

ENGINE LOG

1. Make Pratt & Whitney Canada Corp.
2. Model PT6A- 135A
3. Specification B/S: 1146 E.T.C. E- 15
4. Manufacturer's Serial Number P20192
5. Date of Manufacture JULY 2005
6. Aircraft Inspection Cycle \_\_\_\_\_

RIGHT

# ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD					
11 July 2005	00	00	00	00	New engine final acceptance test and inhibiting run completed satisfactorily and is in condition for safe operation.

Log Book Entry

King Air C90A LJ-1223 R/H Engine PT6-135A S/N PCE/PZ0192

9/7/2005 AFTT 2420.9 Hobbs 2420.9 L/H Engine TT 0000.0 CYLS 0000

Installed this engine in R/H position in accordance with BLACKHAK STC SA10341SC. The engine was serviced with Exxon 2380 oil and rigged engine controls per King Air C90A and BLACKHAWK instructions.

The aircraft identified above was repaired and inspected in accordance with current regulations of the Federal Aviation Administration and is approved to return to service. Pertinent details of repair are on file at Addison Express Under Wo. 787M dated 9/7/2005

Signed Robert Rasmussen A&P 567917510   
Addison Express L.L.C. 4500 Claire Chennault – Addison Texas 75001



**355 MCGREGOR AIRPORT ROAD  
MCGREGOR, TEXAS 76657  
PHONE: (254) 848-4915  
FAX: (254) 848-5437  
CRS #U9RR733J**

06-19-06      N8CA      SN: LJ-1226      Hobbs: 2517.3      ATT: 2517.3  
PT6A-135A      SN: PCE-PZ0192      ETT: 96.4

Performed **Phase Inspections 1 and 2** in accordance with the Beechcraft maintenance manuals, Pratt & Whitney engine maintenance manuals and FAA regulations. Secured several hoses, wires and cables as needed throughout engine compartment. This engine has been inspected in accordance with **Phase Inspections 1 and 2** and found to be in airworthy condition. For work performed this engine is approved for return to service. Details on file under shop order #AA06-0319.

Travis Tatum  
CRS #U9RR733J

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TOTAL THIS PAGE				
TOTAL FROM PREVIOUS SUMMARY				
TOTAL SINCE MFG.				

# MAINTENANCE RECORD

REPAIRS, ADJUSTMENTS, MODIFICATIONS  
 ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENSE  
 NUMBER

N. TOTTH

*N. Totth*

26

TC 4-58  
 NO. 025

PRATT & WHITNEY PT6A-135A  
 SN: PCE-PZ0192  
 TSN: 134 2  
 CSN: 61  
 TSO: NA  
 CSO: NA  
 W/O: 12413



ENGINE ENTRY, PG. 1

POSITION #2  
 BEECHCRAFT C90  
 N8CA  
 HOBBS: 2555.1  
 TTAF: 2555.1  
 LANDINGS: 1799  
 DATE: 9/15/06

**Complied with Phase 1 thru 4 inspections in accordance with Beechcraft C90 M/M Chap 5.**

- > Accomplished Pratt & Whitney minor and routine inspection items.
- > Accomplished compressor wash
- > Accomplished SOAP sample.

I certify that this engine has been inspected in accordance with approved Pratt & Whitney inspection programs, as required by 14 CFR §91.409 (f) (3), and is determined to be in an airworthy condition and is approved for return to service with regards to the maintenance performed. Pertinent details are on file at this repair station under the above work order. A copy of this work order has been provided to the operator.

Signature *[Signature]*  
 WEST STAR AVIATION, INC.  
 796 Heritage Way  
 Grand Junction, CO 81506 (970) 243-7500

FAA CERTIFIED REPAIR STATION  
 WTXR173J

Date: May 24, 2007  
 Hobbs: 2799.0  
 Eng. TT: 378.1

N191TP

Completed Beech C90A Phase I and P&W 100 Hr/periodic inspections. Removed left exhaust stack for weld repairs and reinstalled. Installed new fuel filter, cleaned and inspected oil filter. Completed compressor wash.

I certify that this Engine has been inspected in accordance with a Beech C90A Phase I and P&W 100 Hour/Periodic inspections and was determined to be in Airworthy Condition.

Mark Ulschmid A&P473629783

*Mark Ulschmid*

MAXIMUM HOURS BETWEEN OVERHAULS \_\_\_\_\_ HOURS.

# ENGINE SERVICE AND

DATE	TIME RUN		TIME SINCE OVERHAUL		INSTALLATIONS, INSPECTIONS, <small>NOTE: USE BOTH PAGES AND AS MANY LINES AS REQUIRED FOR COMPLETE</small>
	HRS.	MIN.	HRS.	MIN.	
BROUGHT FORWARD <span style="font-size: 2em;">→</span>					

PRATT & WHITNEY PT6A-135A  
 SN: PCE-PZ0192  
 TSN: 547.1  
 CSN: 400  
 TSO: NA  
 CSO: NA  
 W/O: 14829



POSITION #2  
 BEECHCRAFT C90  
 N191TP  
 HOBBS: 2968.0  
 TTAF: 2968.0  
 LANDINGS: 2286  
 DATE: 10/9/07

ENGINE ENTRY, PG. 1

**Complied with Phase 2 inspections in accordance with Beechcraft C90 M/M Chap 5.**

- Accomplished Pratt & Whitney minor and routine inspection items.
- Accomplished compressor wash.
- Accomplished engine oil change, serviced with BP2380 type II oil.
- Accomplished SB PT6A-72-A1665 R-1, engine igniter inspection.

I certify that this engine has been inspected in accordance with approved Pratt & Whitney inspection programs, as required by 14 CFR §91.409 (f) (3), and is determined to be in an airworthy condition and is approved for return to service with regards to the maintenance performed. Pertinent details are on file at this repair station under the above work order. A copy of this work order has been provided to the operator.

Signature   
 WEST STAR AVIATION, INC.  
 796 Heritage Way  
 Grand Junction, CO 81506 (970) 243-7500

FAA CERTIFIED REPAIR STATION  
**WTR173J**

PRATT & WHITNEY PT6A-135A  
 SN: PCE-PZ0192  
 TSN: 742.0  
 CSN: 551  
 TSO: 0.0  
 CSO: 0.0  
 W/O: 15837



POSITION #2  
 BEECH C90A  
 N191TP  
 HOBBS: 3153.1  
 TTAF: 3153.1  
 LANDINGS: 2307  
 DATE: 2/22/08

ENGINE ENTRY, PG. 1

**Complied with Phase 3 inspection in accordance with Beech C90A M/M chapter 5.**

- Accomplished Pratt&Whitney minor and routine inspection items.
- Accomplished SOAP sample.
- 300 hr fuel inlet screen inspection.
- Replaced outlet filter with new, PN AN6235-3A.
- 12 month/600 hr magnetic chip detector continuity check.
- Accomplished engine fuel nozzle clean and flow check.

I certify that this engine has been inspected in accordance with approved Pratt & Whitney inspection programs, as required by 14 CFR §91.409 (f) (3), and is determined to be in an airworthy condition and is approved for return to service with regards to the maintenance performed. Pertinent details are on file at this repair station under the above work order. A copy of this work order has been provided to the operator.

Signature   
 WEST STAR AVIATION, INC.  
 796 Heritage Way  
 Grand Junction, CO 81506 (970) 243-7500

FAA CERTIFIED REPAIR STATION  
**WTR173J**

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TOTAL FROM PREVIOUS SUMMARY					
TOTAL SINCE MFG.					

# MAINTENANCE RECORD

**REPAIRS, ADJUSTMENTS, MODIFICATIONS**  
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENS  
NUMBER

PRATT & WHITNEY PT6A-135A  
SN PCE-PZ0192  
TSN:880 3  
CSN:  
TSO: 0.0  
CSO: 0.0  
W/O: 16887



ENGINE ENTRY, PG. 1

POSITION #2  
BEECH C90A  
N191TP  
HOBBS: 3291.4  
TTAF: 3291.4  
LANDINGS:  
DATE: 8/25/08

**Complied with Phase 4 inspection in accordance with Beech C90A M/M chapter 5.**

- Accomplished Pratt&Whitney minor inspection items.
- Replaced fuel outlet filter with new, PN AN6235-3A
- Accomplished oil filter clean/ inspection

I certify that this engine has been inspected in accordance with approved Pratt & Whitney inspection programs, as required by 14 CFR §91.409 (f) (3), and is determined to be in an airworthy condition and is approved for return to service with regards to the maintenance performed. Pertinent details are on file at this repair station under the above work order. A copy of this work order has been provided to the operator.

Signature \_\_\_\_\_

*[Signature]*  
WEST STAR AVIATION, INC.  
796 Heritage Way  
Grand Junction, CO 81506 (970) 243-7500

FAA CERTIFIED REPAIR STATION  
**WTXR173J**

DATE : 8/13/09      PT6A-135A      W/O: MT089011      PAGE: 1 of 1  
AC S/N: LJ-1223      PCE-PZ0192      TSN: 1104.5  
AC REG: N191TP      ENG      CSN: 913      HOBBS : 3515.6

Inspected this engine IAW a phase #1 per chapter 5-25-01 and phase #2 per chapter 5-25-02 of the Beechcraft 90 series maintenance manual 90-590012-13 and the Pratt & Whitney maintenance manuals 3043512. C/W minor inspection items per chapter 72-00-00 table 602. Per chapter 12 C/W 200 & 400 -hour lube items. Inspected fuel pump inlet screen. Installed new fuel pump outlet filter. Oil sample taken. Installed new oil filter. Installed overhauled starter generator p/n 23048-016. Operational, leak and ground power checks were satisfactory.

I certify that this engine has been inspected in accordance with inspections and procedures for an inspection program required by FAR 91.409 (f) (3) and has been found to be in AIRWORTHY condition and approved for return to service.

Authorized Signature \_\_\_\_\_  
Turbo Air Inc CRS# FZRR132E / 4000 S. Orchard St, Boise ID 83705

MAXIMUM HOURS BETWEEN OVERHAULS \_\_\_\_\_ HOURS.

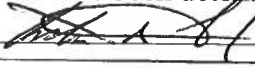


# MAINTENANCE RECORD

REPAIRS, ADJUSTMENTS, MODIFICATIONS  
ENTRIES. DRAW A DIAGONAL LINE THROUGH ANY UNUSED LINES IN DATE AND TIME COLUMNS.

SIGNATURE

LICENCE  
NUMBER

4-30-13 TSO 00.00 TSN 1975.5 Cycles 12384, TSHSI 00.00 Hobbs 4395.4 ATT 4395.4 Right PCE-PZ0192, N190EF, S/N LJ-1223 Inspected IAW Blackhawk Modifications, Inc., Dwg No. 19003-01, Rev. D dated 09-19-2003, & PWC PT6A-135 MM. Completed Phase 1&2 inspections IAW HBC King Air C90A inspection program contained in HBC interactive maintenance manual chapter 5, Pratt & Whitney PT6A-135A maintenance manual periodic inspection items per chapter 72-00-00. CW fuel nozzle clean & flow check Prime Turbines. CW Hot Section Inspection IAW PT6A-135 MM ch72 re grind segments for .011-.012" average CT clearance. Reassembled with HSI kit HS-28. CW torque ITT cal. CW compressor recovery wash & Turbine desalination rinse. Airworthiness directives complied with. Ground performance run, rigging & systems check satisfactory. Service with 6 qts BP2380 oil. I certify this engine has been inspected IAW a phase 1&2 inspection and has been determined airworthy for return to service. BAI WO 12384. Authorized Signature  Certificate 22P539607354

MAXIMUM HOURS BETWEEN OVERHAULS \_\_\_\_\_ HOURS.

PT6A-135A S/N:PCE-PZ0192 FINAL ACCEPTANCE TEST RECORD

2005 JUL 11 TEST CELL : 3202 BUILD SPEC.: 1146

ENGINE TESTED AND ACCEPTED IN ACCORDANCE WITH E&TI : 339

FINAL VANE FLOW AREAS FIRST STAGE : 29501 2S3 5.96

SECOND STAGE : 29501 4S2 15.31

PERFORMANCE DATA

TAKE-OFF

MAX-CRUISE

SPEC ACTUAL

SPEC ACTUAL

PROP SPEED	1900.	1900.	1900.	1900.
S.L.S. STD.DAY POWER	750.	750.	700.	700.
TRIMMED INTERTURBINE TEMP DEG R	1740.	1710.	1705.	1680.
T5D (DERIVED) DEG R		1781.		1747.
GAS GEN. SPEED RPM	36700	36500.	36300	36000.
FUEL FLOW @ 18400 BTU/LB LB/HR	461.	443.	438.	420.

FUEL TYPE : CPW 204

TEST LHV : 18540. BTU/LB

S.G. : 0.808 @ 80. DEG F

OIL TYPE : PWA 521 TYPE II

OIL CONSUMPTION : 0.0 LB/HR

T.O. OIL PRESSURE : 91.0 PSI

OIL TEMPERATURE : 153.3 DEG F

I.T.T. TRIM DELTA T (UNTRIMMED-TRIMMED) : 58.7 DEG F

I.T.T. TRIM DELTA T (UNTRIMMED-TRIMMED) : 32.6 DEG C

I.T.T. TRIM CLASS : 45

TRIM RESISTANCE : 16.1 OHMS

COLD HARNESS RESISTANCE : 0.70 OHMS

HANDLING AND CONTROL SETTINGS

TRIMMED MAX NG : 35615 RPM

UNTRIMMED MAX NG : 38100 RPM

DATA PLATE SPEED : 35615 RPM

IDLE SPEED : 19759 RPM

ACCEL. TIME F.I. TO MAX @ T1 : 2.88 SECS @ 76 DEGI

SG DOME FINAL SETTING : INDEX CLICK

ENGINE DRY WEIGHT : 343.3 LBS.

PRODUCTION SIGNATURE : *[Signature]* (LC 3)

INSPECTION SIGNATURE : *[Signature]* (30)

GOVERNMENT INSPECTOR : \_\_\_\_\_

THE UNDERSIGNED CERTIFIES THAT THIS RECORD ACCURATELY SETS FORTH THE EVENTS DURING THE TEST MADE ON THE ENGINE THEREIN IDENTIFIED.

DATE 11 JUL 2005 FOREMAN, ASSY. & TEST INSP :

*[Signature]* N. TOOTH (TC 4-5J NO. 028)



**Liste des composants moteur à numéros de série**  
**Engine Serialized Component Summary**

P&amp;WC JR3-6830-E (05-1998)

Modèle Model		N° de série Serial No.		Caract. de montage Build Spec NO.		
PT6A-135A		PCE-PZ0192		BS1146		
N° du matériel Material Number	Désignation du matériel Material Name	N° de série Serial No.	Code de trait. thermique Heat Code	N° de série du matériel forgé Forging Serial No.	N° de lot pour trait. thermique Heat Treat Batch No.	N° de matériel du fournisseur Vendor Material No.
3011095	SHAFT-POWER TURBINE	RWA15A207	HSCDS			
3011713	DISC-COMPRESSOR	A001NXTW	KAVYH		42608	
3013111	HUB-COMPRESSOR,REAR	RWA14A028	KAVXM		42438	
3013712	DISC-COMPRESSOR	A001PFH1	KAVYH		42608	
3017609	GEARSHAFT STARTER GENERATOR DRIVE	PKAA029A661				
3018175	COUPLING-COMPRESSOR REAR HUB	RWA13A782				
3018834	COUPLING POWER TURBINE SHAFT	PKAA035A143				
3019906	FLOW DIVIDER AND DUMP GATE	9959512434				
3022312	DISC-TURBINE	A001R56F	PZBPT	098		
3022339	RING-CONTAINMENT	RWA17A213	SGDYL			
3024211	DISC-TURBINE	A001R7W7	PZBNZ	132		
3027629	BUS BAR-T5 THERMOCOUPLE,ASYO	HR21698				
3027798	IMPELLER-CENTRIFUGAL	EAAA000L332	PZBOY	086		
3028004	BEARING OPTION	BB0042425				
		BB0042630				
		BB0043217				
3028007	BEARING-ROLLER FLANGED	PKAA035A052				
3028248	ADAPTER-SPLINED,FIRST STAGE CARRIER	PKAA025A602				
3028252	COUPLING-FLEXIBLE,2ND STAGE RED	PKAA033A287				
3028253	GEAR SUN 2ND STAGE REDUCTION	PKAA034A076				
3028262	CARRIER-2ND STAGE REDUCTION	RWA16A901				
3029022	HOUSING ASSY-PROP.REDN.GBOX,FR.	PKAA032A595				
3029082	GEAR-RING, SECOND STAGE REDUCTION	562B				
3032451CL03	VANE RING-TURBINE	WA22410				
3032710	HEATER-OIL TO FUEL	001096				
3034792	PUMP-FUEL	NNA05163220				
3035889	EXCITER-IGNITION	14309927G				
3035932	GOVERNOR-PROPELLER	PKAA024A275				
3036355	GEAR-PLANET,2STG RDCN 27 TEETH	PKAA024A277				
		PKAA024A278				
		PKAA024A279				
		PKAA024A286				
3037303	GEAR-RING FIRST STAGE REDUCTION	PKAA032A497				
3037304	GEAR-SUN,FIRST STAGE REDUCTION	PKAA032A459				
3037305	GEAR-PLANET,1ST STAGE REDUCTION	PKAA036A152				
		PKAA036A173				
		PKAA036A179				
3037306	CARRIER-FIRST STAGE REDUCTION	PKAA023A161				
3043672CL02	VANE RING-POWER TURBINE(MACH)	W306				
3054486-01	SHAFT-PROPELLER	EAAA000M358	KAVXT			
3057221-01	FUEL CONTROL-TURBOPROP	C80076				

# Liste des composants moteur à numéros de série Engine Serialized Component Summary



**Pratt & Whitney Canada**

Une société de United Technologies / A United Technologies Company

Pratt & Whitney Canada Cie. /  
Pratt & Whitney Canada Corp.  
1000, Marie-Victorin  
Longueuil, Québec, Canada  
J4G 1A1  
450-677-9411

P&WC JR3-6830-E (05-1998)

Modèle Model		N° de série Serial No.		Caract. de montage Build Spec NO.		
PT6A-135A		PCE-PZ0192		BS1146		
N° du matériel Material Number	Désignation du matériel Material Name	N° de série Serial No.	Code de trait. thermique Heat Code	N° de série du matériel forgé Forging Serial No.	N° de lot pour trait. thermique Heat Treat Batch No.	N° de matériel du fournisseur Vendor Material No.
3058641-01 3100829-03 3101635-01 3101864-01 3102227-01 3102336-01 3110863-07 3111780-01 3112368-01	HOUSING-POWER TURBINE STATOR, ASSY OF VALVE ASSY-COMPRESSOR BLEED BEARING-BALL FLANGED BEARING-BALL BEARING-BALL FLANGED SHAFT-STUB, COMPRESSOR, FRONT CASE ASSY-GAS GENERATOR DUCT-TURBINE EXHAUST, ASYO BEARING-ROLLER FLANGED, .94X1.65X.47	EDA00334Y AHX003601 FA0515202 FA0515129 BB0042991 RWA15A239 RWA18A188 RWA17A856 FA0516084 FA0516085 FA0516086 FA0516087 FA0516088 FA0516089 FA0516090 FA0516091 FA0516092 FA0516103 FA0516104 FA0516106 NRA22122 RWA17A591	EPDRW			
3117924-01 3122633-01	WIRING HARN-T5, THERMOCOUPLE LINER-COMBUSTION CHAMBER, ASSY OF					
Approuvé par Approved By <i>Nick Tod</i> <b>N. TOTH</b>				Date 2005.07.08		

T.C. 4-58  
NO. 028











