

CIVIL AVIATION AUTHORITY UGANDA

CAA (L) 28

R/H

5X-MED ENGINE R/H

ENGINE LOG BOOK

9T-A DC

PCE-R20170

CIVIL AVIATION AUTHORITY (UGANDA)

ENGINE LOG BOOK

INSTRUCTIONS FOR USE

- (1.) The entries in this log book shall be made and signed in accordance with the Civil Aviation Authority Ordinance, 1991 or any ordinance amending or replacing the same.
- (2.) Each entry in the log book shall be made as soon as is practicable after the occurrence to which it relates, but in no event more than seven days after the expiration of the certificate of maintenance (if any) in force in respect of the aircraft at the time of the occurrence. All entries shall be made in ink, no entry shall be erased and no page shall be removed.
- (3.) Entries shall be made in respect of the date and duration of each occasion on which the engine is run in flight (on a chock-to-chock basis), or, if the engine is run on more than one occasion on one day, the number of occasion and the total duration of the running of the engine on that day.
- (4.) Entries shall be made in column 8 in respect of maintenance, overhauls, repairs, replacements modifications and mandatory inspections, and of defects and their rectification and the place at which such work was carried out.
- (5.) If the engine is transferred to another aircraft a new page of the log book shall be started, the hours of running being brought forward.
- (6.) Such information as constructor's notes, inspection and test records, timing diagrams, etc., shall be affixed to the binding slips provided for the purpose.
- (7.) This log book shall be produced, on demand, for the inspection of any authorised person.
- (8.) This log book shall be preserved until a date two years after the engine to which it relates has been destroyed or permanently withdrawn from use.

END

OPER

ENGINE

Type PT6A-52
Constructor PRATT + WHITNEY
Constructor's Number PCE-RX0170
Date of Construction

OPERATOR

Name ASANTE AVIATION LTD
Address P. O. BOX 7691, KAMPALA
Name
Address
Name
Address
Name
Address
Name
Address
Name
Address

ERO ELECTRICAL SOLUTIONS



AMO 1011

Cert. : 5565

CERTIFICATE RELATING TO MAINTENANCE OF AN AIRCRAFT

Aircraft Type: BEECHCRAFT 200Registration: 9J-MEDComponent: STARTER GENERATORPart Number: 23048-016

Particulars of work done:

Serial Number: 3697

REPAUL CARRIED OUT ON STARTER GENERATOR.
RIPPED, CLEAN AND INSPECTED. DISASSEMBLED ALL HARDWARE
AND REASSEMBLED AND ALLOTTED HARDWARE. COIL AND REPAIRED
ARMED COMMUTATOR AND UNDERCUT ARMATURE.
REPLATED COIL AND BRUSHHOLDERS WITH SHIMMED BRUSHES.
ON WINDING. WIND 4.186 INCHES. FIELD COIL WINDINGS 215 OHMS.
REPAIRED PART. REASSEMBLED AND BENCH TESTED.
PUSHES BEAT UP TO 100%. OVERSPEED TEST OK. PAID OUT.
UNIT FOUND SERVICEABLE.

Cards held on Job Card: 7584

Specifications embodied:

Maintenance Manuals P/N's used & Revision Status:

202 RE 11 MARCH 1980

Tools used:

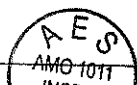
WASHERS
SAWERS
202
LINE
ATS
WHEELS

I hereby certify that in carrying out the foregoing specified maintenance, all the requirements prescribed in the Civil Aviation Regulations, 1997, as amended, which are applicable hereto, have been complied with.

11/05/2009

Signature: _____

Date of Approval No. (Stamp): _____



oving national aviation authority /country -
ntie de l'aviation du pays d'approbation / pays

ransport Canada

2. AUTHORIZED RELEASE CERTIFICATE - BON DE SORTIE AUTORISÉE

TCCA 24-0078

3. Form tracking No. - Numéro de suivi du formulaire

SEE BLOCK 5

oved organization name and address - Nom et adresse de l'organisme agréé

Pratt & Whitney Canada
Une société de United Technologies/A United Technologies Company

Pratt & Whitney Canada Cie./ Pratt & Whitney Canada Corp
4045 - 26 AVE. NORTH
LETHBRIDGE, ALBERTA
T1H 6G2

5. Work order/contract/invoice -
Bon de travail/contrat /facture

P.O.# 4000552591

7. Description

Free Turbine Turbo-Prop
PT6A-52

8. Part No. - N° de pièce

3072554-01 - BS 1228

9. Eligibility* - Admissible*

VARIOUS

10. Qty - Qtée

1EA

11. Serial/lot No. - N° de série/de lot

PCE-RX0170

12. Status/work - État/travail

MANUFACTURED

Remarks - Remarques

ADIAN TYPE CERTIFICATE E-12, FAA TYPE CERTIFICATE E4EA

ENGINE CONFORMS TO ITS UNITED STATES TYPE DESIGN (TYPE CERTIFICATE NUMBER E4EA) AND IS IN CONDITION FOR SAFE OPERATION.
ENGINE HAS BEEN SUBJECTED BY THE MANUFACTURER TO A FINAL OPERATION CHECK AND IS IN A PROPER STATE OF AIRWORTHINESS.

CERTIFIES THAT THE ITEM IDENTIFIED ABOVE WAS MANUFACTURED IN CONFORMITY TO EASA APPROVED TYPE CERTIFICATE DATA SHEET NUMBER:
078 ISSUE 01 AND IS IN A CONDITION FOR SAFE OPERATION.

ifies that the items identified above were manufactured in conformity to:
présent bon certifie que les articles indiqués ci-dessus ont été construits conformément à :

Approved design data and are in condition for safe operation.
des données de conception approuvées et qu'ils peuvent être utilisés en toute sécurité

Non Approved design data specified in block 13. -
des données de conception non approuvées indiquées à la case 13.

Authorized signature - Signature autorisée

16. Certificate / Approval Ref. No.
N° d'agrément/d'autorisation

4-58

TC-4-58
NO. 022

Name - Nom

18. Date (dd/mm/yyyy)
30 OCT 2008

22. Name

N/A

23. Date (dd/mm/yyyy)

N/A

B. HORVATH

14/09/2007) (P&WC 5720 (2005-03)

* Installer must cross-check eligibility with approved data - *Le monteur doit contre-vérifier l'admissibilité avec les données approuvées

document n'autorise aucunement le montage de la pièce. - 1. This document does not constitute authority to install the part.

se base sur la réglementation nationale d'une autorité de navigabilité autre que celle indiquée à la case 1, il doit s'assurer que l'autorité de navigabilité dont il relève accepte les produits ou les travaux de maintenance de l'autorité de navigabilité

1. - 2. Where the installer works in accordance with the national regulations of an airworthiness authority other than the authority specified in block 1, the installer must ensure that his/her airworthiness authority accepts products or maintenance

ness authority specified in block 1.

des cases 14 et 19 ne constituent en aucune façon une certification de montage délivrée conformément à la réglementation de l'état d'immatriculation, et

tout vol puisse avoir lieu. - 3. Statements 14 and 19 do not constitute installation certification. In all cases the aircraft technical record must contain an installation certification, issued in accordance with the national regulations of the state of registry.

ircraft may be flown.

2008 OCT 30 TEST CELL : 3202 BUILT SPEC : 1228
ENGINE TESTED AND ACCEPTED IN ACCORDANCE WITH E&TI : 754
FINAL VANE FLOW AREAS FIRST STAGE : 29501 9S1 6.52
SECOND STAGE : 29501 5S1 21.03

=====

PERFORMANCE DATA		PERF. ACCEPTANC	
		SPEC	ACTUAL
PROP SPEED		2000.	2000.
S.L.S. STD.DAY POWER		950.	950.
I.T.T. (T5A TRIMMED)	DEG R	1718.	1714.
T5D (DERIVED)	DEG R	1800.	1765.
GAS GEN. SPEED	RPM	36000	35550.
SFC @ 18400 BTU/LB	LB/SHP.HR	0.603	0.592
PRESSURE RATIO @ 35500	RPM	8.70	8.35

=====

FUEL TYPE : CPW 204
TEST LHV : 18540. BTU/LB
S.G. : 0.815 @ 70. DEG F
OIL TYPE : PWA 521 TYPE II
OIL CONSUMPTION : 0.0 LB/HR
T.O. OIL PRESSURE : 122.2 PSI
OIL TEMPERATURE : 153.9 DEG F

I.T.T. TRIM DELTA T (UNTRIMMED-TRIMMED) : 23.5 DEG F
I.T.T. TRIM DELTA T (UNTRIMMED-TRIMMED) : 13.1 DEG C
I.T.T. TRIM CLASS : 17
TRIM RESISTANCE : 80.3 OHMS
COLD HARNESS RESISTANCE : 1.42 OHMS

=====

HANDLING AND CONTROL SETTINGS

=====

TRIMMED MAX NG : N/A RPM
UNTRIMMED MAX NG : 39000 RPM
DATA PLATE SPEED : 35100. RPM
IDLE SPEED : 23180 RPM
ACCEL. TIME F.I. TO MAX @ T1 : 3.09 SECS @ 42.7 DEGF
ENGINE DRY WEIGHT : 436.5 LBS.

PRODUCTION SIGNATURE :

H. MONPLAISIR
H. Monplaisir 8 OCT 08

INSPECTION SIGNATURE :

C. Finley C. FINLEY 10 OCT 08

GOVERNMENT INSPECTOR :

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

DATE 30 OCT 2008 FOREMAN, ASSY. & TEST INSP :

B. Horvath B. HORVATH
T.C. 4-58 NO. 022

①

ENGINE INSTALLED
IN AIRCRAFT.
 TYPE PT6A-52 PCE-RX 0170
 NAT. AND REGN. MARKS 5X-MEB

(1) Date	(2) Number of Flights	(3) R.P.M. on Ground	(4) Duration of Flight		(5) Time Run since Top Overhaul		(6) Time Run since Complete Overhaul		(7) Time Run since New	
			Hrs.	Mins.	Hrs.	Mins.	Hrs.	Mins.	Hrs.	Mins.
Total Brought forward	1	7	3	50			N/A		10	30
24.09.09	2	9	1	15			"		11	45
25.09.09	1	10	0	45			"		12	30
26.09.09	6	16	6	20			"		18	50
02.10.09	4	20	3	40			"		22	30
03.10.09	3	23	4	45			"		27	15
07.10.09	5	28	4	25			"		31	40
08.10.09	3	31	2	35			"		34	15
09.10.09	5	36	8	15			"		42	30
15.10.09	3	39	4	50			"		47	20
16.10.09	3	42	5	05			"		52	25
21.10.09	4	46	3	50			"		56	15
22.10.09	3	49	5	15			"		61	30
28.10.09	3	52	5	15			"		66	45
29.10.09	4	56	3	36			"		70	21
30.10.09	3	59	4	06			"		74	27
31.10.09	1	60	1	18			"		75	45
Total Carried forward		60							75	45

H0

H0

170

(7)
Time Run
since New

Hrs. Mins.

10 30

11 45

12 30

18 50

22 30

27 15

31 40

34 15

42 30

47 20

52 25

56 15

61 30

66 45

70 21

74 27

75 45

75 45

NATIONAL AIRWAYS CORPORATION LANSERIA
AMO 4Reg No. 05/19919/07
Division of National Airways Corporation (Pty) LtdLanseria Airport
P O Box 293
Lanseria 1748
South Africa
Fax +27 11 267-5329
Tel +27 11 267-5000**Certificate Relating to Maintenance of an Aircraft.**Job Card No:
LAN39629**LOGBOOK INSERT.**

This constitutes an official log book entry and must be affixed in the appropriate logbook.

Aircraft type.	Aircraft Registration.	Aircraft Serial no.	Engine Type.	Engine Serial No.	Propeller Type.	Propeller Serial No.
Beechcraft King Air 200	9J-MED	BB-1046	PT6A-52	PCE-RX 0169 PCE-RX 0170	Hartzell	FY-2101 FY-2100

RIGHT HAND ENGINE

Total Airframe Hours: 8498.58

Total Airframe Cycles: 9672

LH Engine: 0.0

RH Engine: 0.0 Pratt & Whitney engine PT6A S/N: PCE-RX 0170 fitted to RH side of King Air 200 9J-MED in accordance with Blackhawk aircraft enhancement performance kit STC SA 108245C-2, STC SA 01946LA and King Air AMM 200 manual P/N: 101-590010-19. Rev 34 dated Feb 2009. The following airframe components fitted to new engine that was removed from old engines, no status available at this time.

- o Starter/Gen - TBO 1000 HRS
- o Tach/Gen
- o Overspeed Gov
- o Low fuel press pump

These components to be checked for serviceability and certified by operator/owner.

- New flexible fluid carrying hoses fitted.
- Oil cooler ultrasonic cleaned and pressure checked.
- New engine mounts fitted.
- Engine replenished with mobile Jet II oil.
- Engine controls rigged as per Blackhawk STC instructions and secured.
- Frakes exhaust and butterfly flow through anti-ice system on engine and engine cowlings fitted in accordance with butterflyfield industries installation manual P/N: BI 1003 rev F dated 11 August 2006.

Work done by:

Dual inspection carried out on engine installation and controls by:

- Ground runs carried out and all engine parameters within limits as per Blackhawk STC.

The details relating to the above work are kept on record at NAC Lanseria under Works Authorisation 49390.

Certificate of Maintenance of an Aircraft

This certifies that in carrying out the maintenance above, all the requirements in the Civil Aviation Regulation, 1997 as amended which are applicable there to, have been complied with.

Date: 08/06/2009

Signature:

Licence or Approval No.:



TPSC

TURBO PROP SERVICE CENTRE cc

**TURBO PROP SERVICE CENTRE cc****Z/AMO/65/2008**

P.O.Box 348, Lanseria, 1748

Reg No: CK92/02393/23

CERTIFICATE RELATING TO THE MAINTENANCE OF AN AIRCRAFT*This constitutes an official Log Book entry and must be affixed to the appropriate Log Book*

Aircraft Type	Registration	Cycles	Job Card Number
KING AIR B200	9J-MED	0	5709
Component	Manufacturer	Part Number	Serial Number
ENG (2)	PRATT & WHITNEY	PT6A-52	PCE-RX 0170
Comp, T.T	T.S.O.H	C.S.O.H	Aircraft Hrs
0.0	N/A	ENGINE NEW	8 501.50

Phase 3 and Continuous Corrosion Inspection was carried out as per the Beechcraft Maintenance Manual Chapter 5-20-03 Revision 01/07 Pages 201 - 222 and 5-29-00 Pages 201 to 207 Revision Nov 01/07 and QC43-252/01A Page 1 to 5 by Turbo Prop Service Centre cc. AD's were carried out as per list. All defects are recorded and signed for on Turbo Prop Service Centre cc Defect Sheets, held under Job No: 5709

Defects:

***** (1) Phase 3 Inspection and Continuous Corrosion Inspection due
Carried out as per Maintenance Manual

***** (12) Overspeed governors to be replaced on LH & RH

Overspeed governors SN's: (LH) 2165936 & (RH) 32320 removed and overhauled
LH SN: 2482821F & RH SN: 2240134F fitted

***** (13) Fuel boost pumps to be replaced engine driven booster pump

LH & RH fuel boost pumps SN's: B-5124 & B-5116 removed and new pumps SN's:
(LH) B-4713 & (RH) B-9714 fitted.

***** (27) Both LH & RH engine cowling oil filler doors need repair
Oil filler doors repaired LH & RH cowlings

I Hereby certify that in carrying out the foregoing specified maintenance, all the requirements prescribed in the Civil Aviation Regulations, 1997, that are applicable thereto have been complied with

Date: 29 July 2009

Signature: 

Amo Stamp



TYPE PE9T & WHIMNEY PE-RX0170
NAT. AND REG'N. MARKS P 973-MEN

TYPE PE9T & WHIMNEY PE-RX0170
NAT. AND REG'N. MARKS P 973-MEN

97-MBN

(1) Year 2009		(2) Flight Time		(3) Time Since Com- plete Overhaul		(4) Total Time Run		Details of Repair
Day	Month	Hrs.	Mins.	Hrs.	Mins.	Hrs.	Mins.	
08	06	Brought Forward (747) 85015		0	00	0	00	cycles New engine installed on LH position @ AIRFRAME Hours 8501.5hrs 
6	08	—	50	—	50	—	50	
1	09	2	30	3	20	3	20	
Carried Forward		3	20	3	20	3	20	

checked for C of A renewal
David
 09.09.09

DATE

29 July 2009

5

- (1) Particulars of all maintenance work done on the engine.
- (2) Particulars of all overhauls, repairs, replacement and modification and inspections relating to the engine or any of its accessories
- (3) Particulars of any defects occurring in the engine, and of the rectification of such defect, including a reference to the relevant entries in the Technical Log.
- (4) Certificate that in carrying out the overhaul, repairs, etc. All mandatory applicable thereto have been complied with.

Hours And cycles Brought Fwd From Arabian Leg Book

9.5-MED.

Name: TIGHEST, A. SIGNATURE: [Signature]

WCSXCE: NW 150. DATE 24/09/09
Aschite Aviation
Maintenance

3

ENGINE INSTALLED IN AIRCRAFT.

TYPE PT6A-52
NAT. AND REGN. MARKS 5X-MEB

(1) Date	(2) Number of Flights	(3) R.P.M. on propeller	(4) Duration of Flight		(5) Time Run since Top Overhaul		(6) Time Run since Complete Overhaul		(7) Time Run since New	
			Hrs.	Mins.	Hrs.	Mins.	Hrs.	Mins.	Hrs.	Mins.
Total Brought forward		105					N/A		123	45
19.01.2010	1	106	0	18			"	"	124	03
19.02.2010	1	107	1	00			"	"	125	03
22.02.2010	3	110	3	30			"	"	128	33
23.02.2010	7	117	6	00			"	"	134	33
24.02.2010	6	123	5	42			"	"	140	15
25.02.2010	2	125	2	36			"	"	142	51
12.03.2010	1	126	0	30			"	"	143	21
14.03.2010	1	127	1	00			"	"	144	21
26.03.2010	3	130	5	30			"	"	149	51
28.03.2010	3	133	2	30			"	"	152	21
30.03.2010	4	137	3	42			"	"	156	03
07.04.2010	3	140	3	48			"	"	159	51
08.04.2010	3	143	3	36			"	"	163	27
09.04.2010	6	149	5	12			"	"	168	39
10.04.2010	7	156	5	42			"	"	174	21
17.04.2010	5	161	5	54			"	"	180	15
Total Carried forward										

11/05/10

TPSC

(P) 100

AMO UGANDA (UGANDA)
AMO UGANDA (KENYA)
AMO UGANDA (KENYA)**TURBO PROP SERVICE CENTRE
UGANDA LIMITED AMO UG/CA/075**

cal Log.

CERTIFICATE RELATING TO THE MAINTENANCE OF AN AIRCRAFT

This constitutes an official Log Book entry and must be affixed to the appropriate Logbook.

Registration	Cycles	Job Card Number
5X-MED		2107
Aircraft type	Manufacturer	Part Number
KINGAIR B200		PTA6-52
Component	Pratt & Whittsett	PCE - RX0170
Engine	T.S.O.H	Aircraft Hrs
Comp, T.T		8682.05
180.15		

The Following Phase IV Inspection & defects were carried out as per Asante Aviation Maintenance Schedule AMSI/1/76215/09 by Turbo Prop Service Center Uganda. All defects are recorded and signed for on Turbo Prop service Center Uganda. Defect Sheets, held under Job no: **2107**

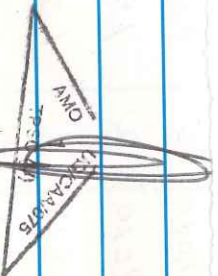
Defects: R/H Engine:

1. Carry out Phase 4 inspection. Carried out as per inspection sheet 05-20-04-201
2. Check all SBs & ADs. Biweekly 2010 - 05 checked. Nil new.
3. Check life components. Checked as per T data dated 26/04/10.
4. Carry out compressor wash on both engines. Compressor wash on 1 & 2 engine carried out. Ground run OPS normal.

I hereby certify the Scheduled Inspection/Maintenance repair & / or modifications recorded above has been carried out in accordance with the Civil Aviation (Airworthiness) Regulations, 2006, and that the information furnished herein is true and correct to the best of my knowledge.

Date: 26/04/2010 Signature: _____

Amo Stamp: _____



Phase 4 in inspection carried out AT. 198.15 Hrs. 27/4/2010.



ENGINE INSTALLED
IN AIRCRAFT.

TYPE P16A-52
NAT. AND REGN. MARKS 6X-MTD

[illegible]

6

ENGINE INSTALLED IN AIRCRAFT.

TYPE PT6A-52
NAT. AND REGN. MARKS SX-MED

(1) Date	(2) Number of Flights	(3) R.P.M. on Ground	(4) Duration of Flight		(5) Time Run since Top Overhaul		(6) Time Run since Complete Overhaul		(7) Time Run since New	
			Hrs.	Mins.	Hrs.	Mins.	Hrs.	Mins.	Hrs.	Mins.
Total Brought forward		220							265	52
30.09.10	1	221	1	18					267	10
03.10.10	1	222	1	12					268	22
12.10.10	6	228	6	48					275	10
19.10.10	3	231	4	42					279	52
20.10.10	3	234	2	54					282	46
21.10.10	3	237	5	06					287	52
10.11.10	4	241	6	06					293	58
26.11.10	7	248	6	06					300	04
01.12.10	2	250	4	42					304	46
03.12.10	1	251	4	00					308	46
04.12.10	1	252	1	18					310	04
11.12.10	4	256	2	06					312	10
14.12.10	2	258	1	24					313	34
17.12.10	1	259	1	18					314	52
18.12.10	4	263	4	06					319	00
19.12.10	4	267	5	24					324	24
Total Carried forward		267							324	24

ENGINE INSTALLED IN AIRCRAFT.

TYPE
NAT. AND REGN. MARKS
PT6A-52
5X-MED

(1) Date	(2) Number of Flights	(3) R.P.M. on Ground	(4) Duration of Flight		(5) Time Run since Top Overhaul		(6) Time Run since Complete Overhaul		(7) Time Run since New	
			Hrs.	Mins.	Hrs.	Mins.	Hrs.	Mins.	Hrs.	Mins.
Total Brought forward		267							324	24
22.12.10	1	268	2	00					326	24
02.01.11	2	270	2	36					329	00
03.01.11	2	272	1	42					330	42
04.01.11	2	274	1	36					332	18
06.01.11	3	277	3	24					335	42
07.01.11	4	281	3	48					339	30
08.01.11	7	288	6	06					345	36
06.02.11	2	290	1	18					346	54
09.02.11	2	292	2	48					349	42
11.02.11	2	294	2	42					352	24
22.02.11	2	296	2	42					355	06
26.03.11	1	297	1	42					356	48
27.04.11	1	298	0	18					357	06
30.04.11	1	299	0	18					357	24
05.05.11	1	300	1	18					358	42
06.05.11	4	304	6	12					364	54
Total Carried forward		304							364	54

TPSCTPSC
TURBO PROP SERVICE CENTRE
AMSI/1/76215/09
AMSI/1/76215/09
AMSI/1/76215/09
AMSI/1/76215/09**TURBO PROP SERVICE CENTRE
UGANDA LIMITED AMO UG/CAA/075****CERTIFICATE RELATING TO THE MAINTENANCE OF AN AIRCRAFT**

This constitutes an official Log Book entry and must be affixed to the appropriate Logbook.		Job Card Number
Aircraft type	Registration	Cycles
KINGAIR B200	5X-MED	299
Component	Manufacturer	Part Number
Engine	Pratt & Whitney	PTA6 - 52
Comp, T.T	T.S.O.H	T.C.S.O.H
357.24	-	-
		Serial Number
		PCE - RX0170
		Aircraft Hrs
		8859.39

The Following Phase IV Inspection & defects were carried out as per Asante Aviation Maintenance Schedule AMSI/1/76215/09 by Turbo Prop Service Center Uganda. All defects are recorded and signed for on Turbo Prop Service Center Uganda. Defect Sheets, held under Job no: 2320

Defects: R/H Engine:

1. Phase I due and all recurring SBs + Ads. Phase I carried out and all recurring SBs & Ads.
2. Compressor washes due. Carried out.

I hereby certify the Scheduled Inspection/Maintenance repair & / or modifications recorded above has been carried out in accordance with the civil Aviation (Airworthiness) Regulations, 2006, and that the information furnished herein is true and correct to the best of my knowledge.

Date: 30/04/2011 Signature: Amo Stamp: 

Technical Log.

