Regulatory amendment

Motivation to withdraw Part 66.4.

Motivation to Submit Part 56; Technical Approved Persons (TAP's) for inclusion in the SA-CARS.

Motivation to Submit Part 55: NTCA Maintenance facilities for inclusion in the SA-CARS

These parts forms a portion of the material developed as part of Project 24, and is submitted separately due to special request based on urgency.

According to the Chicago Convention of the 7th December 1944, to which South Africa remains a signatory, and specifically referencing:

ICAO ANNEX 1:

Personnel Licensing was first adopted by the council on 14 April 1948 pursuant to the provisions of Article 37 on the Convention on International Civil Aviation and designated as ANNEX 1: this became effective on 15th September 1948

ICAO ANNEX 8:

Standards and Recommended Practices for the Airworthiness of Aircraft was first adopted by the council on the 1st of March 1949 pursuant to the provisions of Article 37 on the Convention on International Civil Aviation and designated as ANNEX 8:

Each State would establish its own comprehensive and detailed code of standards or would select a comprehensive code established by another Contracting State.

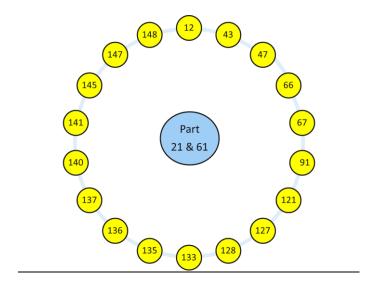
From these Annexes SA have some Primary Regulations;

- Part 21: Certification Procedures that deal with Type Certified Aircraft; and
- Part 61 Personnel Licensing that deals with ICAO recognised Pilot licenses as well as other personnel.

These in turn reference a host of supporting regulations; i.e. Some of which are SA-CAR Parts;

- ➤ 43 General Maintenance Rules
- ➤ 47 Registration and Markings
- ▶ 66 Aircraft Maintenance Engineer
- 91 General Aviation and Operating Flight Rules
- > 135 Air Transport Operations
- ➤ 141 Aviation Training Organisations
- ➤ 145 Aircraft Maintenance Organisations
- > 147 Design Organisations
- > 148 Manufacturing Organisations

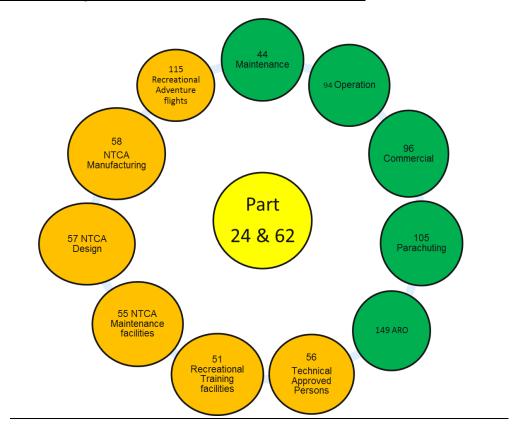
ICAO International Civil Aviation Based Regulations



South Africa Sport and Recreational Aviation

- Clearly ICAO International Civil Aviation Regulations do not and were never intended to cater for our environment i.e. non ICAO aviation.
 - Sport and Recreational Aviation
 - Recreational Adventure Flights
 - Special Air Event Events
 - ❖ Non-Type Certified Aircraft
 - Technical Approved Persons
- What is Sport and Recreational Aviation?
- ➤ It is Not International Civil Aviation, it is Not ICAO
- It Is! South Africa Pilots issued with National or Glider Pilot's license's flying for Sport, Recreational or Adventure purposes, within South Africa.
 Or in some cases for competition purposes locally or internationally.
- > WHAT IS NTCA? A description of what an aircraft is NOT
- > It is Not Certified aircraft. It is not used for the Provision of International Civil Aviation or an Air Service.
- ➤ It is Not subject to the SARPS of ICAO
- > It Is any of the following: Experimental, Amateur build, Historical, Veteran Vintage, or Recreational Aircraft.
- It is also Production Built i.e. Professional or mass produced i.e. Production NTCA.
- ➤ What does South Africa currently have and what have been developed over the years that do cater specifically for this industry.
 - Part 24, Derived from the old LS1 Document, Airworthiness Standards for Non-Type Certified Aircraft "NTCA"
 - ❖ Part 44, Maintenance Rules NTCA, derived from Part 43 and adapted for NTCA
 - Part 66, Aircraft Maintenance Engineer Licensing: Subpart 4 Approved Persons, (Unsuitable for Technical Approved Persons)
 - Part 94, Operations of NTCA.
 - ❖ Part 149, Designated Body i.e. "RAASA" and Approval of Aviation Recreational Organisations.
- For the rest of it no regulation that adequately provide rules and standards for safe and sustainable administration and oversight of Sport and Recreational Aviation and NTCA,

Amendment of existing Recreational and NTCA regulations in Green, and development of new recreational and NTCA regulations in orange with Part 24 NTCA airworthiness at the core.



What is Project 24

Simple: Taking from existing regulations, and Deleting what is not applicable and developing what is applicable into a series of regulations developed for Sport and Recreational Aviation & NTCA.

Why:?

- In order to Promote, Grow and Sustain the Sport and Recreational Aviation and NTCA through a series of self-contained, independent and practical regulations, that are simple, understandable and applicable, whilst maintaining the highest industry standards and safety; for
- Training,
- Licensing,
- Manufacturing,
- Maintenance,
- Sport, Competition and Entertainment,
- Recreational Adventure Flights

Objectives:

- To reduce barriers to entry, whilst maintaining adequate safety, and where necessary to raise standards to promote and ensure safety of persons and sustainability of the industry.
- To create an environment conducive to skills development, job creation and economic growth through training, maintenance, manufacturing and promoting aviation tourism.

Motivation to withdraw Part 66.4.

PART 66 deals with Aviation Maintenance Engineers in accordance with ICAO ANNEX 1: Personnel Licensing which includes maintenance technicians.

Part 66 sub-part 4 was developed to provide a set of basic guidelines for Approved Persons (AP's) that work on Non-Type Certified Aircraft (NTCA) and included in Part 66 as there was no specific provision for AP's at the time.

NTCA and AP's do not fall under the provisions of ICAO, whilst Part 66.4 provided a set of basic regulations for AP's at the time; no further progress and improvement in AP regulations have been developed for a number of years. The NTCA industry has grown and evolved exponentially and the current regulation in subpart 4 of 66 is not sufficient to adequately deal with safety and standards for the training and approval of approved persons. It is proposed that sub-part 4 of Part 66 be withdrawn in its entirety and substituted with a new regulation specifically developed to provide improved standards and requirements for the training and approval of Technical Approved Persons to maintain South African Registered NTCA.

Motivation to Submit Part 56; Technical Approved Persons (TAP's) for inclusion in the SA-CARS.

RAASA together with industry participation has developed through the Project 24 Focus groups a series of new and amended regulations to improve standards and safety for the operation and maintenance of Non-Type Certified aircraft.

Part 56 follows many of the provisions for AME where practical and applicable, whilst providing a far more detailed and comprehensive set of standards and requirements for the training, approval, continuous learning and oversight of Technical approved Persons.

Part 56 specifically addresses the shortcomings and unique differences necessary to promote growth, skills development and job creation in the technical approved person environment whilst raising the quality and standards currently lacking in Part 66.4.

Motivation to Submit Part 55: NTCA Maintenance facilities for inclusion in the SA-CARS

Approved Persons have been working on sport and recreation Non-Type certified aircraft for many years as amateur enthusiasts without any provisions in the regulations for suitable infra structures and facilities.

Part 145 of the SA-CARS provides regulations for the standards and the approval of Aviation Maintenance Organisations (AMO's) of Type Certified Aircraft. This regulation does not provide adequately for standards and the approval of similar organisations for the maintenance of NTCA.

It is not the aim to discourage or hinder the amateur enthusiast technical approved person, but to provide regulations for adequate standards and the approval of NTCA maintenance facilities as used by Technical Approved Persons performing technical work, maintenance and repairs on NTCA, in particular NTCA used for Ab Initio training and Part 96 operations.

RAASA together with industry participation has developed through the Project 24 Focus groups a series of new and amended regulations to improve standards and safety for the approval and oversight of maintenance facilities for Non-Type Certified aircraft.

Part 55 follows many of the provisions for AMO's where practical and applicable, whilst providing a far more detailed and comprehensive set of standards and requirements for the approval and oversight of NTCA maintenance facilities.

Part 55 specifically addresses the shortcomings and unique differences necessary to promote growth, skills development and job creation in the NTCA technical and maintenance environment whilst improving the quality and standards that currently do not exist in the SA-CARS.

25 October 2016 PL

PART 55: NON TYPE CERTIFIED AIRCRAFT MAINTENANCE FACILITY

List of Regulations:

SUBPART 1: GENERAL

55.01.1	Applicability
55.01.2	Requirement for approval
55.01.3	Display of NTCA MAINTENANCE FACILITY approval
55.01.4	Advertisements
55.01.5	Safety inspections and audits
55.01.6	Endorsements
55.01.7	Privileges of an approved NTCA Maintenance Facility
55.01.8	Limitations on an approved NTCA maintenance facility
55.01.9	Register of approvals
55.01.10	Training and checking

SUBPART 2: APPROVAL OF A NTCA MAINTENANCE FACILITY

55.02.1	Manual of procedure
55.02.2	Quality assurance system
55.02.3	Accommodation and facilities
55.02.4	Personnel requirements
55.02.5	Equipment, tools and materials
55.02.6	Application for the issue or amendment of the NTCA maintenance facility approval
55.02.7	Issuing of approval
55.02.8	Privileges
55.02.9	Period of validity
55.02.10	Transferability
55.02.11	Renewal of approval
55.02.12	Changes in quality system
55.02.13	Duties of holder of approval
55.02.14	Record of certifying personnel
55.02.15	Maintenance records
55.02.16	Reports on defects or non-airworthy conditions
55.02.17	Airworthiness data

SUBPART 1: GENERAL

Applicability

55.01.1 This Part applies to the approval and operation of facilities for the maintenance of non-type certified aircraft and their components.

Requirement for approval

55.01.2 (1) No NTCA maintenance facility shall perform maintenance on or release to service—

- (a) an aircraft used or intended to be used for flight operations; or
- (b) an aircraft component fitted or intended to be fitted to the aircraft, except under the authority of, and in accordance with the provisions of a NTCA maintenance facility approval with the appropriate endorsement issued under this Part.
- (2) No organisation or person other than the holder of a NTCA maintenance facility-approval with the appropriate endorsement issued under this Part, shall carry out
 - (a) the overhaul of a NTCA aircraft or NTCA aircraft component
 - (b) maintenance on an aircraft or aircraft component where the relevant airworthiness data requires the use of a jig which is
 - (i) approved by the manufacturer; or
 - (ii) approved by the Appropriate administrative authority;

- (c) maintenance on an aircraft component where the maintenance involves the disturbance of any part of the component which is supplied as a bench tested unit, except where
 - the disturbance is for the replacement or adjustment of a part or parts normally replaceable or adjustable in service; and
 - (ii) subsequent functioning of the part or parts disturbed can be proved without the use of test apparatus which is additional to the test apparatus used for normal functioning checks;
- (d) maintenance on an aircraft engine where the maintenance involves -
 - (i) the dismantling and assembly of the crankcase of a piston engine; or;
 - (ii) the dismantling and assembly of any main casing or main rotating assembly of a turbine engine; or
 - (iii) the dismantling and assembly of a reduction gearbox;
- (e) aircraft propeller balancing other than *in situ* dynamic propeller balancing in accordance with the aircraft manufacturer's recommendations or specifications; and
- (f) maintenance on a rotorcraft where the maintenance involves the dismantling of any transmission gearbox, except where this is for the separation of its casing to obtain access for the purpose of internal inspection in accordance with the rotorcraft manufacturer's recommendations and specifications.
- (3) No NTCA maintenance facility shall release to service an aircraft or aircraft component which has undergone the maintenance referred to in sub-regulation (2), except under the authority of, and in accordance with the provisions of, a NTCA maintenance facility approval with the appropriate approval issued under this Part.
- (4) The provisions of sub-regulations (2) and (3) shall not apply in respect of any amateur-built aircraft, microlight aeroplane, gyroplane, airship, glider or free balloon, unless it is used in commercial operations.

Display of NTCA MAINTENANCE FACILITY approval

- **55.01.3 (1)** The holder of a NTCA maintenance facility approval shall display the approval certificate in a prominent place, generally accessible to the public at such holder's principal place of business and, if a copy of the approval is displayed, shall produce the original approval to an authorised officer, inspector or authorised person if so requested by such officer, inspector or person.
- (2) An NTCA maintenance facility approval shall contain-
- (a) name and location of the organisation;
- (b) date of issue and period of validity;
- (c) and be accompanied by appropriate approvals, prescribing such operations, specifications and limitations.

Advertisements

- 55.01.4 Any advertisement by an organisation indicating that it is a NTCA maintenance facility, shall
 - (a) reflect the number of the NTCA maintenance facility approval issued by the Appropriate administrative authority; and
 - (b) contain a reference to the Group of maintenance of aircraft or aircraft components for which the facility is rated.

Safety inspections and audits

- **55.01.5** (1) An applicant for the issuing of a NTCA maintenance facility approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits which may be necessary to verify the validity and to determine whether the requirements of this part have been complied with.
- (2) The holder of a NTCA maintenance facility approval shall permit an authorised officer, inspector or authorised person to carry out such safety inspections and audits, including safety inspections and audits of its partners or subcontractors, which may be necessary to determine compliance with the appropriate requirements prescribed in this Part.

Categories, Groups and Class Endorsements

- **55.01.6** The approval for categories, groups and class endorsements for a NTCA maintenance facility approval are (a) The categories of aircraft as prescribed in Document SA-CATS 55;
 - (b) Group A and B endorsement for all types of aircraft, either singly or in the categories, groups, classes, makes or types as prescribed in Document SA-CATS 55;

- (b) Group A and B endorsement for rotorcraft only, either singly or in the categories, groups, classes, makes or types as prescribed in Document SA-CATS 55;
- (c) Group C and D endorsement for all types of aircraft engines, either singly or in the categories, groups, classes, makes or types as prescribed in Document SA-CATS 55;
- (d) Group C and D endorsement for all types of rotorcraft engines, either singly or in the categories, groups, classes, makes or types as prescribed in Document SA-CATS 55;
- (e) Group W endorsement for all types of installations in the types of aircraft, excluding radio apparatus installations, either singly or in the categories, groups, classes, makes or types as prescribed in Document SA-CATS 55 –
 - (i) electrical installations
 - (ii) instruments installations; and
 - (iii) radio apparatus installations
- (f) Group X endorsement for aircraft equipment, instruments, components, accessories, auxiliaries or parts, either singly or in the categories, groups, classes, makes or types as prescribed in Document SA-CATS 55.
- (g) Group P endorsement for propellers in the classes A H as prescribed in Document SA-CATS 55.
- (h) Group E endorsement for the types of rotorcraft, either singly or in the categories, groups, classes, makes or types as prescribed in Document SA-CATS 55;
- (i) Group S endorsement for rotors and rotor hub assemblies in the classes A and B.

Privileges of an approved NTCA Maintenance Facility

- **55.01.7** (1) The holder of a NTCA maintenance facility approval with the appropriate endorsement shall ensure that the privileges of such endorsement are not exercised unless the NTCA maintenance facility has the necessary facilities, current technical data, tools, equipment, materials and competent personnel to perform the work in accordance with all current requirements regarding the maintenance and airworthiness of the particular type of aircraft, airframe, engine, aircraft component or other equipment.
- (2) Notwithstanding anything to the contrary contained in the Regulations, the holder of an approval with the appropriate endorsement may, in circumstances where
 - (a) no appropriately licensed and rated TAP; or
 - (b) no other approved and appropriately rated NTCA maintenance facility

is available, rectify any defect in a similar type of aircraft for which the certificate holder is rated.

- (3) Where a defect referred to in sub-regulation (2) is rectified, the holder of the approval shall notify the appropriate administrative authority, in writing, within 48 hours from the moment the defect is rectified, of the reasons for, and nature of, such rectification.
- (4) Where a defect in an aircraft which is not similar to the type of aircraft for which the holder is approved, is rectified, the holder of such approval shall obtain the prior written permission from the appropriate administrative authority, to effect such rectification.

Limitations on an approved NTCA maintenance facility

- **55.01.8** (1) The holder of a NTCA maintenance facility approval may only maintain an aircraft or aircraft components for which it is approved.
- (2) The holder of an approval shall not maintain an aircraft or aircraft component for which it is approved unless such holder has available all the facilities, equipment, tooling, airworthiness data and appropriate personnel necessary to maintain the aircraft or aircraft component in accordance with its manual of procedures and the requirements prescribed in this Part.

Register of approvals

55.01.9 (1) The appropriate administrative authority, shall maintain a register of all NTCA maintenance facility approvals issued in terms of the regulations in this Part.

- (2) The register shall contain the following particulars:
 - (a) the full name of the holder of the approval;
 - (b) the physical address of the holder of the approval;
 - (c) the date on which the approval was issued or renewed;
 - (d) particulars of the endorsement issued to the holder of the approval; and
 - (e) the nationality of the holder of the approval.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within fourteen days from the date on which the approval is issued by the appropriate administrative authority.
- (4) The register shall be kept in a safe place at the office of the appropriate administrative authority.
- (5) A copy of the register shall be furnished by the appropriate administrative authority, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

Training and checking

- **55.01.10** (1) The holder of a NTCA maintenance facility approval shall, as provided for in sub regulation 4 establish and maintain a training programme for aircraft technical approved persons in their employ, as prescribed in Document SA-CATS 55.
- (2) The approval holder shall ensure that technical approved persons
 - (a) receive or have received category, group, class, make or type specific training if applicable in respect of the aircraft or aircraft components for which the organisation has received maintenance approval; and
 - (b) receive periodical recurrent training with specific attention to new technologies and maintenance techniques,
- (3) The training programme, contemplated in sub-regulation (1), shall be part of the facility's manual of procedures.
- (4) Initial training may only be provided by the holder of an approved training facility approval issued in terms of Part 51, or by or on behalf of the original equipment manufacturer.

SUBPART 2: APPROVAL OF A NTCA MAINTENANCE FACILITY

Manual of procedure

- **55.02.1** (1) An applicant for a NTCA maintenance facility approval shall provide the Appropriate administrative authority , with its manual of procedure which
 - (a) complies with the requirements prescribed in this Subpart; and
 - (b) contains the information as prescribed in Document SA-CATS 55.
- (2) Subject to sub-regulations (5) and (6), the holder of a NTCA maintenance facility approval must ensure that the details in its manual of procedures provide a current description of the facility.
- (3) The holder of an approval must
 - (a) ensure that each amendment to its manual of procedures meets the applicable requirements of this Part and any other relevant Part; and
 - (b) comply with the amendment procedures contained in its manual of procedures.
- (4) The holder of a NTCA maintenance facility approval must provide the Appropriate administrative authority, for purposes of approval, with a copy of each amendment to its manual of procedures as soon as practicable after the amendment has been incorporated into the manual of procedures.
- (5) The holder of a NTCA maintenance facility approval who intends to change any of the following must apply to (for) and obtain the prior approval of the appropriate administrative authority:
 - (a) The accountable manager;
 - (b) the listed senior persons;
 - (c) the maintenance endorsement;
 - (d) the location at which maintenance is carried out; or
 - (e) the procedure for technical approved persons to certify maintenance.

- (6) The appropriate administrative authority, may specify conditions under which a NTCA maintenance facility approval holder must operate during or following any of the changes listed in sub-regulation (5), to ensure continued compliance with the requirements of this Part.
- (7) The holder of a NTCA maintenance facility approval must comply with all conditions specified in sub-regulation (6).
- (8) If any change referred to in this regulation requires an amendment to the approval, the holder must forward the approval to the Appropriate administrative authority, immediately after the amended approval has been issued.
- (9) The holder of an approval must make such amendments to its manual of procedures as the appropriate administrative authority, may consider necessary in the interests of aviation safety.

Quality assurance system

- **55.02.2** (1) The applicant shall establish a quality assurance system for the control and supervision of the maintenance of aircraft and aircraft components, covered by the application.
- (2) The minimum standards for a quality assurance system shall be as prescribed in Document SA-CATS 55.
- (3) The quality assurance system, contemplated in sub-regulation (1), shall be part of the facility's manual of procedures.

Accommodation and facilities

55.02.3 The applicant shall satisfy the appropriate administrative authority, that –

- (a) it has adequate accommodation and facilities for all maintenance to be performed by the NTCA maintenance facility, ensuring in particular, protection from the weather;
- (b) specialised work areas are segregated as appropriate to ensure that environmental and work area contamination does not occur;
- (c) appropriate office accommodation is provided for the administration of the maintenance performed and, in particular, for the administration of the organisation's quality, planning and technical records;
- (d) the working environment is suitable to the maintenance performed;
- (e) suitable storage facilities are provided for parts, equipment, tools and materials required by the organisation;
- (f) the storage facilities referred to in paragraph (e) provide security for serviceable parts and segregation of serviceable from unserviceable parts, and control deterioration of, and damage to, stored items; and
- (g) it has established procedures to ensure compliance with the requirements prescribed in paragraphs (d), (e) and (f).

Personnel requirements

55.02.4 (1) An applicant for a NTCA maintenance facility approval shall, subject to sub-regulation (3), engage, employ or contract –

- (a) a senior person identified as the accountable manager who has the authority to ensure that all activities undertaken by the applicant shall be carried out in accordance with the requirements prescribed by this Part;
- (b) An applicant shall not engage, employ or contract a senior person as accountable manager without the prior approval of the appropriate administrative authority.
- (c) a senior person or group of senior persons who are responsible for ensuring that the applicant complies with the requirements of this Part; such person or persons shall be accountable to the accountable manager for the following functions
 - (i) maintenance control;
 - (ii) personnel authorisations:
 - (iii) internal quality assurance; and
- (d) sufficient personnel to plan, perform, supervise, inspect and certify the maintenance activities listed in the applicant's manual of procedure.
- (e) In the case of small maintenance facilities the applicant may nominate the same person to fill the roles listed in sub-regulation (1)
- (2) The applicant shall -
 - (a) establish a procedure to initially assess, and a procedure for maintaining, the competence of the personnel involved in planning, performing, supervising, inspecting or certifying the maintenance activities performed by the applicant; and

- (b) provide such personnel with a clear written mandate containing the scope of their authorisation.
- (3) The holder of a NTCA maintenance facility approval shall state in its manual of procedures a list of its personnel who are responsible for certifying maintenance and such list shall contain, at least, the following information:
 - (a) The full names of the certifying personnel;
 - (b) The company authorisation number or identification stamp; and
 - (c) The TAP number issued by the appropriate administrative authority

Equipment, tools and materials

55.02.5 The applicant shall satisfy the appropriate administrative authority, that it has -

- (a) the equipment, tools and materials necessary to perform adequately the approved scope of work as required by the applicable airworthiness data, its manual of procedures and the relevant legislation in this Part; and
- (b) established a procedure to control and, where necessary, calibrate tools and other equipment at a frequency and to a standard to ensure serviceability, accuracy and traceability.

Application for the issue or amendment of the NTCA maintenance facility approval

55.02.6 An application for the issuing of an NTCA maintenance facility approval, or an amendment thereof, shall be –

- (a) made to the Appropriate administrative authority, on the appropriate form; and
- (b) accompanied by -
 - (i) the appropriate fee as prescribed in Part 187; and
 - (ii) the manual of procedures referred to in regulation 55.02.1.

Issuing of approval

- a. **55.02.7** (1) The appropriate administrative authority shall issue a NTCA maintenance facility approval if the appropriate administrative, is satisfied that –
- (a) the applicant meets the requirements prescribed in Part 55 as applicable and the applicant has compiled a statement of compliance which is accepted by the appropriate administrative authority ;:
- (b) the applicant's senior person or persons required by this Part
 - (i) are current, appropriately rated and competent persons; and
 - (ii) have never held a senior position in the previous five years in any NTCA maintenance facility or aviation maintenance organisation where the approval thereof was cancelled by the appropriate administrative authority, or the Minister as a result of negligence of such person; and
- (c) the granting of the approval is not contrary to the interests of aviation safety.

Privileges

55.02.8 (1) (a) The privileges of a NTCA maintenance facility with a Group A endorsement approval shall be limited to aircraft for which the holder is approved –

- (i) to release to service an aircraft, excluding its engine or engines;
- (ii) to certify in the manner prescribed in the Regulations -
 - (aa) work which the maintenance schedule relating to an aircraft authorises the holder of the approval to certify;
 - (bb) the assembly of an aircraft and any adjustment or minor modification of an aircraft; and
 - (cc) the installation or replacement of completed subassemblies, equipment, and minor components of an aircraft, excluding its engine or engines; and
- (iii) to release to service an aircraft, excluding its engine or engines, for a post maintenance test flight, providing the ATF is still valid.
- (b) For the purpose of sub-regulation (1)(a)ii)(cc) a completed subassembly comprises a unit built up of individual components to form a complete unit which may include a wing, aileron, landing gear shock strut, wheel, complete landing gear, tail plane, fin, rudder and elevator.

- (2) The privileges of an NTCA maintenance approval with a Group B endorsement shall be limited to aircraft for which the holder is approved
 - (a) to certify in the manner prescribed in the Regulations -
 - (i) any overhaul, repair or modification of an aircraft, excluding its engine or engines, except -
 - (aa) the overhaul, repair or modification of such item, equipment or apparatus which is to be certified by the holder of an approval with a Group X endorsement; and
 - (bb) the installation and testing of such instrument, electrical equipment or radio apparatus which is to be certified by the holder of an approval with a Group W endorsement; and
 - (ii) the manufacturing of components and parts in accordance with the appropriate approved specifications as prescribed in Part 24 and 44, if the manufacturing of the components and parts are necessary for the holder of the approval to complete a repair, modification or overhaul which it will certify:
 - (b) in respect of rotorcraft for which the holder is approved under Group A, to release to service a rotorcraft, excluding its engine or engines; and
 - (c) in respect of rotorcraft for which the holder is approved under Group E, to release to service a rotorcraft, excluding its engine or engines.
- (3) The privileges of an NTCA maintenance facility approval with a Group C endorsement shall be limited to engines for

which the holder is approved -

- (a) to release to service an engine installed in an aeroplane;
- (b) to certify in the manner prescribed in the Regulations
 - (i) work which the maintenance schedule relating to an aeroplane engine authorises the holder of the approval to certify;
 - (ii) the installation of an engine in an aeroplane;
 - (iii) any adjustment of an aeroplane engine and the replacement of external components;
 - (iv) the testing of spark plugs; and
- (c) to release to service an aeroplane for a post maintenance test flight, providing the authority to fly is still valid.
- (4) The privileges of an NTCA maintenance facility approval with a Group D endorsement shall be limited to engines for which the holder is approved
 - (a) to release to service an engine; and
 - (b) to certify in the manner prescribed in the Regulations -
 - (i) any overhaul, repair or modification of an engine or its accessories, except the overhaul, repair or modification of the ignition equipment, other than the propeller, starter and generator which is to be certified by the holder of an approval with a Group P and X endorsement; and
 - (ii) the manufacturing of components and parts in accordance with the appropriate approved specifications as prescribed in Part 24, if the manufacturing of the components and parts are necessary for the holder of the approval to complete a repair, modification or overhaul which it will certify.
- (5) The privileges of a NTCA maintenance facility approval with a Group E endorsement shall be limited to rotorcraft for

which the holder is approved-

- (a) to release to service a rotorcraft;
- (b) to certify in the manner prescribed in the Regulations
 - (i) work which the maintenance schedule relating to a rotorcraft authorises the holder of the approval to certify;
 - (ii) the assembly of a rotorcraft and any adjustment or minor modification of a rotorcraft;
 - (iii) any installation and maintenance, other than the overhaul, major modification or major repair, of rotors and the reassembly of rotors which may have been dismantled for transport purposes; and
- (c) to release to service a rotorcraft for a test flight, providing the authority to fly is still valid.
- (6) The privileges of a NTCA maintenance facility approval with a Group W endorsement shall be limited to equipment for

which the holder is approved -

- (a) to release to service the equipment; and
- (b) to certify in the manner prescribed in the Regulations
 - (i) work which the maintenance schedule relating to the aircraft authorises the holder of the approval to certify;
 - (ii) any adjustment, maintenance or modification of such equipment; and
 - (iii) any installation of such equipment in aircraft and the replacement of components and parts of such equipment: Provided that no equipment shall be dismantled for the purpose of making internal replacements.
- (7) The privileges of a NTCA maintenance facility approval with a Group X endorsement shall be limited to aircraft equipment, instruments, components, auxiliaries or parts for which the holder is approved
 - (a) to release to service the aircraft equipment, instruments, components, auxiliaries or parts; and
 - (b) to certify in the manner prescribed in the Regulations
 - (i) their overhaul, repair, testing and modification; and
 - (ii) the manufacturing of components and parts in accordance with the appropriate approved specifications as prescribed Part in 24, if the manufacturing of the components and parts are necessary for the holder of the approval to complete a repair, overhaul, test or modification which it will certify.
- (8) The privileges of a NTCA maintenance facility approval with a Group P endorsement shall be limited to aircraft for which the holder is approved—
 - (a) to release to service an aircraft;
 - (b) to certify in the manner prescribed in the Regulations
 - (i) work which the maintenance schedule relating to an aircraft authorises the holder of the approval to certify:
 - (ii) the assembly of an aircraft and any adjustment or minor modification of an aircraft;
 - (iii) any installation and maintenance, other than the overhaul, major modification or major repair, of propellers and the reassembly of propellers which may have been dismantled for transport purposes; and
 - (c) to release to service an aircraft for a test flight, providing the authority to fly is still valid.

Period of validity

- **55.02.9** (1) A NTCA maintenance facility approval shall be valid for the period determined by the appropriate administrative authority, which period shall not exceed two years, calculated from the date of issuing or renewal thereof.
- (2) The approval shall remain in force until it expires or is suspended by an authorised officer, inspector or authorised person, or cancelled by the appropriate administrative authority.
- (3) If the holder of an approval applies for the renewal of the approval at least 60 days prior to the expiry of the approval, then approval shall, notwithstanding sub-regulation (2), remain in force until the appropriate administrative authority, issues the renewal thereof.
- (4) The holder of an approval which has expired, shall forthwith return the approval to the Appropriate administrative authority .
- (5) The holder of an approval which has been suspended, shall forthwith return the approval upon suspension thereof, to the authorised officer, inspector or authorised person concerned for the appropriate endorsement.
- (6) The holder of an approval which is cancelled, shall, within 30 days from the date on which the approval is cancelled, surrender such approval to the appropriate administrative authority.

Transferability

- **55.02.10** (1) A NTCA maintenance facility approval, is not transferable.
- (2) A change in ownership of the holder of an approval shall be deemed to be a change of significance to the organisation referred to in regulation 55.02.12.

Renewal of approval

- **55.02.11** (1) An application for the renewal of a NTCA maintenance facility approval, shall be
 - (a) made to the appropriate administrative authority, in the prescribed form; and
 - (b) accompanied by the appropriate fee as prescribed in Part 187.
- (2) The holder of the approval shall at least 60 days immediately preceding the date on which such approval expires, apply for the renewal of such approval.

Changes in quality system

- **55.02.12** (1) If the holder of a NTCA maintenance facility approval desires to make any change in the quality system referred to in regulation 55.02.2, which is significant to the showing of compliance with the appropriate requirements prescribed in this Part, such holder shall apply to the appropriate administrative authority, for the approval of such change.
- (2) The provisions of regulation 55.02.6 shall apply with the necessary changes to an application for the approval of a change in the quality system.
- (3) An application for the approval of a change in the quality system shall be granted by the appropriate administrative authority, if the applicant satisfies the appropriate administrative authority, upon submission of appropriate proposed changes to its manual of procedures, that it will continue to comply with the provisions of regulations 55.02.1 to 55.02.5 inclusive, during and after the implementation of such approved changes.

Duties of holder of approval

55.02.13 (1) The holder of a NTCA maintenance facility approval shall -

- (a) hold at least one complete and current copy of its manual of procedures referred to in regulation 55.02.1, at each facility specified in the manual of procedures;
- (b) comply with all procedures detailed in the manual of procedures;
- (c) make each applicable part of the manual of procedures available to the personnel who require those parts to carry out their duties; and
- (d) continue to comply with the appropriate requirements prescribed in this Part.
- (2) The holder of an approval shall ensure that -
 - (a) all persons who will be directly in charge of any maintenance or inspection performed on behalf of the NTCA maintenance facility; and
 - (b) all personnel who are authorised to issue on behalf of the NTCA maintenance facility certificates of release to service and certificates relating to the maintenance of an aircraft, are appropriately approved in terms of Part 56, with the appropriate endorsement, as provided for in the facility's manual of procedure in accordance with regulation 44.

Record of certifying personnel

- **55.02.14** (1)The holder of a NTCA maintenance facility shall maintain a record of all certifying personnel, which record shall include particulars of the scope of their authorisation.
- (2) The holder of an approval shall provide its certifying personnel with clear instructions of the scope of their authorisation.
- (3) The record referred to in sub-regulation (1) shall be retained by the holder of the approval for a period of five years from the date on which the certifying personnel member ceases to be authorised by such holder.

Maintenance records

- **55.02.15** (1) The holder of a NTCA maintenance facility approval with a Group A endorsement shall keep adequate records of all maintenance performed by the NTCA maintenance facility.
- (2) The records referred to in sub-regulation (1) shall -
 - (a) indicate the name of each technical approved person who performed the work;
 - (b) indicate the name of each technical approved person who inspected the work; and

- (c) be retained for at least five years from the date on which the aircraft or aircraft component to which the work relates, was released to service.
- (3) The holder of an approval shall provide a copy of the certificate of release to service to the operator or owner of the aircraft, together with a copy of any specific airworthiness data used for repairs or modifications carried out.
- (4) The holder of an approval shall establish a procedure for recording maintenance details and for the retention of such maintenance records.

Reports on defects or non-airworthy conditions

- **55.02.16** (1) The holder of a NTCA maintenance facility approval shall report to the owner or (and) operator of a NTCA or NTCA component which may present a hazard to the aircraft, within 48 hours from the moment the defect or condition to which the report relates, has been identified.
- (2) The holder of an aircraft maintenance approval shall establish procedures for -
 - (a) Collecting, investigating and analysing information relating tom defects in the aircraft or component maintained by the applicant and distributing that information to
 - (i) The applicable design organisation; and
 - (ii) The owner or the operator of that aircraft or component- and
 - (b) Providing defect, incident information to the appropriate administrative authority in accordance with Part 12.

Airworthiness data

55.02.17 (1) The holder of a NTCA maintenance facility approval shall -

- (a) keep all airworthiness data necessary to support the maintenance work performed by the NTCA maintenance facility; and
- (b) make the airworthiness data available to all personnel who need access to such data to discharge their allocated responsibilities.
- (2) The airworthiness data referred to in sub-regulation (1) shall include all relevant data issued by -
 - (a) the Appropriate administrative authority of (or) the body designated for the purpose in terms of Part 149, as the case may be; and
- (4) The holder of an (NTCA mf) approval shall establish a procedure to control and amend the data referred to in sub-regulations (1), (2)
- (5) If the holder of an (NTCA mf) approval intends to produce its own airworthiness data, additional to the data referred to in sub-regulation (1), such holder shall establish a procedure for producing and controlling such additional data.

Draft Part 56: 25TH Oct 2016 (PL)

Proposal to transfer Subpart 4 of 66 into a new part, Part 56 proposed of its own to adequately deal with NTCA Technical approved persons

SUBPART 1: NTCA TECHNICAL APPROVED PERSON CERTIFICATE

GENERAL

56.01.1	Applicability
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56.01.4	Classes of certificates
56.01.5	Groups of airframes and engines
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56.01.11	Responsibilities of certificate holder
<u>56.01.1</u> 2	Training
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SUBPART 2: TECHNICAL APPROVED PERSON CERTIFICATE AND ENDORSEMENT

56.02.1	Requirements for approval
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SUBPART 3: GRADE ONE AND GRADE TWO TAP INSTRUCTOR ENDORSEMENTS

56.03.1	Requirements for grade one or grade two TAP instructor endorsement

56.03.2 Training

56.03.3	Theoretical knowledge examination
56.03.4	Experience
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56.03.6	Issuing of instructor endorsement
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SUBPART 4: TECHNICAL APPROVED PERSONS DESIGNATED EXAMINER

<u>56.04.1</u>	Designation of examiners
56.04.2	Re-Designation as DE
56.04.3	Register of DE's

Part 56, SUBPART 1: NTCA TECHNICAL APPROVED PERSON CERTIFICATE GENERAL

Applicability

56.01.1 (1) This Part applies to –

- (a) The approval of natural persons in order to exercise the privileges of a TAP, including:
 - (i) persons, other than licenced AMEs or persons authorised in terms of Regulation 145.02.4 by the holder of an approved AMO; or
 - (ii) persons who hold or have held an AME licence issued in terms of Part 66; and
- (b) the issuing of TAP certificates and endorsements specifying the privileges and limitations applicable to the performance of maintenance, including repairs, overhauls, modifications, replacement, defect rectification and inspections on non-type certificated aircraft and its components and equipment, including, but not limited to, airframes, engines, engine components.

Approval to act as a technical approved person

- **56.01.2** (1) No person shall act as a technical approved person on any aircraft listed in Parts 24 or operated in terms of Parts 94, 96 and 115, unless such person is the holder of a valid technical approved person certificate specifying the appropriate endorsement issued by the appropriate administrative authority.
- (2) The holder of a technical approved person certificate shall not exercise any privileges other than those reflected by the TAP approval and the appropriate endorsement held by such holder of a technical approved person certificate.
- (3) The holder of a technical approved person certificate shall only exercise TAP privileges if while being a current and *bona fide* member of the technical approved person's program, and such privileges shall only be extended to *bona fide* members of an approved ARO in terms of Part 149.

TAP Certificate

56.01.3 (1) A technical approved person approval may be issued as any one or a combination of the following certificates, categories, groups or classes as applicable:

- (a) TAP1 certificate: is a technical approved person certificate the holder of which has completed the TAP2 program, has passed the applicable examinations and gained the practical experience with both group A and C endorsements, and is approved for a heavy maintenance, repair, and inspection endorsement, which may include an approval for modifications and overhauls with Group B and/or D endorsements.
- (b) TAP2 certificate: is a technical approved person certificate the holder of which has completed the TAP3 program, has passed the applicable examinations and gained the practical experience toward group A and/or C endorsements, and approved for a general maintenance and repair certificate, and to gain further practical experience and knowledge towards a TAP 1.
- (c) TAP3 certificate: a technical approved person certificate, the holder of which holds a restricted basic maintenance and repair endorsement, in order to gain the practical experience and knowledge under the direct supervision of a TAP instructor or AMO approved for the purpose towards a TAP2.
- (d) TAP4 certificate: a technical approved person certificate, the holder of which has completed the major portion of a build, assembly or restoration of a NTCA, and has obtained an authority to fly, and who may exercise the privileges and limitations, relating to each of the aircraft, specified on the TAP certificate.
- (e) TAP Specialist certifcate, may be issued to any person appointed, approved and recognised to be acceptable to the appropriate administrative authority, as a person with specialist knowledge, skills and experience.

Categories of aircraft

56.01.4 (1) A technical approved person certificate may be issued in respect of any of the following categories_of non-type certificated aircraft:

- (a) aeroplanes;
- (b) helicopters;
- (c) gyroplanes and gyro gliders;
- (d) microlight aeroplanes, including weight shift microlights
- (e) gliders;
- (f) touring motor gliders
- (g) manned captive and manned free balloons;
- (h) powered-paragliders, powered parachutes and powered-para trikes as well as powered hang-gliders or any other powered derivative thereof.

(i) all other non-type certificated aircraft not listed above,

Group Endorsements

56.01.5 (1) The group endorsements for a TAP 3 certificate are -

- (a) Group A endorsement, for aircraft in the categories referred to in regulation 56.01.4:
 - (i) Sub group A1: aeroplanes; or
 - (ii) Sub group A2: helicopters; or
 - (iii) Sub group A3: gyroplanes; or
 - (iv) Sub group A4: microlights including weight shift microlights; or
 - (v) Sub group A5: gliders; or
 - (vi) Sub group A6; touring motor gliders
 - (b) Group C endorsement, for engines used in non-type certificated aircraft in the categories referred to in regulation 56.01.4:
 - (i) Sub group C1: aeroplanes; or
 - (ii) Sub group C2: helicopters; or
 - (iii) Sub group C3: gyroplanes, or
 - (iv) Sub group C4: microlights including weight shift microlights; or
 - (v) Sub group C5: glider sustainer or self- launch engines; or
 - (vi) Sub group C6; touring motor gliders
- (2) The group endorsements for a TAP 2 certificate are -
 - (a) Group A, for non-type certificated aircraft in the categories referred to in regulation 56.01.4:
 - (i) Sub group A1: aeroplanes; or
 - (ii) Sub group A2: helicopters, or
 - (iii) Sub group A3: gyrocopters, or
 - (iv) Sub group A4: microlights including weight shift microlights; or

(v) Sub group A5: glider; or (vi) Sub group A6; touring motor gliders (c) Group C, for engines used in non-type certificated aircraft in the categories referred to in regulation 56.01.4: (i) Sub group C1: aeroplanes; or (ii) Sub group C2: helicopters, or (iii) Sub group C3: gyrocopters, or (iv) Sub group C4: microlights incl weight shift microlights; or (v) Sub group C5: glider sustainer or self- launch engines; or (vi) Sub group C6; touring motor gliders Group W2, equipment, avionics, pitot static systems, electrical equipment, instruments, or (c) Group X3, equipment, instruments, pitot static systems, avionics, compasses, engine ignition (d) equipment, electrical equipment; automatic pilots; or (e) Group P3, propellers, or (f) Group E3, rotors and rotor hub assemblies, or (g) Group S2: welding. (3)The group endorsements for a TAP 1 certificate with group A and C endorsements; are (a) Group A, for non-type certificated aircraft in the categories referred to in regulation 56.01.4: (i) Sub group A1: aeroplanes; or (ii) Sub group A2: helicopters, or (iii) Sub group A3: gyroplanes, or (iv) Sub group A4: microlights including weight shift microlights; or (v) Sub group A5: gliders; or (vi) Sub group A6; touring motor gliders (b) Group C, for engines used in non-type certificated aircraft in the categories referred to in regulation 56.01.4:

(i) Sub group C1: aero planes; or (ii) Sub group C2: helicopters, or (iii) Sub group C3: gyroplanes, or (iv) Sub group C4: microlights including weight shift microlights; or (v) Sub group C5: glider sustainer or self- launch engines; or (vi) Sub group C6; touring motor gliders Group W1, equipment, avionics, electrical equipment, instruments, or Group X2, equipment, instruments, pitot static systems, avionics, compasses, engine ignition equipment, electrical equipment; automatic pilots; or Group P2, propellers, or Group E2, rotors and rotor hub assemblies, or Group S1, welding. The group endorsements for a TAP 1 certificate with group B, D, W, X, P, E and S endorsements; Group B endorsement, for non-type certificated aircraft in the categories referred to in regulation 56.01.4, which includes airframe overhauls, modifications and inspections, which is subject to obtaining a NTCA approved maintenance facility approval issued by the appropriate administrative authority, as the case may be, are:

(c)

(d)

(e)

(f)

(g)

are

(a)

(i)

(ii)

(iii)

(iv)

(v)

(vi)

(b)

Sub group B1: aeroplanes or

Sub group B2: helicopters, or

Sub group B4: microlights including weight shift microlights; or

Group D endorsement, for engines used in non-type certificated aircraft in the categories referred to in regulation 56.01.4, which includes engine overhauls, modifications and

Sub group B3: gyroplanes.

Sub group B5: gliders; or

Sub group B6; touring motor gliders

(4)

inspections which is subject to obtaining an NTCA approved maintenance facility approval issued by the appropriate administrative authority, are:

- (i) Sub group D1: aeroplanes or
- (ii) Sub group D2: helicopters, or
- (iii) Sub group D3: Gyrocopters, or
- (iv) Sub group D4: microlights including weight shift microlights; or
- (v) Sub group D5: glider sustainer or self- launch engines; or
- (vi) Sub group D6; touring motor gliders.
- (c) Sub Group W1, equipment, avionics, electrical equipment, instruments; or
- (d) Sub Group X1, equipment, instruments, pitot static systems, avionics, compasses, engine ignition equipment, electrical equipment; automatic pilots; or
- (e) Sub Group P1, propellers; or
- (f) Sub Group E1, rotors and rotor hub assemblies; or
- (g) Sub Group S1, welding.

Sub Groups for airframes, engines, equipment and components

- **56.01.6** (1) The approvals referred to in sub-regulation (1) may be endorsed in one or more of the following sub-groups:
 - (a) Airframes group endorsements are divided into the following Sub Groups;
 - (i) 1 A– aeroplanes of fabric-covered wooden construction, with a MTOW of 5 700 kilograms or less;
 - (ii) 1 B– aeroplanes of fabric-covered wooden construction, with a MTOW of 1200 kilograms or less,
 - (iii) 1 C aeroplanes of fabric-covered wooden construction, with a MTOW of 600 kilograms or less;
 - (iv) 2 A aeroplanes constructed of composites, with a MTOW of 5 700 kilograms or less;
 - (v) 2 B aeroplanes constructed of composites, with a MTOW of 1200 kilograms or less;
 - (vi) 2 C aeroplanes constructed of composites, with a MTOW of 600 kilograms or less;
 - (vii) 3 A aeroplanes of fabric-covered tubular-metal construction, with a MTOW of 5700 kilograms or less;

- (viii) 3 B aeroplanes of fabric-covered tubular-metal construction, with a MTOW of 1200 kilograms or less;
- (ix) 3 C aeroplanes of fabric-covered tubular-metal construction, with a MTOW of 600 kilograms or less;
- (x) 4 A unpressurised aeroplanes of all-metal construction, with a MTOW of 5 700 kilograms or less;
- (xi) 4 B unpressurised aeroplanes of all-metal construction, with a MTOW of 1200 kilograms or less;
- (xii) 4 C unpressurised aeroplanes of all-metal construction, with a MTOW of 600 kilograms or less;
- (xiii) 5 unpressurised aeroplanes of all-metal construction, with a MTOW exceeding 5700 kilograms;
- (xiv) 6 pressurised aeroplanes of all-metal construction, with a MTOW of 5 700 kilograms or less;
- (xv) 7 pressurised aeroplanes of all-metal construction, with a MTOW exceeding 5 700 kilograms;
- (xvi) 8 aeroplanes constructed of composites, with a MTOW exceeding 5 700 kilograms;
- (xvii) 9 A helicopters, powered by piston engines, with a MTOW of 3175 kilograms or less:
- (xviii) 9 B helicopters, powered by turbine jet engines with a MTOW of 3175 kilograms or less:
- (ixx) 9 C helicopters, with a MTOW exceeding 3175 kilograms;
- (xx) 10 balloons;
- (xxi) 11 gyro-copters and gyro gliders with an MTOW of 2000Kg or less;
- (xxii) 12 microlight aeroplanes including weight shift trikes with a MTOW not exceeding 450kg;
- (xxiii) 13 A gliders of wooden, tube and fabric construction;
- (xxiv) 13 B gliders of composite construction;
- (xxv) 13 C gliders of metal construction.
- (xxvi) 14 touring motor gliders;
- (xxvii) 15 powered hang-gliders, powered paragliders, powered parachutes and powered paratrikes or any other powered derivative thereof;

- (xxviii) 16 fabric coverings in accordance with endorsements listed in Groups 1 and 3 above and as specified on the TAP certificate.
- (xxix) 17 all other non-type certificated aircraft not specified in this part, excluding parachutes;
- (b) Engine group endorsements are divided into the following Sub Groups:
 - (i) 01 A previously certificated horizontally opposed normally- aspirated piston engines with a power endorsement not exceeding 200HP;
 - (ii) 01 B previously certificated horizontally opposed normally- aspirated piston engines with a power endorsement exceeding 200HP;
 - (iii) 01 C all NTC horizontally opposed normally aspirated piston engines;
 - (iv) 02 A- previously certificated horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines with a power endorsement not exceeding 200HP;
 - (v) 02 B— previously certificated horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines with a power endorsement exceeding 200HP;
 - (vi) 02 C all NTC horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines;
 - (vii) 03 A previously certificated in-line piston engines;
 - (viii) 03 B all NTC in-line piston engines;
 - (ix) 04 A previously certificated radial engines;
 - (x) 04 B all NTC radial engines;
 - (xi) 05 A previously certificated turbine jet engines;
 - (xii) 05 B all NTC turbine jet engines;
 - (xiii) 06 other engines not listed above, including automotive and non-aviation engines;
 - (xiv) 07 two stroke engines;
 - (xv) 08 diesel and turbo diesel engines;
 - (xvi) 09 electrical engines;
 - (xvii) 10 sustainer and self-launch engines for gliders.
 - (c) Endorsements relating to equipment and components installed in non-type certificated aircraft are divided in the following groups and sub-groups:
 - (i) Group W Endorsement- equipment

- (aa) sub-group W1 = removal, refitting and inspections, holders of a TAP1, or
- (bb) sub-group W2 = removal and refitting, holders of a TAP 2.
- (cc) The , equipment and components to which sub- group W1 and sub- group W2 apply, are classified as follows:
 - (i) class A: avionic equipment;
 - (ii) class E: electrical equipment;
 - (iii) class I: instrument equipment;
 - (iv) class PS: pitot & static systems
 - (v) class O: combination of such equipment,
- (d) Group X Endorsement instruments, avionics and equipment are endorsed in the following sub-groups and classes:
 - (aa) sub-group X1 = removal, refitting, installation, repair, overhaul and inspections,

holders of a TAP1 with Group B and D endorsements, or

(bb) sub-group X2 = removal refitting, installation and inspections, holders of a TAP1

with Group A and C endorsement, or

- (cc) sub-group X3 = removal and refitting, holders of a TAP2 with an Group A and C endorsement.
 - (dd) The instruments, avionics and equipment to which sub- groups: X1, X2and X3 apply, are classified as follows:
 - (i) class 1: compasses;
 - (ii) class 2: engine ignition equipment;
 - (iii) class 3: all instruments, including electrically operated instruments;
 - (iv) class 4: electrical equipment;
 - (v) class 5: automatic pilots; or
 - (vi) class 6: all avionic equipment, including equipment employing pulse techniques
 - (vii) class 7: pitot and static systems
- (e) Group P Endorsement- propellers
 - (aa) sub-group P1= removal, refitting, installation, repair, overhaul and inspections,

holders of a TAP1 with B and D endorsement, or

(bb) sub-group P2= removal, refitting and inspections, holders of a TAP1 with A and

C endorsement

- (dd) sub-group P3= removal and refitting, holders of a TAP2 with an A and C endorsement.
- (ee) The propellers to which sub- groups: P1, P2 and P3 apply, are classified as follows:

- (i) Class A; fixed pitch propellers of metal construction
- (ii) Class B; fixed pitch propellers of composite construction
- (iii) Class C; fixed pitch propellers of wooden construction
- (iv) Class D; variable pitch ground adjustable propellers of metal construction
- (v) Class E; variable pitch ground adjustable propellers of composite construction
- (vi) Class F; variable pitch ground adjustable propellers of wooden construction
- (vii) Class G; all in flight adjustable variable pitch propellers
- (viii) Class H: all constant speed propellers and constant speed units
- (f) Group E Endorsements- Rotors and Rotor hub assemblies
 - (aa) sub-group E1= removal, refitting, installation, repair, overhaul and inspections, holders of a TAP1 with B and D endorsement, or
 - (bb) sub-group E2= removal, refitting and inspections, holders of a TAP1 with A and C endorsement, or
 - (cc) sub-group E3= removal and refitting, holders of a TAP 2 with an A and C endorsement.
 - (ee) The Rotors and Rotor hub assemblies to which sub- groups: E1, E2 and E3 apply, are classified as follows:
 - (i) Class G1: Gyrocopter
 - (ii) Class H2: Helicopter
- (g) Group S Endorsement- welding
 - (aa) sub-group S1 = welding and inspections on welding as listed in sub paragraph (cc), holders of a TAP1.
 - (bb) sub-group S2 = welding as listed in sub paragraph (cc), holders of a TAP 2.
 - (cc) The kinds of welding and inspections on welding to which sub- groups: S1, and
 - S2 apply, are classified as follows
 - (i) Class A: GMAW / MIG / MAG CO2 welding
 - (ii) Class B: GTAW / TIG welding Argon welding
 - (iii) Class C: FCAW Flux cored welding
 - (dd) Endorsed as applicable in the following sub classes of materials
 - (a) sub-class 1: Aluminium frames or structures, or
 - (b) sub-class 2: Steel frames or structures.

Currency

- **56.01.7** (1) A technical approved person certificate expires if its holder does not maintain currency by complying with the appropriate requirements prescribed in Part 56.02.8(1)(b),
- (2) In the case where such certificate has expired, a TAP shall not exercise the privileges granted by the approval and endorsements.
- (3) Where the of a TAP certificate has expired as provided for in regulation 56.02.9(1)(c), due to its holder's failure to maintain currency, the TAP shall apply *a new* to the appropriate administrative authority for approval as provided for in Regulation 56.02.5.

Consumption of alcohol and drugs

- **56.01.8** No technical approved person shall exercise the privileges approved in terms of his approval to carry out maintenance or any other work on an aircraft, its components or equipment:
 - (a) while the concentration of alcohol in any specimen of blood taken from any part of their body is more than 0.02 gram per 100 millilitres, or when under the influence of any drug having a narcotic effect; or
 - (b) consume alcohol or take any drug having a narcotic effect whilst carrying out maintenance on an aircraft, its components or equipment.

Language

56.01.9 A technical approved person shall have sufficient ability in reading, writing, speaking and understanding the English language to enable them to adequately carry out their responsibilities as a technical approved person.

Register of technical approved persons

- **56.01.10** (1) The appropriate administrative authority shall maintain a register of all technical approved person certificates issued, renewed or reissued in terms of this Part.
- (2) The register shall contain the following particulars
 - (a) the full name of the holder of the certificate;
 - (b) full identification or passport number;
 - (c) the physical and postal address of the holder of the certificate;
 - (d) the date on which the certificate was issued, renewed or reissued;
 - (e) particulars of the qualifications, experience and endorsements held by the certificate holder;
 - (f) details of the physical place where work is performed as applicable; and
 - (g) the nationality of the holder of the certificate.
- (3) The particulars referred to in sub-regulation (2) shall be recorded in the register within thirty days from the date on which the certificate is issued, renewed or reissued.
- (4) The register shall be kept at a safe place at the office of the appropriate administrative authority.

(5) The name, endorsement and currency details on the register referred to in sub-regulation (1) may be made available to any person upon formal application and providing reasons for applying for such details. (Fee)

Responsibilities of certificate holder

56.01.11

- (1) The holder of a technical approved person certificate shall maintain an up to date record of experience in the logbook prescribed in 56.01.13, in which they shall record details of all maintenance, repairs, modifications, overhauls and inspections carried out.
- (2) The holder of a technical approved person certificate shall at all times comply with the rules and code of ethics refered to in document SA-CATS 56.

Training Facilities

56.01.12

Training as required by this Part shall only be provided by the holder of an approved training facility approved in terms of Part 51 or Part 55.

Logbooks

56.01.13

- (1) Any person presenting or undergoing training under the TAP program, or a holder of a TAP certificate shall maintain a logbook and shall record therein details of all training and/or work carried out on an aircraft and its components.
- (2) The format of, and the information to be contained in, the logbook referred to in sub-regulation 56.01.11 and the manner in which such logbook shall be maintained, are as prescribed in Document SA-CATS 56.
- (3) No alterations of a logbook shall be made.

Failure to maintain minimum standards

56.01.14

- (1)(a) If the appropriate administrative authority suspects that a TAP, approved in terms of this Part, has failed to maintain the minimum standard required to exercise the privileges of the technical approved person certificate or any of the endorsements the reflected thereon, the appropriate administrative authority must give the TAP certificate holder a reasonable written notice of such suspicion.
- (b) The appropriate administrative authority may then require the TAP to undergo remedial training, including a re- write all of or some of the theoretical knowledge examinations, or to again undergo all or some of the practical examinations with a designated examiner prescribed in this Part in respect of such approval by a specified date.

- (2) Should the remedial training or examinations, show that the standard of the TAP is below that required for the certificate concerned, the appropriate administrative authority shall suspend the certificate holder from exercising all or any of the privileges of that approval until such time as the holder can show that he or she is able to meet the experience, practical skills, and theoretical knowledge requirements for that certificate.
- (3) If the TAP certificate holder who has been duly notified in terms of sub-regulation (8) fails without reasonable cause to be present on the specified date to undergo the remedial training or examination prescribed, the standard of that TAP holder shall be deemed to be below that required for the certificate concerned and the provisions of sub- regulation (2) shall apply.
- (4) The holder of a lapsed or expired TAP certificate issued in terms of this Part, or where such holder may not exercise the privileges of his or her approval due to non-compliance with the currency requirement may, only for the purpose of renewing their TAP certificate, exercise the privileges of a TAP3 certificate.
- (5) In the case that an imminent safety risk or hazard to persons or property exists or presents itself, the appropriate administrative authority shall summarily suspend the TAP certificate until the conclusion of a thourough investigation, or the appropriate remedial actions have been completed.
- (6) In the case of any administrative action, the appropriate administrative authority shall apply the provisions contained in Part 185.

SUBPART 2: Requirements for the Issue Technical Approved Person Certificate and Endorsement

56.02.1 Requirements

- (1) An applicant for the issuing of a technical approved person certificate in a specific category and with a specific endorsement shall—
 - (a) not be less than 18 years of age;
 - (b) have submitted documented evidence of the required practical work experience in accordance with the TAP program's manual of procedures, in the particular group, class, category or type of aircraft, engines, airframes, components equipment and systems referred to in Subpart 1 of this regulation;
 - (c) have successfully completed the theoretical knowledge examinations referred to in regulation 56.02.3 as determined by the appropriate administrative authority; and
- (2) An application for a TAP3 certificate shall be exempt from the provisions of (b) and (c) above.
- (3) In the case of an AME applying for the issue of a TAP certificate, the following requirements shall apply:
 - (a) provide documented evidence of all recognised qualifications and AMO certified practical work experience in the particular categories, groups, classes, makes or types of aircraft,

- airframes, engines, components and equipment referred to in this regulation, that is being applied for, and
- (b) have successfully completed the TAP air law examination and the TAP manual of procedure examination, as well as any other examination, if applicable, required by the appropriate administrative authority.

Training

56.02.2 (1) An applicant for the issuing of a technical approved person, TAP2 and TAP1 certificate shall have successfully attended an approved training program as prescribed in Document SA-CATS 56, presented by an approved NTCA maintenance facility, original equipment manufacturer or their agent as approved by the appropriate administrative authority, in the following categories, groups or classes:

- (a) Group A, for airframes, or any combination of the airframes referred to in paragraph 56.1.6(1)(a);
- (b) Group C, for engines or any combination of engines, referred to in paragraph 56.1.6(1)(b);
- (c) Group W, for equipment or any combination of equipment, referred to in paragraph 56.1.6 (1)(c)(i);
- (d) Group X, for instruments, avionics and equipment or any combination of , the instruments, avionics and equipment referred to in paragraph 56.1.6 (1)(c)(ii);
- (e) Group P, for propellers or any combination of propellers, referred to in paragraph 56.1.6 (1)(c)(iii);
- (f) Group E, for rotors and rotor hub assemblies or any combination of rotors and rotor hub assemblies referred to in paragraph 56.1.6(1)(c)(iv);
- (g) Group S, for welding or any combination of the types of welding, referred to in paragraph 56.1.6 (1)(c)(v).
- (2) An applicant for the issuing of a, TAP 1 certificate shall have successfully attended an approved training program as prescribed in Document SA-CATS 56, with an approved NTCA maintenance facility, original equipment manufacturer or their agent as approved by the appropriate administrative authority, towards an endorsement in the following categories:
 - (a) Group B, for aeroplanes, or any combination of aeroplanes, referred to in paragraph 56.1.6 (1)(a);
 - (b) Group D, for engines or any combination of engines, referred to in paragraph 56.1.6(1)(b).

Theoretical knowledge examination

56.02.3 The applicant for a TAP certificate and any of the categories, groups or class endorsenets shall have successfully passed the online examinations referred to in documents SA-CATS 56

- (1) (a) An applicant, who fails the online examinations referred to in sub-regulation (1), may apply for a remark within 10 working days of failing such examination.
 - (b) If the remark is successful, the fee will be refunded;

- (c) If the remark is not successful, the candidate may apply in writing to be entered for a reexamination sitting after the prescribed time limits in sub regulation (10) below have elapsed.
- (2) The pass mark for any written technical approved person examination is 75%. A candidate who fails with a mark
 - (a) of equal to or more than 70% and but less than 74%, may apply in writing to be entered for an exam sitting after 30 days from the date of receiving the examination results,
 - (b) of equal to or more than 65% and but less than 69%, may apply in writing to be entered for an exam sitting after 3 months from the date of receiving the examination results,
 - (c) of equal to or more than 60% and but less than 64%, may apply in writing to be entered for an exam sitting after 6 months from the date of receiving the examination results,
 - (d) of equal to or more than 55% and but less than 59%, may apply in writing to be entered for an exam sitting after 9 months from the date of receiving the examination results,
 - (e) of less than 55%, may apply in writing to be entered for an exam sitting after 12 months;
 - (f) A candidate who fails their second attempt, and shows no improvement on the previous attempt, may apply in writing to be entered for an exam sitting after 12 months.
- (3) The contents of the online examination shall be determined and reviewed by the appropriate administrative authority.
- (4) TAP examinations are conducted on the online examination system presented by the appropriate administrative authority.
- (5) An applicant whose application to be entered for an exam sitting is approved, shall be required to answer, in an online examination, questions to demonstrate their knowledge of the categories, groups, and classes which they are applying for.
- (6) In the case of make or type by name endorsements, the applicant shall be required to pass an examination to demonstrate their knowledge with special emphasis on the makes and types for which they are applying for.
- (7) In the case of a special or unusual application, or where no pre-determined syllabus or online examination is available for a category, group, class, make or type by name, the appropriate administrative authority may conduct a special theoretical and practical examination by way of specialist instructors or examiners to determine the knowledge, experience and competence of the applicant.

56.02.4 An applicant for the issuing of a TAP certificate shall:

- (a) be the primary builder of, and having completed the major portion of a build, assembly or restoration, and obtained an authority to fly for their own aircraft; or
- (b) have completed the practical training and gained the experience required at an approved NTCA maintenance facility or under direct supervision of a holder of a TAP instructor certificate, as provided for in Document SA- CATS 56, or
- (c) have obtained a recognised technical qualification, together with proven aircraft maintenance training and experience compatible with the particular endorsement prescribed in this regulation at an approved NTCA maintenance facility, AMO, an approved original aircraft manufacturer, or an approved original equipment manufacturer, or any other organisation acceptable to the appropriate administrative authority.

Application for approval or amendment

56.02.5 (1) An application for the approval and issuing of a technical approved person certificate or for an amendment thereof, shall –

- (a) be made on the appropriate form as prescribed by the appropriate administrative authority, and
- (b) be accompanied by:
 - (i) original or certified proof of :
 - (aa) the identity document of the applicant; and
 - (bb) experience documented in the prescribed maintenance logbook detailing the record of experience in all applicable categories groups, classes, and types together with annual summaries thereof; and
 - (cc) all relevant qualifications attained; and
 - (dd) if applicable, in the case of an owner builder that has completed their own build project and obtained an ATF for the same project as the build number issued in terms of Part 24, such applicant may be issued with a TAP4 certificate for that specific aircraft.
 - (ii) original or certified proof that the applicant has:
 - (aa) obtained the appropriate knowledge and practical experience through the approved training programs prescribed in regulation 56.02.2; and
 - (bb) passed the applicable theoretical knowledge examinations referred to in regulation 56.02.3; and
 - (iii) any further documentation or material that may be required as may be determined by the appropriate administrative authority, in order to determine the competence of the applicant before issuing a TAP certificate.
 - (iv) two recent passport-size photographs of the applicant; and
 - (v) the appropriate application fee as prescribed in Part 187, and
 - (vi) once approved, the hourly administration fee, if applicable, as prescribed in Part 187.

(2) Application for a special approval of a first of type issue, amendment or addition of a certificate with an endorsement on newly registered aircraft shall be made to the appropriate administrative authority, and accompanied by an original letter from the manufacturer stating that the applicant has successfully attended a manufacture's training course and passed an approved examination, approved by the manufacturer together with the appropriate administrative authority.

Issuing of certificate

56.02.6 (1) The appropriate administrative authority, shall issue a technical approved person certificate with the appropriate endorsement if the applicant complies with the requirements referred to in regulation 56.02.5.

- (2) The certificate shall be issued on the prescribed form.
- (3) The certificate shall specify the endorsement for the categories, groups and classes of the aircraft, their engines, components and equipment, and if applicable the makes or types by name of non-type certified aircraft, in respect of which the holder of such certificate is entitled to exercise the privileges thereof.
- (4) Upon receipt of a technical approved person certificate, the applicant shall forthwith affix their signature in black ink in the space on the certificate provided for such purpose.
- (5) The appropriate administrative authority may at any time request further information as considered appropriate in order to support an applicant's experience, knowledge or qualifications prior to the issue of a TAP certificate.

Period of validity

- **56.02.7** (1) A technical approved person certificate issued in accordance with this Subpart shall be valid for a period not exceeding 24 months, calculated from the date on which the approval is issued or from the date of renewal of the approval if such approval is renewed in accordance with the provisions of regulation 56.02.8.
- (2) Any amendment of a technical approved person certificate shall be valid for the period for which the certificate is valid.

Renewal of approved person certificate

56.02.8 (1) To renew a technical approved person certificate, the holder thereof shall:

- (a) within the 12 months preceding the date of expiry of the TAP certificate, have carried out maintenance, inspections or repairs in accordance with the TAP approvals and endorsements on at least four aircraft within the endorsed categories, groups, classes, makes or types, except in the case of an owner builder who may only perform maintenance or repairs on their own aircraft in terms of their TAP4 approval.
- (b) within the 30 days immediately preceding the date of expiry of such certificate, submit an application for renewal accompanied by:
 - (i) a certified copy of the TAP certificate held by the applicant;
 - (ii) an original or certified record of experience contained in their logbook as proof of compliance with the provisions of sub-regulation (1)(a),

- (iv) where applicable, an original or certified proof of having attended approved continuous or refresher training programs required for the categories, group(s), class(es) or of endorsements held and being renewed.
- (v) proof of compliance with the technical approved person program's manual of procedures.
- (vi) the appropriate application fee as prescribed in Part 187.
- (2) The application for the renewal of the certificate shall be made on the prescribed form.
- (3) The appropriate administrative authority, shall renew the certificate if the applicant complies with the requirements referred to in sub-regulation (1).
- (4) The certificate shall be renewed on the appropriate form as prescribed by the appropriate administrative authoruty.

Reissue

56.02.9 (1) (a) The holder of a technical approved person certificate that has expired due to the lapse of the period referred to in regulation 56.02.7 may apply to the appropriate administrative authority for the re-issue of the expired certificate.

- (b) In the case where the certificate has expired for a period not exceeding 2 years, the applicant shall, in addition to rewriting the airlaw examination, comply with the requirements prescribed sub regulation 56.02.8;
- (c) In the case where the certificate has expired for a period exceeding 2 years, the applicant shall, in addition to rewriting the airlaw examination, comply with the requirements prescribed in sub regulation 56.02.5. or as determined by the appropriate authority following a confirmation of knowledge with a TAP DE;
- (2) Upon application for the re-issue of the expired certificate, the appropriate administrative authority shall reissue such certificate if the applicant complies with the requirements prescribed in sub-regulation (1).
- (3) The provisions of regulations <u>56.02.5</u> and 56.02.6 shall apply with the necessary changes to an application referred to in sub-regulation (1).
- (4) the appropriate application fee as prescribed in <u>Part 187</u>.

56.02.10 Privileges and limitations

- (1) The holder of a technical approved person certificate:
 - (a) shall not be competent to grant permission to the constructor, owner or operator to fly his or her aircraft for the purpose of carrying out proving or test flights for the purpose of fulfilling the requirements necessary for the issuing of a release to service.

- (b) any inspection carried out by a TAP on a non-type certificated aircraft in terms of regulation 24.01.8(3) shall be of a conditional nature in that the technical approved person carrying out the inspection shall not be competent to guarantee the airworthiness of the aircraft;
- (c) in the case where a technical approved person issues a release to service for a non-type certificated aircraft they thereby confirm that they are satisfied that the aircraft, its engines, components and equipment are serviceable for flight and that all maintenance has been carried out and recorded in the aircraft's maintenance logbooks in accordance with the regulations and the aircraft's approved maintenance schedule;
- (d) who wishes to carry out welding on a non-type certificated aircraft shall be the holder of an appropriate welding certificate for the type of welding to be carried out. The certificate does not necessarily have to be for aircraft welding, but shall specify the type of welding, the equipment used and type of metals that the applicant is qualified to weld;
- (e) may not perform any other work not approved in terms of, and not endorsed on the TAP certificate.
- (2) (a) the holder of a TAP 3 certificate may, in accordance with the endorsements reflected on the TAP certificate, only, in order to gain the required knowledge and experience towards obtaining a TAP2 certificate, perform basic maintenance and repairs on NTCA and its components under direct instruction and supervision of the holder of a valid TAP instructor certificate approved for the purpose.
 - (b) the holder of a TAP3 certificate shall not:

or

- (i) perform any basic maintenance or repairs and on their own and without direct instruction and supervision by the approved instructor; or
- (ii) certify the aircraft or engine maintenance logbooks; or
- (iii) inspect any maintenance or repairs on aircraft its engine components or equipment;
 - (iv) perform any, overhaul, or modification work on an aircraft its engine components or equipment; or
 - (v) certify a release to service for any aircraft.
- (3) (a) The holder of a valid TAP 2 group A endorsement, may in accordance with their TAP certificate:
 - (i) perform general maintenance and repairs in accordance with the endorsements and approvals, and
 - (ii) perform work which the maintenance schedule relating to the specified sub-group, make or type of aircraft endorsed on their TAP certificate requires; and
 - (iii) perform any adjustment of the specified category, sub-group, class, make or type of aircraft, including the installation or replacement of equipment and minor components of such aircraft, as approved, excluding its engine or engines.

(vii) certify in the aircraft logbook(s) the details of all maintenance or repair work performed,

stating when and where the maintenance or repairs took place and the outcome thereof;

- (b) The holder of a TAP 2 group A endorsement shall not:
 - (i) perform any inspection, overhaul, or modification work to an aircraft, its engine, components or equipment; or
 - (ii) certify the release to service of the non-type certificated aircraft following maintenance, repairs or an annual inspection for the purpose of the issue or renewal of an ATF.
- (4) (a) The holder of a valid TAP 2 group C endorsement may in accordance with their TAP certificate:
 - (i) perform general maintenance on the sub-group of engine or engines in an aircraft; and
 - (ii) perform work which the maintenance schedule relating to the specified sub-group of engine or engines permits such holder to certify; and
 - (iii) perform any adjustment of the specified sub-group, make or type of engine or engines and the replacement of its external components; and
 - (iv) certify in the engine logbook(s) the maintenance work performed, stating when and where the maintenance or repairs took place and the outcome thereof.
 - (b) The holder of a TAP 2 group C endorsement shall not:
 - (i) perform any inspection, overhaul, or modification work to an aircraft its engine components or equipment; or
 - (ii) certify the release to service of a non-type certificated aircraft following maintenance, repairs or an annual inspection for the purpose of the issue or renewal of an ATF.
 - (c) The holder of a valid TAP 2 with both a group A and C endorsement may in accordance with their TAP certificate:
 - (i) complete and sign the aircraft maintenance logbooks detailing all work completed following regular and periodic maintenance or inspections, other than an annual inspection and for the purpose of an ATF issue or renewal, and provided that no snags or work was performed on components or equipment that requires a group W, X, P, E or S endorsement from the TAP.
 - (d) The holder of a valid TAP 2 with a group W2 endorsement may in accordance with their TAP certificate:
 - (i) remove and refit such equipment as approved in their group W endorsement.

- (ii) perform annual checks on pitot and static systems on non-type certificated aircraft
- (e) The holder of a valid TAP 2 certificate with a group X3 endorsement may in accordance with their TAP certificate:
 - (i) remove and refit such equipment as specified by their group X endorsement;
 - (ii) perform annual checks on pitot and static systems on non-type certificated aircraft.
- (f) The holder of a valid TAP 2 certificate with a group P3 endorsement may in accordance with their TAP certificate:
 - (i) remove and refit such equipment as specified in their group P endorsement.
- (g) The holder of a valid TAP 2 with a group E3 endorsement may in accordance with their TAP certificate:
 - (i) remove and refit such equipment as specified by their group E endorsement.
- (h) The holder of a valid TAP 2 with a group S2 endorsement may in accordance with their TAP certificate:
 - (i) perform welding as specified by their group S endorsement
- (5) the holder of a valid TAP 1 certificate with an A and C endorsement, may in accordance with their TAP approval perform, and shall certify, in the aircraft maintenance logbook:
 - (a) all maintenance, repairs and inspections carried out on the aircraft;
 - (b) all such maintenance, repairs, and inspections, in accordance with the requirements prescribed in Part 24 and Part 44, on a non-type certificated aircraft, its components and equipment, and as may be required by a TAP 2, or the constructor or owner of the non-type certificated aircraft;
 - (c) the details of all maintenance or repair work performed, stating when and where it was performed, and the outcome thereof;
 - (d) certify the release to service of a non-type certificated aircraft, in accordance with Part 24,
 - (e) complete and certify all applicable documents.
- (f) perform inspections on non-type certificated aircraft for the purpose of a release to service and annual inspections and for the issue or renewal of an authority to fly permit.
 - (g) oversight and inspections, as may be required by the appropriate administrative authority, on a non-type certificated aircraft in accordance with the requirements prescribed in Parts 24, 44, 94, 96 and 115 as applicable.
- (6) The holder of a valid TAP 1 certificate with a group X2 endorsement, may in accordance with their TAP certificate perform and certify, in the aircraft maintenance logbook: the removal refitting,

installation,	inspections
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- (a) and compass swing of the specified compasses;
- (b) of the specified engine ignition equipment, and replacements thereof;
- (c) of the specified instruments;
- (d) of the specified electrical equipment, and replacements thereof;
- (e) automatic pilots other than automatic pilots which operate on electronic principles;
- (f) of electronic automatic pilots;
- (g) of the specified avionic equipment, and replacements thereof; and
- (h) including annual checks of pitot and static systems, and replacements thereof;
- (7) The holder of a valid TAP 1 with a group P2 endorsement, may in accordance with their TAP certificate perform, and shall certify, in the aircraft maintenance logbook:
 - (a) the removal, refitting and inspections of propellers, and replacement thereof as specified by the applicable endorsement;
- (8) The holder of a valid TAP 1 with a group E2 endorsement, may in accordance with their TAP certificate perform, and shall certify, in the aircraft maintenance logbook:
 - (a) the removal, refitting and inspections of rotors, and rotor hub assemblies and replacement thereof as specified by the applicable endorsement in:
 - (i) Sub class G1, or
 - (ii) Sub class H1;
- (9) The holder of a valid TAP 1 with a group S1 endorsement, may in accordance with their TAP certificate perform and certify, in the aircraft maintenance logbook:
 - (i) the carrying out of the specified welding and inspections on welding in the applicable classes and sub classes as specified in Regulation 56.02.3(8).
- (10) The holder of a valid TAP 1 with a group B endorsement may in accordance with its TAP certificate perform and shall certify in the aircraft maintenance logbook:
 - (a) all modifications carried out on the aircraft in accordance with regulation 44.01.11; and

- (b) all maintenance, repairs, inspections, overhauls or modifications, including trimming, spray painting, electroplating or machining, of the specified type of aeroplane or rotorcraft, excluding its engine or engines, except:
 - the overhaul, repair, inspection or modification of such item, equipment or component, which may be required only to be inspected and shall be certified by the holder of a group X1 endorsement; and
 - (ii) the installation, inspection and testing of such instrument, electrical equipment or radio apparatus, which may be required only to be inspected and shall be certified by the holder of a group W1 endorsement.
 - (c) the manufacturing or replacement of structures, components and parts, if the manufacturing or replacement of the structures, components and parts is necessary for such holder to complete an overhaul, repair or modification which he or she shall certify in the airframe logbook.
- (11) The holder of a valid TAP 1 with a group D endorsement, may in accordance with their TAP certificate

perform, and shall certify, in the aircraft maintenance logbook:

- (a) all modifications carried out on the aircraft in accordance with regulation 44.01.11;
- (b) all maintenance, repairs, inspections, overhauls, or modifications of the specified group or type of engine or engines, except the overhaul, repair or modification of the ignition equipment, and of the propeller, starter and generator, which shall be inspected and certified in the engine logbook by the holder of a group X1 endorsement; and
- (b) the manufacturing or replacement of components and parts, if the manufacturing or replacement of the components and parts is necessary for such holder to complete an overhaul, repair or modification.
- (12) The holder of a valid TAP 1 with a group W1 endorsement may, in accordance with their TAP certificate perform, and shall certify, in the aircraft maintenance logbook:
 - (a) all removal, refitting, and inspections of such equipment;
 - (b) all work performed in accordance with the maintenance schedule relating to the specified type of equipment;
 - (c) any installation of such equipment in an aircraft and the replacement of components of such equipment: Provided that no equipment shall be dismantled for the purpose of making internal replacements.

- (13) The holder of a valid TAP 1 with a group X1 endorsement may, in accordance with their TAP certificate perform, and shall certify, in the aircraft maintenance logbook removal, refitting, installation, repair, overhaul and inspections:
 - (a) including a compass swing of the specified compasses;
 - (b) of the specified engine ignition equipment, and replacements thereof;
 - (c) of the specified instruments;
 - (e) of the specified electrical equipment, and replacements thereof;
 - (f) of automatic pilots other than automatic pilots which operate on electronic principles;
 - (g) of in-flight adjustment of electronic automatic pilots;
 - (h) of the specified avionic equipment, and replacements thereof; and
 - (i) including annual checks of pitot and static systems, and replacements thereof;
- (14) The holder of a valid TAP 1 with a group P1 endorsement, may in accordance with their TAP certificate perform, and shall certify, in the aircraft maintenance logbook:
 - (a) the removal, refitting, installation, repair, overhaul and inspections of propellers, and replacements thereof as approved in the applicable classes;
- (15) The holder of a valid TAP 1 with a group E1 endorsement, may in accordance with their TAP certificate perform, and shall certify, in the logbook:
 - (a) the removal, refitting, installation, repair, overhaul and inspections rotors, and rotor hub assemblies and replacements thereof as approved in the applicable G1 or H1 classes;
- (16) The holder of a valid TAP 1 with a group S1 endorsement, may in accordance with their TAP certificate perform, and shall certify, in the logbook:
 - (i) the carrying out of the specified welding and inspections on welding as approved in the applicable classes and sub classes.

SUBPART 3: TECHNICAL APPROVED PERSONS INSTRUCTOR ENDORSEMENTS (TAPI)

Requirements for TAP instructor endorsement

- **56.03.1 (1)** An applicant for the issuing of a TAP instructor endorsement shall
 - (a) be not less than 21 years of age;
 - (b) hold a valid technical approved persons TAP 1 certificate;
 - (c) hold at least one valid endorsement; Provided that, where the applicant is the holder of a group B or D endorsement for a particular sub-group, make or type of an aircraft or engine, the applicant shall also be the holder of both group A and C endorsements, for that category, group, class, make or type of aircraft or engine as applicable;
 - (d) have successfully completed the training referred to in regulation <u>56.03.2</u>;
 - (e) have passed the theoretical knowledge examination referred to in regulation <u>56.03.3</u>; and
 - (f) have acquired the experience referred to in regulation <u>56.03.4</u>.
- (2) Notwithstanding (c) above technical approved persons who work on gliders only will be exempt from the requirement for a Category C endorsement for purposes of applying for a TAP instructor endorsement.

Training

56.03.2 An applicant for the issuing of a TAP instructor endorsement shall have successfully completed an approved training program as provided in document SA-CATS 56 presented by a recognised approved NTCA maintenance facility, original equipment manufacturer or their agent as approved by the appropriate administrative authority, in the categories groups, classes, as endorsed on the TAP 1 certificate.

Theoretical knowledge examination

56.03.3

- (1) An applicant for the issuing of a TAP instructor endorsement shall have passed the applicable written examinations as provided in Document SA-CATS 56.
- (2) (a) An applicant, who fails the online examinations referred to in sub-regulation (1), may apply for a remark to the appropriate administrative authority, as provided for in the technical approved persons' manual of procedures, subject to payment of the appropriate fee prescribed in Part 187.
 - (b) If the remark is successful, the fee will be refunded;
 - (c) If the remark is not successful, the candidate may apply in writing to be entered for a reexamination sitting after the prescribed time limits in Regulation 56.02.3(10) above have elapsed.

Experience

56.03.4 An applicant for the issuing of a TAP instructor endorsement shall comply with the requirements for the appropriate experience as provided in Document SA-CATS 56.

Application for instructor endorsement

56.03.5

- (1) An application for the issuing of TAP instructor endorsement shall be made to the appropriate administrative authority on the prescribed form.
- (2) The application referred to in sub-regulation (1) shall be accompanied by:
 - (a) in the case of a TAP instructor endorsement:
 - (i) original or certified proof of -
 - (aa) the identity document of the applicant;
 - (bb) compliance with the requirements referred to in regulation <u>56.03.1(d)</u>, (e) and (f); and
 - (cc) the applicant's competency to exercise the privileges referred to in regulation 56.03.8;
 - (bb) the full aircraft maintenance and overhaul record of experience of the applicant;

and

(dd) that the applicant has passed the theoretical knowledge examinations referred to

in regulation 56.03.3;

- (ii) a certified copy of the TAP 1 certificate and all relevant qualifications held by the applicant; and
- (iii) the appropriate fee as prescribed in Part 187;
- (3) The grades of technical approved person instructor approvals that may be endorsed on technical approved persons TAP 1 Certificates are:

- (i) a grade one TAP instructor, holds a TAP1 certificate with group B and/or D endorsement for an uninterrupted period not less than 3 years in this category, and
- (ii) a grade two TAP instructor, holds a TAP1 certificate with group A and C endorsements for an uninterrupted period not less than 2 years in this category.
- (iii) a TAP instructor for W, X, P, E and S groups shall be the holder of a TAP1, endorsed with W1, X1, P1, E1 and S1 endorsements in the respective groups for an uninterrupted period of not less than 5 years.

Issuing of Technical Approved Person instructor endorsement

56.03.6 (1) The appropriate administrative authority shall issue a TAP instructor endorsement if the applicant complies with the requirements referred to in regulation <u>56.03.1</u>

- (2) The instructor endorsement shall be issued on the TAP certificate.
- (3) The certificate shall specify the endorsement for the categories, groups and classes of the aircraft, engines, components and equipment, and where applicable the makes or types by name of non-type certificated aircraft, its engines, components or equipment in respect of which the holder of such certificate is entitled to exercise the privileges thereof.
- (4) Upon receipt of a technical approved person certificate with an instructor endorsement, the applicant shall forthwith affix their signature in black ink in the space on the certificate provided for such purpose.
- (5) The appropriate administrative authority may at any time request further information as considered appropriate in order to support an applicant's experience, knowledge or qualifications prior to the issue of a TAP certificate.
- (6) The summary shall be in the format prescribed in Document SA-CATS 56 and be signed, certifying it to be a true reflection of their experience during the period summarised.

Period of validity

56.03.7 A technical approved person instructor endorsement shall be valid for the period for which the TAP certificate is valid.

Privileges of the holder of a TAP instructor endorsement

- (a) provide theoretical and practical instruction to TAP's on any of the valid endorsements held by them; and
- (b) act as an examiner in any of the valid endorsements held by them, if approved by the appropriate administrative authority as the case may be.

Renewal of instructor endorsement

56.03.9 (1) To renew a TAP instructor endorsement, the holder thereof shall, within the 24 months preceding the date of expiry of the endorsement, have served for not less than 120 hours as a TAP instructor.

- (2) An application for the renewal of a TAP instructor endorsement shall, within 30 days immediately preceding the date of expiry of such endorsement, be
 - (a) made to the appropriate administrative authority in the prescribed form; and
 - (b) accompanied by -
 - (aa) certified copy of the TAP I certificate held by the applicant;
 - (bb) the appropriate fee as prescribed in Part 187; and
 - (cc) an original or certified copy of proof of compliance with the provisions of subregulation (1).
- (3) The appropriate administrative authority shall renew the TAP I endorsement if the applicant complies with

the requirements referred to in sub-regulations (1) and (2).

- (4) The endorsement shall be renewed in the prescribed form.
- (5) The renewal of the endorsement shall be valid for the period for which the TAP certificate is valid.

SUBPART 4: TECHNICAL APPROVED PERSONS DESIGNATED EXAMINER

Designation of examiners

(1) All persons considerd for designation as Designated Examiners shall be fit and proper persons, and comply with the requirements provided for in document SA-CATS 56, and any additional requirements

required by the appropriate administrative authority.

- (2) The appropriate administrative authority may designate examiners for a period not exceeding two years, to conduct, according to the privileges indicated by the valid endorsement or endorsements held by the examiner, oversight and inspections in respect to instructors, technical approved persons, approved facilities and aircraft on behalf of the appropriate administrative authority.
- (3) The privileges referred to in (1) shall be exercised and performed according to the conditions, rules, requirements, procedures or standards as provided for in the Technical Approved Persons manual of procedures.
- (4) The appropriate administrative authority shall sign and issue to each designated examiner a document which shall state the full name of such examiner and contain a statement that
 - (a) such examiner has been designated in terms of sub-regulation (1); and
 - (b) such examiner is authorised to exercise the privileges referred to in sub-regulation (1) and to perform the duties specified on the DE certificate, only when explicitly instructed to perform such duties referred to in sub regulation (1) by the appropriate administrative authority.
- (5) The application to be considered for designation as referred to in sub-regulation (1) shall be accompanied by :
 - (a) details of the certificate, approvals, endorsements and experience to which the application applies; and
 - (b) the appropriate fee as prescribed in Part 187.
- (6) The appropriate administrative authority shall conduct oversight over the activities of designated examiners.

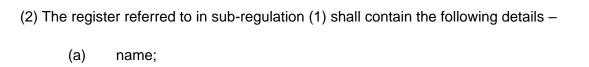
Re-designation as DE

56.04.2

- (1) An application for renewal as a designated examiner must be made on the prescribed form not less than 30 days prior to the date that the designation expires, together with the fee as prescribed in Part 187.
- (2) Submission of such application does not automatically entitle the applicant to continue to exercise the privileges of a DE after the expiry date.

Register of DE's

56.04.3 (1) The appropriate administrative authority shall maintain a register of all DE's.



- (b) category and privileges of the designation;
- (c) licences and endorsements held; and
- (d) expiry date.

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NTCA Technical Approved Persons Certificate

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56.01.13 Logbooks

- 1. Completion of logbooks
- 1.1 Category A/B and C/D and W, X, P, E, S
- (a) All Logbooks shall be completed including details of the designation of all aircraft types and engine types to be filled in properly.
- (b) The TAP experience shall be logged in hours
- (c) Logbooks shall be signed and stamped in the appropriate place by the TAP, TAP I, a TAP DE performing the maintenance as well as a Supervising Inspector, a Quality Manager or Accountable Manager of an AMO or NTCA Approved maintenance facility.
- (c) Logbooks shall be updated and signed and stamped on completion of each job card or work pack.
- (d) An example of how the experience should be recorded in the logbook shall be as contained in Appendix RA 56.22

56.02.2 PRACTICAL TRAINING

- 1. Basic training syllabus for the endorsement: TAP A, B, C, D, W, X, P, E, and S
 - 1.1 Introduction
 - (1) Competency Based Modular Training (CBMT) as per Appendix RA56.03
- 2. Basic training syllabus for the trade: Aircraft Structures TAP Category B
 - 2.1 Introduction
 - (1) Competency Based Modular Training (CBMT) as per Appendix RA56-03
- 3. Basic training syllabus for the trade: Instrument TAP Category X
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 - (1) Competency Based Modular Training (CBMT) as per Appendix RA56.04
- 4. Basic training syllabus for the trade: TAP Aircraft Radiotrician Category X
 - 4.1 Introduction
 - (1) Competency Based Modular Training (CBMT) as per Appendix
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- 5.1 Introduction
 - (1) Competency Based Modular Training (CBMT) as per Appendix
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- 6.1 Introduction

- (1) Competency Based Modular Training (CBMT) as per Appendix
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56.02.3 THEORETICAL KNOWLEDGE EXAMINATION

1. Entry requirements and procedures for theoretical knowledge examinations for Technical Approved Person certificate (Groups A, C, B, D W, X, P, E and S)

1.1 General

As per Appendix RA 56.08

- 2 Knowledge requirements
 - 2.1 Technical Approved Person certificate (Group A endorsement)

As per Appendix RA 56.09

2.2 Technical Approved Person certificate (Group C endorsement)

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2.7 Technical Approved Person certificate (Group P endorsement)

As per Appendix RA 56.15.1

2.8 Technical Approved Person certificate (Group E endorsement)

As per Appendix RA 56.15.2

2.9 Technical Approved Person certificate (Group S endorsement)

As per Appendix RA 56.16

- 3. Theoretical knowledge examination
- (1) An applicant for the initial issuing of a TAP3 certificate shall have passed the online examinations:
 - (a) TAP general:
 - (i) Air law, SA-CAR and SA-CATS; and
 - (ii) TAP program manual of procedures.

- (2) An applicant for the issuing of a TAP2 certificate, Group A, shall have passed the following online examination;
 - (a) for airframes:
 - (i) airframes general; and
 - (ii) sheet metal airframes; or
 - (iii) wood and fabric covered airframes; or
 - (iv) tubular metal and fabric covered airframes; or
 - (v) composite airframes, or
 - (vi) pressurised airframes.
 - (b) airframes in the respective sub-categories of:
 - (i) microlights and weight shift microlights with a MTOW not exceeding 450kg (480kg); or
 - (ii) aeroplanes with a MTOW not exceeding 600kg (650kg); or
 - (iii) aeroplanes with a MTOW not exceeding 1200kg; or
 - (iv) gliders, self-launching/sustainer gliders, or
 - (v) touring motor gliders.
 - (c) aeroplane with a MTOW exceeding 1200kg and not exceeding 5700kg in the respective sub-groups, aircraft makes and types by name as applicable.
 - (d) for gyrocopters and gyrogliders, in the respective aircraft makes or types by names as applicable:
 - (i) gyrocopters and gyro gliders with a MTOW not exceeding 2000kg.
 - (e) for helicopters in the respective sub-groups, aircraft makes and types by name as applicable:
 - (ii) helicopters with a MTOW not exceeding 3175kg; or
 - (iii) helicopters with a MTOW not exceeding 5700kg.
 - (e) for all other aircraft not listed above, in the respective categories, groups, makes or types by name as applicable:
 - (i) balloons, or
 - (ii) powered hang gliders, powered paragliders, powered parachutes and powered paratrikes or any other powered derivatives thereof.
- (3) An applicant for the issuing of a TAP2 certificate group C, shall have successfully passed the following online examination:
 - (a) for engines in the respective sub-groups of:
 - (i) engines, and fuel systems general, and
 - (ii) horizontally opposed piston engines; or

- (iii) turbo normalised, turbo charged and supercharged piston engines, or
- (iv) in-line piston engines, or
- (v) radial engines, or
- (vi) turbine & jet engines general, or
- (vii) non-aviation engines, or
- (viii) two stroke engines, or
- (ix) diesel and turbo diesel engines or
- (x) electrical engines, or
- (xi) sustainer and self-launch engines for gliders
- (4) An applicant for the issuing of a TAP 2 or TAP1 certificate, group W, shall have successfully passed the following online examination:
 - (a) class A: avionics, radio and radar equipment; or
 - (b) class E: electrical equipment; or
 - (c) class I: instrument equipment, or
 - (d) class PS: pitot & static systems
- (5) An applicant for the issuing of a TAP 2 or TAP1 certificates, group X, shall have successfully passed the following online examination:
 - (a) class 1: compasses; or
 - (b) class 2 engine ignition equipment; or
 - (c) class 4: instruments, including electrically operated instruments; or
 - (d) class 5: electrical equipment; or
 - (e) class 6: automatic pilots; or
 - (f) class 7: avionic equipment, including equipment employing pulse techniques.
 - (g) class 7: pitot and static systems
- (6) An applicant for the issuing of a TAP2 or TAP1 certificates, group P, shall have successfully passed the following online examination:
 - (a) A; fixed pitch propellers of metal construction; or
 - (b) B; fixed pitch propellers of composite construction; or
 - (c) C; fixed pitch propellers of wooden construction; or
 - (d) D; variable pitch ground adjustable propellers of metal construction; or
 - (e) E; variable pitch ground adjustable propellers of composite construction; or
 - (f) F; variable pitch ground adjustable propellers of wooden construction; or
 - (g) G; in flight adjustable pitch propellers; or
 - (h) H: constant speed propellers.
- (7) An applicant for the issuing of a TAP 2 or TAP 1, group E, shall have successfully passed the following online examination:

- (a) G1: gyrocopter(b) H1: helicopter
- (8) An applicant for the issuing of a TAP 2 or TAP1, group S endorsement, shall have successfully passed the following online examination:
 - (a) A: GMAW / MIG / MAG CO2 welding, or
 - (b) B: GTAW / TIG welding Argon welding, or
 - (c) C: FCAW Flux cored welding.
 - (d) sub-classes
 - (i) 1: aluminium frames or structures, or
 - (ii) 2: steel frames or structures.

56.02.4 EXPERIENCE

- 1. Technical Approved Person certificate; Group "A" Airframes.
- 1.1 Category Aeroplanes: Issue or addition of sub-group, make or type.
- (1) An applicant for the issuing or for the addition of an endorsement in group A, to an existing TAP certificate, shall have aeronautical maintenance experience after completing the approved program in the applicable category, group or class being applied for as contained in: **Appendix RA-56.17**
- 1.2. Category Helicopters: Issue or addition of sub-group, make or type.

An applicant for the issuing or for the addition of an endorsement in group A, to an existing certificate, with a maximum certificated mass of 3175kg or less, shall have aeronautical maintenance experience after completing the approved program in the applicable category, group or class being applied for as contained in: **Appendix RA-56.17**

1.3. Category Gyrocopters: Extension of group A

An applicant for the extension of Categories A of a licence already valid for the certification before flight of rotorcraft, to include a further type or types of rotorcraft, must have had a total six months' experience on the practical maintenance and inspection of rotorcraft on type or six months within the same type data specification of which a minimum of thirty days spent solely on the type for which the extension is desired including engines.

- 2. Technical Approved Person certificate; Group "C" Engines
- 2.1. Group C: Issue or addition of sub-group, make or type.
- (1) An applicant for the issuing or for the addition of an endorsement in group C, to an existing TAP certificate, shall have aeronautical maintenance experience after completing the approved program in the applicable category, group or class being applied for as contained in: **Appendix RA-56.18**
- (2) Where a certificate is already valid under Category D for an engine classified under groups 01A, to 05A, the experience requirements for the addition of Category C to include the same engine will be half of those stated above in column 3.
- 3. Technical Approved Person certificate; Group "B" Airframes.

3.1. Category Aeroplanes: Issue or addition of sub-group, make or type.

1) An applicant for the issuing or for the addition of an endorsement in group B, to an existing TAP certificate, shall have aeronautical maintenance experience after completing the approved program in the applicable category, group or class being applied for as contained in: **Appendix RA-56.19**

3.2. Group B (Aircraft Structure Worker): Issue of Group B (Aircraft Structure Worker)

An applicant for the issuing of an endorsement in Group B, for the repair and overhaul of airframes, shall have aeronautical maintenance experience after completing the approved program in the applicable category, group or class being applied for as contained in: **Appendix RA-56.20**

4. Technical Approved Person certificate; Group "D" Engines

4.1. Group C: Issue or addition of sub-group, make or type.

An applicant for the issuing of an endorsement in group D or for the addition of group D to an existing certificate, for the certification of the repair and overhaul of engines shall have aeronautical maintenance experience after completing the approved program in the applicable category, group or class being applied for as contained in: **Appendix RA-56.21**

4.2. Category D (Engines): Extension of Category D (all types within same type data specification)

An applicant for the extension of Category D of his or her licence must have had a total of six months' experience in the practical repair and overhaul of engines type or six months within the same type data specification of which a minimum of thirty days spent solely on the type for which the extension is desired.

5. Technical Approved Person certificate; Group "W" Equipment

5.1. Group W: Issue or addition of a sub-group, or class.

- (1) Avionic equipment installations/servicing
- (a) An applicant for the issuing of a licence in Category W, or for the addition of Category W to an existing licence, for the certification of the installation, modification, troubleshooting, rectification of defects, repair and system checks in aircraft of all types of Radio Communication Equipment, Radio Navigational equipment (Pulse and Non-pulse), and Electronically Operated Systems, i.e. amplifiers, computers, recorders, flight management and entertainment systems, must have two years' electronic maintenance experience after qualifying on relevant trade, of which twelve months of recent (within three years) general practical experience in the installation, modification, troubleshooting, rectification of defects, repair and system checks in aircraft of all types of Radio Communication Equipment, Radio Navigational Equipment (Pulse and Non-pulse), and Electronically Operated Systems, i.e. amplifiers, computers, recorders, flight management and entertainment systems to which the application relates.
- (b) For the addition of a "W" to a current licence 6 months recent experience is required.
- (2) Electrical equipment installations/servicing
- (a) An applicant for the issuing of a licence in Category W, or for the addition of Category W to an existing licence, for the certification of the installation, modification, troubleshooting, rectification of defects, repair and system checks in aircraft of all types of electrical equipment, must have two years electronic maintenance experience after qualifying on relevant trade, of which twelve months of recent (within three years) general practical experience in the installation, modification,

troubleshooting, rectification of defects, repair and system checks in aircraft of all types of electrical equipment to which the application relates.

- (b) For the addition of a "W" to a current certificate 6 months recent experience is required.
- (3) Instrument equipment installations/servicing
- (a) An applicant for the issuing of a licence in Category W, or for the addition of Category W to an existing licence, for the certification of the installation, modification, troubleshooting, rectification of defects, repair and system checks in aircraft of all types of instrument equipment, must have had at least two years electronic maintenance experience after qualifying on relevant trade or has written a trade exam, of which twelve months of recent (within three years) general practical experience in the installation, modification, troubleshooting, rectification of defects, repair and system checks in aircraft of the types of instrument equipment to which the application relates.
- (b) For the addition of a "W" to a current licence 6 months recent experience is required.

6. Technical Approved Person certificate; Group "X" (Instruments, Avionics and Equipment)

6.1. Group W: Issue or addition of a sub-group, or class. (Automatic Pilots)

- (1) An applicant for the issuing of a licence in Category X for the certification of the overhaul, repair, modification, calibration and installation in aircraft of automatic pilots which do not operate on electronic principles, must have two years' instrument maintenance experience after qualifying on relevant trade, of which a minimum of nine months on gyroscopic instruments, and three months general practical experience of the repair, modification, calibration, installation and testing of aircraft automatic pilots, must be recent (within three years) experience concentrated on the particular type of automatic pilot to which the application relates.
- An applicant for the issuing of a licence in Category X for the certification of the installation and in flight adjustment of electronic automatic pilots, must have two years' electronic experience after qualifying on relevant trade, of which twelve months' general practical experience of the repair, modification, calibration, installation and testing of electronic automatic pilots, must be recent (within three years) experience concentrated on the particular type of automatic pilot to which the application relates.

6.2. Category X (Compasses): Issue of Category X (Compasses)

An applicant for the issuing of a licence in Category X for the certification of the installation and compensation of direct-reading or remote-reading magnetic compasses in aircraft must have two years aeronautical maintenance experience after qualifying on relevant trade including the appropriate experience referred to in CAR 43.02.18, in the installation and compensation of direct-reading magnetic compasses in aircraft.

6.3. Category X (Electrical equipment): Issue or addition of Category X (Electrical equipment)

An applicant for the issuing of a licence in Category X for the certification of the overhaul, repair or modification of aircraft electrical equipment, including installations in aircraft with main power supply systems, the nominal tension of which does not exceed 30 volts, must have two years' electrical maintenance experience after qualifying on relevant trade, of which a minimum of twelve months of recent (within the last three years) general practical experience in the overhaul, repair and testing of aircraft electrical equipment, including recent experience of the inspection and testing of electrical installations in aircraft: Provided that three months' recent (within the last three years) general practical experience in the overhaul, repair or modification of aircraft electrical equipment for

engines classified in groups 01, 02 and 03 will be acceptable for the issuing of a licence in Category X –

- (a) if the applicant is the holder of an existing licence in Category X (ignition equipment); or
- (b) if the applicant is the holder of an existing licence in Category D for any or all of the engines classified in groups 01, 02 and 03: Provided that the privileges of any Category X licence issued or added to an existing licence in accordance herewith shall be restricted to the certification of the overhaul, repair or modification of electrical equipment fitted to the engine type endorsements entered under Category D of the existing licence.

6.4. Category X (Ignition equipment): Issue or addition of Category X (Ignition equipment)

An applicant for the issuing of a licence in Category X for the certification of the overhaul, repair or modification of aircraft engine ignition equipment, must have two years' electrical maintenance experience after qualifying on relevant trade, of which a minimum of twelve months of recent (within the last three years) general practical experience in the overhaul, repair and testing of all types of aircraft engine ignition equipment: Provided that three months' recent (within the last three years) general practical experience in the overhaul, repair and modification and testing of ignition equipment for engines classified in groups 01, 02 and 03 will be acceptable for the issuing of a licence in Category X –

- (a) if the applicant is the holder of an existing licence in Category X (electrical equipment); or
- (b) if the applicant is the holder of an existing licence in Category D for any or all of the engines classified in groups 01, 02 and 03: Provided that the privileges of any Category X licence issued or added to an existing licence in accordance herewith will be restricted to the certification of the overhaul, repair, modification and testing of ignition equipment fitted to the engine type endorsements entered under Category D of the existing licence.

6.5. Category X (Instruments): Issue or addition of Category X (Instruments)

- (1) An application for the issuing of a licence in Category X for the certification of the overhaul, repair or modification of aircraft and engine instruments, excluding electrically operated instruments, must have two years' instrument maintenance experience after qualifying on relevant trade, of which a minimum of twelve months of recent (within the last three years) general practical experience in the overhaul, repair, calibration and installation in aircraft of all types of physically and mechanically operated aircraft and engine instruments.
- (2) An applicant for the issuing of a licence in Category X for the certification of the overhaul, repair or modification of aircraft and engine instruments, including electrically operated instruments, must have had two years instrument maintenance experience after qualifying on relevant trade including twelve months of recent (within the last three years) general practical experience in the overhaul, repair or modification of electrically operated aircraft and engine instruments.

6.6. Category X (Avionic equipment): Issue or addition of Category X (Avionic equipment)

An applicant for the issuing of a licence in Category X for the certification of the overhaul, repair, modification and installation of avionic equipment or of avionic equipment employing pulse techniques, must have two years' electronic maintenance experience after qualifying on relevant trade, of which a minimum of twelve months of recent (within the last three years) general practical experience in the overhaul, repair, calibration and installation in aircraft of all types of avionic equipment to which the application relates.

6.7. Category X: (Avionic Equipment): Extension of Category X (Avionic equipment)

An applicant for the extension of Category X of a licence already valid for the certification of the overhaul, repair modification and installation of avionic equipment or of avionic equipment employing pulse techniques to include the type of avionics equipment to which the application relates, must in addition to the experience detailed in paragraph 9 above, have had at least one year of recent (within the last three years) general practical experience in the overhaul, repair or modification of avionic equipment of the type concerned.

6.8. Group P (Propellers): Issue or addition of Group P (Propellers)

An applicant for the issuing of a licence in group P, or for the addition of group P to an existing licence, for the certification of the overhaul, repair or modification of variable-pitch propellers, must have had two years aeronautical maintenance experience after qualifying on relevant trade, of which at least six months must have been spent on the overhaul or repair of the type of propeller to which the application relates: Provided that the Appropriate administrative authority may agree to lesser periods of experience on specified types of propellers of comparatively simple construction: Provided further that six months' experience in the overhaul and repair of the type of propeller to which the application relates will be acceptable if the applicant, being the holder of an existing aircraft maintenance engineers' licence in Category B or D, applies for the addition of Category X to such licence.

6.9. Group E Rotors and Rotor hub assemblies: Issue or addition of Group E (Propellers)

An applicant for the issuing of an endorsement in group E, or for the addition of group E to an existing licence, for the certification of the overhaul, repair or modification of variable-pitch propellers, must have had two years aeronautical maintenance experience after qualifying on relevant trade, of which at least six months must have been spent on the overhaul or repair of the type of propeller to which the application relates: Provided that the Appropriate administrative authority may agree to lesser periods of experience on specified types of propellers of comparatively simple construction: Provided further that six months' experience in the overhaul and repair of the type of propeller to which the application relates will be acceptable if the applicant, being the holder of an existing aircraft maintenance engineers' licence in Category B or D, applies for the addition of Category X to such licence.

6.10. Group S (Aircraft welding): Issue or addition of Group S (Aircraft welding)

(1) General

(a) An applicant for the issuing of an endorsement in group S for aircraft welding and certification of welding on aircraft shall have aeronautical maintenance experience after completing the approved program in the applicable category, group or class being applied for as contained in: **Appendix RA-56.23**

NOTE

An "approved program" refers to a program approved for the purpose by the appropriate administrative authority, which includes practical and theoretical training in the maintenance and inspection of Airframes or Engines, Electrical, Instruments or Avionics equipment as per the TAP approved Manual of Procedures Appendix 56.01.

56.03.2 TAP instructor Training

1. Training standards

- (1) The training, referred to in regulation 56.03.2, is
 - (a) the appropriate training set out in Appendix RA56.01; and
 - (b) satisfactory completion of a recognized training techniques course;
 - (i) a Grade two instructor an assessor and moderator course and
 - (ii) a Grade one instructor train the trainer course.

56.03.3 Theoretical knowledge examination

- (1) Shall have successfully passed the following theoretical examinations;
- (a) a Grade two instructor the technical instructor, assessor and moderator examination, or
- (b) a Grade one the instructor train the trainer examination.

56.03.4 Experience

1. Requirements

The experience requirements referred to in regulation 56.03.4 are –

- (a) the appropriate experience requirements set out in Appendix RA56.01;
 - (i) a Grade Two TAP instructor endorsement, have had experience as a TAP1 for not less than two years, in the applicable category, groups, classes, makes or types being applying for.
 - (ii) a Grade One TAP instructor endorsement, have had experience as a Grade Two TAP instructor for not less than three years in the applicable category, groups, classes, makes or types being applying for.

56.04.1 DESIGNATION OF EXAMINERS

1. Conditions, rules, requirements, procedures and standards for designation of examiners

1.1. Purpose

This technical standard deals with the selection and designation of TAP Designated Examiners (TAP-DE) and identifies the specific functions which, authorised by the appropriate administrative authority, may be performed by DE's.

1.2 Qualification criteria

(a) General qualifications

To qualify for a designation as a DE, the applicant must possess the general qualifications listed hereunder, in addition to having the specialised experience appropriate to the particular function for which designation is sought —

- (i) current and thorough knowledge of the Civil Aviation Regulations and relevant Aeronautical Information Circulars, and Civil Aviation Technical Standards, and the TAP Manual of Procedure APPENDIX: RA 56.01
- (ii) current technical knowledge and experience commensurate with that required for the particular function;
- (iii) unquestionable integrity, co-operative attitude, and ability to exercise sound judgment;

- (iv) the ability to maintain the highest degree of objectivity while performing approved functions on behalf of the appropriate administrative authority in compliance with the SA-CAR and safety goals, notwithstanding any coercion by any person to the contrary;
- at least five years of satisfactory experience as a TAP1 in the field of work covered by the designation, or
- (vi) At least five years' experience as a Grade one TAP instructor at an approved aviation training organisation (ATO) or an approved NTCA maintenance facility or an approved recreational aviation training facility; and –
- (vii) Must hold or have held a valid instructor's certification with an appropriate endorsement and must demonstrate the ability to carry out instruction and examination to determine the status of aircraft, engines, propellers, rotors, avionics, instruments, electrical and component parts of a similar type and complexity for which DE designation is sought, or
- (b) Specialised experience, In addition to the general qualifications, specified in sub-paragraph (a), an applicant for designation as examiner shall have any specialised experience, and demonstrated ability acceptable to the appropriate administrative authority for which DE designation is sought –

1.3. Application procedure

- (a) A suitably qualified TAP may apply to be considered by the appropriate administrative authority for designation as a DE.
- (b) Applications shall be initiated by an application in the prescribed form.
- (c) Applications submitted by individual applicants must be accompanied by
 - (i) a detailed CV and record of experience of all technical training and work performed as a TAP, AME or specialist and
 - (ii) all records of examinations passed and qualifications obtained as a TAP, AME or specialist.
 - (ii) all required supporting documents, to substantiate that they meet all the relevant qualifications specified in paragraph 1.2.

SA-CATS 55 NTCA Maintenance Facilities

List of technical standards

55.01.6 Categories of aircraft, group endorsements, sub-groups, class, sub-class endorsements

55.01.10 Training and checking

- 1. Initial training
- 2. Ongoing and recurrent training

55.02.1 Manual of procedure

- 1. Information to be contained in manual of procedure
 - (a) Management
 - (b) Maintenance procedures
 - (c) Line maintenance

55.02.2 Quality assurance system

1. Minimum standards for a quality assurance system

55.01.6 CATEGORIES OF AIRCRAFT

- (1) A NTCA maintenance facility approval may be issued in respect of any of the following categories_of non-type certificated aircraft:
- (a) aeroplanes;
- (b) helicopters;
- (c) gyroplanes and gyro gliders;
- (d) microlight aeroplanes, including weight shift microlights
- (e) gliders;
- (f) touring motor gliders
- (g) manned captive and manned free balloons;
- (h) powered-paragliders, powered parachutes and powered-para trikes as well as powered hang-gliders or any other powered derivative thereof.
- (i) all other non-type certificated aircraft not listed above,

GROUP ENDORSMENTS

- (1) A NTCA maintenance facility approval may be issued in respect of any of the following groups and subgroups for non-type certificated aircraft:
 - 1. Groups A and B
 - 2. Groups C and D

- 3. Group W
- 4. Group X
- 5. Group P
- 6. Group E
- 7. Group S

SUB-GROUPS, CLASS, SUB-CLASS ENDORSMENTS

- (1) A NTCA maintenance facility approval may be issued in respect of any of the sub-groups, classes, subclasses, makes and types for non-type certificated aircraft as follows:
- (2) The approvals referred to in sub-regulation (1) may be endorsed in one or more of the following sub-groups:
 - (a) Airframes group endorsements are divided into the following Sub Groups;
 - (i) 1 A– aeroplanes of fabric-covered wooden construction, with a MTOW of 5 700 kilograms or less;
 - (ii) 1 B— aeroplanes of fabric-covered wooden construction, with a MTOW of 1200 kilograms or less,
 - (iii) 1 C aeroplanes of fabric-covered wooden construction, with a MTOW of 600 kilograms or less;
 - (iv) 2 A aeroplanes constructed of composites, with a MTOW of 5 700 kilograms or less;
 - (v) 2 B aeroplanes constructed of composites, with a MTOW of 1200 kilograms or less;
 - (vi) 2 C aeroplanes constructed of composites, with a MTOW of 600 kilograms or less;
 - (vii) 3 A aeroplanes of fabric-covered tubular-metal construction, with a MTOW of 5 700 kilograms or less;
 - (viii) 3 B aeroplanes of fabric-covered tubular-metal construction, with a MTOW of 1200 kilograms or less;
 - (ix) 3 C aeroplanes of fabric-covered tubular-metal construction, with a MTOW of 600 kilograms or less:
 - (x) 4 A unpressurised aeroplanes of all-metal construction, with a MTOW of 5 700 kilograms or less;
 - (xi) 4 B unpressurised aeroplanes of all-metal construction, with a MTOW of 1200 kilograms or less;
 - (xii) 4 C unpressurised aeroplanes of all-metal construction, with a MTOW of 600 kilograms or less;
 - (xiii) 5 unpressurised aeroplanes of all-metal construction, with a MTOW exceeding 5 700 kilograms;
 - (xiv) 6 pressurised aeroplanes of all-metal construction, with a MTOW of 5 700 kilograms or less;

- (xv) 7 pressurised aeroplanes of all-metal construction, with a MTOW exceeding 5 700 kilograms;
- (xvi) 8 aeroplanes constructed of composites, with a MTOW exceeding 5 700 kilograms;
- (xvii) 9 A helicopters, powered by piston engines, with a MTOW of 3175 kilograms or less;
- (xviii) 9 B helicopters, powered by turbine jet engines with a MTOW of 3175 kilograms or less;
- (ixx) 9 C helicopters, with a MTOW exceeding 3175 kilograms;
- (xx) 10 balloons;
- (xxi) 11 gyro-copters and gyro gliders with an MTOW of 2000Kg or less;
- (xxii) 12 microlight aeroplanes including weight shift trikes with a MTOW not exceeding 450kg;
- (xxiii) 13 A Gliders of Wooden, tube and fabric construction;
- (xxvi) 13 B Gliders of Composite construction;
- (xxvii) 13 C Gliders of Metal construction.
- (xxvi) 14 touring motor gliders;
- (xxvii) 15 powered hang-gliders, powered paragliders, powered parachutes and powered paratrikes or any other powered derivative thereof;
- (xxviii) 16 fabric coverings in accordance with endorsements listed in Groups 1 and 3 above and as specified on the TAP certificate.
- (xxix) 17 all other non-type certificated aircraft not specified in this part, excluding parachutes;
- (b) Engine group endorsements are divided into the following Sub Groups:
 - (i) 01 A previously certificated horizontally opposed normally- aspirated piston engines with a power endorsement not exceeding 200HP;
 - (ii) 01 B previously certificated horizontally opposed normally- aspirated piston engines with a power endorsement exceeding 200HP;
 - (iii) 01 C all NTC horizontally opposed normally aspirated piston engines;
 - (iv) 02 A– previously certificated horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines with a power endorsement not exceeding 200HP;
 - (v) 02 B— previously certificated horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines with a power endorsement exceeding 200HP;
 - (vi) 02 C all NTC horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines;
 - (vii) 03 A previously certificated in-line piston engines;

- (viii) 03 B all NTC in-line piston engines;
- (ix) 04 A previously certificated radial engines;
- (x) 04 B all NTC radial engines;
- (xi) 05 A previously certificated turbine jet engines;
- (xii) 05 B all NTC turbine jet engines;
- (xiii) 06 other engines not listed above, including automotive and non-aviation engines;
- (xiv) 07 two stroke engines;
- (xv) 08 diesel and turbo diesel engines;
- (xvi) 09 electrical engines;
- (xvii) 10 sustainer and self-launch engines for gliders.
- (c) Endorsements relating to equipment and components installed in non-type certificated aircraft are divided in the following groups and sub-groups:
 - (i) Group W Endorsement- equipment
 - (aa) sub-group W1 = removal, refitting and inspections, holders of a TAP1, or
 - (ff) sub-group W2 = removal and refitting, holders of a TAP 2.
 - (gg) The , equipment and components to which sub- group W1 and sub- group W2 apply, are classified as follows:
 - (i) class A: avionic equipment;
 - (ii) class E: electrical equipment;
 - (iii) class I: instrument equipment;
 - (iv) class PS: pitot & static systems
 - (v) class O: combination of such equipment,
- (h) Group X Endorsement instruments, avionics and equipment are endorsed in the following sub-groups and classes:
 - (ff) sub-group X1 = removal, refitting, installation, repair, overhaul and inspections, holders of a TAP1 with Group B and D endorsements, or
 - (gg) sub-group X2 = removal refitting, installation and inspections, holders of a TAP1 with Group A and C endorsement, or
 - (hh) sub-group X3 = removal and refitting, holders of a TAP2 with an Group A and C endorsement.
 - (ii) The instruments, avionics and equipment to which sub- groups: X1, X2 and X3 apply, are classified as follows:
 - (i) class 1: compasses;
 - (ii) class 2: engine ignition equipment;
 - (iii) class 3: all instruments, including electrically operated instruments;
 - (iv) class 4: electrical equipment;
 - (v) class 5: automatic pilots; or

- (vi) class 6: all avionic equipment, including equipment employing pulse techniques
- (vii) class 7: pitot and static systems
- (i) Group P Endorsement- propellers
 - (aa) sub-group P1= removal, refitting, installation, repair, overhaul and inspections, holders of a TAP1 with B and D endorsement, or
 - (bb) sub-group P2= removal, refitting and inspections, holders of a TAP1 with A and C endorsement
 - (hh) sub-group P3= removal and refitting, holders of a TAP2 with an A and C endorsement.
 - (ii) The propellers to which sub- groups: P1, P2 and P3 apply, are classified as follows:
 - (ix) Class A; fixed pitch propellers of metal construction
 - (x) Class B; fixed pitch propellers of composite construction
 - (xi) Class C; fixed pitch propellers of wooden construction
 - (xii) Class D; variable pitch ground adjustable propellers of metal construction
 - (xiii) Class E; variable pitch ground adjustable propellers of composite construction
 - (xiv) Class F; variable pitch ground adjustable propellers of wooden construction
 - (xv) Class G; all in flight adjustable variable pitch propellers
 - (xvi) Class H: all constant speed propellers and constant speed units
- (j) Group E Endorsements- Rotors and Rotor hub assemblies
 - (aa) sub-group E1= removal, refitting, installation, repair, overhaul and inspections, holders of a TAP1 with B and D endorsement, or
 - (bb) sub-group E2= removal, refitting and inspections, holders of a TAP1 with A and C endorsement, or
 - (cc) sub-group E3= removal and refitting, holders of a TAP 2 with an A and C endorsement.
 - (jj) The Rotors and Rotor hub assemblies to which sub- groups: E1, E2 and E3 apply, are classified as follows:
 - (iv) Class G1: Gyrocopter
 - (ii) Class H2: Helicopter
- (k) Group S Endorsement- welding
 - (aa) sub-group S1 = welding and inspections on welding as listed in sub paragraph (cc), holders of a TAP1.
 - (bb) sub-group S2 = welding as listed in sub paragraph (cc), holders of a TAP 2.
 - (cc) The kinds of welding and inspections on welding to which sub- groups: S1, and
 - S2 apply, are classified as follows
 - (i) Class A: GMAW / MIG / MAG CO2 welding
 - (v) Class B: GTAW / TIG welding Argon welding
 - (vi) Class C: FCAW Flux cored welding
 - (dd) Endorsed as applicable in the following sub classes of materials

- (a) sub-class 1: Aluminium frames or structures, or
- (b) sub-class 2: Steel frames or structures.
- (2) A NTCA maintenance facility approval shall in accordance with the categories, groups, sub-groups, classes, sub-classes, makes and types as endorsed on the responsible TAP certificate or certificates.

55.01.10 TRAINING AND CHECKING

1. Initial training

- (1) Aviation technical approved persons in the employ of the holder of an NTCA maintenance facility approval, issued in terms of Part 55 of the CAR, shall have successfully completed the training prescribed in Part 56 for the appropriate certificate and endorsement or endorsements if such personnel are to be in direct charge of any maintenance or inspection performed on behalf of the facility, or are authorised to issue on behalf of the facility certificates of release to service and certificates relating to the maintenance of an aircraft.
- (2) All other aviation technical approved persons in his or her employ shall have successfully completed basic training in maintenance practices as relevant to their particular responsibilities.

2. Ongoing and recurrent training

- (1) All aviation technical approved persons in the employ of the holder of an NTCA maintenance facility approval, issued in terms of Part 55 of the CAR, shall receive ongoing and recurrent training in accordance with the facility's approved training programme.
- (2) Ongoing training should be aimed at expanding the employee's knowledge, skills and experience and should provide for new aircraft and their components that are introduced.
- (3) Recurrent training should be aimed at ensuring that technical approved persons remain current with evolving new technologies and maintenance techniques, as well as with changing legislation, to the extent applicable to the facility's aviation maintenance approval.

55.02.1 MANUAL OF PROCEDURE

1. Information to be contained in manual of procedure

(1) The information referred to in CAR 55.02.1, which must be contained in the manual of procedure of the applicant, must include the following:

(a) Management

(i) Corporate commitment

A statement containing the commitment of the accountable manager and the facility to comply with the airworthiness requirements as set out in this document and approved by the appropriate administrative authority .

(ii) Management personnel

A list of the key management personnel and their positions.

(iii) Duties and responsibilities of the management personnel

A statement containing the duties and responsibilities of each management position mentioned in (ii). For clarity, additional positions may be added.

(iv) Management facility chart

The chart must show all line management positions down to supervisory level.

(v) List of certifying personnel

A list of all certifying personnel authorised to release aircraft on behalf of the facility, with a scope of their authority and with signatures and stamps must be provided.

A separate document may be referenced.

(vi) Human resources

A statement identifying the human resources employed by the facility.

(vii) General description of facilities at each address intended to be approved

A description of the facilities and layout is required.

(viii) Facility's intended approved scope of work

A statement of the scope of work being applied for.

(ix) Notification procedure to the Appropriate administrative authority regarding changes in the facility's activities/approval/location/personnel

A statement indicating who is responsible for notifying the Appropriate administrative authority regarding changes, and what changes are subject to notification.

(x) Manual of procedure amendment procedures

A statement regarding the responsibility and procedure for amendment of the manual of procedure, as well as the associated documents referred to in the manual of procedure.

(b) Maintenance procedures

(i) Acceptance/inspection of aircraft components from outside contractors

A description of, or reference to, a procedure for the documented control of verification, storage and maintenance of aircraft components from outside contractors.

(ii) Storage, tagging and release of aircraft components and material to aircraft maintenance

A description of, or reference to, a procedure for handling, storage, packaging (tagging), preservation of aircraft components and material to aircraft maintenance.

(iii) Acceptance of tools and equipment

A description of, or reference to, a procedure for acceptance of tools and equipment by the facility for use in the maintenance of aircraft.

(iv) Calibration of tools and equipment

A description of, or reference to, a procedure for the calibration of measuring and testing tools and equipment used on aircraft systems and equipment.

(v) Use of tools and equipment by personnel

A description of, or reference to, a procedure for the methods in which special tools and equipment are used.

(vi) Cleanliness standards of maintenance facility

A statement regarding the standard of cleanliness to be maintained.

(vii) Repair procedure

A description of, or reference to, the procedures for the repair of aircraft components.

(viii) Maintenance, structural repair and parts manuals

A description of, or reference to, a procedure for the updating and availability to personnel of the relevant maintenance, structural repair and parts manuals for the aircraft to be maintained.

(ix) Aircraft maintenance programme, A.D. procedures, modification procedures and technical record control

A description of, or reference to, a procedure indicating compliance with the aircraft maintenance programme, A.D. procedures, modification procedures and technical record control.

(x) Maintenance documentation

A description of, or reference to, a procedure of the relevant documentation to be used and instructions for the completion thereof.

(xi) Rectification of defects

A description of, or reference to, a procedure for the methods to be employed for the rectification of defects arising during base maintenance.

(xii) Release to service

A description of, or reference to, a procedure for the manner in which an aircraft is to be released to service after base maintenance.

(xiii) Records for the operator

A description of, or reference to, a procedure for the records to be kept and the manner in which they are to be given to the operator.

(xiv) Defective aircraft components

A description of, or reference to, a procedure for the return of defective aircraft components to the store and the method to be employed for routing the defective aircraft components to outside contractors and the return thereof.

(xv) Special maintenance procedures

A description of, or reference to, a procedure for the manner in which specific maintenance procedures that may be required, such as –

- (aa) engine running;
- (bb) aircraft towing and others,

are to be employed.

(c) Line maintenance

(i) Line maintenance control

A description of, or reference to, a procedure for the control of aircraft components, tools, equipment, etc., used during line maintenance.

(ii) Servicing, fuelling, etc. during line maintenance

A description of, or reference to, a procedure for the servicing, fuelling, etc. done during line maintenance.

(iii) Control of defects and repetitive defects

A description of, or reference to, a procedure for the manner in which defects and repetitive defects are to be controlled.

(iv) Completion of technical log

A description of, or reference to, a procedure for the completion of aircraft technical log during line maintenance.

(v) Return of defective parts removed from aircraft

A description of, or reference to, a procedure for the return to the stores of defective aircraft parts removed from the aircraft during line maintenance.

- (2) The manual of procedure must contain the information to demonstrate that the facility has the management, resources and procedures to comply with the requirements of the CARs Part 55.
- (3) The manual of procedure may either be a self-contained document, or it may refer to other documents referred to in the manual of procedure which will be considered to be equally binding on the facility.

55.02.2 QUALITY ASSURANCE SYSTEM

1. Minimum standards for a quality assurance system

- (1) The objectives of the quality assurance system referred to in CAR 55.02.2(2) are -
 - (a) to monitor, and report to management, the level of compliance with the facility's manual of procedure and airworthiness requirements;
 - (b) to correct any non-compliance identified and to implement actions to prevent the recurrence of such non-compliance; and
 - (c) to present to management for the purpose of review and implementing further corrective or preventive action, quality indicators such as audit reports, accidents, incidents, occurrences, customer complaints and personnel reports.
- (2) The quality assurance system must include
 - (a) Quality audit of the facility

A description of, or reference to, a procedure for the quality audits to be performed on the facility.

(b) Quality audit of aircraft

A description of, or reference to, a procedure for the quality audits to be done on the aircraft during maintenance work.

(c) Quality audit remedial action

A description of, or reference to, a procedure of remedial actions to be taken after quality audits.

(d) Management analyses and overview

A description of, or reference to, a procedure for bringing to the attention of management quality indicators (such as audit reports, progress on corrective action, accidents, incidents, occurrences, customer complaints and personnel reports) and documenting the appropriate action decided and implemented to maintain an adequate level of conformance to airworthiness requirements.

(e) Certifying personnel competence and training

A description of, or reference to, a procedure for the competence required of certifying personnel and the programme of training and recurrent training of certifying personnel.

(f) Certifying personnel records

A description of, or reference to, a procedure of the methods to be used for keeping technical records of certifying personnel.

(g) Quality audit personnel

A chart or a list indicating the qualifications of quality audit personnel.

(h) Qualifying inspectors and mechanics

A description of, or reference to a procedure for the competence required of technical approved persons, and a programme of training and recurrent training of personnel.

(i) Exemption/concession control

A description of, or reference to, a procedure to be used when permission is required to deviate from the requirements of the facility's manual of procedures, or to deviate from specified aircraft/aircraft component maintenance tasks.

(j) Specialised activities

A description of, or reference to, a procedure for applying specialised activities such as welding, N.D.T. etc.

- (3) Measures must be taken to ensure that the system is understood, implemented and complied with at all levels.
- (4) The quality control system must be documented in the manual of procedure referred to in CAR 55.02.1.