

RAM

AIRCRAFT CORPORATION

AIRFRAME MAINTENANCE RECORDS

Registration No. N6815T *th*
Serial No. 414A-0645 *2*



AIRFRAME MAINTENANCE RECORDS

Log No. 2

Aircraft Registration No. NG815T

Model Cessna 414A

Serial No. 414A-0645

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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Waco Regional Airport

CESSNA S/N 414A-0645 N6815T

Airframe Total Time: 1123.3
 Hour Meter: 1123.3
 Date: 6/15/90

Above referenced aircraft modified per installation of RAM winglets and gross weight increase per STC SA4943SW. See 337. Installed re-marked tachometer, manifold pressure gage, airspeed indicators, and 3-in-1 gages per STC requirements. Static system tested per FAR 91.171, para A 2. (Leak check of system only.) Installed strobe light per STC SA4851SW. New empty weight and balance computed. Winglets painted to match aircraft. Aircraft approved for return to service for engine run-in procedures and modifications performed. Pertinent details on file under work order #11223.

Robert Franklin

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

CONTRACT AIRCRAFT PAINTING LOG BOOK ENTRY
 TYPE OF A/C CESSNA 414A0645 WORK ORDER 7040
 DATE 5-29 90 N # N6815T
 COMPLETE STRIP & PAINT. FOIL PAPER WINDOWS,
 GLASS, ANTENNAS, GEARS, GEARWELLS, ETC., PRI
 STRIPPING. HAND WASH OVER ALL A/C WITH ELDORADO
 ED 500 SOAP AND SCOTCH BRITE PADS. SPRAY ALODINE
 OVER ALL A/C, MASK & PRIME OVER ALL AIRCRAFT WITH
 Y-94 ALUMIGRIP CORROSION RESISTANT PRIMER.
 BASE G8004 VESTEL WHITE
 MAJOR 44449U CHESTNUT THANK YOU,
 ACCENT 5242U LAS VEGAS GOLD ANDREW PEN
 A/C CONTROLS REMOVED, BALANCED, AND RE-INSTAL
 BY- *Andrew Penick* 4971480372

SUB-TOTALS this page

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				TOTALS brought forward from previous page
				<p>Joliet Avionics DuPage Airport West Chicago, IL 60185</p> <p>Tach: <u>1137.5 HRS</u></p> <p>Removed Arnav R-40, CI-121SP and T-1000. Installed King KLN-88, KA-84. See Form 337 this date. Weight and Balance has been computed and entered in aircraft paperwork.</p> <p>June 26, 1990 WD 121058 N 6815T</p> <p><i>(Handwritten notes and stamps follow, including: "Total and removal Avionic Components", "Do not include in Minor Alteration Form-Date: 2/22/90", "Weight on file at (JA, Inc.)", "FAA Repair Station #NF2R029L CLASS III", "JOLIET AVIONICS, INC.", "FAA REPAIR STATION #NF2R029L CLASS III")</i></p>

TYPE C-414
 N# 6815T
 S/N _____

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. _____
 TSMOH _____
 REC. HR METER _____

AIRFRAME LOG

ALTIMETER (S)
 PILOTS United C/PILOTS United ALTIMETER
 S/N V5116 S/N V4998

TESTED TO 35000 FT.
 AS REQUIRED BY FAR 91.171 IN ACCORDANCE WITH FAR 43 APPENDIX "E"
 PARAGRAPH (b) DATED 6/21/90
 JOLIET AVIONICS, INC.
 FAA REPAIR STATION #NF2R029L CLASS III
 SIGNATURE [Signature]

DATE 6/21/90 MODEL RT-559A S/N 9310
 TRANSPONDER TESTED IN ACCORDANCE WITH PART 43.
 APPENDIX "F" FOR COMPLIANCE WITH FAR 91.172 THIS DATE
 JOLIET AVIONICS, INC.
 FAA REPAIR STATION #NF2R029L CLASS III
 Signature [Signature]
 Alternate Inspector

STATIC SYSTEM TESTED THIS DATE 6/21/90 AS REQUIRED BY FAR 91.171 IN ACCORDANCE WITH FAR 43 APPENDIX "E" PARAGRAPH (a).
 JOLIET AVIONICS, INC.
 FAA REPAIR STATION #NF2R029L CLASS III
 SIGNATURE [Signature]

AUTOMATIC PRESSURE ALTITUDE REPORTING SYSTEM TESTED AND INSPECTED AS REQUIRED BY FAR 91.171 IN ACCORDANCE WITH FAR 43, APPENDIX "E" PARAGRAPH (c).
 JOLIET AVIONICS, INC.
 FAA REPAIR STATION #NF2R029L CLASS III
 SIGNATURE [Signature]

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

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. 1187.1
 TSMOH
 REC. HR METER 1187.7

AIRFRAME LOG

At this time the following repairs were made: Installed Dayton Granger static wicks on the primary flight controls. Checked cause of exhaust staining from the LH and RH. Found leaks to be from around tail pipe clamps and waste gate overboard clamps. Removed, cleaned, and retorqued these connections. Ordered proper gasket for the waste gate clamps. Replaced the LH alternator with an overhauled unit, p/n 649304R, s/n H2589310R. Replaced the defective LH tach generator with an overhauled unit, p/n MS25038-2, s/n 122830. Installed a 3M radome boot and painted. Replaced the RH engine inboard induction elbow from the intercooler to intake tube.

-----END-----

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 000153
 DATE 8-18-90 SIGNED Eric T. Heath FOR

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

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

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. 1236.1
 TSMOH
 REC. HR METER 1236.1

AIRFRAME LOG

At this time the following work was completed: Serviced the LH strut with nitrogen. Disassembled the right strut, replaced the seals, serviced with MILH5606E hydraulic fluid and set the height. Adjusted the stall warning switch. Removed the cabin door and interior window panel. Tightened the cabin door seal pressure lines and corrected the position of pressure valve interfering with the latch pins. Checked door rigging. Serviced the oxygen system to 1800 PSI. Checked the rigging of the elevator trim system. Found the actuator and travels out of limits. Rigged

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 000460
 DATE 10-31-90 SIGNED Eric T. Heath FOR

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

-----END-----

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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Waco Regional Airport

Airframe Total Time: 1340.5
 Hour Meter: 1340.5
 Date: 3/4/91

CESSNA S/N 414A-0645 N6815T

Above referenced aircraft modified per STC SA7633SW. See 337. Installed new TSIOL-550-A liquid cooled engines s/n 800530 and 800532 and new McCauley 3AF36C514-C propellers s/n 901903 and 902167. Installed Symbolic Displays Inc. Hoskins Fuel Flow Indicating System per STC requirements. Replaced left and right engine wastegate and valve assy's. Replaced left and right engine turocharger. Replaced left and right engine EGT probe. Installed re-marked tachometer, manifold pressure gage, new 4-in-1 gages, and new coolant pressure and coolant temperature gages per STC requirements. Installed new prop de-ice brush block on left and right engine. Installed new throttle, propeller, and mixture cables on left and right engine. Cables are RAM-FAA-PMA parts installed I/A/W STC SA7594SW. C/W AD 84-26-02 per replacement of air filters. Due replacement every 500 hours. Installed Precise Flight, Inc. Pulselite System I/A/W STC SA4005NM. See 337. New empty weight and balance computed. Engine nacelles painted to match aircraft. Aircraft approved for return to service for engine run-in procedures and modifications performed. Pertinent details on file under work order #11496.

Robert Franklin

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

3-8-91	1344.1		1344.1	Install new Gill aircraft battery
				Pertinent details on file under
				work order # 11496



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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
				TOTALS brought forward from previous page
3-27-91		1360.0 hrs	hobbs	Removed and replaced both main gear tires. Serviced air-conditioning system with freon. MAINTENANCE RELEASE <small>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</small> WORK ORDER NUMBER <u>001033</u> DATE <u>3-27-91</u> SIGNED <u>[Signature]</u> FOR JOLIET AVIONICS INC. Dupage Airport West Chicago, IL 60185 FAA Repair Station NF2R029L
4-4-91		1370.3 hrs	hobbs	Removed cabin pressurization outflow valve and cleaned. Reinstalled valve, saghted and ground op's ck. MAINTENANCE RELEASE <small>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</small> WORK ORDER NUMBER <u>001097</u> DATE <u>4-4-91</u> SIGNED <u>[Signature]</u> FOR JOLIET AVIONICS INC. Dupage Airport West Chicago, IL 60185 FAA Repair Station NF2R029L
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				TOTALS —Carry forward to next page

TYPE C-414A
N# 6815T
S/N 414A0645

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. 1416.2
TSMOH _____
REC. HR METER 1435.2

AIRFRAME LOG

At this time this aircraft was opened, cleaned, inspected and serviced as per Cessna service manual and Ram aircraft maint. manual for an annual inspection. All flight controls were checked for proper condition, cable tensions and travels. Lubricated the labyrinth seals. Lubricated the aircraft as required. Cleaned the outflow and safety valves. Inspected the pressurization filters, belly drain seals, door and window seals. The fuel system was checked for condition, security, and leaks. Serviced the fuel sumps and filters. The heater system was checked for condition, operation and AD compliance. All anti and de-ice systems were service and functionally tested. Electrical and lighting systems were checked for condition and operation. Serviced the aircraft battery. Functionally tested the elt. Battery exp. date is 4/92. The aircraft was jacked. Landing gear operational and rigging checks were performed. Cleaned and lubricated the gear system. Inspected and serviced the hydraulic system. Wheels were removed. Bearings were cleaned, inspected and greased. The brakes and brake system were inspected and serviced. The airframe mounted ~~control~~ systems were inspected and serviced as per Ram service manual. The aircraft was checked for required markings and placards. The interior components, seat structures and belts were checked for proper condition, security and location. These items were repaired, replaced or corrected: Complied with AD 82-07-03 Janitrol heaters by inspection and pressure decay test. Adjusted the pressure switch, spark plug gap and Ram air cable stop. Cleaned the fuel filter. Next inspection is due at a heater meter time of 798.1 or 24 mos. Removed the left and right propellers. Installed one additional spacer shim on each as per Ram service manual. Repaired the right rear seat arm rest. Installed new longer left and right tail pipe assy, from Knisley Exhaust Systems. Rerouted the right hydraulic line chaffing on the turbo. Secured other lines and wires rubbing on components in the right engine compartment. Replaced the leaking left engine gear hydraulic pump with an exchange unit, p/n 24194LAA, s/n 0471. Removed the rudder trim actuator and internally lubricated the jack screw. Reassembled and checked rigging. Replaced the elevator trim tab horn bearing. Replaced the left and right hydraulic system filters. Next replacement due in 500 hrs. Tightened seeping fuel fitting in the right inboard wing. Tightened seeping hydraulic pressure lines in the right wing root. Inspected the flap system to determine the cause of severe flap tension problem. Inspected the cables, pulleys, brackets and bellcranks. Found the cause to be excessively loose cables allowing the drive chain to jump at the drive. Rerigged the system as per Cessna service manual. Replaced the cracked pilot's seat inboard seat track. Removed the right strobe power supply, s/n 7517 and sent for repairs. Adjusted the lower cabin door cables. Adjusted the elevator trim cable tensions to spec's. Cleaned mold or corrosion from under the cabin floor on the belly skin. Replaced the missing emergency exit handle cover. Replaced the missing fuel filler placards. Replaced the left wing de-ice light. Replaced and balanced the nose tire. Installed a new Goodyear F.S.II 6.00X6 6 ply tire. Replaced the nose wheel bearings and races. AD's were checked through BW 91-09. The aircraft was ground run and checked for proper operation.-----end-----

DATE 5-20-91 TACH 1435.2
TOTAL TIME 1416.2
I certify that this AIRCRAFT
was repaired and/or inspected in accordance with AN ANNUAL inspection
service,
s Repair
pector



Waco Regional Airport

CESSNA S/N 414A-0645 N6815T

Airframe Total Time: 1456.7
Hour Meter: 1456.7
Date: 5/23/91

On above referenced aircraft, installed RAM overhauled turbo controllers, left s/n KFRO168 and right s/n NJRO147. See serviceable parts tags dated 4/29/91. Installed new left engine oil pressure transducer and left EGT probe; checked gage calibration. Installed new recognition light lens on right cowling light. Pertinent details on file under work order #11712.

Robert Franklin

TYPE Cessna 414A
 N# 6815T
 S/N 414A-0645

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. hobbs: 1563.8
 TSMOH
 REC. HR METER 1563.8

AIRFRAME LOG

Replaced the left hand and right hand engine coolant check valves supplied by Ram. Part number 1304D-3-80. Removed leaking right hand propeller governor, part number DCFS290D9/T3, serial number 900139 and installed governor serial number 910151. Ground and flight checked. Bled the left hand engine coolant system and added coolant. Opened the cabin and right hand wing to gain access to the airconditioning components. Leak checked the system with an electronic sniffer. Located one leaky fitting in the condenser and one in the right hand evaporator fitting. Tightened fittings and rechecked. Tested windshield heat operation. No problem was found. Checked the cabin pressurization for cause of pressure change. Removed and cleaned the outflow and safety valve. Pressurized the aircraft with the GPU. No leaks found. Checked the wing heat exchanger connections. Tightened loose clamps. Cleaned, gapped and rotated all spark plugs.-----end-----

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 001724
 DATE 9-19-91 SIGNED [Signature] FOR

JOLIET AVIONICS INC.
 DuPage Airport
 West Chicago, IL 60185
 FAA Repair Station NF2029L

Joliet Avionics
 DuPage Airport
 West Chicago, IL 60185

27 September 1991
 WO 126092
 N 6815T

Sheepskin Slip Cover, Pilot: Brown Sheepskin from Regal Shearling and US-431 Brown Vinyl from Matthew Hinsman. All fabric meets FAR23.853 B Vertical Requirements. Burn test on file at Joliet Avionics.

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 126092
 DATE 9/27/91 SIGNED [Signature] FOR

JOLIET AVIONICS INC.
 DuPage Airport
 West Chicago, IL 60185
 FAA Repair Station NF2029L

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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
				TOTALS brought forward from previous page



Waco Regional Airport

Airframe Total Time: 1618.0
 Hour Meter: 1618.0
 Date: 10/23/91

CESSNA S/N 414A-0645 N6815T

On above referenced aircraft, c/w RAM Service Letter 050191 per flushing and reservicing coolant systems w/ETX-6024 coolant w/ 50/50 mix. Complied with RAM Service Letter 100491 per p/n 1235-3 wastegate overboard pipes installed. Complied w/ RAM Service Letter 072991 per p/n 1510-1 radiator exit ramps installed. Calibrated 4-in-1 gages and coolant gages. Drilled air holes in cowling around landing light and replaced lens. Aircraft approved for return to service. Pertinent details on file under work order #11898.

[Handwritten Signature]

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

OUT OF ORDER

				NOTE: IN ABOVE Entry 4-in-1 gages were replaced. Ref. w.o. 11898.



TYPE Cessna 414A
 N# N6815T
 S/N 414A0333

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. 1606.5
 TSMOH
 REC. HR METER 1606.5

AIRFRAME LOG

Complied with RAM Service Letter 060591 Alternate Air Door springs by installing new LE055CD-7 springs supplied by RAM and checking door operation. Removed the right hand engine propeller governor, serial number 910151 and installed an overhauled unit DCFS290D9/T3, serial number 810557 supplied by RAM due to oil leaks from the head. Set high RPM stop and rigged the propeller control. Removed the lower cabin door snubber. Replaced the seal and serviced. Installed a loaner cabin pressure controller and flight checked for proper operation. Adjusted the left hand engine alpha angle to eliminate a throttle split @ upper cruise settings. Set idle mixtures and speeds. Serviced the air conditioning system with freon. Repaired a broken wire on the flap preselect up switch.-----end-----

THE FEDERAL AVIATION ADMINISTRATION HAS APPROVED THIS AIRFRAME LOG AS PERTINENT DETAILS OF THE REPAIR ARE ON FILE AT THIS REPAIR STATION

WORK ORDER NUMBER 001781

DATE 10-10-91 BY James L. [Signature]

J. E. MONICS INC.
 DuPage Airport
 West Chicago, IL 60185
 FAA Repair Station NF280291

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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Waco Regional Airport

CESSNA S/N 414A-0645 N6815T

Hour Meter: 1709.7
 Total Time: _____
 Date: 12/12/91

On above referenced aircraft replaced left and right Westberg 4-in-1 engine gages complete with control boxes and oil pressure transducers. Check gage operation and calibration. Check both airspeed indicator calibrations and found to be in tolerance. Leak check both pitot static systems per FAR 91.411 and found in tolerance. Replaced left engine starter adapter with TCM rebuilt unit s/n P91DCL, reservice coolant system with existing coolant I/A/W RAM Service Manual Supplement No. 1381. See engine logs this date for other details. Note: Hour Meter is disconnected at this time. Meter ran while aircraft was on jacks 11/11/91. Will be reconnected when aircraft total time matches meter time. Pertinent details on file under work order #11971.

Robert Franklin

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

1/27/91				Replaced G-550A s/n 2759B on work 135477
				JOLIET AVIONICS, INC. FAR PART 65.817 (1) CLASS III
				SIGNATURE <i>[Signature]</i> Inspector
				Joliet Avionics, Inc. DuPage Airprot West Chicago, IL 60185
				27 April 1992 WO 136793 N 6815T
				Hobbs: 1761.0
				Removed ARC Cooling Fan. Installed IceBox FN-200 Cooling Fan. Weight change negligible.
				JOLIET AVIONICS, INC. FAR REPAIR STATION #NF2R029L CLASS III SIGNATURE <i>[Signature]</i> Inspector

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2-27-92	1725.8		1725.8	Rigged the up lock hooks and tested landing gear operation. Ordered new style hooks & springs. Repaired the taxi light wires. Tested the pressurization system. JOLIET AVIONICS, INC. FAA REPAIR STATION #NF2R029L CLASS III SIGNATURE <u>002400 DuPage Aviation</u> Inspector

TYPE Cessna 414A
 N# 6815T
 S/N 414A-0645

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. 1761.1
 REC. HR METER 1761.1

AIRFRAME LOG

- 1) Tested the pressurization controller resevoir tank. Found a 200 feet per minute leak. Replaced the tank with a new unit.
- 2) Replaced the nose gear door closing ramp at the nose fork found broken during a general check.

end— JOLIET AVIONICS, INC.
 FAA REPAIR STATION #NF2R029L CLASS III
 SIGNATURE DuPage Aviation
 WO 002651 Alternate Inspector

Joliet Avionics
 DuPage Airport
 West Chicago, IL 60185

Date: 5/22/92
 N# 6815T
 WO# 138648

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's Altimeter P/N 5934 S/N V516 Range 30K
 Co-Pilot's Altimeter P/N 5934 S/N V4998 Range 30K

Date: 5/27/92 Model: RT-459A S/N: 9645/930
 Transponder Tested in Accordance with Part 43, Appendix "F" for compliance with FAR 91.413 this date.

F.A.A. REPAIR STATION #NF2R029L, Class III

Signature DuPage Aviation Inspector

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. 1783.6
 REC. HR METER 1783.6

AIRFRAME LOG

- 11) Resealed leaking fittings on the right hand waste-gate.
- 12) Replaced the defective right hand wing ice light socket.
- 13) Replaced the inoperative tail nav lamp.
- 14) Repaired the left hand engine left hand mag "P" lead to correct the hot mag.
- 15) Replaced the leaking air conditioning hydraulic pump with a new unit P/N 24343LAD.
- 16) Resealed the leaking left hand engine fuel flow transducer fittings.
- 17) Removed the oxygen bottle S/N 1358X and sent to Overland Aviation for hydro-testing. Next test required 5/97.
- 18) Removed the nitrogen blow-down bottle S/N 194 and sent to Overland Aviation for hydro-test. Next test required 5/97.
- 19) Complied with AD84-26-02 Induction air filters by replacing the filters. Next replacement is due in 500 hours @ 2283.9 hours total.
- 20) Complied with 82-07-03 Janitrol heaters by pressure decay test of the heater and 100 hour service. Next inspection is required in 24 months or 100 heater hours @ 1004.7 heater hours.
- 21) Replaced the broken right hand engine landing gear hydraulic pump drain line.
- 22) Replaced both broken pilots rudder pedal return springs with new type units.
- 23) Replaced the left hand and right hand fuel cap o-rings.
- 24) Replaced the left hand rear wing drain valve.
- 25) Replaced the left hand main tire with a new Goodyear FSII 6.50 X 10 8ply tire.
- 26) Replaced the left hand wing fuel quantity placard.
- 27) Removed a large birds nest from the aircraft's tail.
- 28) Replaced the right hand hydraulic filter housing line fitting packings to stop a hydraulic leak.
- 29) Found a seeping hydraulic line in the right hand wing root. Tightened the loose "B" nut and rechecked.
- 30) Found a seeping fuel line in the right hand wing root. Tightened the loose "B" nut and rechecked.

The aircraft was ground run and checked for proper operation.

-----end-----

DATE 6-1-92 TACH 1783.6
 TOTAL TIME 1783.6

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. # 002825

[Signature] Inspector
JOLIET AVIONICS, INC.
WEST CHICAGO, IL 60185
F.A.A. APPROVED REPAIR STATION # NF28029L

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. 1798.5
REC. HR METER 1798.5

AIRFRAME LOG

- 1) Repaired shorted LH EGT and CHT system gauge. Located cause of interconnection box failure. Found a chaffed and shorted harness in the LH wing from the interconnect box to the gauge. Repaired the wires, replaced the interconnect box, and replaced the defective CHT probe. Calibrated the system as per Ram Service Manual using loaner Ram calibration box.

-----end-----

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 003035
DATE 7/17/92 SIGNED [Signature] FOR

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

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. _____
REC. HR METER 1798.5

AIRFRAME LOG

- 1) Replaced broken static wick on RH elevator.
- 2) Air conditioning system inoperative. Troubleshoot system and found compressor unit bad. Removed and replaced compressor unit with new compressor P/N 8366-508 S/N 0203905170. Also replaced dryer. Vacuated system and serviced with freon and operational checked. Testing included checking the hydraulic motor and pump due to low pressure indications.

-----end-----

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 002835
DATE 7/17/92 SIGNED [Signature] 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
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TYPE Cessna 414A
 N# 6815T
 S/N 414A0645

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. 1817.9
 REC. HR METER 1817.9

AIRFRAME LOG

- 1) Repaired the cabin door extend snubber attach point. Repaired the door frame. Installed a new nut plate and modified the attaching stud to accept a second nut plate. Reassembled and checked the operation.
- 2) Troubleshooted the inoperative overhead dimmer and inoperative hot circuit. Found a loose and shorted wire in the overhead dimmer assembly. Repaired the wire; reset the circuit breaker and tested.

-----end-----

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 003026
 DATE 7/31/92 SIGNED [Signature] FOR

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

Joliet Avionics, Inc.
 DuPage Airport
 West Chicago, IL 60185
 Hobbs: 1902.8


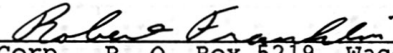
15 October 1992
 WO 140599
 N 6815T

Removed King KLN-88 Loran S/N 1993 and King KA-84 Loran Antenna. Installed Bendix/King KLN-90 Global Positioning System S/N P1077 and Bendix/King KA-91 GPS Antenna S/N 1012. Form 337 references this installation. Weight change negligible.

JOLIET AVIONICS, INC.
 FAA REPAIR STATION NF2R029L CLASS II
 SIGNATURE [Signature] Inspector

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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
				
Waco Regional Airport				Airframe Total Time: <u>1911.9</u> Hour Meter: <u>1911.9</u> Date: <u>11/11/92</u>
<u>CESSNA S/N 414A-0645 N6815T</u>				
<p>Above referenced aircraft modified by removal of existing oil pressure, oil temperature, cylinder temperature, and EGT 4-in-1 gages and dual coolant temperature/pressure gage with wiring, probes and transducers. Installed new R.C. Allen oil pressure, oil temperature and coolant temperature 3-in-1 gages, new coolant pressure gages, new cylinder head temperature gages and new Alcor EGT gage with wiring, probes, and lines as needed. Installed I/A/W RAM Dwg. No. 1524, Rev. C, dated 9/1/92 and STC SA7633SW. See 337. Negligible weight and balance change. Left and right engine coolant systems flushed I/A/W RAM Service Letter No. 050191. Systems re-serviced with 60/40 mixture of Prestone/distilled water per RAM Service Manual 1381. Installed new slip joint p/n 1001-3 on left engine exhaust, inboard side. All systems checked for leaks and operation. Aircraft approved for return to service. Pertinent details on file under work order no. 0395.</p>				
 RAM Aircraft Corp., P. O. Box 5219, Waco, TX 76708 CRS VA1R551K				

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

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185


T.T. 1946.3
 REC. HR METER 1946.3

AIRFRAME LOG

- 1) Replaced the cracked LH engine outboard exhaust riser assembly with an overhauled assembly from Dawley Aviation.
- 2) Removed the loaner pressurization controller and reinstalled the original unit S/N 60-1776 after repair by AirSearch.
- 3) Replaced the inoperative gear down light lamps.
- 4) Troubleshoot inop. heater (only on ground). Found the combustion blower intermittent. Replaced the motor with an overhauled unit P/N WZ1V01Z S/N 4RA11629 and tested heater operation.
- 5) Inspected the tires for wear. Replaced the RH main with a new Goodyear 6.50X10 8ply FSII tire. LH main tire will be due for replacement @ next scheduled service.
- 6) Troubleshoot cause of hydraulic leak between RH engine nacelle and fuselage. Found three "B" nut fittings loose in the wing on the hard lines. Retorqued fittings & leak checked.
- 7) Troubleshoot cause of LH prop slow to feather. Found control cable very stiff restricting the governor movement. Lubricated & adjusted the control. Checked operation of the propeller.

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 003650
 DATE 1/9/93 SIGNED  FOR

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

-----end-----

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

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. 2036.7
 REC. HR METER 2036.7

AIRFRAME LOG

- 1) Removed the interior panels as necessary to gain access to the cabin door recepticals. Adjusted the latch recepticals for proper door pin engagement. Reassembled the interior as necessary.
- 2) Serviced the oxygen system. 3) Replaced LH main tire with new Goodyear 6.50X10 8ply FSII tire.
- 4) Tightened the loose LH engine EGT probe. 5) Replaced post lamps as necessary; tightened the socket tabs.
- 6) Tightened the nose gear torque link attach bolts and replaced the cotter pins.
- 7) Troubleshooted the inoperative taxi lamp. Found broken wires at the drag brace pivot points. Replaced the defective wire segments. 8) Removed the RH engine turbo, intercooler and other induction components as necessary to facilitate removal of the lower induction scoop duct. Fitted and installed a new inlet induction duct supplied by RAM. Cleaned old duct debris from the airfilter housing and replaced the induction filter. Reassembled the scoop, cowl and engine as necessary. AD84-26-02 induction filters is next due @ 2536.7 on the RH filter.
- 9) Replaced broken safety on LH tach generator.
- 10) Troubleshooted shorted RH engine nose cap inlet de-ice.
 Found chaffed & shorted wires. Repaired as necessary.
- 11) Replaced one RH propeller de-ice boot and tested operation.

 end

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 003847
 DATE 3/18/93 SIGNED [Signature] FOR

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

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

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. _____
 REC. HR METER 2071.6

AIRFRAME LOG

- 1) Complied with AD93-05-03 wing fuel check valves by testing of the wing valves per procedures in the AD. Found the forward and middle LH wing valves defective. Closed the wing. Installed placards correcting the unusable fuel to 15 gallons and added ammendments to the P.O.H. as called out in the AD until new valves are available.

 end

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 003954
 DATE 4/14/93 SIGNED [Signature] FOR

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

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

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. 2137.0REC. HR METER 2137.0**AIRFRAME LOG**

At this time this aircraft was opened, cleaned, inspected and serviced as per Cessna Service Manual and RAM Aircraft Maintenance Manual for an Annual Inspection. All flight controls were checked for proper condition, cable tensions and travels. Lubricated the labyrinth seals. Lubricated the aircraft as required. Cleaned the outflow and safety valves. Inspected the pressurization filters, belly drain seals, door and window seals. The fuel system was checked for condition, security and leaks. Serviced the fuel filters and sumps. The heater system was checked for condition, operation and AD compliance. All anti- and de-ice systems were serviced and functionally tested. Electrical and lighting systems were checked for proper condition and operation. Serviced the aircraft battery. Functionally tested the ELT; battery expiration date is 4/94. The aircraft was jacked. Landing gear operational and rigging checks were performed. Cleaned and lubricated the gear system. Inspected and serviced the hydraulic system. Wheels were removed. Bearings were cleaned, inspected and greased. The brakes and brake system were inspected and serviced. The airframe mounted coolant systems were inspected and serviced as per RAM Service Manual. The aircraft was checked for required markings and placards. The interior components, seat structures and seat belts were checked for proper condition, security and location. These items were repaired, replaced or corrected:

- 1) Replaced the broken RH hydraulic pump case drain tube.
- 2) Replaced the leaking RH landing gear hydraulic pump with an exchange unit P/N 24194-LAA S/N 128.

Continued Next Page----

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

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. 2137.0REC. HR METER 2137.0**AIRFRAME LOG**

- 3) Replaced the LH & RH hydraulic filters. Next replacement is due in 500 hours @ 2637.0 total time.
- 4) Replaced the worn brake disc with new 164-06406 Cleveland assemblies.
- 5) Replaced the LH & RH brake linings.
- 6) Disassembled the leaking RH main strut. Replaced the seals and scraper. Reassembled and serviced with 5606 and nitrogen as per Cessna Service Manual.
- 7) Replaced the shimmy dampener seals and serviced with 5606.
- 8) Replaced one nose wheel bearing and race.
- 9) Reattached the loose nose gear door seal felt strip.
- 10) Removed the leaking RH main uplock actuator. Replaced all seals; reassembled and tested.
- 11) Replaced the LH engine propeller control cable.
- 12) Replaced the LH engine throttle control cable. Rigged both cables for proper travels and control alignment.
- 13) Serviced the air-conditioning system after the evaporators were reinstalled due to engine control replacement.
- 14) Installed a rubber protective strip on the bulkhead cut out for the LH evaporator blower.
- 15) Replaced the kinked LH surface de-ice pressure line under the turbo.
- 16) Replaced the inoperative tail nav light.

Continued Next Page----

TOTALS—Carry forward to next page

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

JA AIR CENTER
DuPage Airport / West Chicago, Il 60185

T.T. 2137.0
REC. HR METER 2137.0

AIRFRAME LOG

- 17) Repaired a broken wire at the flap pre-select switches.
- 18) Serviced the oxygen system to proper pressure.
- 19) Replaced loose and missing roll pins in the pilot's seat tilt system.
- 20) Replaced the failing front and rear cabin door extend cables.
- 21) Replaced the defective RH front belly drain seals.
- 22) Removed and cleaned the outflow and safety valves.
- 23) Replaced the left hand and right hand pressurization dump valve o-rings.
- 24) Replaced the broken battery vent tube.
- 25) Repaired and installed the broken left hand arm rest forward of the cabin door.
- 26) Replaced the left hand and right hand fuel filler placards.
- 27) Replaced the defective left hand forward and aft fuel inlet valves found defective at previous test as per AD93-05-03. This removes restrictions on unusable fuel requirements. Next inspection is required in 200 hours @ 2236.7 hours total time.
- 28) Replaced the failing right hand boost pump with an Airborne overhauled assembly P/N 2B7-290H S/N 6E904.
- 29) Complied with AD82-07-03 Janitrol heaters by pressure decay test and 100 hour heater inspection. Next inspection is due in 100 heater hours at a heater meter time of 1143.3 or 24 months.

Continued Next Page----

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

JA AIR CENTER
DuPage Airport / West Chicago, Il 60185

T.T. 2137.0
REC. HR METER 2137.0

AIRFRAME LOG

- 30) Replaced the nose baggage door tumbler right hand side.
 - 31) Replaced the emergency door seal.
 - 32) Replaced the right hand engine waste-gate vee clamp P/N U84-210SH.
 - 33) Set the elevator cable tensions to specifications as per Cessna Service Manual.
 - 34) Set the LH aileron cable tensions to specifications as per Cessna Service Manual.
- raft was flight tested and checked for proper operation.

-----end-----

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has been disassembled in accordance with the manufacturer's instructions. Some of the parts have been disassembled in accordance with the manufacturer's instructions.

DATE 7/8/93 TACH 2137.0
TOTAL TIME 2137.0

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. # 004233

[Signature] Inspector

JOLIET AVIONICS, INC.
WEST CHICAGO, IL 60185
F.A.A. APPROVED REPAIR
STATION # NF2R029L

TOTALS—Carry forward to next page

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

JA AIR CENTER
 DuPage Airport / West Chicago, IL 60185

T.T. 2213.10
 REC. HR METER 2213.10

AIRFRAME LOG

- 1) Troubleshoot the LH nacelle heat light flickering. Found the annunciator panel swivel loose. Tightened the swivel and reset the lamp.

-----end-----

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 004771
 DATE 11/22/93 SIGNED [Signature] FOR

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

<u>1/4/94</u>	<u>2253.4.</u>	<u>Replaced 6-550A attitude indicator with 50/2752D on work 149249</u>	
		JOLIET AVIONICS, INC. FAA REPAIR STATION NF2R029L CLASS III SIGNATURE <u>[Signature]</u> Inspector	
<u>2/21/94</u>	<u>2267.6</u>	<u>Replaced defective yaw damper s/n 191169 with s/n 189, see work 149978</u>	
		JOLIET AVIONICS, INC. FAA REPAIR STATION NF2R029L CLASS III SIGNATURE <u>[Signature]</u> Inspector	

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. 2253.4
 REC. HR METER 2253.4

AIRFRAME LOG

- 1) Complied with AD93-05-03 by modifying the left forward wing valve into a P/N 9910242-12 and left center valve into a P/N 9910242-11. Also replaced all remaining valves (4) with new 9910242-11 and -12 assemblies. Next inspection is due in 200 hours @ 2453.4 total time.
600 2853.4
BIL
- 2) Replaced the RH nav lens.

-----end-----

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 005236
 DATE 02/04/94 SIGNED [Signature] FOR

JOLIET AVONICS INC.
 Dupage Airport
 West Chicago, IL 60185
 FAA Repair Station NF2R029L

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. 2253.4
 REC. HR METER 2253.4

AIRFRAME LOG

- 1) Removed engine S/N 800532 due to a cracked case. Installed a TSIOL-550-A S/N 800571. The engine was supplied with Slick mags, harness, plugs, fuel pump S/N F169305B, manifold valve S/N F169305C, metering unit S/N F1693111A, starter S/N S189331, alternator S/N D219313.0, turbo S/N UB0113, controller S/N UH0103, heat exchanger S/N 118 and oil cooler S/N 133. The engine was installed after cleaning the engine compartment.
- 2) Replaced all four engine Lord mount assemblies.
- 3) Replaced the failing tach generator with an exchange Aero Electric unit P/N 22A667ECH S/N AT-6461.
- 4) Removed the Slick mags and harness. Installed TCM magnetos (LH) 10-349420-1 S/N 1279302FR, (RH) 10-349460-1 S/N 1259304FR and TCM harness to meet RAM specifications.
- 5) Modified the lower engine nacelle and new oil cooler for proper fit to the airframe and installed the attaching nut plates.
- 6) Modified the lower engine nacelle for proper fit of the induction heat exchanger to the airframe and proper alignment to the throttle body.
- 7) Fitted the new coolant radiator to the aft engine nacelle. Transferred required attaching hardware, nut plates and baffle seals to the new assembly.
- 8) The exhaust system was cleaned and inspected. Found the elbow assembly P/N 99102990-10 and wye assembly P/N 9910299-9 cracked. Sent the assemblies to Knisley Exhaust Systems for repair. Reassembled the exhaust after replacing the attaching hardware.

Continued Next Page----

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. 2253.4
 REC. HR METER 2253.4

AIRFRAME LOG

- 9) The propeller 3AF36C514-C/G-80VMFA-2 S/N 902167 was sent to Aircraft Propeller Services for reseal, bearing replacement and replace defective de-icer boots as necessary.
- 10) Replaced worn propeller de-icer brushes; set alignment to the slip ring.
- 11) Repaired cracked exhaust system heat shields.
- 12) Replaced crushed vacuum pump aluminum outlet line to the surface de-ice system and one to the de-ice loading valve assembly.
- 13) The coolant tank P/N 1330-2K S/N 005 was sent to RAM Aircraft for repair due to the welded line assembly rubbing on the tank. Reinstalled tank with new relief valve assembly.
- 14) TCM/RAM coolant line and clamp inspection dated 09/17/93 was complied with by changing the engine.
- 15) Serviced and bled the coolant system with ETX6024M coolant blend as per RAM & TCM Service Manuals
- 16) Serviced the engine with 20W50 Type M Phillips oil.
- 17) Attempted to set up the boost and fuel flow to specifications.

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 005235
 DATE 02/04/94 SIGNED Diana K. Kovalik FOR

JOLIET AVONICS INC.

DuPage Airport
 West Chicago, IL 60185
 FAA Repair Station NF2R029L

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. 2253.4
 REC. HR METER 2253.4

AIRFRAME LOG

This work was completed on the LH engine and related systems:

- 1) Removed the coolant radiator from the aft engine nacelle and sent to RAM Aircraft for flushing. Reinstalled the radiator after flushing. Replaced the coolant line seals. Reassembled the airframe structure as per RAM Service Manual.
- 2) Removed the defective coolant tank P/N 1330-2K S/N 21 and sent to RAM Aircraft for repairs to the welded line assemblies rubbing on the S bend. Reinstalled the tank after repairs as per RAM Service Manual.
- 3) Removed the leaking oil cooler line adapter and replaced the gasket.
- 4) Complied with TCM/RAM coolant line clamp inspection dated 09/17/93 by inspection of the clamps and lines. All clamps were replaced due to excessive looseness. Replaced the clamps for the coolant lines in the aft nacelle to the radiator P/N's 652298 and 14J02-12 A (clamps).
- 5) Replaced the defective coolant lines P/N's 652344 (2 ea.), 652292, 649800, 652291, 652290 and 652293 due to clamp wear and chafe marks from contact with other engine compartment lines.
- 6) Replaced the coolant tank pressure relief valve.
- 7) Serviced and bled the coolant system with ETX6024M coolant blend as per RAM and TCM Service Manual.

Continued Next Page----

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185

T.T. 2253.4
REC. HR METER 2253.4

AIRFRAME LOG

- 8) Removed the propeller P/N 3AF36C514-C/G-80VMFA-2 S/N 902167 and sent to Aircraft Propeller Services for reseal and de-icer boot replacement as necessary. Reinstalled the propeller after repairs as per McCauley and RAM Service Manuals.
- 9) Replaced the worn de-icer brushes and set brush alignment.

-----end-----

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 005234
DATE 02/04/94 SIGNED [Signature] FOR

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

Cessna 414A
N6815T
J.A. Air Center
DuPage Airport, West Chicago, IL 60185
Airframe Log;

Complied with Cessna Service Bulletin# MEB93-10. Removed left hand forward and aft fuel inlet valves and modified by installing Service Kit #K74D. Reinstalled and closed up wing.

-----end-----

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 005194
DATE 02/28/94 SIGNED [Signature] FOR

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

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
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TYPE Cessna 414A **JA AIR CENTER** T.T. 2359.0
 N # 6815T **DuPage Airport / West Chicago, IL 60185**
 S/N 414A0645 **Repair Station #NF2R029L**
REC. HR METER 2359.0

AIRFRAME LOG

At this time this aircraft was opened, cleaned, inspected and serviced as per Cessna Service Manual and RAM Aircraft Maintenance Manual for an Annual Inspection. All flight controls were checked for proper condition, cable tensions and travels. Lubricated the labyrinth seals. Lubricated the aircraft as required. Cleaned the outflow and safety valves. Inspected the pressurization filters, belly drain seals, door and window seals. The fuel system was checked for condition, security and leaks. Serviced the fuel filters and sumps. The heater system was checked for condition, operation and AD compliance. All anti-ice and de-ice systems were serviced and functionally tested. Electrical and lighting systems were checked for proper condition and operation. Serviced the aircraft battery. Functionally tested the ELT. The aircraft was jacked. Landing gear operational and rigging checks were performed. Cleaned and lubricated the gear system. Inspected and serviced the hydraulic system. Wheels were removed. Bearings were cleaned, inspected and greased. The brakes and brake system were inspected and serviced. The airframe mounted coolant systems were inspected and serviced as per RAM Service Manual. The aircraft was checked for required markings and placards. The interior components, seat structures and seat belts were checked for proper condition, security and location.

These items were repaired, replaced or corrected:

- 1) Replaced the broken LH fuel sump drain valve with a new unit from RAM.
- 2) Replaced the missing LH & RH fuel quantity placards.
- 3) Resealed a seeping fuel line fitting.
- 4) Replaced the LH & RH wing fuel sumps drain valves with new type valve assemblies.
- 5) Troubleshoot the shorted RH propeller de-icer system. Relocated harness terminals to corrected shorts to ground.
- 6) Replaced the failing LH propeller de-icer brush block assembly and set brush to slip ring alignment.
- 7) Replaced the LH engine nose cap inner and outer inlet de-icer heater elements and tested.
- 8) Replaced the RH vacuum pump with a new Airborne 442CW-5 S/N 05AK000406.
- 9) Replaced the central vacuum filter. Next replacement is due in 500 hours @ 2859.0 hours total time or on condition.
- 10) AD84-26-02 Induction air filters. Parts replacement was checked from previous J.A. WO's. LH filter is due for replacement @ 2773.3 hours; RH filter is due for replacement @ 2536.7 hours total time.
- 11) Replaced the air-conditioning hydraulic system filter. Next replacement is due in 400 hours @ 2759.0 hours total time.

Continued Next Page—

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
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JA AIR CENTER

TYPE Cessna 414A DuPage Airport / West Chicago, IL 60185 T.T. 2359.0
 N # 6815T Repair Station #NF2R029L
 S/N 414A0645 REC. HR METER 2359.0

AIRFRAME LOG

- 12) Repaired the RH engine induction air filter cannister cover by installing anti-chafe tape to stop damage to the air filter.
- 13) Installed protective epoxy on the exposed heater elements of the stall lift detector vane.
- 14) Repaired shorted wiring for the LH cowl nose cap light and replaced lamp.
- 15) Replaced the ELT battery; new battery expiration date is 08/96.
- 16) Replaced the defective heater hobbs meter. Old meter reading was 1086.1 hours. New meter is -0- time. Next compliance of AD82-07-03 Janitrol heaters is due @ 57.2 hours heater hobbs meter.
- 17) AD93-05-03 Fuel inlet valve inspection is next due @ 2853.4 hours total time as per MEB93-10.
- 18) Adjusted the rudder cable tensions to specifications as per Cessna 414A Service Manual.
- 19) Reattached the LH pressurization sonic venturi to hose clamp.
- 20) Repaired the bent RH nose baggage door lock arm.
- 21) Removed the LH & RH main gear assemblies. Removed the loose aft pivot bearings from the aft trunnion supports. Reinstalled the bearings using an approved method as per Cessna Technical Department.
- 22) Repaired the cracked lower wing skins aft of the wheel well opening by installing an inner and outer doubler.
- 23) Adjusted the main gear door rigging to stop stressing of the aft wheel well openings. 24) Removed the frozen nose wheel axle spacer; removed corrosion from the axle. 25) Replaced the nose wheel LH grease felt.
- 26) Replaced the worn nose wheel axle bolt. 27) Replaced the leaking air-conditioning hydraulic reservoir cap gasket. 28) Removed corrosion from under the lower wing skins in the exhaust affected areas, neutralized, primed and painted. 29) Cleaned the flap well areas, removed corrosion from affected ribs and reapplied zinc chromate. 30) Removed cabin pressurization ducting from the forward pressure bulkhead supports over the nose wheel well. Removed corrosion from the supports and treated affected areas. Reassembled the removed parts. 31) The aircraft was ground run and flight checked for proper operation.

DATE 08/10/94 TACH 2359.0
 TOTAL TIME 2359.0

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. # 005778
[Signature] Inspector
 JOLIET AVIONICS, INC.
 WEST CHICAGO, IL 60185
 F.A.A. APPROVED REPAIR
 STATION # NF2R029L

SUB-TOTALS this page
 TOTALS—Carry forward to next page

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185
Repair Station #NF2R029L

T.T. 2426.3
REC. HR METER 2426.3

AIRFRAME LOG

Remove & replace nose tire with new Flight Custom II tire.

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 006062
DATE 11/15/94 SIGNED [Signature] FOR

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

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

JA AIR CENTER
DuPage Airport / West Chicago, IL 60185
Repair Station #NF2R029L

T.T. 2434.1
REC. HR METER 2434.1

AIRFRAME LOG

1. Noise coming from under instrument panel. Test flight made to locate noise from pressurization. Replaced bad hose on vacuum volume tank & checked for leaks. Resealed wire harness at forward pressure bulkhead.
2. Removed IH fuel drain, cleaned & resealed.
3. Right alternator intermittent. Troubleshoot, found F1 terminal post loose & hitting cowling. Removed & replaced alternator with exchange rebuilt unit P/N 642056 S/N E070358.364.

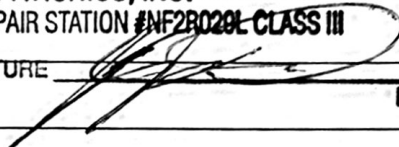
MAINTENANCE RELEASE

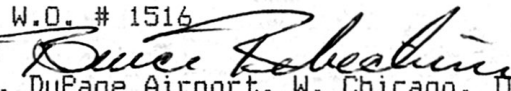
THE AIRCRAFT, AIRFRAME, ENGINE, APPLIANCE, OR COMPONENT IDENTIFIED WAS REPAIRED AND INSPECTED IN ACCORDANCE WITH CURRENT REGULATIONS OF THE FEDERAL AVIATION AGENCY AND IS APPROVED FOR RETURN TO SERVICE. PERTINENT DETAILS OF THE REPAIR ARE ON FILE AT THIS REPAIR STATION UNDER

WORK ORDER NUMBER 006164
DATE 12/13/94 SIGNED [Signature] FOR

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

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
4/1995			2508.2	TOTALS brought forward from previous page
				Replaced defective HSI s/n W1996B with like unit s/n 2056B, see WO# 156316, tested operation in ALL
				<p style="text-align: center;">JOLIET AVIONICS, INC. FAA REPAIR STATION #NF2R029L CLASS III</p>
				SIGNATURE  Inspector

J A AIR CENTER DuPage Airport/WestChicago, IL. 60185 P 1
 Repair Station #NF2R029L AIRFRAME LOG
 Type CESSNA 414A TT 2563
 N # 6815T
 S/N 414A0645 REC. HR. METER 2563
 Painted, fit and installed a new Raydome P/N 9711019-1
 after the original unit was damaged by hail in flight.
 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. # 1516
 Date 6-27-95 Signed  For
 Joliet Avionics, Inc. DuPage Airport, W. Chicago, IL 60185
 F.A.A. Approved Repair Station #NF2R029L

SUB-TOTALS this page

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