SOUTH AFRICAN CIVIL AVIATION AUTHORITY	**REPUBLIC OF SOUTH AFRICA** **CIVIL AVIATION AUTHORITY**	**SACAA** **Private Bag X 73** **Halfway House** **1685**
Tel: (011) 545-1000 **Fax: (011) 545-1465** **E-Mail:** **mail@caa.co.za**	**GENERAL NOTICE # AIR-2019/005**	**DATED: 21 October 2019**

Acceptance of maintenance schedule

1. Applicability

This general Notice is applicable to all NTC aircraft registered and operating in the Republic of South Africa.

2. Purpose of this General Notice

This General Notice serves to provide guidance to NTC aircraft owners and operators in regard to the processing and acceptance of Maintenance Schedules.

The owner of a non-type certificated aircraft for which an authority to fly (ATF) is required shall submit to the Director or the organization designated for the purpose in terms of part 149, as the case may be, for acceptance a maintenance schedule or document similar to Annex A in Document SA-CATS 44, for the aircraft;

The AMS/AMP is the owner/operator's responsibility. SACAA does not approve NTC aircraft AMS/AMP; the Authority only reviews and accepts these documents.

3. Regulatory References

CAR 94.07.1 (1) No owner, operator or PIC of a non-type certificated aircraft, classified in paragraphs (a) to (g) of sub-regulation 24.01.1 (2), shall operate the aircraft unless such aircraft is maintained and released to service in accordance with the provisions of part 24.

CAR 24.01.2 (1) (b) Before a non-type certificated aircraft, other than an aircraft classified in paragraphs (k) and (l) in regulation 24.01.1 (2), is considered to be airworthy it shall have been maintained in accordance with the provisions of part 44.

CAR 44.02.1(1) The owner of a non-type certificated aircraft for which an authority to fly is required in terms of these regulations shall submit to the Director, or the organisation designated for the purpose in terms of part 149, as the case may be, for acceptance, a maintenance schedule or document similar to Annex A in Document SA-CATS 44, for the aircraft.

(2) A non-type certificated aircraft, specified in regulation 24.01.1 (1) and classified in the paragraphs (a) to (j) of regulation 24.01.1 (2), shall be maintained in accordance with its accepted maintenance schedule in such a manner that it is airworthy at the commencement of any flight.

(3) (a) Any non-type certificated aircraft, other than those referred to in sub-regulation (1) above, shall be maintained by or on behalf of its owner in such a manner that it is airworthy at the commencement of any flight.

(b) Where the aircraft manufacturer or any approved organisation has issued maintenance instructions or guidelines, these instructions or guidelines should be adhered to.

4. Applicability of CAR 24.01.1 (1)

This part applies to—

(a) amateur-built aircraft;
(b) production-built aircraft;
(c) veteran aircraft;
(d) ex-military aircraft;
(e) any other aircraft not qualifying, or no longer qualifying for the issue of a certificate of airworthiness in terms of Part 21 of these regulations.

(2) The aircraft referred to in sub-regulation (1) are classified in the following sub-groups—
(a) aeroplanes, including microlight aeroplanes;
(b) helicopters;
(c) gyroplanes and gyrogliders;
(d) gliders, including self-launching gliders and touring gliders;
(e) manned captive and manned free balloons;
(f) airships;
(g) hang-gliders, including powered hang-gliders;
(h) paragliders, including powered paragliders and paratrikes;
(i) parachutes;
(j) model aircraft;
(k) rockets.

(3) This part does not apply to any aircraft that, for the purpose of flight—

(a) is to be attached to and towed by a vehicle or vessel traveling on the surface;
(b) other than a manned captive balloon is to be moored to the surface or any construction on the surface; and
(c) is to be flown line-controlled by a person on the surface:

Provided that such aircraft shall not be operated in contravention of these regulations or cause an obstruction to aviation.

(4) The airworthiness design standards for each sub-group of aircraft referred to in sub-regulation (2) are those referred to in regulation 24.01.2 (4) (a).

5. Acceptance of the Maintenance Schedule SA CATS 44.02.1 and SA CATS 44.03.1

The AMS referred to in regulation 44.03.1 and which may be issued in separate parts, shall contain a description of the procedures to be followed, to the extent applicable, to ensure that:

(a) the aircraft is maintained in an airworthy condition;
(b) the operational and emergency equipment, required for intended flight, is serviceable;
(c) the Authority to Fly or Special Flight Permit referred to in regulation 24.02.4, remains valid for each aircraft to which the AMS applies;
(d) in the case where an aircraft is operated in terms of Part 96, a description of the administrative and contractual arrangements between the owner and the person or persons approved to carry out maintenance on the aircraft.

6. Format

The AMS shall contain or reference the following information:

(a) maintenance tasks and the intervals at which these are to be performed, taking into account the anticipated utilisation of the aircraft;
(b) when applicable, a continuing structural integrity program;
(c) procedures for changing or deviating from paragraphs (a) and (b) above.

7. Work Pack

Annex A provides the minimum requirements for an annual inspection for amateur-build aircraft other than balloons mandatory 25-hour periodic inspections for microlight aeroplanes operating in terms of part 96.

The manufacturers, as well as the OEM's maintenance tasks and the intervals at which these tasks are to be performed together with the minimum requirements as stated in CATS-44 Annex A will form part of the complete work pack.

This checklist must be completed/performed in conjunction with the applicable engine and propeller Checklists.

Any provisions set out in this checklist that are not applicable to the work being performed should be marked "N/A" and signed in confirmation. (No entries should be left blank.)

The layout of the work pack must include the following:

- Description of the applicable aircraft such as the registration number, serial number, and model description;
- Reference to the accepted maintenance schedule as required for by SA CATS 44.01.6;
- Record of revisions;
- List of effective pages, Each page must me numbers;
- Aircraft Equipment list.

The work pack Index must at least include the following sections:

- Technical signature references;
- Aircraft acceptance form;
- Job Card;
- MPI and Service checklist;
- Engine maintenance checklist;
- Propeller maintenance checklist;
- AD and SB compliance (If applicable);
- Defect rectifications;
- SA CAA Form 44-01;
- Labels;
- CRMA's;
- Copy of Certificate of Release to Service.
- Copy of Inspection Reminder;
- Required logbook entries;
- Copy of Flight folio.

8. Release to Service CATS 44.01.13

The release to service for a non-type certificated aircraft shall either;

(a) be an entry in the flight folio; or

(b) be a separate form contained in the aircraft document folder.

(2) An entry to the following effect shall be made:

Aircraft Registration:
Aircraft type:
Serial No.:

"I hereby certify that I am satisfied that the above-mentioned aircraft and all its equipment are in every way serviceable for flight and that all maintenance has been carried out in accordance with the Civil Aviation Regulations of 2011, as amended, and the aircraft's Accepted Maintenance Schedule. This certificate lapses at a total of…… hours of …… flight time or on…….. (date), whichever occurs first, unless the aircraft is involved in an accident or becomes unserviceable, in which case the certificate is invalid for the duration of the period".

Licence No.:

Signed:

Date:

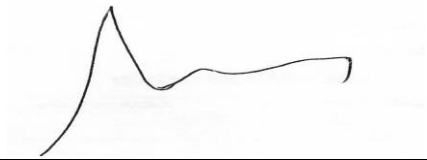
9. Defect Sheet / Rectification of unsatisfactory items

When during maintenance or at any other time any part, product, component, equipment or item is found to be unserviceable or is unlikely to remain serviceable under normal operating conditions during the period preceding the next inspection, such rectification action as considered necessary shall be taken to ensure the continued serviceability of the part, component or item prior to releasing the aircraft to service. CAR 44.01.5 (1)

Any maintenance carried out to restore the serviceability of any part, component, equipment or item shall be clearly recorded in the relevant logbook.

In the case were an unsatisfactory item cannot be rectified an entry shall be made into the relevant logbook by an appropriately rated approved AMO, AME or approved person, rated in accordance with subpart 4 of part 66, stating any limits to the serviceability of the aircraft.

Manager: Aircraft Inspection and Registration: Gouwsj@caa.co.za (Tel: 011 545 1128)

Issued by the South African Civil Aviation Authority (SACAA) and validated by:		
	**JURIE GOUWS**	**21 October 2019**
SIGNATURE OF MANAGER: Aircraft Inspection & Registration	**NAME IN BLOCK LETTERS**	**DATE**

Annex "A'Sample Workback ONLY

ANNUAL INSPECTIONS

as required for by SA CATS 44.01.6 for Aircraft: ZU-……..

RECORD OF REVISIONS

REVISIONS			
No.	Date Effective	Date Entered	Entered by
Orig			

REVISIONS			
No.	Date Effective	Date Entered	Entered by

LIST OF EFFECTIVE PAGES

Page	Revision No.	Date Effective
1.		

Page	Revision No.	Date Effective

1. AIRCRAFT MAINTENANCE SCHEDULE ACCEPTANCE PAGE

1.1 The procedures set out herein **document ZU-…..** forms the Aircraft Maintenance Schedule required by Part 24.01.2 read together with SA CATS 44.01.6, SA CATS 44.021 and SA CATS 44.03.2 of the South African Civil Aviation Regulations, as amended, to show how the Certificate holder will comply with the said Regulations.

1.2 The Certificate holder is to ensure that all members of the staff, AP, AME or AME are familiar with such procedures as set out herein that relates to their duties and that such procedures are followed at all times.

2. The Certificate holder is also to ensure that in exercising the privilege of Aircraft Maintenance Schedule **ZU-…..** the provisions of the South African Civil Aviation Regulations, as amended, are complied with at all times.

3. No amendments shall be made to this Aircraft Maintenance Schedule without the written approval of the Director. When accepted (by means of a signature on the list of effective pages and acceptance letter issued), such amendments shall be incorporated and implemented immediately.

For: DIRECTOR OF CIVIL AVIATION

Date:

PART ONE

1 GENERAL INSTRUCTIONS

1.1 The onus for ensuring that his aircraft is kept airworthy rests on the registered Operator of the aircraft. This maintenance schejuled has been prepared to assist the owner or operator, to ensure as far as possible in the light of information and experience available, that the aircraft is effectively maintained in an airworthy condition by scheduling the maintenance to be done during its operational life with a programme of inspections and overhauls based on normal operational usage of the aircraft.

1.2 This maintenance schejuled becomes effective on the date as accepted by the Director of Civil Aviation and supersedes any previously accepted maintenance schedule for the aircraft concerned.

1.3 The routine maintenance, scheduled inspections, structural integrity inspections, overhaul, modification and major repairs on the aircraft referred to in this schedule shall be undertaken and certified by an appropriately rated Aircraft Maintenance Organisation (AMO) or Approved Person (AP).

1.4 In terms of SA-CATS 44.03.1 Line maintenance comprising of the following may be carried out by the owner of a non-type certificated aircraft provided that only approved materials, parts and components are used:

(a) changing of tyres and tubes and repairing of punctures;

(b) servicing landing gear shock struts with air;

(c) correcting defective locking wire and split pins;

(d) replenishing hydraulic fluid in the hydraulic fluid reservoir;

(e) small simple repairs to fairings, non-structural cover plates and cowlings by means of stop drilling cracks and fitting small patches or reinforcements which will not change contours or interfere with proper airflow;

(f) replacing side windows where such work does not interfere with the primary system;

(g) replacing safety belts;

(h) replacing seats or seat parts where such work does not involve any removal, dismantling or interference with a primary structure system;

(i) replacing pre-fabricated fuel and oil lines, provided that a fuel flow check is subsequently carried out;

(j) replacing any electrical bulb, reflector, lens or fuse of navigation and landing lights;

(k) replacing or cleaning spark plugs and setting spark plug gaps;

(l) cleaning fuel and oil strainers;

(m) replacing batteries and checking fluid level and specific gravity;

(n) replacing tail wheels and tail-wheel springs;

(o) changing engine oil.

1.5 However, it must be recognised that it is the duty and responsibility of the pilot in command who flies the aircraft to ensure that unusual occurrences, defects or suspected faults, coming to their notice which may affect the serviceability and safety of the aircraft, are recorded in the flight folio as and when they occur and are reported to the AP/AME mentioned in above paragraph for investigation and/or rectification.

1.6 All rectification must be entered and certified in the aircraft's flight folio and transferred into the aircraft's logbooks.

1.7 The AP/AME responsible for the maintenance of an aircraft to which this schedule relates will ensure compliance with all information issued by the manufacturer's of the aircraft, its engines, propellers, instruments and installed equipment relating to the maintenance, inspection, repair, modification and overhaul of these items. Any requirements, including those contained in Airworthiness Directives and such SB's, SL's and SI's classified mandatory by the manufacturer and SA CAA.

1.8 The terms "check", "inspect" and "examine for condition" where used in this maintenance schejuled shall mean that the part, component or item referred to is required to be inspected, as applicable and to an extent considered to be commensurate with its known condition at the last inspection and with the known usage or abuse/age it has undergone since then, for cleanliness, corrosion, wear, deterioration, cracks, dents, scores, cuts, scratches, distortion, bowing, evidence of overheating, freedom from obstruction, fouling, leaks, security, correct locking and any other unacceptable feature not specifically mentioned herein.

Any part, component or item found to be adversely affected shall be rendered serviceable by such rectification as is necessary and no check required by this maintenance schedule shall be considered to be complete until all items found unsatisfactory have been effectively rectified.

1.9 Nothing in this maintenance schedule shall be construed as:

- absolving the owner or operator, the AP or any person or institution from ensuring that any additional maintenance found necessary for the continued airworthiness of the aircraft is done;

-relieving the Pilot in Command of the aircraft from complying with the requirements of this schedule, which are applicable to him/her.

2 SCHEDULED AND UNSCHEDULED MAINTENANCE INSPECTIONS

2.1 Scheduled and unscheduled maintenance inspections shall be done in accordance with the requirements of Part Two of this maintenance schejuled.

2.2 Any amendments to this maintenance schejuled must first be submitted for approval by the Director of Civil Aviation, prior to the implementation of such amendment/s.

3 OVERHAULS AND/OR REPLACEMENT

3.1 Unless the Director of Civil Aviation has indicated otherwise in writing, the aircraft and its components or installed equipment shall be overhauled or replaced in accordance with current instructions prescribed in Annexure A of this maintenance schejuled and at such times as is recommended or specified by the aircraft manufacturer.

3.2 When the Director of Civil Aviation has approved a Time Between Overhaul (TBO) which differs from that recommended or specified by the manufacturer, such TBO MUST be specified in the maintenance schedule. In addition, the TBO of certain items for which the manufacturer has not prescribed an overhaul life and the Director of Civil Aviation considers it necessary, in the interests of safety, to prescribe one, this life will be published in the aforementioned part of this AMS.

3.3 The Operator of the aircraft to which this maintenance schedule refers wishes to extend any TBO recommended or specified by the manufacturer or specified hereafter, he is to apply in writing for exemption from the requirements of this AMS and such application is to be supported by adequate information substantiating the extension applied for and follow the format as laid down in Part 11 of the CAR's.

4 CERTIFICATES OF RELEASE TO SERVICE

4.1 A Certificate of Release to Service must be issued in accordance with Part 44 of the CAR's, and shall be valid for 100 hours or 12 months, whichever comes first.

4.2 A Certificate of Release to Service shall become invalid when an aircraft sustains a defect, its validity shall be restored when the defect which caused it to become invalid is rectified and such rectification has been certified by the holder of an appropriately rated AP/AME.

5 AMENDMENTS

This AMS specifies the minimum maintenance, which is considered necessary to maintain the aircraft, to which it refers, in an airworthy condition. Any amendment to this AMS shall not be made without the prior written approval of the Director of Civil Aviation. This is not to be construed as prohibiting any additional maintenance, not specifically mentioned in this schedule that may be required to ensure that the aircraft can be operated with safety. Such maintenance may be undertaken without the approval of the Director of Civil Aviation provided he is advised of such a requirement and this maintenance schejule is amended accordingly. The Director of Civil Aviation reserves the right to waiver the amendment requirement.

5.1 Amendments to this maintenance schedule shall become effective on the date of accepted by the Director of Civil Aviation.

5.2 The user of this maintenance schedule shall prior to use, ensure that it is amended to date.

6 AIRCRAFT INSPECTION REPORT

An aircraft inspection report (CA44-01) shall be submitted after any scheduled inspection at intervals not exceeding 12 months commencing on the date of validation of the Authority to Fly.

7 OTHER INSPECTIONS

A duplicate inspection of all engine and flight control systems shall be carried out after the initial assembly and at any time, the systems are disturbed in any way. The purpose of the duplicate inspection is to verify that the manufacturer’s specifications and requirements have been met in detail. An initial inspection of the control system shall be made and certified immediately after the maintenance is completed and before the aircraft is flown, by a person in possession of a valid AME/AP license or who has been approved by the Director of Civil Aviation as required in SACAR 44.01.4

44.01.4 (1) No person may carry out maintenance on an amateur built aircraft or a production-built non-type certificated aircraft, or any component thereof, unless such person—

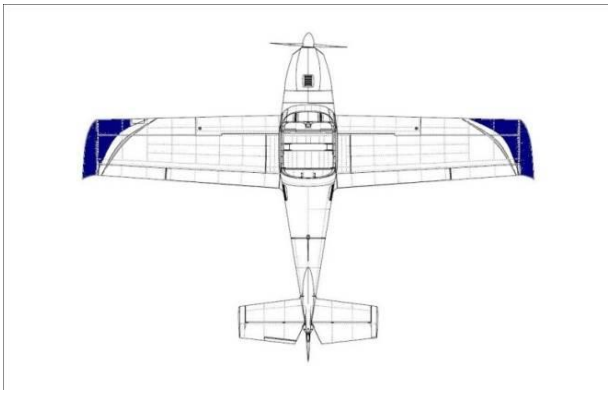
(a) is appropriately rated or approved on type by the Director or the organisation designated for the purpose in terms of part 149, as the case may be, to carry out maintenance; or

(b) carries out the maintenance under the prescribed supervision of a person authorised by the Director or by the organisation referred to in paragraph (*a*). A dual check of the maintenance carried out must be performed by a person referred to in subparagraph (*a*); or

(*c*) is the owner of the aircraft provided that an appropriately rated approved AMO, AME or Approved Person, rated in accordance with subpart 4 of part 66, performs a dual check on the maintenance which was carried out; or

(d)is an appropriately rated approved AMO, AME or approved person, rated in accordance with subpart 4 of part 66.

2. AIRCRAFT ACCEPTANCE FORM



Customer Name: _____

Date: _____

Aircraft Reg: _____

Aircraft Type: _____

Aircraft S/N:_____

Fuel Quantity L/H	Fuel Quantity R/H

Aircraft Signed IN by Customer:	Aircraft Signed IN by AMO/AP Technician:
Name: _____	Name: _____
Signature: _____	Signature: _____
Aircraft Signed OUT & Ready for Collection by the AMO Technician:	**Aircraft Signed OUT & Collected by Customer:**
Name: _____	Name: _____
Signature: _____	Signature: _____

Goods In Aircraft	Y	N
Pilots Operating Handbook		
Mass & Balance		
Equipment List		
Flight Folio		
Certificate of Registration		
ATF / PFA		
Radio Station License		
Fire Extinguisher		
First Aid Kit		
Signal ST		
Fuel Tester		
Keys		
Spare Keys		
Micro/P		
Headsets		
Control Locks		
Pitot Cover		
Instrument Cover		
Sun Shield		
Prop Straps		
Cowl Plug		
Chocks		
EXTRAS		
1.		
2.		

A/C REGISTRATION	
DATE	
PILOT	
AIRFIELD	

FLIGHT TIME	

3. POST MAINTENANCE TEST FLIGHT FORM (If applicable)

A/C REGISTRATION	
DATE	
PILOT	
AIRFIELD	
FLIGHT TIME	

MAINTENANCE PERFORMED / TEST FLIGHT CONSIDERATIONS

MAINTENACE CHEK FLIGHT REPORT NOTES

DEFECTS AND SNAGS IDENTIFIED

Signed: _____ Date: _____

AMO: MPI Checklist

This checklist must be completed/performed in conjunction with the applicable manufacturer Aiframe, Engine and Propeller checklists.

See SA – CATS 44.01.6 for the minimum standards of maintenance Annexure ‘’A’’ as amended as well as the latest revision of the applicable maintenance manuals:

Airframe maintenance manuals revision No: _____ Dated: _____

Engine maintenance manuals revision No: _____Dated: _____

Propeller maintenance manuals revision No: _____Dated: _____

Any provisions set out in this checklist that are not applicable to the work being performed should be marked “N/A” and signed in confirmation. **(No entries shall be left blank)**

A/C TYPE	
A/C SERIAL NO	
ENGINE SERIAL NO	
PROPELLER SERIAL NO	
A/C REGISTRATION	
DATE	
A/C HOURS	
A/C HOBBS HOURS	
Inspection Type (25, 50, 100, 500 or 1000 hour as an example.)	

4. AIRCRAFT DOCUMENTATION

Work to be done		**TECHNICIAN**	**INSPECTOR**
Verify all aircraft documentation is in aircraft and valid			
Confirm ATF expiry date:			
Certificate of Registration.			
Confirm aircraft radio station license expiry date:			
Confirm Certificate of release to service expiry date:			
Confirm Hours:			
AFM revision:	Dated:		
Confirm Mass and balance report expiry date:			
Confirm Flight folio No:			
List of visual signals and procedures for use by intercepting and intercepted aircraft.			

5. AIRFRAME AND INSTALLED EQUIPMENT

6.1 Fuselage or Hull

Work to be done	**TECHNICIAN**	**INSPECTOR**
Open all access panels, clean the aircraft, engine, and propeller		
Carefully inspect the fuselage or hull for general condition.		
Check the skin covering for condition and security.		

Check installed systems and components for proper installation, security, defects, and satisfactory functioning.		
Check registration markings for conformity		
Ensure all drain holes are open		

6. CABIN AND COCKPIT

Work to be done	**TECHNICIAN**	**INSPECTOR**
Inspect the cabin and cockpit for cleanliness and loose or displaced articles that might interfere with the operation of controls.		
Check seats, seat rails, seat locking mechanisms, safety harness, flooring and tie-down fittings for security and condition.		
Check windscreens and windows for security, condition and where applicable, satisfactory operation.		
Check exits for proper installation, condition, legibility of operating instructions and other markings and for satisfactory functioning.		
Check flight, engine and propeller controls for correct installation, the security of connections, condition, proper operation and where applicable legibility of markings.		
Check all systems and their controls in the cockpit or cabin for proper installation, security, satisfactory operation, and legibility of markings.		
Ensure that all required placards and registration letters are correctly installed and positioned, are legible and in good condition.		

7. INSTRUMENTS AND INSTRUMENT SYSTEMS

Work to be done	**TECHNICIAN**	**INSPECTOR**
Check instruments for proper installation, security, obvious defects and legibility and correctness of markings.		
Check instrument operating systems for proper installation, security, and condition.		
Check those filter elements of vacuum-operated instruments are cleaned or replaced in accordance with the manufacturer's recommendations.		
Check altimeter and airspeed indicators for accuracy by performing the test on the last page of this checklist.		

8. LANDING GEAR

Work to be done	**TECHNICIAN**	**INSPECTOR**
Check the landing gear for general condition and security of attachment of all components		
Check linkages, trusses, and other members for condition and security of attachments		
Check steering mechanisms for condition and bearings for condition, lubrication, and correct adjustment		
Check tires for condition and creep, check tire pressures		
Check brakes for condition, correct adjustment and operation		

9. WINGS AND CENTER SECTION

Work to be done	**TECHNICIAN**	**INSPECTOR**
Check wing attachment and bracing for security, condition, correct assembly and where applicable, correct torquing of attachment bolts 1. ft.lb – front mounting bolts 2. ft.lb – rear mounting bolts 3. ft.lb – main spar attachment bolts		
Check movable surfaces for condition, security, proper attachment, correct travel and operation and security of all control connections		
Check installed systems and components for proper installation, security,condition, and satisfactory functioning.		

10. EMPENNAGE

Work to be done	**TECHNICIAN**	**INSPECTOR**
Check attachment of all components for security and correct assembly		
Check movable surfaces for condition, security, proper attachment, correct travel and operation and security of all control connections		
Check installed systems and components for proper installation, security, conditio, and satisfactory functioning		

11. ELECTRICAL AND RADIO EQUIPMENT INSTALLATIONS

Work to be done	**TECHNICIAN**	**INSPECTOR**
Inspect batteries for condition, corrosion, and venting and for correct installation, and check specific gravity and level of electrolyte		
Check electrical installations and components for condition, the security of mounting and satisfactory functioning		
Check electrical wiring and conduits for condition and security of mounting		
Check bonding and shielding for correct installation, security, and condition		
Check radio equipment for the correct functioning and for correct installation and security of mountings		
Check radio antenna systems for condition, correct installation and security, and trailing aerials for satisfactory operation		
Check for unacceptable interference from electrical and ignition systems on applicable radio equipment		
Perform a transponder test as per the transponder manufacturer checklist, read with SA CATS 43.02.10		
Perform the ELT test as per the manufacturers manual, read with SA CATS 43.02.11		

12. FUEL SYSTEMS

Work to be done	**TECHNICIAN**	**INSPECTOR**
Check fuel tanks and fuel systems for the presence of water or other foreign matter, condition, security, correct installation, freedom from leaks and satisfactory functioning of components		
Check fuel lines, wire, and cables beneath the floor for condition		
Inspect RIGHT, LEFT, OFF fuel selector for condition and proper operation		

POWER PLANT

ENGINE AND ENGINE INSTALLATION

Work to be done	**TECHNICIAN**	**INSPECTOR**
Inspect the engine for evidence of fuel, oil or any other fluid leaks and for the source of any such leaks		
Check all studs, nuts, and other fasteners for security, condition and correct torque		
Check the internal condition of the engine by means of cylinder compression or blow-by checks, oil filter and sump drain plugs for evidence of metal particles (refer to engine maintenance checklist)		
Check engine shock mounts for condition, security and correct installation		
Check engine controls for correct installation, operation, condition, and security		
Check fluid-carrying lines for security, correct installation, and condition		
Check security and condition of exhaust manifold assemblies, heat exchangers and heater mufflers		
Check engine driven accessories for condition and security of mountings		
Check carburetor air intake filters for cleanliness, condition, security, and correct installation		
Check engine mountings for condition and security of attachment to the main structure 1. ft.lb – engine mount onto the firewall 2. ft.lb – engine onto engine mount		
Check cooling baffles and seals for condition, security and correct installation		
Check engine cowling for condition, security and correct installation		
Check cooling gills or other cooling devices for condition, security, correct installation, and proper operation		
Check ignition systems for condition and correct timing of magnetos.		
Ensure that fuel flow at the carburetor from the tanks meets the minimum requirements		
Perform the relevant engine maintenance checklist		

13. PROPELLERS

Work to be done	TECHNICIAN	INSPECTOR
Check metal and composite propeller blades for nicks and damage		
Check propeller hub bolts are correctly torqued and leading-edge caps are properly secured. 1. ft.lb – propeller mounting bolts spacer to the propeller hub		
Check security of attachment of propeller to the engine 1. ft.lb – propeller mounting bolts spacer to the engine flange		
Check propeller for oil leaks and for satisfactory operation		
Check propeller control systems for condition and satisfactory operation		
Check the propeller track is within specified limits		
Perform the relevant propeller maintenance manual checklist		

14. POWERPLANT INSTRUMENTS AND INSTRUMENT SYSTEMS

Work to be done	TECHNICIAN	INSPECTOR
Check instruments for proper installation, security, obvious defects and legibility and correctness of markings		
Check powerplant instruments before and during engine runs		

15. ENGINE OPERATION / ENGINE RUNS

Work to be done	TECHNICIAN	INSPECTOR
Verify power output is sufficient (static & idle RPM)		
Verify RPM drop on each magneto is within limits		
Verify fuel and oil pressures		
Satisfactory operation of any engine-driven accessory or other items not specifically mentioned above		

16. COMPASS SWING

a. Compass swing (every 12 months, read with SA CATS 43.02.18)

Work to be done	TECHNICIAN	INSPECTOR
Verify by means of a compass swing the accuracy of the compass fitted in the aircraft		

17. MASS & BALANCE

a. Mass & Balance (5 Years / Annual if Commercial CAR44.01.12, read with SA CATS 43.02.7)

Work to be done	**TECHNICIAN**	**INSPECTOR**
Perform the mass and balance check		

18. PITOT-STATIC SYSTEM TEST

a. Pitot static test performed at annual inspection.

b. CAR 24.01.5 and CATS 44 Annex A, 1.3

c. Required to verify compliance with the annual calibration requirement as per CAR 24.01.5

INSTRUMENT MPI		**INSPECTED AND FOUND SERVICEABLE**	
		INITIAL INSPECTION	**FINAL INSPECTION**
1	Test the pitot-static for freedom from obstructions and leaks. Drain water traps if applicable		
2	Test stall warning unit and pitot heater		
3	Inspect the compass for discoloration and bubbles, check for freedom or rotation and ensure that the compass has been swung in accordance with the requirements and periods specified in SA-CATS 43.02.18		
4	Check altimeters and airspeed indicators for accuracy. Carry out pitot-static check if applicable		
5	Inspect and check the autopilot for correct functioning during the flight test		
6	Inspect all instruments for proper installation security, obvious defects, legibility and legibility of markings		
7	Inspect and test pneumatic operated instruments for the correct functioning		
8	Inspect VSI for proper function and zero pointer		

19. AIRSPEED INDICATOR

AIRSPEED INDICATOR	**SCALE ERROR TOLERANCE**	**FRICTION TOLERANCE**	**READING ON L/H**	**READING ON R/H**
40	+/- 2.5	+/- 3		
60	+/- 2.5	+/- 3		

80	+/- 2.5	+/- 3		
100	+/- 2.5	+/- 3		
120	+/- 2.5	+/- 3		
140	+/- 2.5	+/- 3		

20. ALTIMETER

ALTITUDE	**EQUIVALENT PRESSURE**	**TOLERANCE**	**READING ON L/H**	**READING ON ANALOGUE**
-1000	1050.36	20		
0	1013.25	20		
1000	977.15	20		
2000	942.10	30		
3000	908.10	30		
4000	875.09	35		
6000	811.97	40		
8000	752.61	60		
10000	696.12	80		
12000	644.38	90		
14000	595.21	100		

TEST	**READING EFIS**	**READING ANALOGUE**	**TOLERANCE**
Case leak test			100
Hysteresis test First test point (50% of maximum altitude)			75
Second test point (40% of maximum altitude)			75
After effect test			30

21. FRICTION TEST

ALTITUDE (feet)	TOLERANCE (feet)	READING EFIS	READING ANALOGUE
1000	70		
2000	70		
3000	70		
5000	70		
10000	80		
14000	90		

22. PRESSURE ALTITUDE TEST

PRESSURE IN MILLIBARS	ALTITUDE (feet)	READING EFIS	READING ANALOGUE
951.55	1727		
965.10	1340		
982.03	863		
998.96	392		
1013.25	0		
1032.82	+531		
1046.37	+893		
1049.41	+974		

23. RELEASE TO SERVICE (CRS) AS PER CAR 44.01.13

(1) The release to service for a non-type certificated aircraft shall either;

a) be an entry in the flight folio; or
b) be a separate form contained in the aircraft document folder.

(2) Entry to the following effect shall be made:

Aircraft Registration:

Aircraft type:

Serial No.:

"I hereby certify that I am satisfied that the above-mentioned aircraft and all its equipment are in every way serviceable for flight and that all maintenance has been carried out in accordance with the Civil Aviation Regulations of 2011, as amended, and the aircraft's Accepted Maintenance Schedule. This certificate lapses at a total of…… hours of …… flight time or on…….. (date), whichever occurs first, unless the aircraft is involved in an accident or becomes unserviceable, in which case the certificate is invalid for the duration of the period".

Licence No.: _____

Signed: _____

Date: _____

24. DEFECT SHEET

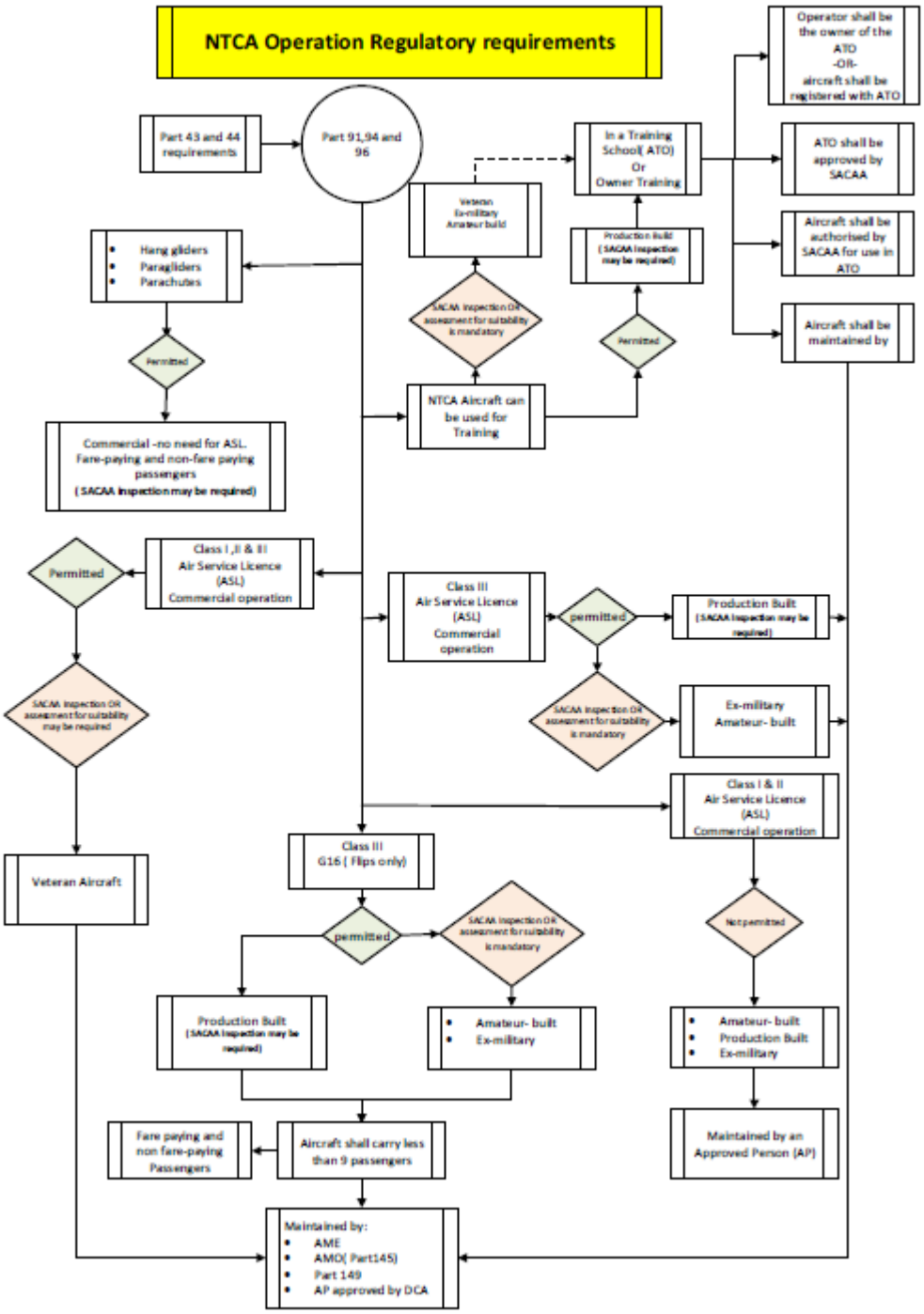
Rectification of unsatisfactory items

CAR 44.01.5 (1) When during maintenance or at any other time any part, product, component, equipment or item is found to be unserviceable or is unlikely to remain serviceable under normal operating conditions during the period preceding the next inspection, such rectification action as considered necessary shall be taken to ensure the continued serviceability of the part, component or item prior to releasing the aircraft to service.

(2) Any maintenance carried out to restore the serviceability of any part, component, equipment or item shall be clearly recorded in the relevant logbook.

(3) For the case when an unsatisfactory item cannot be rectified an entry shall be made into the relevant logbook by an appropriately rated approved AMO, AME or approved person, rated in accordance with subpart 4 of part 66, stating any limits to the serviceability of the aircraft.

No		**Defect**	**Rectification**
1.			
2.			
3.			


NTCA Operation Regulatory requirements
Part 43 and 44 requirements
Part 91,94 and 96
Operator shall be the owner of the ATO -OR- aircraft shall be registered with ATO
In a Training School(ATO) Or Owner Training
ATO shall be approved by SACAA
Aircraft shall be authorised by SACAA for use in ATO
Aircraft shall be maintained by
Veteran Ex-military Amateur build
Production Build (SACAA Inspection may be required)
Hang gliders
Paragliders
Parachutes
SACAA Inspection OR assessment for suitability is mandatory
Permitted
NTCA Aircraft can be used for Training
Commercial -no need for ASL. Fare-paying and non-fare paying passengers (SACAA Inspection may be required)
Class I ,II & III Air Service Licence (ASL) Commercial operation
Class III Air Service Licence (ASL) Commercial operation
permitted
Production Built (SACAA Inspection may be required)
SACAA Inspection OR assessment for suitability may be required
Ex-military Amateur- built
Class I & II Air Service Licence (ASL) Commercial operation
Veteran Aircraft
Class III G16 (Flips only)
Not permitted
Production Built (SACAA Inspection may be required)
Amateur- built
Ex-military
Fare paying and non fare-paying Passengers
Aircraft shall carry less than 9 passengers
Maintained by an Approved Person (AP)
Maintained by:
AME
AMO(Part145)
Part 149
AP approved by DCA