



**Registration: 2007/001003/07**

**Domestic Air Service Licence Number: N958D**

Class of Air Services: II

Type: N 1 & N2

Categories of Aircraft: A4

# **Maintenance Control Manual (MCM)**

Notwithstanding anything elsewhere contained herein – *Bushveld Air Charters (Pty) Ltd* undertakes to conduct all operations in accordance with this manual and the following Acts as amended, and all the Regulations made in terms of such Acts. The following acts have been taken into consideration in the compilation of this manual:

***Compiled in fulfillment of the recommended practices and procedures of:***

***Part 43.02.2 (f);***

***ICAO Annex 6;***

***SA-CATS-GMR;***

***Part 43.02.3 (a – p); and***

***Annex 8 of the Chicago Convention, 1944***



***Certified Statement***

Operator : Bushveld Air Charters (Pty) Ltd  
Registration number : 2007/001003/07

Herein represented by

Mr. JT Marais  
(Responsible Person: Aircraft being duly authorized)

And

AMO : Breytech Aviation CC  
Registration number : 2007/207897/23

Herein represented by

Mr. Willie Breytenbach  
(Accountable Manager being duly authorized)

Hereby agree that Breytech Aviation, an approved aircraft Maintenance Organisation AMO 914 for category A, B, C, D, E and X rating, hereby undertakes to support Bushveld Air Charters (Pty) Ltd (Operator) on the above aircraft type, with specific reference to Aircraft Serial Number 182-60832 and P210-00532 in accordance with the SACAA approved inspection programme/maintenance schedules, the approved Part 135 Operations Manual of Bushveld Air Charters (Pty) Ltd (Operator) the approved Maintenance Control Manual of the Operator and the provisions of the maintenance agreement entered into between these parties.

Agreed upon and signed on this the 19 March 2010.

.....  
Name and Signature

.....  
Witness

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Name and Signature

Witness

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/  
**APPROVAL PAGE**

MCM ACCEPTED BY: \_\_\_\_\_ Date: 2010/ \_\_ / \_\_  
BUSHVELD AIR CHARTERS (Operator)

MCM ACCEPTED BY: \_\_\_\_\_ Date: 2010/ \_\_ / \_\_  
BREYTECH AVIATION AMO914

MCM APPROVED BY: \_\_\_\_\_ Date: 2010/ \_\_ / \_\_  
For/Commissioner for Civil Aviation  
(Airworthiness Division)

Note: This Maintenance Control Manual is also considered as the contractual agreement between the Operator, **BUSHVELD AIR CHARTERS (PTY) LTD**, and **BREYTECH AVIATION AMO914**, the contracted Aircraft Maintenance Organization for Maintenance and Safety Standards required by the Operator.

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1. Portion of the text pages, charts and diagrams affected by changes is indicated by a vertical line in the outer left margin of the page.
2. Pages changed will be indicated by:
  - R- Amendment
  - D- Deleted
  - N- New



**04.*****DISTRIBUTION LIST***

Copy no 1:	Chief Executive Officer	Paper Copy
Copy no 2:	South African Civil Aviation Authority	Paper Copy
Copy no 3:	Responsible Person: Aircraft	Paper Copy
Copy no 4:	Air Service Safety Officer	Paper Copy
Copy no 5:	Flight Operations	Paper Copy
Copy no 6:	Accountable Manager	Paper Copy
Copy no 7:	Quality Assurance	Paper/CD-ROM
Copy no 8:	Engineer	Paper
Copy no 9:	Line stations	Paper
Copy no 10:	Technical Library	Paper

### ***0.5 TERMS AND ABBREVIATIONS APPLICABLE TO THIS MCM***

**"Aircraft":** For the purpose of this manual includes the airframe, engine/s and where applicable the components, parts, accessories, instruments, avionics and electrical equipment installed in the aircraft.

**"Maintenance":** Means that all work is carried out in accordance with the manufacturer's Airworthiness Data and approved includes cleaning, inspection, adjustment, modification, overhaul and testing.  
AMS and rectification, repair,

AD : Airworthiness Directive  
AIC : Aeronautical Information Circular  
AIP : Aeronautical Information Publication  
AME : Aircraft Maintenance Engineer

**AMO : Aircraft Maintenance Organisation**

AMS : Aircraft Maintenance Schedule  
SACAA : South African Civil Aviation Authority  
FAA : Federal Aviation Authority  
MPI : Mandatory Periodic Inspection  
MOP : Manual of Procedures

*CAR's : Civil Aviation Regulations, 1997, as amended*

CRMA : Certificate Relating to Maintenance of an Aircraft  
ICAO : International Civil Aviation Organization  
MCM : Maintenance Control Manual  
MOP : Manual of Procedures  
NDT : Non Destructive Testing

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*SA-CATS : South  
African Civil Aviation  
Technical Standards*

SB : Service Bulletin  
SI : Service Instruction  
SL : Service Letter

**0.6 OPERATOR INFORMATION**

Name of Company	BUSHVELD AIR CHARTERS (PTY) LTD
Trade Name of Company	n/a
Company Registration number	2007/001003/07
SACAA Ops Certificate Number	N958D
Physical Address for Admin	Plot 82, Shere, Gauteng
Postal Address	Suite 20, Private Bag X30, Lynnwood Ridge, 0040
Telephone number	012 809 0038
Fax number	
Contact Person	Mr. Bertus van Zyl
Contact Number	829087674
E-mail address	mwt-naa@mweb.co.za

**.7 MCM APPLICABILITY**

<b>Aircraft Type</b>	<b>Aircraft Model</b>	<b>Aircraft Serial Number</b>	<b>A i r c r a f t Registration</b>
Cessna	C182	182-60832	ZS-ILU
Cessna	P210N	P210-00532	ZS-LAF

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## ***1.0 INTRODUCTION***

The procedures set out herein forms the Maintenance Control Manual (MCM) required by Part 43.02.3 (f) of the CARS and compiled with reference to AIC 60.14 dated 06/07/07.

BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, operates aircraft for scenic and charter flight operations and shall ensure by means Quality Assurance Training Workshops presented by Mrs Eonette Leslie, that all members of their staff are familiar with all such procedures as set out herein that relate to their duties, and that all such procedures are followed at all times.

No amendments will be made to this Maintenance Control Manual without written approval of the Commissioner for Civil Aviation. When approved, such amendments shall be inserted in all controlled copies of this Maintenance Control Manual.

### ***1.1 AMENDMENT AND REVISION***

#### General

- (1) The individual who is responsible for the control of the contents of the MCM is the Responsible Person: Aircraft (RP:A). He is also responsible for the issuance and insertion of amendments and revisions. He is also responsible for the issuance of individual volumes and for the ensuring that appropriate amendments are dispatched to the holders of volumes.
- (2) To ensure control of the volumes and their amendments, each volume is numbered individually. A distribution list of the MCM will be kept by the RP:A. A revision to the list of effective pages must be included with any amendment to the MCM.
- (3) Amendments, revisions and additions to the MCM must be approved by the person responsible for the manual. In revision or altering the contents of the MCM, BUSHVELD AIR CHARTERS (PTY) LTD is aware that the SACAA is required to approve the contents of the MCM. The RP:A will liaise with the SACAA for approval of all amendments.
- (4) BUSHVELD AIR CHARTERS (PTY) LTD employees are individually responsible for maintaining full knowledge of the contents of the MCM as applicable to their various functions and responsibilities.



## **.2            *NUMBER OF CONTENTS***

Two original master copies will be submitted to the SACAA for formal approval. Upon approval, one copy will be retained by the SACAA and the other will be returned to BUSHVELD AIR CHARTERS (PTY) LTD. This copy will be maintained in an up-to-date manner and be made readily available at the designated bases of Operations.

### **1.3            *MANDATORY MCM DISTRIBUTION***

BUSHVELD AIR CHARTERS (PTY) LTD will prepare and keep a current manual for flight crew, ground personnel and Management personnel, which will be complied with and issued as guidance in the execution of their duties. BUSHVELD AIR CHARTERS (PTY) LTD will ensure that this directive will:

- be made available to every employee by means of easily accessible copies of the MCM;
- ensure that all copies of the MCM are kept up to date ; and
- ensure that all flight crew has a copy of the aircraft operating manuals and every part of the MCM which is relevant to his/her duties is complied with.

**2.0. CORPORATE COMMITMENT BY THE OPERATOR**

Reference: SA-CATS: Part 43.02.3 paragraph (a)

1. BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, is committed to comply with the airworthiness requirements as set out in this MCM approved by the Commissioner for Civil Aviation.
2. BUSHVELD AIR CHARTERS (PTY) LTD shall ensure that all type certificated and non type certificated aircraft used for CAR Part 135 commercial air transport operations are maintained by a SACAA approved AMO with the appropriate rating/s.
3. BUSHVELD AIR CHARTERS (PTY) LTD shall ensure that the Aircraft Maintenance BREYTECH AVIATION AMO914, contracted to perform maintenance on behalf of BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, has amended to date manufacturer's Airworthiness Data, special tools and equipment for the satisfactorily completing of any maintenance on the aircraft, and that the Airworthiness Data, special tools and equipment are readily available to the person/s carrying out the maintenance, and to those required to supervise, inspect and certify such maintenance.
4. BUSHVELD AIR CHARTERS (PTY) LTD shall ensure that all type certificated aircraft used by this Organization for CAR Part 135 commercial air transport operations have an AMS approved by the Commissioner for Civil Aviation.
5. BUSHVELD AIR CHARTERS (PTY) LTD shall ensure that all maintenance is carried out in accordance with the CAR's, this MCM, the aircraft's approved AMS, amended to date Manufacturer's Airworthiness Data, if applicable, and any requirements laid down by the Commissioner for Civil Aviation.
6. BUSHVELD AIR CHARTERS (PTY) LTD shall ensure that operational and emergency equipment necessary for the intended flight is available and that the equipment is serviceable.
7. BUSHVELD AIR CHARTERS (PTY) LTD shall ensure that all type certificated aircraft used for CAR Part 135 commercial air transport operations have a Certificate of Registration and a valid Certificate of Airworthiness or Commercial

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- Authority to Fly on board, or certified copies thereof, and that these certificates are kept valid.
8. It is understood that any new or amended Regulations, published in the CAR's, and/or any other instructions issued by the SACAA, and/or any instructions issued by the Aircraft Manufacturer's from time to time, which may be in conflict with these procedures, that the provisions of the former shall prevail.
  9. It is further understood that the SACAA reserves the right to suspend, withdraw and/or amend this MCM.
  10. This MCM is accepted and approved by the undersigned and shall be adhered to at all times.

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*For/BUSHVELD AIR  
CHARTERS (PTY) LTD  
(Operator)*

CEO

### 3.0 *Operator Management Personnel*

<b>Position in Organisation</b>	<b>Name and title</b>	<b>Signature</b>
Chief Executive Officer	Mr. JT Marais	
Responsible Person: Flight Operations	Mr. JA van Zyl	
Responsible Person: Aircraft	Mr. JT Marais	
Air Service Safety Officer	Me Y Janse v Rensburg	
Quality Assurance	Me E. Leslie	

#### 3.1 **RESPONSIBLE PERSON: AIRCRAFT**

The approved Responsible Person: Aircraft, as per approved Management Plan, will ensure that all maintenance is carried out in accordance with this Maintenance Control Manual and the approved maintenance Program.

##### **Responsibilities:**

- (1) Ensure that the air service operates in a safe and reliable manner with regard to aircraft maintenance and engineering.
- (2) Ensure that each aircraft used in providing the air service is airworthy and serviceable for flight.
- (3) Ensure that the provisions of this Section are fully complied with in respect of aircraft.
- (4) Ensure that all maintenance personnel have the appropriate knowledge, qualifications, skills, experience and training to perform or supervise their assigned duties.
- (5) Ensure that all maintenance personnel at all times fully comply with this Section.
- (6) Inform the Air Safety Officer of any maintenance and engineering related changes required to this Section.
- (7) Co-ordinate daily aircraft scheduling with the Responsible Person: Flight Operations and Maintenance Manager.

In addition, he shall also be responsible for the following:

- (1) All aircraft used in providing the air service shall comply with the aircraft engineer/engineering and maintenance provisions of the South African Civil Aviation Regulations, Part 43, Part 145 and SA-CATS-AMO.
- (2) All aircraft which are used in providing the air service shall have a valid certificate of airworthiness or commercial authority to fly, issued in accordance with the South African Civil Aviation Regulations.
- (3) All aircraft which are used in providing the air service shall be inspected, constructed, repaired, overhauled, maintained or modified in accordance with the provisions of the South African Civil Aviation Regulations.
- (4) Tech Logs and logbooks for aircraft, aircraft engines, aircraft components, and aircraft engine components and other specified item or equipment shall be kept, preserved and maintained in accordance with the provisions of the South African Civil Aviation Regulations.
- (5) All aircraft, aircraft engines, aircraft components, aircraft engine components and other specified item or equipment that is/are owned, hired or exclusively managed by the Operator, which are used in providing the air service shall furthermore be engineered, maintained, inspected, constructed, overhauled, repaired and modified in accordance with the, sub-contracted, Aircraft Maintenance Organisation's Manual of Procedure.
- (6) The Responsible Person: Aircraft shall ensure that the above mentioned Approved Maintenance Organisation (AMO) is licensed in accordance with the provisions of the South African Civil Aviation Regulations, to carry out maintenance on the aircraft being operated by the Operator.
- (7) Notwithstanding any other provisions in this Section, no aircraft shall be operated by the licensee, unless the Responsible Person: Aircraft has satisfied himself that:
  - (a) A copy of the AMO licence, of the AMO maintaining a particular aircraft, as well as the Certificate of Airworthiness (or as certified true cope thereof) of that aircraft, is kept on file by the licensee;
  - (b) A copy of the defect report, if any, at the termination of the last previous flight of an aircraft, plus, a copy of the documentation relating to the defect removal of such a defect, shall be kept on file by the licensee;
- (8) Documentation referred to above, shall be made available, on request to any inspector authorised by the Commissioner for Civil Aviation.
- (9) Approved Maintenance Organisations
- (10) Types of Maintenance to be done by AMO's:  
MPI's, inspections, general repairs, inspections and modifications (full maintenance)
- (11) Categories and Ratings of AMO's. As endorsed on AMO licence certificates.

**Authority:** Prohibit the use of any unsafe or unreliable aircraft, aircraft component, aircraft engine component or other specified items or equipment.

**Extent of Delegation:** Should the Responsible Person Aircraft not be able to execute his responsibilities and/or authority, the Chief Executive Officer will appoint a suitable person to fill this post.

### **3.2 *QUALITY ASSURANCE***

- (1) Responsible to the Chief Executive Officer.
- (2) Monitor compliance with and the adequacy of procedures required to ensure safe operation and operational practises.
- (3) Monitor procedures to ensure airworthiness of aircraft.
- (4) Implement, maintain and amend Quality Assurance system as may be required from time to time to reflect the operational environment of BUSHVELD AIR CHARTERS (PTY) LTD.
- (5) Monitor flight operations, maintenance, crew training and ground operations and ensure that the standards required by the Commissioner of Civil Aviation and any additional requirements defined by BUSHVELD AIR CHARTERS (PTY) LTD are being carried out by the nominated post holder.
- (6) Maintain a relationship with the Accountable Manager which is conducive to ensuring that directives and non-compliances are dealt with efficiently and permanently.
- (7) Assure that QA: Maintenance Conduct quality inspections of all-subcontractor organisations.
- (8) Conduct audits of all outstanding bases of operation.
- (9) Report findings and recommendations to the Accountable Manager and CEO in an expeditious manner.
- (10) Arrange Human Factor's Training.
- (11) Report continuous findings and recommendations reported to the CEO and Accountable Manager not rectified to the SACAA.

### ***3.3 HUMAN FACTORS TRAINING***

The aim of human factors training is to increase safety, quality and efficiency in aircraft maintenance operations by reducing human error and its impact on maintenance activities.

The objectives are to

- Enhance maintenance personnel's awareness of individual and organisational human factor's issues, both positive and negative, that may affect airworthiness.
- Develop human factors skills, e.g. communication, effective teamwork, task management, situational awareness, procedural writing, as appropriate to the job, in order to make positive impact on the safety and efficiency of maintenance operations.
- To encourage a positive attitude towards safety, and to discourage unsafe behaviour and practises.

#### **4.0 ADMINISTRATIVE ARRANGEMENTS**

Following is a description of the Administrative arrangements between BUSHVELD AIR CHARTERS (PTY) LTD *and* BREYTECH AVIATION AMO914. SA-CATS Reference: Part 43.02.3 (b)

This MCM describes the requirements laid down by BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, and how maintenance functions performed on behalf of BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, and are coordinated with BREYTECH AVIATION AMO914.

BUSHVELD AIR CHARTERS (PTY) LTD shall ensure that all maintenance is carried in out in accordance with the requirements of this MCM. A controlled copy of this MCM shall be available at BREYTECH AVIATION AMO914, contracted to perform maintenance on behalf of this Organization.

BUSHVELD AIR CHARTERS (PTY) LTD shall ensure that all scheduled maintenance is carried out at the intervals as specified in the approved AMS as well as SA-CATS-GMR for aircraft below 5700kg. A controlled copy of the aircraft's AMS shall also be available at the AMO's contracted to perform maintenance on behalf of this Organization.

Unscheduled maintenance and/or defects shall be recorded in the aircraft's Tech Log. When required the Tech log shall be submitted to the AMO contracted to perform maintenance on behalf of this Organization. The Tech Log must be returned to operator after the completion and certification of the required maintenance and/or rectifications.

**Note: NO aircraft shall be operated with defects unless the defect is a deferrable item as per MEL. In the case of the C182 and P210 where no MEL is available, no aircraft shall be operated that will affect the safe operation of the aircraft are not rectified and if the rectification actions performed are not certified in the applicable aircraft's Tech Log. Also refer to SA-CATS-GMR for aircraft below 5 700kg.**

The aircraft Logbooks shall be kept at the contracted AMO. All scheduled and un-scheduled maintenance performed, including defect rectification actions performed must be recorded and certified in the applicable aircraft's Logbook/s.

BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, shall audit the aircraft Logbooks at monthly intervals to ensure that the Logbooks are maintained to an acceptable standard as required by Part 43, of the CAR's.

It shall be the responsibility of BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, to ensure that the following document copies are valid, kept current and certified copies onboard the aircraft if originals are kept in the Operations office, prior to the commencement of any flight operations:

- Certificate of Registration;
- Certificate of Airworthiness;
- Radio Station Licence;
- Certified and up to date Equipment List;
- Minimum Equipment List (MEL);
- Weighing Report;
- Insurance Certificate;
- Certificate of Release to Service;
- Inspection Reminder;
- Compass Deviation Card; and
- CAA approved Flight Manual.
- Part 135 Flight Operations Manual

BUSHVELD AIR CHARTERS (PTY) LTD must ensure that all safety equipment required for an intended flight as displayed/referenced on the aircraft's Emergency Equipment Diagram is available and serviceable at all times. The contracted AMO must verify the availability and serviceability of this equipment at each scheduled maintenance interval. The Operator will supply the aircraft's Emergency Equipment Diagram to the contracted AMO.

The contracted AMO must have a **Quality Assurance System** in place for the control and supervision of the maintenance as required by Part 145 of the CAR's.

**5.0 CONTRACTED AMO PARTICULARS**

<b>Name of AMO:</b>	Breytech Aviation CC
<b>R e g i s t r a t i o n Number:</b>	2007/207897/23
<b>SACAA Approval Number:</b>	AMO 914

<b>Physical Address:</b>	Hanger 32, Wonderboom Airport
<b>Postal Address:</b>	PO Box 83329, Doornpoort, 0017
<b>Telephone Number:</b>	(012) 567-3139
<b>Facsimile Number:</b>	(012) 543 -1326
<b>E-mail Address:</b>	-

### ***5.01 LIAISON AND REVIEW MEETINGS***

Management liaison meetings will be held between the Operator and the AMO to ensure effective exchange of operationally relevant information throughout the management system for maintenance operations.

Liaison meetings between BUSHVELD AIR CHARTERS (PTY) LTD and the AMO engineering management will include the following:

Items to be discussed on a 6 monthly basis or as necessary:

- a) Incident/accidents reports and closeout of finalised items;
- b) Operational technical delays
- c) Deferred defects. Nil hour failures/no fault items;
- d) Recurring defects and maintenance actions;
- e) Component/spares requirement for MEL deferred items; and
- f) Aircraft status

Production meeting – items to be discussed during major maintenance checks:

- a) Check status progress report.
- b) Unscheduled and or unforeseen additional aircraft downtime;
- c) Manpower utilisation and requirements;
- d) Target date versus expected complete date; and
- e) Material/spares requirement and expected delivery dates

6 Monthly maintenance planning meetings:

- a) Scheduled aircraft maintenance;
- b) Unscheduled aircraft maintenance;
- c) Maintenance significant items;

- d) Proposed modifications;
- e) Incorporations of AD/SB's; and
- f) Scheduled component changes

Quarterly QA/Safety reports meetings:

The following items are discussed at a quarterly basis:

- a) pilot safety reports;
- b) customer complaints;
- c) customer requests; and
- d) nil hour failures

## ***6.0 AIRCRAFT MAINTENANCE PROGRAMME COMPLIANCE***

Where a Maintenance service agreement exists between the Maintenance organisation (AMO) and a contracted operator, the contracted AMO's are responsible for providing maintenance and ancillary services in accordance with the approved Maintenance Schedule. This agreement includes the compliance to Air Directives (AD's), modification embodiment and all necessary record keeping.

Record of compliance and certification shall be recorded on the documentation approved by the operator.

### ***.1 MAINTENANCE AND CERTIFICATION PROCEDURES***

SA-CATS Reference: Part 43.02.3 (c)

Following is a description of Maintenance and certification procedures regarding maintenance performed away from base where the contracted AMO's are not represented. Maintenance can be carried out by an AMO not normally contracted by the Operator, but licensed and approved by the SACAA.

The holder of a pilot licence may not carry out maintenance on an aircraft used for commercial operations. Ref: CAR 43.02.02(2) (b)

### ***.2 SERVICING AND FUELLING AWAY FROM BASE***

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The Pilot in Command shall be responsible to supervise the servicing and fuelling of the aircraft and ensure that the aircraft is correctly bonded/earthed and that a serviceable correct type of fire extinguisher/s is/are available.

The Pilot in Command shall ensure that the fuel and/or oils obtained is of the correct grade and uncontaminated and completed in accordance with the aircraft specific refuelling procedures.

The Pilot in Command shall only use reputable suppliers of fuels and oils.

All fuel and oil uptakes shall be recorded by the Pilot in Command in the aircraft's **Tech Log**.

The Certifying Pilot in Command shall ensure that the fuel and oil caps are properly closed after re-fuelling/servicing.

The holder of a pilot's licence may NOT carry out maintenance on aircraft used for commercial operations. Reference: CAR43.02.02(2)(b).

### ***6.3 Control of defects and repetitive defects away from base***

- a) All airworthiness defects that cannot be rectified and which are authorised by the aircraft's approved MEL may be deferred by the assigned certifying AME in the aircraft's Tech Log and deferred book. Such defects may only be deferred for the allowable time provided for in the MEL.
- b) Certain defects may only be rectified by the assigned certifying AME as authorised by SA-CATS 43.02.2.
- c) All defects which shall affect the airworthiness/safe operation of the aircraft, shall be Rectified and certified immediately by the Certifying AME in the aircraft's Tech Log.
- d) Prior approval from the SACAA shall be obtained in cases where parts, etc. are not available for defects which shall effect the airworthiness/safe operation of the aircraft before the aircraft is operated or released to service.

### ***6.4 Completion of Flight Folio away from base***

- a) The completion of the aircraft Tech Log is the responsibility of the Pilot in Command and the certified AME.
- b) The pilot in command and the certifying AME shall ensure that the aircraft is not operated if the defects are not rectified and certified as laid down in paragraph 6.3

### ***6.5 Line Stations away from Base***

The line station manager is responsible for ensuring that the facility, personnel (Certified Staff) Equipment, tools and materials, approved data, certification of maintenance and records comply with the SACAA.

It is the responsibility BUSHVELD AIR CHARTERS (PTY) LTD to ensure that all technical data is current, accessible and the Technical Library has the latest revision status.

**6.6 *Return of defective parts removed from aircraft away from base***

- a) All defective parts removed from the aircraft away from base must be routed back to the contracted AMO where a Certifying AME/Inspector must clean and inspect the parts to establish if the parts are repairable or have to be scrapped.
- b) Serviceable or Scrap Label must then be completed, certified and attached to the part by the Certifying AME.
- c) The contracted AMO's must then advise BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, of such action.

## **7.0 *Names, duties and responsibilities of the maintenance personnel***

SA-CATS Reference: Part 43.02.3 paragraph (d)

### **7.1 *Contracted AMO management personnel***

BREYTECH AVIATION AMO914

<b>Position in AMO</b>	<b>Name and title</b>
ACCOUNTABLE MANAGER	Mr.
QUALITY ASSURANCE OFFICER	Mr.
WORKSHOP MANAGER (Quality Control)	Mr.

Note: The duties, responsibilities and accountabilities of the above personnel must be as laid down in the contracted AMO 914 SACAA approved Manual of Procedure (MOP)

### **.2 *Technical Certifying Personnel***

As per BREYTECH AVIATION AMO914 *SACAA approved* Manual of Procedures (MOP).

### **.3 *SACAA Notification Procedure***

Notification procedure to the SACAA Regarding Changes to contracted AMO activities/ location/approval/personnel.

The notification of any changes, including the name of the Company to SACAA is the responsibility of the Accountable Manager for any changes. The notification of changes must be passed to the SACAA in writing within 5 working days from the change and in all cases an amendment of the MOP shall be submitted to the SACAA.

#### **.3.1 Accountable Manager:**

A change to this position shall immediately be notified to the SACAA in writing for approval. A comprehensive CV of this person will accompany this writing in order to ensure that he/she is acceptable to the SACAA.

#### **.3.2 Senior nominated personnel:**

Changes to senior personnel shall be submitted to the SACAA in writing for approval.

.3.3 Changes to approved locations:

Any changes to the approved location or the addition of other locations shall be notified to the SACAA in writing and an inspection of the new premises by the SACAA shall be arranged.

.3.4 Company activities:

Any change to the scope of work of the Company shall be agreed with the SACAA. Any change to the capability list shall be agreed with SACAA.

## **8.0 COMPLETION AND RETENSION OF MAINTENANCE RECORDS**

SA-CATS Reference: Part 43.02.3 paragraph (e)

8.1 The contracted AMO shall be responsible for the compiling of a Work Pack for Scheduled Maintenance with the following minimum documents:

- Job Card;
- Defect Sheet;
- Parts and Material List;
- AD compliance Sheet;
- SB Compliance Sheet;
- Inspection Check Sheets as in approved AMS of aircraft; and
- Life Component Status Report.

.2 The **Job Card** of the contracted AMO must indicate what scheduled maintenance task must be performed, including unscheduled maintenance due to accident or incident or mandatory maintenance prescribed by the Commissioner for Civil Aviation, SACAA approved modifications, etc.

.3 All defects recorded in the Aircraft Tech Log must be transferred by the Certifying AME/ Inspector, of the contracted AMO onto a Defect **Sheet**.

8.4 All defects noted during maintenance tasks performed, must also be recorded onto a **Defect Sheet** by the Certifying Inspector of the contracted AMO.

- .5 The Certifying Inspector of the contracted AMO must record all parts and materials used for a specific maintenance task on a **Parts and Material List** of which must demonstrate proper trace-ability to the contracted AMO reputable Part Supplier/s.
- .6 To establish the AD's and SB's that must be complied with during scheduled maintenance, the contracted AMO's must compile an **AD and SB Compliance Report** from their Airworthiness Data. The Certifying AME/Inspector must make a physical check of the AD and SB status on the aircraft (where possible), as well as the aircraft Logbooks. These results must be certified on the **AD and SB Compliance Report**.
- .7 All outstanding AD's and Mandatory SB's must be complied with, and shall be recorded and certified on the AD and SB Compliance Check Sheets as well as in the applicable aircraft's Logbooks.
- .8 The **Inspection Check Sheets** forms part of the AMO's aircraft Work Packs, and are obtained from the manufacturer's Airworthiness Data (Maintenance Manuals) of which it is the AMO Certifying AME/Inspector responsibility to ensure that the Maintenance Manuals of the aircraft used, are amended to date by verifying its revision status with their supplier/s.
- .9 All maintenance performed by the contracted AMO's must be performed under the direct supervision of a valid type rated AME/Inspector.
- .10 The contracted AMO's must also maintain a **Life Component Status Report** of which must list all full or part life products installed to the aircraft, including safety equipment, i.e. Fire Extinguisher/s.
- 8.11 The **Life Component Status Report** must contain the following minimum life and/or part life Class 1, Class 2 and Class 3 product/s Information:
- Aircraft Model;
  - Aircraft Serial Number;
  - Aircraft Registration;
  - Airframe Total Time (ATT);
  - Component Part Number;

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- Component Serial Number;
  - Total Time Since New (TTSN); (where applicable)
  - Total Time Since Overhaul (TTSO); (where applicable)
  - Total Cycles Since New (TCSN); (where applicable)
  - Total Cycles Since Overhaul (TCSO); (where applicable)
  - Calendar Time (CT);
  - Time Remaining (TR);
  - Cycles Remaining (CR);
  - Calendar Time Remaining (CTR); and
  - Release Document Reference Number.

- 8.12 The contracted AMO's must on request from BUSHVELD AIR CHARTERS (PTY) LTD make available an up to date **AD and SB Compliance Report and an up to date Life Component Status Report after every scheduled maintenance visit.**
- 8.13 The Work Packs shall be kept by the contracted AMO's and kept for a **period of 5 years.**
- 8.14 If the contractual agreement between BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, and the contracted AMO is terminated the contracted AMO make available all Work Packs to BUSHVELD AIR CHARTERS (PTY) LTD on request for copying purposes. The original Work Packs will remain the property of the contracted AMO.

## ***9.0 RELEASE TO SERVICE PROCEDURE***

- .1 The contracted AMO must issue a **Certificate of Release to Service** in duplicate, certified by a valid type rated Aircraft Maintenance Engineer (AME) with maintenance release, immediately on satisfactory completion of scheduled maintenance.
- .2 The original must be placed in the aircraft and the copy shall be retained by the contracted AMO for record purposes.
- .3 A **Certificate of Release to Service** for aircraft maintained in accordance with an approved AMS shall be for the validation period authorised by the aircraft's AMS.

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- .4 No extensions shall be granted in respect of calendar times. Thus an aircraft may not be flown after the period of validity has lapsed, without written approval from the SACAA.
  - .5 When a Certificate of Airworthiness becomes invalid due to an aircraft sustaining a defect and/or damage the defect and/or damage shall first be rectified, recorded and certified by a Certifying AME/Inspector of the contracted AMO, to restore the validity of the Certificate of Airworthiness.

## ***10. MONITORING, ASSESSING AND REPORTING PROCEDURE***

SA-CATS Reference: Part 43.02.3 paragraph (f)

### **10.1 Progressive Inspections**

- 10.1.1 The AMO shall not commence with a Progressive Inspection unless this program is approved by the SACAA.
- 10.1.2 The scheduled maintenance intervals are laid down by the SACAA approved Progressive Inspection Program, which must be performed at these intervals.
- 10.1.3 The Certifying AME/Inspector of the AMO performing the Progressive Inspection must ensure that the program used, is amended to date.

### ***10.2 Aircraft Maintenance Schedule (AMS) Inspections ( Reference only)***

- 10.2.1 BUSHVELD AIR CHARTERS (PTY) LTD, the Operator will supply the AMO's with the current SACAA approved AMS.
  - .2 The contracted AMO shall not commence any scheduled checks or maintenance, without the SACAA approved AMS being available.
  - .3 The scheduled maintenance intervals are laid down by the SACAA approved AMS.
  - .4 The certifying AME of the contracted AMO must ensure that the AMS used is amended up to date.
  - .5 Scheduled maintenance performed by the AMO must be performed in accordance with the current aircraft's Airworthiness Data and SACAA requirements.

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- .6 The contracted AMO shall maintain a computerized component tracking system, to monitor and control the maintenance of life and/part life components.
  - .7 The computerised system shall also provide for AD/SB/SL/SI/SID/SSID/ CCP/ CPCP status reports.

### ***10.3 PROCEDURE FOR THE REPORTING OF DEFECTIVE AIRCRAFT COMPONENTS TO THE SACAA AND THE OPERATOR***

SA-CATS Reference: Part 43.02.3 paragraph (g)

- .1 BUSHVELD AIR CHARTERS (PTY) LTD (Operator) shall report to the SACAA any defect or condition of an aircraft, engine, component or equipment (reportable occurrences) which may effect the airworthiness of such aircraft, engine, component or equipment **within 48 hours** from the moment the defect or condition to which the report relates, has been identified.
- .2 BUSHVELD AIR CHARTERS (PTY) LTD (Operator) shall also inform the contracted AMO of any such defect or condition.
- .3 The contracted AMO shall then remove any component or equipment which are found to be unserviceable, shall have an Unserviceable Label completed and attached by the Certifying AME/Inspector, after the component or equipment is cleaned, and where applicable blanked-off.
- .4 The part is then scrapped, repaired or forwarded to an approved repair facility, after the completion of the required stores documentation of the contacted AMO.
- .5 Components or equipment received back by the contracted AMO from their outside contractors, after repairs or overhauls were carried out, shall first be handed to the AMO Certifying AME/Inspector responsible for the specific maintenance task to inspect the component or equipment to ensure that the required release documentation are available, and that the component or equipment have been repaired or overhauled in accordance with the order placed as well as the compliance with the current manufacturer's Airworthiness Data.
- .6 The components or equipment will be labeled as serviceable, after which it is routed to the stores of the contracted AMO or directly installed to the aircraft.

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**10.4 PROCEDURE FOR ASSESSING MANDATORY CONTINUING AIRWORTHINESS INFORMATION**

SA-CATS Reference: Part 43.02.3 paragraph (h)

- .1 In compliance with Part 145 and Part 43 of the CAR's, the contracted AMO shall ensure that all maintenance is carried out in accordance with the current manufacturer's Airworthiness Data.
- .2 The **Accountable Manager** of the contracted AMO shall ensure that the AMO are subscribed to a SACAA acceptable supplier of Airworthiness Data and that the contracted AMO receive revisions on a regular basis.

**Note: The Accountable Manager of the contracted AMO shall also ensure that the guidelines in the various AIC's and SA-CATS documents are followed and complied with in detail, when applicable.**

- a) The Accountable Manager of the contracted AMO's shall ensure that the Technical Library keeps all other essential Airworthiness Data pertaining to maintenance of the Operator's aircraft types, and shall ensure that all maintenance personnel of the contracted AMO's have free access to data and that all the necessary and current data is provided at their place of work.
- b) Airworthiness data and revisions are received by the AMO Technical Library. On receipt in this section the Accountable Manager of the contracted AMO shall then first assesses the data for applicability for Bushveld Air Charter's Aircraft.
- c) The revisions are then forwarded to the applicable workshop managers who shall then revise the applicable data, complete and certify the applicable revision record page and/or cards.

**Note: The Internal QA Manager must confirm the current revision status of Airworthiness Data held, and required, to support the aircraft types of the Operator, 3 times annually, with the OEM and/or supplier/s of such data.**

**.5 AD control**

- .5.1 The contracted AMO is responsible for ensuring that it is subscribed to a reputable supplier of Airworthiness Directives for all aircraft types maintained on behalf of BUSHVELD AIR CHARTERS (PTY) LTD, the Operator, and that these Airworthiness Directives are received and revised at regular intervals.

- .5.2 The Workshop Manager of the contracted AMO shall then decide in which category this Airworthiness Directives fall i.e.:
- a) those of an urgent nature requiring immediate compliance upon receipt; and
  - b) those of a less urgent nature requiring compliance within a relatively longer period.

**Note: The Workshop Manager shall routinely ensure that all AD's effect on that date are complied with before releasing aircraft to service.**

- .5.3 Whenever an AD has been complied with, the Certifying AME/Inspector must not only record the date of compliance and time in service in the aircraft Logbooks, but also furnish a description of the work done, as several alternative methods of compliance may be possible, and at some later date it may be important to know which route was followed.

## ***.6 MOD/SSID/SID/SB/SL/SI control***

10.6.1 Modifications shall not be carried out:

- a) without prior written approval of the SACAA, including changes to equipment or the installation thereof, which affect, or are likely to affect, the serviceability of the aircraft, or the safety of its occupants or of any other persons or property;
  - b) before the approval of the SACAA is granted for a modification referred to in above paragraph, the contracted AMO must first apply and furnish the SACAA with information, such as, data, calculations, reports on tests, drawings or wiring diagrams relating to the design, and proof of effectiveness or airworthiness of such modification as the SACAA may require; and
  - c) notwithstanding the provisions of above paragraphs, such modifications as may from time to time be recommended by the manufacturer of the type of aircraft, engine, component or equipment concerned, may be carried out if the modifications are carried out in accordance with the said manufacturer's recommendations, if applicable.
- .2 After any major repair or major modification to an aircraft, engine, component or equipment, test flights shall, if required by the SACAA, be carried out and under

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such conditions and in such a manner as the SACAA may determine and no passengers, cargo or mail shall be transported in any aircraft undergoing test flights.

- 10.6.3 Any temporary or permanent repair to an aircraft, engine, component or equipment which has been damaged after an accident or an incident shall be carried out in accordance with the requirements as prescribed in Document SA-CATS.

### ***.7 Overhaul of Components and Installed Equipment***

The overhaul of all components and items of equipment installed on aircraft must be executed at such times as is recommended by the manufacturer.

The contracted AMO shall maintain a computerized component tracking system, to monitor and control the maintenance of life and/part life components.

### ***.8 Life limited component control***

See paragraph 8.11 of this Maintenance Control Manual.

### ***10.9 Reliability control***

An approved reliability control program is under development by BUSHVELD AIR CHARTERS (PTY) LTD.

**Comment: Fixed wing Aircraft below 5700kg have no AMS**

**Note : This aircraft is below 5700kg and has no MEL**

## ***11. Procedure for the Updating and the monitoring of Compliance with the Aircraft's AMS***

Reference: SA-CATS Part 43.02.3 paragraph (i)

- .1 The contracted AMO may not commence any scheduled checks or maintenance without SACAA approved Aircraft Maintenance Schedule (AMS) or Program (AMP)
- .2 The AMO maintenance planning department shall ensure that the AMP/AMS used is amendment to date, that the current requirements laid down in the current

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aircraft's Airworthiness Data, i.e. Maintenance Planning Document (MPD), corrosion Prevention Control Program (CPCP), structural Integrity Programme (SID), as applicable, are reflected and complied with in detail.

- .3 All ZS-registered aircraft for which a certificate of Airworthiness has been issued must be maintained in accordance with an AMS/AMP approved by the SACAA.
- .4 The intervals between scheduled inspections are those prescribed in the SACAA approved AMS/AMP.

### ***12.0 Procedure for the deferment and recording of defects***

SA-CATS Reference: Part 43.02.3 paragraph (j)

- 12.1 Only Defects provided for in the applicable aircraft's MEL, can be deferred by the valid type rated AME of the contracted AMO.
- 12.2 These defects must be recorded onto the aircraft Tech Log.
- 12.3 The Certifying AME must record the applicable MEL Reference used for the deferred actions onto the Deferred Defect Sheet.

NOTE: Defects may only be deferred if allowed for in the applicable aircraft MEL, and for only the period as described in the MEL.

### ***13. Procedure for the control and rectification of deferred defects***

SA-CATS Reference: Part 43.02.3 paragraph (k)

- 13.1 Deferred Defects recorded on the aircraft Tech Log shall be rectified on or before the MEL allowable operational limits.
- 13.2 These defects shall be transferred onto the contracted AMO Defect Sheets when the aircraft is returned for rectification actions.
- 13.3 These defects will then be rectified and the rectification actions recorded and certified by a valid type rated AME.

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13.4 The Deferred Defects Sheets recorded in the aircraft Tech Log must also be certified by the Certifying AME.

**14. Procedure for extending deferred defects**

SA-CATS Reference: Part 43.02.3 paragraph (l)

14.1 Defects that cannot be rectified due to possible non-availability of parts at the time will be treated as an Exemption.

14.2 An Exemption application will be submitted to the SA CAA in accordance with Part 11 of the Civil Aviation Regulations, 1997, as amended.

**15. Procedure for control of recurring defects**

SA-CATS Reference: Part 43.02.3 paragraph (m)

15.1 Recurring defects must also be monitored by the contracted AMO and the Operator.

15.2 For **Reliability Control** see paragraph 10.9

**16. Procedure for control of components removed from another aircraft (Robbing Procedure)**

SA-CATS Reference: Part 43.02.3 paragraph (n)

16.1 Parts removed from one aircraft to install on another aircraft shall be recorded on a Component Replacement Record Sheet of the contacted AMO. The applicable component status report (TTSN, TTSO, TCSN and TCSO) will then be revised adding the hours or cycles of these part as operated on the "Robbed aircraft," if applicable. The written approval of the owner of the aircraft must be on record.

16.2 The traceable release documents of the part concerned will remain in the maintenance records of the robbed aircraft.

16.3 If the component is returned/re-installed to the robbed aircraft, the applicable status report (TTSN, TTSO, TCSN and TCSO) will then be revised adding the hours or cycles of the part operated, if applicable.

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**17. Procedure for the reporting of significant in-service occurrences (Incidents)**

SA-CATS Référence: Part 43.02.3 paragraph (o)

- .1 Reportable occurrences such as flight and maintenance related accidents, incidents, unusual occurrences, service difficulties, bogus aircraft parts, recurring defective aircraft components, equipment, etc., which may effect the safe operation of the aircraft, engine, propeller, component and/or equipment shall be reported to the SA CAA within 48 hours by raising a Defect and/or Occurrences Report.
  
- .2 A copy of the Defect and/or Occurrences Report shall then be forwarded to the person responsible for the implementation, recording and certification of the corrective and/or preventative actions taken.

**Note: The Operator's Responsible Person Aircraft must review and verify the Effectiveness of the corrective and/or preventative action/s taken.**

Reference Material:

- a) Preparation of aircraft for flight
- b) Sub-contracted ground handling functions
- c) Security of cargo and baggage loading
- d) Control of refueling, Quantity/Quality
- e) Control of snow and ice
- f) Aircraft weighing
- g) Flight tests

Refer to:

- 1) BUSHVELD AIR CHARTERS (PTY) LTD Part 135 Operations Manuals
- 2) Aircraft Manuals
- 3) Maintenance Organisation Exposition