaust Risor Assy, sup-  plied from Knisley.  Exhaust leaks from inboard slip joint. Installed new in-  board and outboard slipjoints, RAM P/N 1001-3 per STC  #SA4331SW.  Inboard Exhaust Pipe does not clamp to hangar. Clamped  the Inboard Exhaust Pipe to the Hangar Brackett.  The Outboard Heat Shield is Cracked. Welded crack on Out-  board Heat Shield and reinstalled.  Installed a new Inboard and Outboard Slip Joint,  RAM P/N 1001-3 per STC #SA4331W on the RH Engine Exhaust  System.  AD 95-09-13 (Fuel valves) Supersedes 93-05-03. Next due  2853.4 hours total time.  AD 82-07-03 (Heater) TT 1234.7 Heater Meter 148.6.  Complies with AD 82-07-03 by pressure decay test. Next due  in 100 hr. heater hours or 24 months by 248.6 Heater Hobbs  or 1334.7 Heater total time.  AD 84-26-02 Induction Air Filters Replaced the LH and RH  Filters. Next replacement is due in 500 hours by 3120.9  hours total time or on condition.  AD 94-06-09 (Capacitors) One time.  Complies with AD 94-06-09 by inspection of date code on  Capacitors. Found Capacitors not affected by date code.  AD 85-13-03 (Engine mounts) Every 9600 hours. Next due at  10176.2.  Removed the existing Hoskins fuel flow indicators and  transducers.  Installed a new Shadin Co. Digiflo Indicator P/N 910522D,  S/N 7977, Harness P/N 412220, LH engine transducer P/N  680501A, S/N 85093, and RH engine transducer P/N 680501A,  S/N 84615 as per STC SA5776L. Installation of a Shadin  Company 910502, 910504, or 910514 Fuel Flow indicating  System in accorcance with Shadin Company Report No. 4026,</p>	

DATE

J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P 10  
 Repair Station #NF2R029L AIRFRAME LOG OF REPAIR WORK  
 Type CESSNA 414A TT 2620  
 N # 6815T TOTALS brought forward from previous entry  
 S/N 414A0645 REC. HR. METER 2620  
 dated July 18, 1981, revised May 11, 1983 or subsequent FAA  
 approved revision.

Installed the engine transducers as per STC SE444GL.  
 Incorporation of a Fuel Flow Transducer in accordance with  
 Shadin Company Report Number 4021, revised August 16, 1986,  
 or other FAA Approved revision.

No weight change was required.

I certify that this ~~Aircraft~~ was repaired and/or inspected  
 in accordance with An Annual inspection and is approved for  
 return to service. Pertinent details are on file at this  
 Repair Station under W.O.# 1693 . Date 9-13-95  
 Joliet Avionics Inc., DuPage Airport, West Chicago, IL 60185  
 F.A.A. Approved Repair Station #NF2R029L

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*Quasi Fehalunio*  
 Inspector

J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P 1  
 Repair Station #NF2R029L AIRFRAME LOG  
 Type CESSNA 414A TT 2648  
 N # 6815T  
 S/N 414A0645 REC. HR. METER 2648

Painted the RH inboard cowl door.

Replaced the aircraft battery due to a defective cell.

Installed a new Gill G-246, S/N G01624615.

Replace LH Main Gear forward and aft main gear attach fit-  
 tings. Removed the LH main gear assy. Removed all special  
 High Lock and standard fasteners from the forward gear pivot  
 fitting. Installed a new P/N 5122720-9 fitting and reassem-  
 bled the forward section. Removed the aft wheel well skin  
 P/N 5122006-43 to gain access to the aft gear fitting attach-  
 ing High Locks and fasteners. Removed the aft fitting and  
 installed a new P/N 5122724-5 fitting assy. Fit a new aft  
 wheel well skin and reassembled the aft section. All new  
 special fasteners were installed in both fittings. Painted  
 the new skin to match. Reassembled the landing gear system  
 and checked for proper operation.

Repaired the #3 seat back and freed the LH aft seats.

The aircraft, engine, appliance, or component identified was  
 repaired & inspected in accordance with current regulations  
 of the Federal Aviation Agency and is approved for return to  
 service. Pertinent details of the repair are on file at this  
 repair station under W.O. # 1878

Date 11-3-95 Signed *Quasi Fehalunio* For  
 Joliet Avionics, Inc. DuPage Airport, W. Chicago, IL 60185  
 F.A.A. Approved Repair Station #NF2R029L



DATE

J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P 1  
 Repair Station #NF2R029L AIRFRAME LOG  
 Type CESSNA 414A TT 2784  
 N # 6815T TOTALS brought forward from previous page  
 S/N 414A0645 REC. HR. METER 2784

## Airframe Inspection -

At this time this aircraft was opened, inspected, and serviced as per Cessna Service Manual for an Annual inspection. All flight controls were checked for proper travels, cable tensions, & condition and lubricated as required. Lubricated the flight control labyrinth seals. The electrical and lighting systems were checked for proper operation and condition. Surface deice and anti-ice systems were checked for proper operation and serviced as required. Serviced the aircraft battery and functionally tested the ELT; inspected as per FAR 91.207d. Battery exp. date is June of 1998. The vacuum and pressure systems were checked for proper operation and condition. Filters, screens, and sumps were serviced as required. The aircraft was jacked and wheels were removed. Bearings were cleaned, inspected, and greased. The brake system was checked for wear limits, calipers were cleaned, and the system serviced. Landing gear operational and rigging checks were performed. Cleaned the cabin outflow and safety valves. Serviced the pressurization system. The

J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P 2  
 Repair Station #NF2R029L AIRFRAME LOG  
 Type CESSNA 414A TT 2784  
 N # 6815T  
 S/N 414A0645 REC. HR. METER 2784

interior components were checked for condition, security, and proper markings. External markings and placards were checked. These items were repaired, replaced, or corrected:

Two flight control static dischargers are broken-  
 Installed two new discharger assys.

RH induction air filter housing cover is chaffing on the can.

Installed teflon anti-chafe tape.

RH engine hydraulic pump case drain line is broken-  
 Removed the line, repaired the cracked flair and reassembled

Found the RH spinner bulkhead cracked-

Removed the spinner and old bulkhead. Transferred the de-ice system components to the new assy. Reassembled the bulkhead to the propeller and reinstalled the propeller on the RH engine as per RAM and McCauley service information.

LH flap inboard link bushing is loose-  
 Disassembled the linkage. Reinstalled the bushing using Loctite compound and reassembled the linkage.

The ELT battery is expired-

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TOTALS—Carry forward to next page



Repair Station #NF2R029L

AIRFRAME LOG

Type CESSNA 414A

TT 2784

N # 6815T

S/N 414A0645

REC. HR. METER 2784

Installed a new ELT battery P/N BP1020 and functionally tested the ELT. New expiration date is June of 1998.

RH outboard de-ice boot--one tube stays inflated.

Troubleshoot the system found left boots shuttle valve not operating properly. Removed the valve and disassembled, cleaned, and reassembled. Checked lines for leaks; none were noted. Reinstalled and retested with satisfactory results.

Central vacuum filter is due in 74.7 hours by 2859.0 hours hobbs and total time.

Oxygen system is low-

Serviced the oxygen to 1850 psi.

RH rear passenger seat back will not stay up.

Removed the seat and checked the reclining mechanism; was able to duplicate the discrepancy. Checked actuator cylinder for proper rigging. Put seat into a full recline and allowed cylinder to release seat back to full position. Could not duplicate squawk after several positions.

LH main gear up-lock switch is loose-

Tightened the switch and checked for proper operation and rigging.

LH and RH brake disc are worn below minimum limits. The brake linings are also worn to minimum limits.

Installed two new brake disc assys P/N 164-06406 and 18 new 66-66 linings.

LH and RH main gear actuator rod ends seem to have excessive movement.

Cleaned, inspected and lubricated. Found the rod ends within servicable limits.

LH main gear torque link is loose at the center hinge point.

Disassembled, cleaned, inspected and lubricated. Reassembled, shimmed and retorqued the attaching bolt.

Nose wheel grease felts are broken-

Installed new felts on both bearings.

Nose wheel has one defective race and bearing-

Installed a new race and bearing.

RH main wheel inboard race and bearing are defective- Installed a new race and bearing.

Hydraulic system filters are due for replacement in 236.6 hours by 3020.9 hours hobbs and total time.

AD82-07-03 Janitrol heaters-

Complied with AD82-07-03 by pressure decay test and 100 hour heater inspection. No defects were found. Next inspection is required in 100 heater hours by 411.5 heater meter or 24 months by 9 of 98.

AD84-26-02 Induction Airfilters is next due in 336.6 hours by 3120.6 hours hobbs and total time or on condition.

AD95-09-13 Fuel Inlet Valves is due in 69.1 hours by 2853.1 hours hobbs and total time.

I certify that this AIRFRAME was repaired and/or inspected in accordance with An Annual inspection and is approved for return to service. Pertinent details are on file at this Repair Station under W.O.# 2999 . Date 9-13-96

Joliet Avionics Inc., DuPage Airport, West Chicago, IL 60185 F.A.A. Approved Repair Station #NF2R029L

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Inspector

WORK

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<p style="text-align: right;">TOTALS—Carry forward from previous page</p> <p>J-A AIR CENTER DuPage Airport/West Chicago, IL. 60185 P 1  Repair Station #NF2R029L AIRFRAME LOG  Type CESSNA 414A TT 2802  N # 6815T  S/N 414A0645 REC. HR. METER 2802</p> <p>Hydraulic fluid is leaking from under nose.  Checked the nose area for leaks. Found the suction line coming from the fluid reservoir partially chafed through. Replaced with a high pressure hose and AN fittings. Serviced the system and ground ran with satisfactory results.</p> <p>Prop sync is intermittent.  All electrical harnesses were checked with satisfactory results and problem could not be duplicated.  Right hand fuel drain is leaking.  Installed new fuel drain P/N 79C1. No further leaks were found.  Left hand inboard fuel panel is leaking.  Removed panel and <del>85-04-13</del> installed new seal using pro-seal.  Comply with AD <del>93-05-05</del> Fuel inlet check valve.  Complied with AD <del>93-05-03</del> as outlined in AD note. No problems found at this time. <sup>95-04-13</sup> Due again in 600hrs at 3402 hrs total time.</p> <p>LH engine outboard exhaust riser assy is failing—  Replaced the riser assy with a new unit P/N K9910295-13 from Knisley Exhaust Systems.  The aircraft, engine, appliance, or component identified was repaired &amp; inspected in accordance with current regulations of the Federal Aviation Agency and is approved for return to service. Pertinent details of the repair are on file at this repair station under W.O. # 3056  Date 10-3-96, Signed <i>Dave Felchman</i> For  Joliet Avionics, Inc. DuPage Airport, W. Chicago, IL 60185  F.A.A. Approved Repair Station #NF2R029L</p>
				<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p><b>BROWN FLYING SCHOOL, INC.</b>  Sky King Airport  6898 North Clinton Street  Terre Haute, IN 47805</p> <p><i>From</i></p> <p><i>Cessna 414 N6815T 11-25-96</i>  <i>change oil and filter both engines</i>  <i>William E. Fickel</i>  <i>JA1782926</i>  <i>Time 2844.7</i>  <i>Log entry</i></p> <p><i>For</i></p> </div>
				TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<p>J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P-1                      Repair Station #NF2R029L AIRFRAME LOG                      Type CESSNA 414A TT 2850                      N # 6815T                      S/N 414A0645 REC. HR. METER 2850</p> <p>ADF and magnetic compass lights are out-                      Troubleshoot both systems and found that the ADF had two bad bulbs. Removed ADF and installed new lamps. Found compass to have a bad lamp socket. Removed old socket and installed a new socket. Reassembled all of the above. Operational check was satisfactory.</p> <p>Lt boot won't deflate-                      Inflated the deice system. Found a large hole in the inboard boot of the RH wing. Patched with some EC801. Also found the loading valve to be sticking. Removed for cleaning. Re-installed and the operational check was satisfactory.</p> <p>The aircraft, engine, appliance, or component identified was repaired &amp; inspected in accordance with current regulations of the Federal Aviation Agency and is approved for return to service. Pertinent details of the repair are on file at this repair station under W.O. # 3294 Date: 12-12-96</p> <p>Signed: BRUCE P. REBECHINI <i>Bruce Rebechini</i> For                      Joliet Avionics, Inc. DuPage Airport, W. Chicago, IL 60185                      F.A.A. Approved Repair Station #NF2R029L</p>



Waco Regional Airport

Airframe Total Time: 2888.3  
 Hour Meter: 2888.3  
 Date: 2/7/97

CESSNA S/N 414A-0645 N6815T

On above referenced aircraft flushed left coolant radiator. Radiator flushed for six hours with RAM high pressure/high temperature pump system using Mantek Radi-Flush. Flush system with distilled water to remove cleaner. Reconnect radiator to engine coolant system. Serviced system with 60/40 mixture of Texaco ETX 6024 coolant/distilled water. System leak checked satisfactory. System reconnected and serviced in accordance with RAM Service Manual Supplement. Aircraft approved for return to service for maintenance performed. Pertinent details are on file under Work Order No. 2585.

*Robert Franklin*  
 RAM Aircraft Corporation, P. O. Box 5219, Waco, Texas 76708 CRS VA1R551K


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J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 p-1

Repair Station #NF2R029L

AIRFRAME LOG

Type CESSNA 414A

TT 2926

N # 6815T

SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK

S/N 414A0645

REC. HR. METER 2926

Service tires to proper pressures-  
Serviced tires to prescribed pressures. Mains 70 PSI and 35 PSI for the nose.

Bent LH baggage door hinge-  
Removed hinge from left side nose baggage door. Disassembled and straightened, reinstalled and lubricated. Door hinge mounts were also straightened. Checked the door and latch for proper operation.

Propellers are due for overhaul-  
Removed the LH propeller P/N 3AF36C514-C, S/N 901903 and RH propeller P/N 3AF36C514-C, S/N 902167 with 1486.7 hours total time and sent to Aircraft Propeller Service for overhaul. Reinstalled the propellers as per McCauley and TCM service information.

The aircraft, engine, appliance, or component identified was repaired & inspected in accordance with current regulations of the Federal Aviation Agency and is approved for return to service. Pertinent details of the repair are on file at this repair station under W.O. # 167314 Date: 8-20-97

Signed: BRUCE P. REBECHINI *Bruce Rebechini* For  
Joliet Avionics, Inc. DuPage Airport, W. Chicago, IL 60185  
F.A.A. Approved Repair Station #NF2R029L

J.A.AIR CENTER DuPage Airport/West Chicago IL 60185

N6815T 8/22/97 TT:2954 wo#167314

Replaced pilot side altimeter with new unit  
sn/391176. Tested static system and correlation.

**MAINTENANCE RELEASE**

THE AIRCRAFT, AIRFRAME, ENGINE, APPLIANCE, OR COMPONENT IDENTIFIED WAS REPAIRED AND INSPECTED IN ACCORDANCE WITH CURRENT REGULATIONS OF THE FEDERAL AVIATION AGENCY AND IS APPROVED FOR RETURN TO SERVICE. PERTINENT DETAILS OF THE REPAIR ARE ON FILE AT THIS REPAIR STATION UNDER

WORK ORDER NUMBER 167314  
DATE 8-22-97 SIGNED *Dwight McCall* FOR

JOLIET AVIONICS INC.  
DuPage Airport  
West Chicago, IL 60185  
FAA Repair Station NF2R029L

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<b>TOTALS</b> brought forward from previous page
9-26-97	8957.7	8957.7		CERTIFY THAT THIS Aircraft HAS BEEN INSPECTED IN ACCORDANCE WITH an Annual INSPECTION AND WAS DETERMINED TO BE IN A WORTHY CONDITION THE DATE September 26, 1997  check and subvisual flight control. Gear landing gear fitting. Perform retraction and extension on jacks clean and pack wheel bearings. Repair left main tire - check light and electrical systems service battery. Function test ELI per 91307C battery expire <sup>6-98</sup> check and install no 351-10 hose installed 3-95/3-97 per AD 97-01-13 - check and subvisual flight control - check wing gear system and wing spar attach fitting  Certification details of inspection on file (this company) under work order no. 4547 Date 9-26-97 Signed William E. Duple Aviation Training School, Inc. CRI DAVR1200 6050 Clinton Road Tate, Indiana 47805
4/4/98				HOBBS READS 3025.4.  REMOVED BOTH GOVERNORS, OVERHAULED AND REINSTALLED Paul Jones 326362844 AIP.
4/27/98				HOBBS READS 3031.3  REMOVED, OVERHAULED, AND HYDRSTATIC TEST OF OXYGEN BOTTLE AND GEAR BLOW DOWN BOTTLE AND REINSTALLED. Paul Jones 326362844 AIP
				SUB-TOTALS this page
				TOTALS—Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<b>TOTALS</b> brought forward from previous page
				<p><b>Joliet Avionics</b>                      DuPage Airport                      West Chicago, IL 60185</p> <p>Date: <u>1/28/98</u>                      N#: <u>6815T</u>                      WO#: <u>1702029</u></p> <p>Tested Altimeter(s), Altitude Reporting and Static System(s) in accordance with Part 43, Appendix "E" for compliance with FAR 91.411 and FAR 91.217.</p> <p>Pilot's Altimeter P/N <u>5934PA</u> S/N <u>391176</u> Range <u>30K</u>                      Co-Pilot's Altimeter P/N <u>5934PA</u> S/N <u>V5116</u> Range <u>30K</u>                      Date: <u>1/28/98</u> Model: <u>RT-459A</u> S/N: <u>9645/9310</u></p> <p>Transponder Tested in Accordance with Part 43, Appendix "F" for compliance with FAR 91.413 this date.</p> <p>F.A.A. REPAIR STATION #NF2R029L, Class III.</p> <p>Signature <u><i>Charles D. Walling</i></u> Inspector</p>
				<p>Hobbs: 300.8 <sup>3</sup>, Cessna 414A                      N 6815T</p> <p>Installed Insight Strikefinder Weather Mapping System (SF-2000-021-009 Display S/N 5846 and SF-2000-022 Antenna). Also installed N.A.T. AA80-060 Intercom S/N 15824. Forms 337 reference this installation. Weight &amp; Balance and Equipment List have been updated.</p>
				<p style="text-align: center;"><b>MAINTENANCE RELEASE</b></p> <p>THE AIRCRAFT, AIRFRAME, ENGINE, APPLIANCE, OR COMPONENT IDENTIFIED WAS REPAIRED AND INSPECTED IN ACCORDANCE WITH CURRENT REGULATIONS OF THE FEDERAL AVIATION AGENCY AND IS APPROVED FOR RETURN TO SERVICE. PERTINENT DETAILS OF THE REPAIR ARE ON FILE AT THIS REPAIR STATION UNDER</p> <p>WORK ORDER NUMBER <u>170112</u>                      DATE <u>01-28-98</u> SIGNED <u><i>Charles D. Walling</i></u> FOR</p> <p style="text-align: center;"><b>JOLIET AVIONICS INC.</b> Charles D. Walling                      DuPage Airport                      West Chicago, IL 60185                      FAA Repair Station NF2R029L</p>
				<b>SUB-TOTALS</b> this page
				<b>TOTALS</b> —Carry forward to next page

Repair Station #NF2R029L

AIRFRAME LOG

Type CESSNA 414A

TT 3062

N # 6815T

SIGNATURE & DATE OF INSPECTOR

DRK

S/N 414A0645

REC. HR. METER 3103

AIRFRAME INSPECTION -

AT THIS TIME THIS AIRCRAFT WAS OPENED, CLEANED, INSPECTED & SERVICED PER CESSNA SERVICE MANUAL FOR AN ANNUAL INSPECTION. ALL FLIGHT CONTROLS WERE CHECKED FOR PROPER TRAVELS, CABLE TENSIONS, CONDITION & LUBRICATED AS REQUIRED. LUBRICATED CONTROL LABYRINTH SEALS. THE ELECTRICAL & LIGHTING SYSTEMS WERE CHECKED FOR PROPER OPERATION & CONDITION. ELECTRICAL DEICE & ANTI-ICE SYSTEMS WERE CHECKED FOR CONDITION & OPERATION. SURFACE DEICE SYSTEMS WERE TESTED AND SERVICED AS REQUIRED. SERVICED THE AIRCRAFT BATTERY. FUNCTIONALLY TESTED THE ELT AND INSPECTED AS PER FAR91.207d. BATTERY EXP DATE IS AUG OF 2000. THE VACUUM SYSTEM WAS CHECKED FOR CONDITION AND SERVICED AS REQUIRED. THE FUEL SYSTEM WAS INSPECTED FOR SECURITY, LEAKS, AND CONDITION. FUEL FILTERS AND SUMPS WERE CLEANED AND SERVICED. THE AIRCRAFT WAS JACKED AND LANDING GEAR WAS CLEANED, LUBRICATED AND OPERATIONAL CHECKS WERE PERFORMED. HYDRAULIC SYSTEMS WERE INSPECTED FOR CONDITION AND LEAKS AND FILTERS WERE SERVICED AS REQUIRED. THE BRAKE SYSTEM WAS SERVICED AS REQUIRED. BRAKE WAER LIMITS WERE CHECKED. CLEANED, INSPECTED, AND GREASED THE WHEEL BEARINGS. THE PRESSURIZATION SYSTEM WAS TESTED. CLEANED THE OUTFLOW AND SAFETY VALVES. FIRE, BLOWDOWN AND OXYGEN BOTTLES WERE CHECKED FOR SECURITY, CONDITION AND PROPER MARKINGS. EXTERNAL MARKINGS AND PLACARDS WERE CHECKED. THESE ITEMS WERE REPAIRED, REPLACED OR CORRECTED:

CONFIRM AD NOTE STATUS-

COMPLETED A COMPLETE EQUIPMENT AUDIT. CHECKED THE STATUS OF ALL AIRWORTHINESS DIRECTIVES. GENERATED A SIGNED COMPLIANCE LIST AND ATTACHED TO THE AIRCRAFT RECORDS. SAVED A COPY TO A FLOPPY DISK.

LH SPINNER RUBBING ON NOSE COWL-

INSURED PROPER CLEARANCE UPON REINSTALLATION OF COWLING.

RH ENGINE PROP CONTROL NO CUSHION-

ADJUSTED RH PROP CONTROL TO OBTAIN REQUIRED CUSHION AND MATCH LH PROP CONTROL.

LH ENGINE OUTBOARD NOSE COWL HAS MISSING CAMLOCK AND MULTIPLE CAMLOCKS WHICH ARE MISSING KEEPERS-

INSTALLED NEW STUD P/N S2319-6, INSTALLED FOUR NEW RINGS P/N CM2791-1.

LH ENGINE #6 CYLINDER BLAST TUBE CHAFFED THROUGH-SEALED TUBE WITH RTV BEFOR INSTALLATION OF HEAT SHIELD.

RH ENGINE EXCESS PLAY IN ROD END FOR PROP GOVERNOR-REMOVED EXISTING ROD END AND INSTALLED NEW P/N S1106-3. CHECKED FOR PROPER RIGGING AND SAFETY.

MULTIPLE FROZEN SCREWS IN AIRFRAME INSPECT PANELS-EXTRACTED FROZEN SCREWS AS NEEDED TO GAIN ACCESS FOR INSPECTION.

ELT BATTERY REPLACEMENT DUE JUNE 1998-

INSTALLED NEW ELT BATTERY DATED AUGUST 2000. TESTED UNIT ON SWITCH AND G SWITCH.

ONE FUSELAGE BELLY DRAIN SEAL IS TORN-

REMOVED OLD DRAIN SEAL AND RIVETED NEW SEAL INTO PLACE.

SEVERAL SMALL PIN HOLES IN DEICE BOOTS ON HORIZONTAL STAB, ALSO IN RH WING DEICE BOOTS-

PATCHED PIN HOLES IN HORIZONTAL STABILIZER AND RH WING DEICE BOOT.

Repair Station #NF2R029L

AIRFRAME LOG

Type CESSNA 414A

TT 3062

N # 6815T

S/N 414A0645

REC. HR. METER 3103

DATE

TO  
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DRK

CHIP IN LH AND RH WINGLET-  
REPAIRED USING FIBERGLASS RESIN AND PATCH REPAIR FILLER.  
AIR CONDITIONING DOOR IS HANGING UP-  
REMOVED DOOR AND TRIMED, BENT BACK FOLDED ALUMINUM AND IN-  
STALLED DOOR. PERFORMED OPERATIONAL CHECK, ALL FUNCTIONS  
FOUND NORMAL.

WING FLAP PUSH RODS HEAVILY CORRODED BOTH SIDES-  
REMOVED 4 PUSH RODS (2/SIDE). REMOVED CORROSION, PRIMED,  
AND PAINTED ALL 4 RODS. REINSTALLED RODS CHECKED FLAPS FOR  
PROPER RIGGING AND OPERATION, ALL FUNCTIONS NORMAL.

LH OUTBOARD FLAP PUSH ROD HAS BOLT SIEZED IN ROD END-  
REMOVED ROD FROM ROD END, DISCONNECTED PUSH ROD TO FLAP AND  
REMOVED BELLCRANK ASSEMBLY. EXTRACTED FROZEN BOLT, CLEANED  
AND INSPECTED BELLCRANK AND LUBRICATED NEEDLE BEARINGS. RE-  
INSTALLED BELLCRANK AND SAFETIED PIVOT BOLT. SEE ITEM 200.

RH ENGINE OIL TEMP VERY LOW-  
REMOVED EXISTING PROBE, INSTALLED NEW OIL TEMP PROBE  
P/N MS28034-3, AND SAFETIED.

PROP ANTI-ICE AMMETER INOP-  
REMOVED GLARE SHIELD AND CHECKED AMMETER CONNECTIONS, FOUND  
GOOD. REMOVED AMMETER AND BENCH TESTED, FOUND AMMETER OPER-  
ATIONAL. CLEANED SHUNT CONNECTIONS AND REINSTALLED.  
CHECKED OPERATION, ALL FUNCTIONS NORMAL.

LIP HEAT INOP-  
TROUBLE SHOT SYSTEM, FOUND TWO DEFECTIVE RELAYS. PARTS  
ON ORDER. REPAIRED DEFECTIVE CONNECTOR FOR THE LH AND RH  
CAP.

LH ENGINE ALTERNATOR NOISE FILTER WIRE BROKEN-  
REMOVED NOISE FILTER, FOUND ALTERNATOR GROUND TERMINAL  
LOOSE. SECURED GROUND TERMINAL, FABRICATED, AND INSTALLED  
NEW LEAD FOR NOISE FILTER, REINSTALLED NOISE FILTER.

LH ENGINE ALTERNATOR OUT SENSOR MOUNTING IS BROKE-  
RE-MOUNTED ALTERNATOR OUT SENSOR.

AUX TEMINAL ON ALTERNATOR IS CHAFFING ON SOMETHING-  
SHORTEN AUX TERMINAL TO KEEP IT FROM CHAFING ON THE LANDING  
LIGHT HOUSING IN COWLING.

RH NAV LIGHT INOP-  
INSTALLED NEW LAMP IN RH WING TIP, FUNCTION CHECK NORMAL.

LH ENGINE VACUUM PUMP DISCHARGE HOSE KINKED-  
REPLACED LE VACUUM PUMP DISCHARGE FITTING WITH 90 DEGREE  
TYPE, TRIMMED HOSE TO FIT.

CENTRAL VACUUM SYSTEM FILTER REPLACEMENT-  
REMOVED EXISTING FILTER ELEMENT AND INSTALLED NEW FILTER  
P/N AM1035351S. NEXT REPLACEMENT IS DUE BY 500 HOURS AT  
3603.5 HOBBS/3562.3 TOTAL TIME OR ON CONDITION.

LH ENGINE FUEL FLOW TRANSDUCER MOUNT BRACKET BROKEN-  
PART ON BACKORDER AT FACTORY. TRANSDUCER DETERMINED TO BE  
SECURE FOR FURTHER FLIGHT.

LH WING INBOARD BOTTOM LEADING EDGE PANEL FUEL STAIN-  
REMOVED STAINS AND RETORQUED ALL PANEL SCREWS. ALLOWED TO  
STAND OVERNIGHT AND RECHECKED AREA FOR LEAKS, NONE DETECTED.

RH AUX FUEL PUMP CASE DRAIN LINE DISCONNECTED AND CAPPED  
OFF-

FOUND PORT ON FUEL PUMP NOT USED, NEW STYLE PUMP, DRAIN LINE  
OBSOLETE. REMOVED UNUSED DRAIN LINE.

O2 SYSTEM LEAKING-  
COULD NOT LOCATE LEAK, SYSTEM CURRENTLY HOLDING, 1500PSI.



Repair Station #NF2R029L

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WORK

RH PRESSURIZATION DUMP VALVE O-RING MISSING-  
REMOVED AND DISASSEMBLED DUMP VALVE. REMOVED BROKEN PIECES  
OF O-RING AND INSTALLED NEW P/N MS28775-228. REASSEMBLED  
VALVE AND RIGGED. CHECKED CONTROL FOR PROPER OPERATION, ALL  
FUNCTIONS NORMAL.

AIR CONDITIONING OIL AND FILTER CHANGE-  
DRAINED HYDRAULIC FLUID AND REMOVED FILTER, INSTALLED NEW  
FILTER P/N 572744. INSTALLED BOWL USING NEW O-RINGS P/N MS  
28775-226, SERVICED HYDRAULIC RESEVOIR. NEXT DUE AT 3462.3  
HOURS TOTAL TIME/3503.5 HOBBS TIME.

RH MAIN TIRE WORN-  
INSTALLED NEW 650X10 8PLY FSII TIRE ON RH MAIN GEAR.  
LANDING GEAR ACTUATOR HOSE STIFF, DATED 1980-  
REMOVE ALL ACTUATOR HOSES IN MAIN AND NOSE GEAR. INSTALL  
1 NEW HOSE P/N 350-4-0100, AND 1 NEW HOSE P/N 350-4-0090 ON  
NOSE GEAR ACTUATOR, NEW HOSE P/N 950012-6-0122 AND 950004-  
6-00100 ON BOTH LH AND RH MAIN LANDING GEAR ACTUATORS.  
PERFORMED RETRACTION TEST, ALL FUNCTIONS FOUND NORMAL AND NO  
LEAKS DETECTED.

GEAR WELL BRAKE HOSES NOT DATED, RECOMMEND REPLACEMENT-  
REMOVED OLD HOSES, INSTALLED 1 NEW HOSE P/N S1167-4-0520 ON  
RH AND LH MAIN GEAR. BLED BRAKES, INSPECTED FOR LEAKS,  
NO LEAKS DETECTED.

EVIDENCE OF HYDRAULIC FLUID LEAKING AT RESERVOIR SIGHT  
GLASS PLASTIC TUBE-  
SECURED CLAMPS, CLEANED AREA, CHECKED FOR LEAKS, NONE  
DETECTED.

HYDRAULIC SYSTEM FILTER REPLACEMENT-  
INSTALLED NEW HUDRAULIC FILTERS IN RH AND LH SIDES  
P/N 572760, WITH NEW O-RINGS. NEXT REPLACEMENT DUE AT 3420.  
9 HOURS TOTAL TIME/3503.5 HOBBS TIME.

LH ENGINE #6 CYLINDER EXHAUST HEAT SHIELD BREAKING UP-  
STOP DRILLED CRACK.

LH ENGINE AFT INBOARD EXHAUST ELBOW SUPPORT CLAMP OFF-  
PUT CLAMP INTO PROPER POSITION AND TIGHTEN.

LEFT ENGINE INBOARD REAR EXHAUST RISER DISTORTED-  
INSTALLED NEW RISERS P/ K9910295-14, S/N 57097 ON RH BANK OF  
LH ENGINE.

SLIP JOINT FOR LH ENGINE, RIGHT EXHAUST BANK IS FROZEN-  
DISASSEMBLED SLIP JOINT, CLEANED AND INSPECTED, LUBED WITH  
ANTISEIZE AND REINSTALLED.

LH ENGINE HAS CRACK IN LH EXHAUST BANK-  
INSTALLED NEW KNISLEY EXHAUST ASSEMBLY ON LH BANK OF LH  
ENGINE. P/N K9910295-13, S/N 56914.

SLIP JOINT FOR LH ENGINE, LH EXHAUST BANK IS FROZEN-  
REMOVED AND SENT SLIP JOINT TO DAWLY FOR REPAIR. INSTALLED  
REPAIRED SLIP JOINT.

RH EXHAUST COLLECTOR OFF OF CYLINDER #1 IS DISTORTED-  
INSTALLED NEW KNISLEY EXHAUST ASSEMBLY P/N K9910295-14,  
S/N 59757.

RH WASE GATE TAIL PIPE IS CHAFFED FROM THE ACCESS PANEL -  
RELIEVED SCOOP AREA THAT WOULD CONTACT TAIL PIPE.

RH EXHAUST CLAMP AFT OF SLIP JOINT IS LOOSE-  
TIGHTEN CLAMP IN PROPER POSITION.

SLIP JOINT ON RH ENGINE EXHAUST BANK IS FROZEN-  
SENT SLIP JOINT TO DANLEY FOR REPAIRS. REINSTALLED REPAIRED  
SLIP JOINT.



DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<b>TOTALS</b> brought forward from previous page
8-28-98		3114.9		
8-28-98	AFTT APPROX. 3155.9	Hobbs 3155.9	HEATER Hobbs 412.4	INSPECTED AIRCRAFT PER CESSNA PROGRESSIVE CARE PROGRAM OPERATION #1 PER INSPECTION SHEETS AND CESSNA SERVICE MANUAL. RUDDER TRIM SYSTEM LUBRICATED. BAGGAGE COMPARTMENT LIGHT BULB REPLACED. FWD BAGGAGE DOOR TRIMMED TO PREVENT BINDING. SECURE WIRES UNDER PANEL NEAR FLAP LEVER. LOSS HYDRAULIC SYSTEM CHECK. PLACARDS & DELAYS SECURE. STATIC WIRE CHECK. RUDDER & ELEVATORS (K) OK. DEICE SYSTEMS CHECK. LIGHTING SWD OK. (See FAR 91.207) OK. ECT BAT. DUE 8-00. VACUUM SYSTEM CHECK OK. ALL PANELS REINSTALLED AFTER INSPECTION. AD'S SKD THROUGH ISSUE 98-17. AFTT RUN UP & OPERATION CHECK.
AD	95-09-13 (6-14-95)	FUEL INLET FLOAT VALVE	EACH 600 HRS DUE 3402	Hobbs
AD	97-26-16 (2-2-98)	ENGINE MOUNT BEARINGS	ME885-3 (EACH 960 HRS DUE 10, 217.2)	
AD	84-26-02 (1-29-85)	IGNITION PAPER FILTER REPLACEMENT	EACH 500 HRS. DUE 3120.9	3162.1 Hobbs L.H. MARTIN
CLW AD	96-20-07 (11-14-96)	LAN AERO ACCESS SWITCH + DERRA TEST	100 HRS OF 512.4 HEATER Hobbs 24 mos. DUE 8-00 WHICH WERE FIRST	
		O <sub>2</sub> HYDRO TEST	DUE 4-03.	
<b>LEWIS UNIVERSITY AVIATION SERVICES ROMEVILLE, ILLINOIS 60441</b>				DATE 8-28-98 TACH Hobbs 3155.9 I CE RTI F T T T T S AIRCRAFT ENGINE HAS BE SP T D I N ACCORDANCE WITH A Phase I INSPECTION AND WAS DETERMINED T. B. I. AIRWORTHY CONDITION. SIGNED: <i>[Signature]</i> NO. I4321501677
10-22-98		3163.2		
10-22-98	AFTT APPROX. 3204.2	Hobbs 3204.2	HEATER Hobbs 420.6	INSPECTED AIRCRAFT PER CESSNA PROGRESSIVE CARE PROGRAM OPERATION #2. CLEANED PAINT STRIPPING MATERIAL FROM WING FLAP AREA. REPLACED RH PULSE LIGHT BULB. ELEVATOR TRIM TRAVEL ADJUSTED. CKD AND ADJUSTED RIGGING OF FLAP CONTROL SYSTEM. BATTERY SERVICED AND CHARGED. BATT BOX CHECKS OK. AILEONS & SYSTEM INS OK. VACUUM SYSTEM CHECK OK. CKD FOR REQUIRED PLACARDS. AIR CONDITIONING CHECK. WIRING CKD FOR GENERAL SOUNDING INTERIOR SEAT BELTS & TRACKS CHECK. ALL CONTROLS CABLES BUCKLES TURNBUCKLES CKD AND LUBRICATED AS REQUIRED. FUEL STRAINERS CLEANED. HEATER FUEL STRAINER CLEANED. HEATER FUEL CONT'D →
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DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<b>TOTALS</b> brought forward from previous page
→				PUMP SCREEN CLEANED OK. SHOCK STRUTS OK. ALL LIGHTING CHECK.
				O <sub>2</sub> SYSTEM MASKS OK. CABIN DOOR AIR STRUCTURE INSA OK.
				INDUCTIVE AIR FILTERS CHG BY SPECIAL INJECTION EACH 400HRS DUE AGAIN 3604.2
				LANDING LIGHT PISTON RINGS AND GEARS CHG AND LUBRICATED.
				PRESSURE CABIN TYPE A INSPECTION C/W THIS DATE
				ALL ATTACK POINTS CHG AND LUBRICATED AS REQUIRED
				AD'S CHECKED THROUGH ISSUE 98-20
AD	95-09-13 (6-14-95)			FUEL INLET FLOAT VALVE EACH 600HRS DUE 3402.0
AD	97-26-16 (2-2-98)			ENGINE MOUNT BEAMS ME 85-3 EA 9600HRS DUE 10,217.2
CLW AD	84-26-02 (1-29-85)			REPLACE PAPER INDUCTIVE FILTERS (EA 5004HRS) DUE 3704.2 H.665
AD	96-20-07 (11-14-96)			JAN AERO PRESS SWITCH/DECAY TST 24 hrs DUE 8-00 whichever is <sup>1004HRS OPS 512.4 HTR H.665</sup>

LEWIS UNIVERSITY  
AVIATION SERVICES  
ROMEDEVILLE, ILLINOIS 60441

DATE 10-22-98 TACH H.665 3204.2 AFT APPROX.  
I CERTIFY THAT THIS AIRCRAFT ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH A PHASE II INSPECTION AND WAS DETERMINED TO BE IN AIRWORTHY CONDITION.  
SIGNED [Signature] No. 1327504677

97.1

1-21-99	H.665 3211.8	3214.7		HEATER HOODS 468.2 INSPECTED AIRCRAFT PER COMBIA
				PROGRESSIVE CARE PROGRAM OPERATION #3. REPLACED BOTH RAM THROTTLE CABLES WITH NEW RAM REPLACEMENTS. RH NACELLE RIVETS REPLACED. RH DE-ICE LIGHT REPAIRED. LH LANDING LIGHT MOTOR REPAIRED. VACUUM REGULATOR FILTERS REPAIRED. SHIMMY DAMPER SEALS REPAIRED & SERVICED. LH UP LOCK ACTUATOR SEALS REPAIRED. RH NOSE CAP HEAT WIRING REPAIRED. ACFT JACKED. TRANSM. HYDRAULIC UNIT SERVICED AND OPERATED LANDING GEAR. EXTERNAL POWER APPLIED GEAR OPERATION PER OPS #3 CHECKLIST OK. ALL GEAR WARNING HORNS AND LIGHTS OPERATE OK. AD'S C/W THROUGH ISSUE 98-26 (CLW FAR 91.207(d))
AD	95-09-13 (6-14-95)			FUEL INLET FLOAT VALVE EACH 600HRS DUE 3402.0 3499.3
AD	97-26-16 (2-2-98)			ENG. MOUNT BEAMS ME 85-3 EACH 9600HRS DUE 10,217.2 HRS 10,273.3
AD	84-26-02 (1-29-85)			PAPER INDUCTIVE FILTERS REPLACE EA 5004HRS DUE 3704.2 3760.3
AD	96-20-07 (11-14-96)			JAN AERO PRESS SW/DECAY TST 1004HRS OR 24 HRS @ HTR H.665 512.4 OR 8-00 whichever is first.

LEWIS UNIVERSITY  
AVIATION SERVICES  
ROMEDEVILLE, ILLINOIS 60441

DATE 1-21-99 TACH H.665 3311.8  
I CERTIFY THAT THIS AIRCRAFT ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH A PHASE III INSPECTION AND WAS DETERMINED TO BE IN AIRWORTHY CONDITION.  
SIGNED [Signature] No. 1327504677

1-22-99 H.665 3311.8 AFT. TT. IS 3214.7 NUMBERS CHANGED DUE TO HOBBS RUNNING WHILE ACFT ON JACKS FOR MAINTENANCE. TIMES ADJUSTED 56.1 HRS. ACCORDINGLY.

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
4-23-99	AFT 3275.2	L-1001.8 R-1024.8	Hobbs New "0"	THIS DATE "0" TOTALS brought forward from previous page
HEATER HOBS SOB. R INSPECTED A/CFT MAIN CESSNA PROGRESSIVE CARE PROGRAM OPERATION #4 USING THE APPROVED CHECKLIST. TAIL POSITION LIGHT REPAIRED FIBERGLASS REPAIR MADE TO LH INNER COUL DOOR. EXT ANTENNA REPLACES. AIR CONDITIONING RESERUIRE SERVICES. BRAKE RESERUIRE SERVICES. BATTERY SERVICES. EXT BATT DUE 8-00 (W FAR 91.207(d)). AIRLON CABLE TENSIONED ON HYDRAULIC SYSTEM CHECK. LH ENGINE FUEL FLOW TRANSDUCER BRACKET REPAIRED DUE TO CRACKING. RH SPINNER BULK HEAD REPAIRED DUE TO CRACK. LH ENGINE INNER SCID JOINT RAM PIN INSTALLED 1001-3 PER STC 5443315W SEE FAR FORM 337 THIS DATE FOR DETAILS. AD'S CMT THROUGH ISSUE 99-08.				
AD 95-09-13 (6-14-95) FUEL INST FLOAT VALUE EACH 600HRS DUE 127.0				
AD 97-26-16 (2-2-98) ENGINE MOUNT BEARING ME BS-3 69600HRS DUE 6901.0				
AD 84-26-02 (1-29-85) PAPER INDUCTION FILTERS REPLACE L+R EACH 500HRS DUE 388.0				
AD 96-20-07 (11-14-96) JAN AERO PRESS SWITCH/DELAY TST <sup>100HRS</sup> HTA OAS DUE <sup>608.2</sup> <sub>401</sub>				which is first.
O <sup>2</sup> Hyd DUE 4-03 Hyd Bottle Hyd DUE 4-03 HANA FIRE EXT. DUE 4-03				
LEWIS UNIVERSITY AVIATION SERVICES ROMEOVILLE, ILLINOIS 60441				DATE 4-23-99 TACH Hobbs "0" I CERTIFY THAT THIS AIRCRAFT ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH A PHASE IV INSPECTION AND WAS DETERMINED TO BE IN AIRWORTHY CONDITION. SIGNED: [Signature] No. IA327504677
10/11/99	Hobbs 58	REMOVED AND REPLACED LEFT LANDING LIGHT MOTOR AND		
WORM GEAR P/N A6580.0P ✓ GOOD				
[Signature] P/N 49357 228427				LEWIS UNIVERSITY AVIATION SERVICES ROMEOVILLE, ILLINOIS 60441
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DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
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**J.A. AIR CENTER**  
 DuPage Airport • West Chicago, IL 60185  
 FAA Repair Station #NF2R029L

Type C 414  
 S/N 414A 0645  
 N# 6815T

Description of work done:

**AIRFRAME LOG ENTRY**

Tested Altimeter(s), Altitude Reporting and Static System(s)  
 in accordance with Part 43, Appendix E for compliance with  
 FAR 91.411 and FAR 91.217.

Pilot Altimeter P/N 5934PA-3 S/N 391176 Range 30K  
 Copilot Altimeter P/N 5934PAD-1 S/N V5116 Range 30K

Transponder tested in accordance with Part 43, Appendix F  
 for compliance with FAR 91.413 this date.

Date 1/27/00 Make ARC Model RT -459A S/N 9645/9310

MAINTENANCE RELEASE

The aircraft, airframe, engine, appliance, or component identified was repaired and inspected in accordance with current regulations of the Federal Aviation Agency and is approved for return to service. Pertinent details of the repair are on file at this repair station under

WO 180285 Date 1/27/00 Tach/Hobby 104 Signature Doug Mall  
 Inspector (print) Doug Mall

4-20-00 HOBBS 131.0 AFTT 3406.2 HEATER HOBBS 572.4

ANNUAL INSP. COMPLETED USING AN APPROVED CHECK LIST, ALL PULLEYS, CABLES, TURNBUCKLES, AND FAIR LEADS INSP. FOR CONDITION AND TENSION. INSP. FLIGHT CONTROLS FOR CONDITION, TRAVEL AND SECURITY. ALL WING, TAIL, AND LANDING GEAR ATTACH POINTS INSP. SERVICED BATTERY, SPINNY DAMPER, GASTROUS. BROKE YES. REPLACED 1440 PUMP FILTER. A/C OIL FILTER, HEATER FUEL FILTER, AND HEAT FUEL PUMP SCREEN. 1/2 1200HR WING STRUT INSP. (PORT B). REPAIRED O-RINGS IN 1440 RES. AND RE-SERVICED 1/2 400 HR A/C FLUID REPLACEMENT TREATED LIGHT CORROSION BEHIND EXHAUST. REPAIRED 1/4" & 1/2" MLL TUBES INSP BRAKE PADS SERVICED / INSP WHEEL BEARINGS. PERFORMED LIME RETENTION TEST. ALL WARNING HORN AND LIGHTS OPERATE NORMAL. PERFORMED ENGR. BLOW DOWN TEST. OPS CHECK GOOD. SERVICED NITROGEN BATTLE TO 2000PSI. PERFORMED INLET FLOAT VALVE TEST AD 95-09-13

FABRICATED REPAIRS ON TWO SMALL CRACKS ON LH FLDG. REPLACED WING

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				<p>Changed filters. cleaned radiators with solvent (external)</p> <p>Replaced ECT BATTERY. NEW BATTERY DUE REPAIRMENT</p> <p>TESTED ECT I/A/W 91.207(6). REMOVED ALL FUEL PANECS. REINSTALLED WITH NEW SEALS LEAK CHECK GOOD. STALL WARNING AND HEAT, PITOT HEAT AND STATIC HEAT, AND AFT LIGHTING OPS CHECK NORMAL.</p> <p>RUN-UP + LEAK CHECK GOOD ADJ THRU ISSUE 00-06</p>
				<p>C/W 95-09-13 (6-14-95) FUEL INLET FLOW VALVE (E4600) DUE NEXT AT 731.0 HOURS</p> <p>84-26-02 (1-29-85) PAPER INDUCTION FILTER REPL. (E4500) DUE 388.0 HOURS</p> <p>96-20-07 (11-14-96) TAN AERO PRESS SWITCH/RECTOR (100 PMS OR 24 MMS) 608.2 WHICHEVER IS OR 4-01 FIRST</p>
				<p>DATE <del>4-20-00</del> HOURS 131.0 TACH</p> <p>I CERTIFY THAT THIS AIRCRAFT ENGINE HAS BEEN INSPECTED IN ACCORDANCE WITH A ANNUAL INSPECTION AND WAS DETERMINED TO BE IN AIRWORTHY CONDITION.</p> <p>SIGNED: <i>[Signature]</i> 2854198869</p> <p>LEWIS UNIVERSITY AVIATION SERVICES ROMEDEVILLE, ILLINOIS 60441</p>
				<p>3-29-00 HOURS 167.0</p> <p>REINSTALLED <del>REPAIR</del> PROP GOVERNOR P/N DCF529019/13</p> <p>S/N 810557 ON 1/4 ENGINE. SET MAX RPM. RUN-UP + LEAK CHECK GOOD. <i>[Signature]</i> 2854198869</p> <p>LEWIS UNIVERSITY AVIATION SERVICES</p>
				<p>9-5-00 HOURS 170.5</p> <p>REPLACED 1/4 MIL TIRE. SERVICED WHEEL BEARINGS <i>[Signature]</i> LEWIS UNIVERSITY 2854198869</p>
				<b>SUB-TOTALS</b> this page
				<b>TOTALS</b> —Carry forward to next page

DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<b>TOTALS</b> brought forward from previous page
		8/12/2000		
		Cessna 414	N6815T	
		Recovered interior components with the following materials,		
		Seats:	Leather, Dalwhinnie, D/L 22410	
		Sidepanels:	Leather, Dalwhinnie, D/L 22410, Fabric, J30 Crayons	
		Carpeting:	Ashton Sand	
		Curtains:	Eurostretch 0112	
		Foam:	Chestnut Ridge Foam	
		Headliner:	N/A	
		Baggage Comp.:	Grospoint Grey	
		Seatbelts:	Re-webbed by Safety, LTD., conforms to TSO-C22F	
		All materials burn tested in accordance with FAR 25.853 (a) Appendix F Part I (a) (1) (ii), see burn tests included with logbooks.		
		Williams Aviation Inc. Eagle River Airport, Eagle River WI Barrett Williams AP388722362		
		<i>Barry Miller</i>		
10/11/00			1721	Installed overhauled vacuum pump, with new accessory pad seal, on 1H engine, test run OK. End <i>Barry Miller AP388722362</i>

MAINTENANCE RECORD ENTRY  
N6815T

NOVEMBER 3, 2000  
CESSNA 414A-0645

COMPLETE EXTERIOR STRIP AND REFINISH PER U.S. PAINT ALUMIGRIP AND JET GLO SPECIFICATIONS. CONTROL SURFACE BALANCE AND REINSTALLATION PER CESSNA SERVICE MANUAL. PLACARDS INSTALLED.

UB640 TENDER YELLOW  
4125 SAND  
HR10706 LAGOON  
99U BLACK  
1356 TAN (JAMBS)

*[Signature]*  
A&P322286320


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DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<b>TOTALS</b> brought forward from previous page
11/11/00	Hobbs: 14929			Installed new starting vibrator, part no. 10-357487-242, test run OK End  Gary Wilk AP 388722362

Cessna 414AW Serial #645 N6815T  
 HM Reads: 200  
 December 27, 2000

Complete the following repairs: re-rigged right prop control; replaced left and right engine vacuum pump pressure line — check valves for deice boots and check operation; rewired right prop deice at engine and install new prop deice timer; correct wiring at left engine landing light and lip boots. This aircraft returned to service.

**PROFESSIONAL AVIATION, INC.**

Porter County Airport  
 3801 Murvihill Road  
 Valparaiso, IN 46383  
 219-462-8781

*Lawrence F. Bub*  
 Lawrence F. Bub, A&P/IA 1513912

**→ Gary Jet Center**

5401 Industrial Hwy., Gary, IN 46406 (219) 944-1210 Fax (219) 944-8232

Date: January, 02 2001 HM:200.7 N6815T  
 Installed New P/N CM3509-1 Oxygen fill valve.

*Daniel Hinsch*  
 Daniel Hinsch  
 AP308767051

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DATE

J.A. AIR CENTER DuPage Airport/West Chicago, IL. 60185 P. 1  
 Repair Station #NF2R029L AIRFRAME LOG  
 Type CESSNA 414A TOTALS brought forward 3482 previous page

N # 6815T

S/N 414A0645

REC. HR. METER 207

DYNAMICALLY BALANCED THE LH McCAULEY PROPELLER AS PER CHADWICK HELMUTH SMOOTH PROPELLER MANUAL AND McCAULEY SL 1989-4C FROM .5 IPS TO .07 IPS.

DYNAMICALLY BALANCED THE RH McCAULEY PROPELLER AS PER CHADWICK HELMUTH SMOOTH PROPELLER MANUAL AND McCAULEY SL 1989-4C FROM 1.5 IPS TO .05 IPS.

PROPELLER SYNC SYSTEM INOP-  
 TESTED THE SYNC SYSTEM. FOUND THE LH AND RH GOVERNOR SPEED PICKUPS AND COILS OUT OF SPEC. REMOVED THE LH AND RH GOVERNORS LH P/N DCFS290D9/T3, S/N 920001 AND RH P/N DCFS290D9/T3, S/N 810557 AND SENT TO AIRCRAFT PROPELLER FOR BENCH TEST AND SETUP. REINSTALLED THE GOVERNORS AND TESTED THE SYSTEM. LH CAPTURED THE RH SIDE BUT RH WOULD NOT CAPTURE THE LH. RETESTED THE AIRCRAFT WIRING AND FOUND THE TP3 WIRE HAD A GROUND FAULT. ISOLATED THE WIRE AND FOUND THE SHIELD SHORTED TO THE CENTER CONDUCTOR. INSTALLED A NEW WIRE FROM THE GOVERNOR TO CONTROL BOX UNDER THE PANEL. REASSEMBLED AND TESTED WITH AN OSCILLOSCOPE AND VERIFIED SIGNAL. TESTED FOR PROPER OPERATION.

RH DE-ICE BOOTS ARE PARTIALLY INFLATE IN FLIGHT-  
 TESTED THE DEICER SYSTEM. ISOLATED THE PROBLEM TO THE RH SEQUENCE CONTROL VALVE. REMOVED THE VALVE P/N 3D2352-01, S/N BS01014 AND SENT TO B&S AIRCRAFT FOR REPAIR AND OVERHAUL REINSTALLED THE VALVE AND TESTED THE SYSTEM FOR PROPER OPERATION. REPAIRED A LEAKING RH OUTBOARD BOOT HOSE.

NOSE WHEEL BEARING MAKING NOISE-  
 REMOVED NOSEWHEEL. FOUND BOTH RACES AND BEARINGS WERE CORRODED. REPLACED RACES P/N LM29710 AND BEARINGS P/N LM29749. GREASED AND REINSTALLED THE WHEEL.

SERVICE NOSE STRUT WITH NITROGEN-  
 SERVICED NOSE TIRE WITH NITROGEN.

THE AIRCRAFT, ENGINE, APPLIANCE, OR COMPONENT IDENTIFIED WAS REPAIRED & INSPECTED IN ACCORDANCE WITH CURRENT REGULATIONS OF THE FEDERAL AVIATION AGENCY AND IS APPROVED FOR RETURN TO SERVICE. PERTINENT DETAILS OF THE REPAIR ARE ON FILE AT THIS REPAIR STATION UNDER W.O. # 8887 DATE: 02-22-01

SIGNED: BRUCE P. REBECHINI *Bruce Rebechini* For  
 J.A. AIR CENTER, DUPAGE AIRPORT, W. CHICAGO, IL 60185  
 F.A.A. APPROVED REPAIR STATION #NF2R029L

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DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
<p><b>Burlington Air Center</b> <span style="float: right;">(light forward from previous page)</span>                      703 Airport Road Burlington, WI. 53105                      (262) 763-3544 fax (262) 763-2910</p>				
Date 7/9/2001		<b>Aircraft Maintenance Record</b>		Reg. Number N6815T
Aircraft Serial Number 414A-0645		Make Cessna		Model 414AW
Total Time Aircraft 3539.50	Landings	L. Eng. TTSN	L. Eng. TTSOH	L. Eng. TTSHSI
Tach	Hobbs 264.3	R. Eng. TTSN	R. Eng. TTSOH	R. Eng. TTSHSI
		L. Tot Cyc. SOH	L. Prop. TTSN	L. Prop. TTSOH
		R. Tot Cyc. SOH	R. Prop. TTSN	R. Prop. TTSOH
<b>Airframe Maintenance Performed</b>				
<p>Annual Inspection this date. All routine maintenance complete. Repairs as listed. Drained, flushed and serviced coolant system both engines. Removed air conditioning hydraulic pump due to leak. Sent to RLB accessories inc. for overhaul and reinstalled. See yellow tag for details. Removed replaced #2 rocker cover gasket with new L/H engine. Complied with AD 2000-01-06 Exhaust System Inspection. No defects noted. Next due @ 3639.5 AFTT. Complied with AD 96-20-07 Heater Inspection. No defects noted. Next due @ 729.8 heater hobbs or 8/03 whichever occurs first. Complied with AD 01-08-01 Heater Fuel System Inspection. No defects noted. Complied with FAR 91.207 ELT function test. No defects noted. Next due 8/02. Changed engine oil and filter. Serviced with Aeroshell 15w50. Removed replaced R/H main gear wheel race and bearings with new. Removed and replaced nose wheel race and bearings with new.</p>				
<p>I certify that this airframe has been inspected in accordance with an Annual Inspection and was determined to be in airworthy condition.</p> <p style="text-align: right;"><i>J. J. Regan</i> IA394505153</p>				
<p>J-A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P-1                      Repair Station #NF2R029L AIRFRAME LOG                      Type CESSNA 414A TT 3492                      N # 6815T                      57N 414A0645 REC. HR. METER 217</p> <p>BROKEN STATIC WICK RH OUTER WING-                      REPLACED BROKEN STATIC WICK P/N DG16305.                      REPLACE LH WING OUTBOARD DEICER BOOT, SEAL HOLES IN LH AND                      RH INBOARD BOOTS AND REMOVE MOISTURE FROM THE SYSTEM-                      PRESSURIZED THE BOOTS AND MARKED ALL HOLES. EVACUATED THE                      BOOTS TO REMOVE MOISTURE. SEALED ALL SMALL PIN HOLES.                      REMOVED THE LH DEICER. FOUND AND REMOVED CORROSION UNDER                      THE BOOT AND FILLER USED TO BLEND THE WINGLET TO THE WING.                      INSTALLED A NEW SMR DEICER P/N SMR5070-37.</p> <p>FOUND LEFT ENGINE DE-ICE CONTROL VALVE COMING APART AND                      NOT COMPLETELY CLOSING WHEN ACTUATED-                      REMOVED FAULTY DE-ICE CONTROL VALVE AND INSTALLED AN                      OVERHAULED UNIT P/N 302363-01 S/N PN025. TESTED THE DEICER                      SYSTEM FOR PROPER OPERATION.</p> <p>SERVICE MAIN STRUTS WITH NITROGEN-                      SERVICED MAIN STRUTS WITH NITROGEN.</p>				
				SUB-TOTALS this page
				TOTALS—Carry forward to next page



DATE	TOTAL TIME IN SERVICE	TOTAL TIME SINCE OVERHAUL	TACH OR RECORDING METER TIME	DESCRIPTION OF WORK PERFORMED— SIGNATURE & CERTIFICATE NO. OF PERSON PERFORMING WORK
				<b>TOTALS</b> brought forward from previous page
<div style="border: 2px solid black; padding: 10px;"> <p>J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P 2                      Repair Station #NF2R029L AIRFRAME LOG                      Type CESSNA 414A TT 3492                      N # 6815T                      S/N 414A0645 REC. HR. METER 217                      THE AIRCRAFT, ENGINE, APPLIANCE, OR COMPONENT IDENTIFIED WAS REPAIRED &amp; INSPECTED IN ACCORDANCE WITH CURRENT REGULATIONS OF THE FEDERAL AVIATION AGENCY AND IS APPROVED FOR RETURN TO SERVICE. PERTINENT DETAILS OF THE REPAIR ARE ON FILE AT THIS REPAIR STATION UNDER W.O. # 9015 DATE: 3-12-01                      SIGNED: BRUCE P. REBECHINI <i>Bruce Rebechini</i> For                      J.A. AIR CENTER, DUPAGE AIRPORT, W. CHICAGO, IL 60185                      F.A.A. APPROVED REPAIR STATION #NF2R029L</p> </div>				

Make CESSNA Model 414AW Serial No./No. 414A 0645

Tach Reading	<u>307.20</u>	Date	<u>2-22-02</u>	<u>Installed new</u>
<u>static wick adapter part # 15385 and new static wicks</u>				
<u>part # 16606</u>				

**GREAT NORTHERN AIRCRAFT SALES, INC.**

1705 East Main Street • Griffith, IN 46319  
 Telephone: (219) 922-2632 • 800-247-7070

W.O. # 9015  
*[Signature]*  
 Authorized Signature

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**TOTALS**—Carry forward to next page



RAM Aircraft, Limited Partnership • Waco Regional Airport

Cessna 414A0645 N6815TAirframe Total Time: 3593.0Hour Meter: 317.8Date: 06-06-02

On above referenced aircraft, Installed RAM overhauled TSIOL-550-A engines S/N L-800533 and R-800587 and overhauled McCauley propellers S/N 901903 and 902167. Slick pressurized magnetos P/N 6320 installed per STC SA7633SW. **C/W AD 2000-01-16, para. (g) by removal of the exhaust system from the slip joints aft. Re-installed existing RAM/FAA/PMA stainless steel exhaust slip joints P/N 1001-3 on left and right engines I/A/W STC SA7633SW. Inspected and re-installed left and right engine left exhaust elbows P/N 9910377-1, and right exhaust elbow P/N 9910377-2. Inspected and re-installed elbow to wye clamps P/N NH1000897-60. Inspected and re-installed left and right turbo wye P/N 1967-1. Inspected and re-installed left and right wye to wastegate elbow P/N 1967-3. Inspected and re-installed left and right wastegate overboard tailpipes P/N 1967-7. Inspected and re-installed wye to wastegate elbow clamps P/N NH1009109-10. Inspected and re-installed left overboard tailpipe P/N 9910299-1. Installed new right overboard tailpipe P/N HWS340414-20, S/N 245. Inspected and re-installed overboard tailpipe clamps P/N NH1000897-50. Replaced left and right wastegate and valve assy's. Installed new RAM turbochargers P/N 2059-1, left S/N FAL1688, right S/N DFL13133. Re-inspection per paragraph (g) due each 2500 hours TIS or 12 years, whichever occurs first. C/W para (b) by visual inspection of the exhaust system and found to be serviceable. Next visual inspection per para (b) due in 50 hours TIS or 30 calendar days, whichever occurs later. C/W para (c) by removal and visual inspection of exhaust tailpipes found to be serviceable at this time. Next removal and visual inspection per para (c) due within 5 years on right tailpipe and each 12 calendar months on left tailpipe. C/W para (d) by inspection of the outboard engine beams and canted bulkheads and found airworthy. Inspected left and right engine firewalls and found no distortion or overheating. Re-inspection per paragraph (d) due each 500 hours TIS. C/W para (e) by pressure check and inspection of left and right exhaust system. System checked satisfactory at this time. Re-inspection per para (e) due each 12 calendar months. Para (f) N/A per no multi-segment V-band clamps installed. Installed re-marked tachometer, manifold pressure gauge, airspeed indicators, 3-in-1 gauges, coolant pressure and cylinder head temperature gauges per STC requirements. Static system tested per FAR 91.411, para A 2. (Leak check of system only.) Installed new Aeroquip integral firesleeved fuel, oil, hydraulic and coolant hoses meeting TSO-C53A Type D and TSO-C75 Type III on each engine. Installed wing stringer doublers and increased zero fuel weight to 6515 lbs I/A/W STC SA4943SW, Rev. 7 Flight manual Supplement AFMS 1026 furnished. Installed new co-pilot windshield P/N 5111604-202. Installed new co-pilot side window P/N 5111605-4. Installed new left and right cowl light lens P/N 1317-29 and 1317-30. Installed overhauled prop de-ice meter P/N C662503-0101RX, S/N 01E475. Installed new left fuel tank forward sump drain. Installed new pressurization air ducts in wings P/N CM3211-10B38.0. Cleaned pressurization outflow and safety valves. Installed new elevator trim control placard P/N 1394-15. C/W AD 84-26-02 per replacement of air filters. RAM Aircraft recommends Air Filters to be replaced every 300 hours or annual with mandatory log entry required. Installed vacuum pump cooling shroud on left and right engine vacuum pumps per STC SA7633SW. Installed RAM vortex generators on wing and vertical fin and strakes on outboard nacelles and on fuselage per Dwg. 1536, Rev. E, dated 6/16/94 with Flight Manual Supplement AFMS 1026 furnished with change in airspeed markings; I/A/W STC SA8204SW. Negligible weight and balance change. Aircraft is airworthy and is approved for return to service for engine run-in procedures and modifications performed. Pertinent details on file under project no. 131.**

RAM Aircraft, Limited Partnership, P.O. Box 5219, Waco, Texas 76708 CRS VA1R551K

Total Time: 3598.6Hour Meter: 323.4Date: 06-07-02

Aircraft test flights complete under project no. 131 and aircraft is airworthy and approved for return to service.

RAM Aircraft, Limited Partnership, P. O. Box 5219, Waco, Texas 76708 CRS VA1R551K

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				<b>TOTALS</b> brought forward from previous page

**J.A. AIR CENTER**  
 DuPage Airport • West Chicago, IL 60185  
 FAA Repair Station #NF2R029L

Type Cessna 414A  
 S/N 414A0645  
 N# 6815T

Description of work done:  
**AIRFRAME LOG ENTRY**

Removed two (2) Narco AR-850 Encoders (S/N 57740 and S/N 39227).

Installed Ameri-King AK-350 #1 Encoder S/N 48208 and Ameri-King AK-350 #2 Encoder S/N 48207. Form 337 references this installation.

No change to Weight & Balance.

MAINTENANCE RELEASE  
 The aircraft, airframe, engine, appliance, or component identified was repaired and inspected in accordance with current regulations of the Federal Aviation Agency and is approved for return to service. Pertinent details of the repair are on file at this repair station under

WO 193559 Date 6-20-02 ~~XXX~~/Hobbs 330.7 Signature *Douglas J. Mall*  
 Total Time 3605.9 Inspector (print) Douglas J. Mall

**J.A. AIR CENTER**  
 DuPage Airport • West Chicago, IL 60185  
 FAA Repair Station #NF2R029L

Type C414A  
 S/N 414A0645  
 N# 6815T

Description of work done:  
**AIRFRAME LOG ENTRY**

Tested Altimeter(s), Altitude Reporting and Static System(s) in accordance with Part 43, Appendix E for compliance with FAR 91.411 and FAR 91.217.

Pilot Altimeter P/N 5934PAD-1 S/N V5116 Range 30k  
 Copilot Altimeter P/N 5934PA-3 S/N 391176 Range 30k

Transponder tested in accordance with Part 43, Appendix F for compliance with FAR 91.413 this date.

Date 6/21/02 Make ARC Model RT-459A S/N9645/9310

MAINTENANCE RELEASE  
 The aircraft, airframe, engine, appliance, or component identified was repaired and inspected in accordance with current regulations of the Federal Aviation Agency and is approved for return to service. Pertinent details of the repair are on file at this repair station under

WO 193559 Date 6/21/02 Tach/Hobbs 330-7 Signature *Doug Mall*  
 Inspector (print) DOUG MALL

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11/1/02	Hobbs 384.5			Removed N.L.C. Lower strut tube Assy. Installed new orings & new Bearing P/N 0841200-60 (See Attached tag). Installed strut Assy As per Cessna Service manual. Serviced strut up's ✓ Good.  Victor D. for AP 35-7 728427 For Brubly Enterprises w/b #15
1/23/03	3668.9		<del>393.7</del> 443.7	re-sealed all fuel tank access panels, installed new seals in nose strut, serviced with nitrogen and 3606, installed new nose gear door brackets, painted brackets and nose gear fer, touched up rivets on nose gear door, installed new bulb for prop sync. indicator light. Buss wire. AP 365 727362
	Hobbs accidentally activated 250.0			
	Hrs. white on jacks			

**NORTHERN AIR**

Airframe  
 LOG BOOK ENTRY  
 Make: Cessna  
 Total Time: 3678.7  
 Note: A total of 22.5 hours were ran up on the Hobbs meter while the aircraft was on jacks.

Dated: 03/17/03  
 Model: 414A  
 Hobbs time 476.0

N 6815T  
 SN: 414A0645

Performed an Annual inspection on this airframe per the Cessna 414A series service manual.  
 Performed Annual ELT inspection and operational checks per FAR 91.207(d). Installed a new ELT battery which expires April of 2005.  
 Removed left tach generator and installed an overhauled unit p/n 22A667, serial AT-14537.  
 Complied with AD2001-17-13 by performing a of visual inspection of exhaust system per part b. AD2001-17-13 was previously complied with per the instructions listed in part (1) of AD2001-08-01.  
 Replaced vacuum regulator filters, and central gyro filter. Torqued and safety hardware as needed.  
 Rigged Aileron trim tab and adjusted left and right travel stops.  
 Adjusted rudder control lock and lubed lock linkage and pin.  
 Adjusted rudder cable tension.  
 Removed left fuel crossfeed valve and cleaned and rigged valve  
 Adjusted flap return and extend cable tensions for both wings, follow-up cable, and pointer  
 Adjusted aileron auto-pilot servo cable tension.  
 Safetied rudder stop bolts as required.  
 Re-sealed lower vertical stabilizer de-ice boot.  
 Resealed banjo fitting on air conditioning pressure valve forward of wing locker.  
 Left temperature control cable installed new, and rigged. Cable P/N 5117239-61





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				<b>TOTALS</b> brought forward from previous page

LOGBOOK ENTRY MAYDAY AVIONICS INC.  
MFG Cessna MDL 414A HOBBS 476.0  
A/C REG N681ST S/N 414A-0645 SO# 38983  
Repaired/aligned A/P Computer Reinstalled +  
ops good  
AFTER SERVICE WAS PERFORMED THIS SYSTEM AND ALL ASSOCIATED SYSTEMS WERE GROUND TESTED AS REQUIRED BY FAR 43.13 AND THE AIRCRAFT HAS BEEN APPROVED FOR RETURN TO SERVICE.  
[Signature] DATE 3/17/3  
CRS # IT5R947M

LOGBOOK ENTRY MAYDAY AVIONICS INC.  
MFG Cessna MDL 414A HOBBS 476.0  
A/C REG N681ST S/N 414A-0645 SO# 38983  
R+R THE AIM TS200-2B SN.189 AND ARC  
PA 495A-1 SN8249. OPS CHECKED GOOD.  
AFTER SERVICE WAS PERFORMED THIS SYSTEM AND ALL ASSOCIATED SYSTEMS WERE GROUND TESTED AS REQUIRED BY FAR 43.13 AND THE AIRCRAFT HAS BEEN APPROVED FOR RETURN TO SERVICE.  
[Signature] DATE 3-7-03  
CRS # IT5R947M

LOGBOOK ENTRY MAYDAY AVIONICS INC.  
MFG Cessna MDL 414A HOBBS 476.0  
A/C REG N681ST S/N 414A-0645 SO# 38983  
Repaired KING KY 196 COMM S/N 43762  
AFTER SERVICE WAS PERFORMED THIS SYSTEM AND ALL ASSOCIATED SYSTEMS WERE GROUND TESTED AS REQUIRED BY FAR 43.13 AND THE AIRCRAFT HAS BEEN APPROVED FOR RETURN TO SERVICE.  
[Signature] DATE 3/17/03  
CRS # IT5R947M

LOGBOOK ENTRY MAYDAY AVIONICS INC.  
MFG Cessna MDL 414A HOBBS 476.0  
A/C REG N681ST S/N 414A-0645 SO# 38983  
INSTALLED A NEW YAW DAMPNER  
CIRCUIT BREAKER. OPS CHECKED GOOD.  
AFTER SERVICE WAS PERFORMED THIS SYSTEM AND ALL ASSOCIATED SYSTEMS WERE GROUND TESTED AS REQUIRED BY FAR 43.13 AND THE AIRCRAFT HAS BEEN APPROVED FOR RETURN TO SERVICE.  
[Signature] DATE 3-7-03  
CRS # IT5R947M

LOGBOOK ENTRY MAYDAY AVIONICS INC.  
MFG Cessna MDL 414A HOBBS 502.7  
A/C REG N681ST S/N 414A 0645 SO# 39442  
Repaired & aligned A/P comp. to correct HDG offset  
+ Bank angles GUD Vial good  
AFTER SERVICE WAS PERFORMED THIS SYSTEM AND ALL ASSOCIATED SYSTEMS WERE GROUND TESTED AS REQUIRED BY FAR 43.13 AND THE AIRCRAFT HAS BEEN APPROVED FOR RETURN TO SERVICE.  
[Signature] DATE 5/22/3  
CRS # IT5R947M