PROPOSAL FOR AMENDMENT OF PART 66 AND INSERTION OF PART 56 IN THE CIVIL AVIATION REGULATIONS, 2011

PROPOSER

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PROPOSER'S INTEREST

Recreation Aviation Administration South Africa (RAASA) is designated by the Director for Civil Aviation in terms of the Civil Aviation Act 2009 and Regulation 149 of the Civil Aviation Regulations to establish standards relating to recreational aviation and oversight over such activities.

RAASA is a member of the Civil Aviation Regulation Committee which includes various subcommittees. This proposal is a subject of these sub-committees as RAASA relies on consultative processes in executing its functions.

GENERAL EXPLANATORY NOTE

Words in **[bold and solid square bracket]** indicate deletions from the existing regulations. Words underlined with a solid line indicate insertions in the existing regulations.

PROPOSAL FOR THE DELETION OF SUBPART 4 OF PART 66

1.1 It is hereby propose to delete the following subpart 4 of Part 66:

[SUBPART 4: APPROVED PERSON CERTIFICATE

Applicability

66.04.1 This subpart applies to the issuing of approvals, certificates and ratings to natural persons, other than licensed AMEs, licensed pilots and persons authorised by the holder of an AMO approval, to carry out maintenance on South African registered non-type certificated aircraft, their engines, components and equipment.

Authority to act as approved person

66.04.2 (1) No person shall act as an approved person on any aircraft mentioned in Part 24 and referred to in regulation 66.04.3, unless such person is the holder of a valid approved person certificate with the appropriate rating issued by the Director or,

if applicable, the body or institution designated for the purpose in terms of Part 149, as the case may be.

(2) The holder of an approved person certificate shall not exercise privileges other than those granted by the approval and the appropriate rating held by such holder.

Categories of aircraft

- 66.04.3 An approved person certificate may be issued in respect of any of the following categories of non-type certificated aircraft—
 - (a) aeroplanes, including microlight aeroplanes;
 - (b) helicopters;
 - (c) gyroplanes and gyrogliders;
 - (d) gliders, including power assisted and touring gliders;
 - (e) manned captive and manned free balloons;
 - (f) powered paragliders and paratrikes, as well as powered hang-gliders.

Classes of certificates

- 66.04.4 (1) The classes of certificates for an approved person are—
 - (a) APC1: inspection certificate, which does not include inspections on repair, or modification work;
 - (b) APC2: repair and maintenance certificate, which includes inspections on repair, maintenance or modification work which has been done as well as carrying out such work;
 - (c) APC3: restricted inspection certificate for airframes and/or engines, issued by type, excluding inspections on modifications and repairs.
- (2) The certificates referred to in subregulation (1) may be issued in one or more of the following groups—
 - (a) Airframes are classified into the following groups—
 - (i) Group 1 aeroplanes of wooden construction, with an MCM of 5 700 kg or less:
 - (ii) Group 2 aeroplanes constructed of composites, with an MCM of 5 700 kg or less;
 - (iii) Group 3 aeroplanes of fabric-covered tubular-metal construction, with an MCM of 5 700 kg or less;

- (iv) Group 4 unpressurised aeroplanes of all-metal construction, with an MCM of 5 700 kg or less;
- (v) Group 5 pressurised aeroplanes of all-metal construction, with an MCM of 5 700 kg or less;
- (vi) Group 6 unpressurised aeroplanes of all-metal construction, with an MCM exceeding 5 700 kg;
- (vii) Group 7 rotorcraft powered by reciprocating engines;
- (viii) Group 8 pressurised aeroplanes of all-metal construction, with an MCM exceeding 5 700 kg;
- (ix) Group 9 rotorcraft powered by turbine jet engines, with an MCM of 3 180 kg or less;
- (x) Group 10 rotorcraft powered by turbine jet engines, with an MCM exceeding 3 180 kg;
- (xi) Group 11 aeroplanes constructed of composites, with an MCM exceeding 5 700 kg;
- (xii) Group 12 balloons;
- (xiii) Group 13 trikes; and
- (xiv) Group 14 all other aircraft.
- (b) Engines are classified into the following groups—
 - (i) Group 01 all horizontally opposed normally-aspirated piston engines;
 - (ii) Group 02 all horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines;
 - (iii) Group 03 all in-line piston engines;
 - (iv) Group 04 all radial engines;
 - (v) Group 05 turbine jet engines; and
 - (vi) Group 06 all other engines.
- (3) The categories of ratings for an APC2: repair and maintenance certificate for approved persons are—
 - (a) Category A rating, for all types of—
 - (i) aeroplanes registered in the Republic, either singly or in the groups referred to in subregulation (2); or
 - (ii) rotorcraft registered in the Republic, either singly or in the groups referred to in subregulation (2);
 - (b) Category C rating, for all types of engines installed in—

- (i) aeroplanes registered in the Republic, either singly or in the groups referred to in subregulation (2); or
- (ii) rotorcraft registered in the Republic, either singly or in the groups referred to in subregulation (2); and
- (c) Category W rating, for any—
 - (i) avionic equipment;
 - (ii) electrical equipment;
 - (iii) instrument equipment; or
 - (iv) combination of such equipment, installed in aircraft registered in the Republic.
- (4) The categories of ratings for an APC1: inspection certificate for approved persons are—
 - (a) Category B rating, for all types of—
 - (i) aeroplanes registered in the Republic, either singly or in the groups referred to in subregulation (2); or
 - (ii) rotorcraft registered in the Republic, either singly or in the groups referred to in subregulation (2);
 - (b) Category D rating, for all types of engines installed in—
 - (i) aeroplanes registered in the Republic, either singly or in the groups referred to in subregulation (2); or
 - (ii) rotorcraft registered in the Republic, either singly or in the groups referred to in subregulation (2); and
 - (c) Category X rating, for—
 - (i) the installation of compasses;
 - (ii) the installation of engine ignition equipment;
 - (iii) the installation of variable-pitch propellers;
 - (iv) the installation of instruments, including or excluding electrically operated instruments;
 - (v) the installation of electrical equipment;
 - (vi) the installation of automatic pilots; or
 - (vii) the installation of avionic equipment, including or excluding equipment employing pulse techniques.

Competency

66.04.5 The holder of an approved person certificate shall not exercise the privileges granted by the approval and rating unless such holder maintains competency by complying with the appropriate requirements prescribed in this Part and in the approved manual of procedures of the body or institution designated in terms of Part 149.

Consumption of alcohol and drugs

66.04.6 No approved person shall—

- (a) carry out any maintenance on an aircraft, its components or equipment while the concentration of alcohol in any specimen of blood taken from any part of his or her 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

66.04.7 An approved person shall have sufficient ability in reading, speaking and understanding the English language to enable him or her to adequately carry out his or her responsibilities as an approved person.

Requirements for approval and rating

66.04.8 An applicant for the issuing of an approved person certificate with the appropriate category and rating shall—

- (a) be not less than 18 years of age;
- (b) have successfully passed the theoretical knowledge examination referred to in regulation 66.04.9; and
- (c) have acquired the experience referred to in regulation 66.04.10.

Theoretical knowledge examination

- 66.04.9 (1) An applicant for the issuing of an approved person certificate shall have successfully passed the written examination prescribed in Document SA-CATS 66.
- (2) A candidate who fails the written examinations referred to in subregulation (1), may within 30 days from the date of notification of the examination results apply in writing for a remark.
- (3) The application shall be made on the appropriate form and be accompanied by the appropriate fee prescribed in Part 187.
- (4) If the remark is successful, the fee will be refunded.

(5) An applicant, who fails the written examinations referred to in subregulation (1), may apply for re-testing after a period of not less than 3 months; Provided that an applicant may only be re-tested twice.

Experience

- 66.04.10 An applicant for the issuing of an approved person certificate shall either—
 - (a) be the primary builder of, and have obtained an authority to fly for his or her own aircraft; or
 - (b) have obtained proven aircraft maintenance experience, compatible with the particular rating; or
 - (c) in the case of the APC3 restricted inspection rating, complete the practical training as per Document SA-CATS 66.

Application for approval or amendment

- 66.04.11 An application for the issuing of an approved person certificate or for an amendment thereof, shall—
 - (a) be made on the appropriate form as prescribed by the Director; and
 - (b) be accompanied by—
 - (i) original or certificated proof of—
 - (aa) the identity of the applicant;
 - (bb) the age of the applicant;
 - (cc) the maintenance experience of the applicant; and
 - (dd) if applicable: the build number, issued in terms of paragraph (c) of subregulation 24.01.2 (4), and the authority to fly, issued in terms of subpart 2 of Part 24;
 - (ii) original or certificated proof that the applicant has passed the theoretical knowledge examination referred to in regulation 66.04.9;
 - (iii) two recent passport-size photographs of the applicant; and
 - (iv) the appropriate fee as prescribed in Part 187.

Issuing of approval certificate

- 66.04.12 (1) The Director or if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue an approved person certificate with the appropriate rating if the applicant complies with the requirements referred to in regulation 66.04.11.
- (2) The certificate shall be issued on the appropriate prescribed form.

- (3) The certificate shall specify the categories of aircraft, classes of certificates and ratings, and where applicable the name of non-type certificated aircraft, its components or equipment in respect of which the holder of such certificate is entitled to exercise the privileges thereof.
- (4) Upon receipt of the approved person certificate, the holder shall forthwith affix his or her signature in ink in the space on the certificate provided for such purpose.

Period of validity

- 66.04.13 (1) An approved person certificate issued in accordance with this subpart shall be valid for a period of 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 66.04.14.
- (2) Any amendment of an approval person certificate shall be valid for the period for which the certificate is valid.

Renewal of approved person certificate

- 66.04.14 (1) To renew an approved person certificate, the holder thereof shall—
 - (a) within the 24 months preceding the date of expiry of the certificate, have carried out an inspection or maintenance on at least two aircraft within his or her class(es) or rating(s);
 - (b) within 30 days immediately preceding the date of expiry of such certificate, submit an application for renewal accompanied by—
 - (i) a certificated true copy of the certificate held by the applicant;
 - (ii) original or certificated proof of compliance with the provisions of paragraph (1) (a).
- (2) The application for the renewal of the certificate shall be made on the prescribed form.
- (3) The Director or the organisation designated for the purpose in terms of part 149, as the case may be, shall renew the certificate if the applicant complies with the requirements referred to in subregulation (1).
- (4) The certificate shall be renewed on the appropriate prescribed form.

Reissue

- 66.04.15 (1) (a) The holder of an approved person certificate that has expired due to the lapse of the period referred to in regulation 66.04.13 may apply to the Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, for the reissue of the expired certificate.
- (b) To qualify for reissuing of the certificate the person needs to comply with the requirements prescribed in regulation 66.04.8.
- (2) Upon application for the reissue of the expired certificate, the Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the

case may be, shall reissue such certificate if the applicant complies with the requirements prescribed in regulation 66.04.8.

(3) The provisions of regulations 66.04.11 and 66.04.12 shall apply with the necessary changes to an application referred to in subregulation (1).

Privileges and limitations

66.04.16 (1) Subject to the provisions of regulations 66.04.5 and 66.04.6, the holder of an approved person certificate shall be entitled—

- (a) if he or she is the holder of the inspection certificate—
 - (i) to exercise in respect of a non-type certificated aircraft, the privileges of an authorised officer, inspector or authorised person provided for in regulations 24.01.8 and 24.01.9;
 - (ii) to carry out inspections on a non-type certificated aircraft in accordance with the requirements prescribed in Part 24 as may be called for from time to time by the constructor or owner of the non-type certificated aircraft;
 - (iii) certify the aircraft logbook(s) when the inspection, repair or maintenance work took place, and the outcome of such inspection;
 - (iv) certify, in accordance with the regulations in Part 24 of the regulations, the release to service of the non-type certificated aircraft;
- (b) if he or she is the holder of the repair and maintenance certificate—
 - (i) to carry out, in accordance with the requirements prescribed in Part 24, such maintenance, repairs or modifications, including the inspections referred to in subparagraph (a) (ii), on a non-type certificated aircraft, its components and equipment as may be called for from time to time by the constructor or owner of the non-type certificated aircraft;
 - (ii) certify in the aircraft logbook(s)—
 - (aa) all maintenance or repairs carried out on the aircraft; and
 - (bb) all modifications incorporated on the aircraft in accordance with regulation 44.01.10; and
 - (iii) certify, in accordance with the regulations in Part 24, the release to service of the non-type certificated aircraft;
- (c) if he or she is the holder of an APC3 restricted inspection approved person certificate—
 - (i) to carry out annual inspections on a non-type certificated aircraft or engine for which he or she holds the type rating, in accordance with the requirements prescribed in Part 24, for the purpose of renewing the annual authority to fly;

- (ii) to certify the logbook(s) as to when the inspection took place and the outcome of such inspection;
- (iii) to certify, in accordance with the regulations in Part 24, the release to service of the non-type certificated aircraft or engine for which he or she holds the type rating; and
- (d) to complete form RA24.01.
- (2) The holder of an approved person certificate is not authorised to grant permission to the constructor to fly his or her aircraft for the purposes of carrying out proving or test flights unless he or she is the holder of the appropriate flight test rating.
- (3) Any inspection carried out on a non-type certificated aircraft in terms of regulation 24.01.8 shall be of a conditional nature in that the approved person carrying out the inspection shall not be required to guarantee the airworthiness of the aircraft.
- (4) Whenever an authorised person issues a release of service for a non-type certificated aircraft he or she thereby certifies that he or she is satisfied that the aircraft and all its equipment are in every way serviceable for flight and that all maintenance has been carried out in accordance with the regulations and with the aircraft's approved maintenance schedule.
- (5) The holder of an authorised person certificate who wishes to carry out welding on a non-type certificated aircraft shall be the holder of a welding certificate for the type of welding to be carried out. The certificate does not necessary have to be for aircraft welding.

Register of approved persons

- 66.04.17 (1) The Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be, shall maintain a register of all 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) the postal address of the holder of the certificate;
 - (c) the date on which the certificate was issued, renewed or reissued;
 - (d) particulars of the ratings held by the certificate holder; and
 - (e) the nationality of the holder of the certificate.
- (3) The particulars referred to in subregulation (2) shall be recorded in the register within seven 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 Director or, if applicable, the organisation designated for the purpose in terms of Part 149, as the case may be.
- (5) The register, referred to in sub regulation (1), shall be made available to any person upon request.

Responsibilities of certificate holder

66.04.18 The holder of an approved person certificate shall maintain a logbook up to date in which he or she shall record details of all inspections and maintenance carried out. The format of the logbook and the manner in which it will be kept are as prescribed in Part 43.

Suspension and cancellation of certificate and appeal

66.04.19 The procedure for the suspension and cancellation of an approved person certificate and appeal shall be as prescribed in regulations 185.00.4, 185.00.5 and 185.00.7]."

2. PROPOSAL TO INSERT PART 56 IN THE REGULATIONS

"PART 56: TECHNICAL APPROVED PERSONS

LIST OF REGULATIONS: TECHNICAL APPROVED PERSONS

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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 Technical Approved Person including:
 - (i) <u>persons, other than licenced AMEs or persons authorised in terms of Regulation</u> 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, and inspections on non-type certified aircraft and its components and equipment, including, but not limited to, airframes, engines, and their 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 Part 24, unless such person is the holder of a current and valid technical approved person certificate specifying the appropriate endorsements 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 certificate and the appropriate endorsement booklet.
- (3) The holder of a technical approved person certificate shall only exercise TAP privileges while being a current and *bona fide* member of the technical approved person's program.

TAP Certificate and Endorsement booklet

- **56.01.3** (1) A technical approved person approval may be issued on the TAP certificate and endorsement booklet as any one or a combination of the following categories, groups, subgroups, classes or sub-classes as applicable:
 - (a) TAP1: is a technical approved person certificate which is issued to a person who has completed a TAP2 or equivalent training program, and
 - (i) has passed the applicable examinations, and
 - (ii) has gained the practical experience for both group A and C endorsements, or
 - (iii) has gained the practical experience for groups W, X, P, E, or S endorsements as applicable, and

- (iv) is approved for maintenance, repair, and inspection endorsement, which may include an approval for modifications and overhauls with Group B or D endorsements.
- (b) TAP2: is a technical approved person certificate which is issued to a person who has completed the TAP3 training program,
 - (i) has passed the applicable examinations, and
 - (ii) gained the practical experience toward groups A or C or both, or
 - (iii) W, X, P, E or S endorsements, and
 - (iv) is approved for a maintenance and repair certificate, excluding overhauls and modifications, and to gain further practical experience and knowledge towards a TAP 1.
- (c) TAP3: a technical approved person certificate which is issued to a person, in order to gain the practical experience and theoretical knowledge under the direct supervision of a TAP instructor, NTCA maintenance facility or AMO approved training program towards obtaining a TAP2 certificate.
- (d) TAP4: a technical approved person certificate issued to the owner of an NTCA, and who has completed the major portion of a build, assembly or restoration of a NTCA project, and
 - (i) has obtained an authority to fly for the same aircraft, and
 - (ii) who may exercise the privileges and limitations of a TAP relating to the aircraft or components of an aircraft specified on their TAP certificate, other than annual inspections for the issue or renewal of an ATF.
- (e) TAP Specialist certificate, may be issued to any person approved and recognised to be acceptable to the appropriate administrative authority, as a person with specialist knowledge, skills or 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 certified aircraft:

- (a) aeroplanes;
- (b) helicopters;
- (c) gyroplanes and gyro gliders;
- (d) microlight aeroplanes, including weight shift microlights
- (e) gliders including self-launching gliders;
- (f) touring motor or powered 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 certified aircraft not listed above,

Group Endorsements

56.01.5 (1) The group endorsements for TAP's are -

(a) Group	A: (i) airframe maintenance for the repair, replacement and defect rectification in the case of a TAP1 or TAP2 endorsement, or (ii) airframe inspections in the case of a TAP1 endorsement, and
_	(iii) shall not include airframe overhauls or modifications.
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(b) Group	B: (i) airframe maintenance for the repair, replacement and defect
	rectification in the case of a TAP1 endorsement, and
	(ii) airframe inspections in the case of a TAP1 endorsement, and
	(iii) airframe overhauls or modifications in the case of a TAP 1
(c) Group	C: (i) engine maintenance for the repair, replacement and defect rectification in the case of a TAP1 or TAP2 endorsement, or (ii) engine inspections in the case of a TAP1 endorsement, and
	(iii) shall not include engine overhauls or modifications.
(d) Group	D: (i) engine maintenance for the repair, replacement and defect rectification in the case of a TAP1 endorsement, and (ii) engine inspections in the case of a TAP1 endorsement, and (iii) engine overhauls or modifications in the case of a TAP1

- (2) The Group endorsements for a TAP 3 shall be as per the approved TAPI endorsements, and/or the NTCA maintenance facilities approved training program for which a TAP3 has enrolled.
 - (3) The group endorsements for a TAP 2 with group A and C endorsements are -
 - (a) Group A, for airframes in the sub-groups listed below:
 - (i) Subgroup A1: aeroplanes; or
 - (ii) Subgroup A2: helicopters, or
 - (iii) Subgroup A3: gyrocopters, or
 - (iv) Subgroup A4: microlights including weight shift microlights; or
 - (v) Subgroup A5: glider; or
 - (vi) Subgroup A6; touring motor or powered gliders
 - (vii) Subgroup A7: other as specified in the TAP 2 certificate.
 - (b) Group C, for engines fitted to aircraft in the sub-groups listed below:
 - (i) Subgroup C1: aeroplanes; or
 - (ii) Subgroup C2: helicopters, or
 - (iii) Subgroup C3: gyrocopters, or
 - (iv) Subgroup C4: microlights incl weight shift microlights; or

- (v) <u>Subgroup C5: glider sustainer or self- launch engines; or</u>(vi) <u>Subgroup C6; touring motor or powered gliders</u>
- (vii) Subgroup C7: other as specified in the TAP 2 certificate
- (c) Group W2, equipment, avionics, pitot static systems, electrical equipment, instruments, or
- (d) <u>Group X3, equipment, instruments, pitot static systems, avionics, compasses, engine ignition equipment, electrical equipment; automatic pilots; or experiments are suppressed in the compassion of the compas</u>
- (e) Group P3, propellers and constant speed units, or
- (f) Group E3, rotors and rotor hub assemblies, or
 - (g) Group S2: welding.
- (4) The group endorsements for a TAP 1 with group A and C endorsements; are
 - (a) Group A, for airframes in the sub-groups listed below:
 - (i) Subgroup A1: aeroplanes; or
 - (ii) Subgroup A2: helicopters, or
 - (iii) Subgroup A3: gyroplanes, or
 - (iv) Subgroup A4: microlights including weight shift microlights; or
 - (v) Subgroup A5: gliders; or
 - (vi) Subgroup A6; touring motor or powered gliders
 - (vii) Subgroup A7: other as specified in the TAP 1 certificate
 - (b) Group C, for engines fitted to aircraft in the sub-groups listed below:
 - (i) Subgroup C1: aero planes; or
 - (ii) Subgroup C2: helicopters, or
 - (iii) Subgroup C3: gyroplanes, or
 - (iv) Subgroup C4: microlights including weight shift microlights; or
 - (v) Subgroup C5: glider sustainer or self- launch engines; or
 - (vi) Subgroup C6; touring motor or powered gliders
 - (vii) Subgroup C7: other as specified in the TAP 1 certificate
- (5) The group endorsements for a TAP 1 with group B and D, endorsements are:
 - (a) Group B, for airframes in the sub-groups listed below, which includes airframe overhauls, modifications and inspections, in the employ or contracted to an approved NTCA maintenance facility issued by the appropriate administrative authority:
 - (i) Subgroup B1: aeroplanes or
 - (ii) Subgroup B2: helicopters, or
 - (iii) Subgroup B3: gyroplanes.
 - (iv) Subgroup B4: microlights including weight shift microlights; or
 - (v) Subgroup B5: gliders; or

- (vi) Subgroup B6: touring motor or powered gliders
- (vii) Subgroup B7: other as specified
- (b) Group D for engines fitted to aircraft in the sub-groups listed below, which includes engine overhauls, modifications and inspections in the employ or contracted to an approved NTCA maintenance facility issued by the appropriate administrative authority:
 - (i) Subgroup D1: aeroplanes or
 - (ii) Subgroup D2: helicopters, or
 - (iii) Subgroup D3: Gyrocopters, or
 - (iv) Subgroup D4: microlights including weight shift microlights; or
 - (v) Subgroup D5: glider sustainer or self- launch engines; or
 - (vi) Subgroup D6: touring motor or powered gliders.
 - (vii) Subgroup D7: other as specified
- (6) The group endorsements for a TAP 1 with group W, X, P, E and S endorsements are:
 - (c) Subgroup W1, equipment, avionics, electrical equipment, instruments; or
 - (d) Subgroup X1 or X2, equipment, instruments, pitot static systems, avionics, compasses, engine ignition equipment, electrical equipment; automatic pilots; or
 - (e) Subgroup P1 or P2, propellers and constant speed units; or
 - (f) Subgroup E1 or E2, rotors and rotor hub assemblies; or
 - (g) Subgroup S1 or S2, welding.

Subgroups of TAP endorsements for airframes, engines, equipment and components

- 56.01.6 (1) These approvals may be endorsed in one or more of the following subgroups:
 - (a) Airframe group A or B endorsements are divided into the following subgroups;
 - (i) 1 A– makes or types of aeroplanes of fabric-covered wooden construction, with a MTOW of 5 700 kilograms or less;
 - (ii) 1 B– all aeroplanes of fabric-covered wooden construction, with a MTOW of 1200 kilograms or less,
 - (iii) 1 C all aeroplanes of fabric-covered wooden construction, with a MTOW of 600 kilograms or less;
 - (iv) 2 A makes or types of aeroplanes constructed of composites, with a MTOW of 5 700 kilograms or less;

- (v) 2 B all aeroplanes constructed of composites, with a MTOW of 1200 kilograms or less;
- (vi) 2 C all aeroplanes constructed of composites, with a MTOW of 600 kilograms or less;
- (vii) 3 A makes or types of aeroplanes of fabric-covered tubular-metal construction, with a MTOW of 5 700 kilograms or less;
- (viii) 3 B all aeroplanes of fabric-covered tubular-metal construction, with a MTOW of 1200 kilograms or less;
- (ix) 3 C all aeroplanes of fabric-covered tubular-metal construction, with a MTOW of 600 kilograms or less;
- (x) 4 A makes or types of unpressurised aeroplanes of all-metal construction, with a MTOW of 5 700 kilograms or less;
- (xi) 4 B all unpressurised aeroplanes of all-metal construction, with a MTOW of 1200 kilograms or less;
- (xii) 4 C all unpressurised aeroplanes of all-metal construction, with a MTOW of 600 kilograms or less;
- (xiii) 5 makes or types of unpressurised aeroplanes of all-metal construction, with a MTOW exceeding 5 700 kilograms;
- (xiv) 6 makes or types of pressurised aeroplanes of all-metal construction, with a MTOW of 5 700 kilograms or less;
- (xv) 7 makes or types of pressurised aeroplanes of all-metal construction, with a MTOW exceeding 5 700 kilograms;
- (xvi) 8 makes or types of aeroplanes constructed of composites, with a MTOW exceeding 5 700 kilograms;
- (xvii) 9 A makes or types of helicopters, powered by piston engines, with a MTOW of 3175 kilograms or less;
- (xviii) 9 B makes or types of helicopters, powered by turbine jet engines with a MTOW of 3175 kilograms or less;
- (ixx) 9 C makes or types of helicopters, with a MTOW exceeding 3175 kilograms;
- (xx) 10 all balloons;
- (xxi) 11 all gyro-copters and gyro gliders with an MTOW of 2000Kg or less;

- (xxii) 12 all microlight aeroplanes including weight shift trikes with a MTOW not exceeding 450kg;
- (xxiii) 13 A all gliders of wooden, tube and fabric construction;
- (xxiv) 13 B all gliders of composite construction;
- (xxv) <u>13 C gliders of metal construction.</u>
- (xxvi) 14 all touring motor and powered gliders;
- (xxvii) 15 all powered hang-gliders, powered paragliders, powered parachutes and powered paratrikes or any other powered derivative thereof;
- (xxviii) 16 all 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 certified aircraft not specified in this part, excluding parachutes;
- (b) Engine group C or D endorsements are divided into the following subgroups:
 - (i) 01 A makes or types of previously certified horizontally opposed normally- aspirated piston engines with a power endorsement not exceeding 200HP;
 - (ii) 01 B makes or types of previously certified horizontally opposed normally- aspirated piston engines with a power endorsement exceeding 200HP;
 - (iii) 01 C all non-certificated horizontally opposed normally aspirated piston engines;
 - (iv) 02 A makes or types of previously certified horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines with a power endorsement not exceeding 200HP;
 - (v) 02 B makes or types of previously certified horizontally opposed turbo-normalised, turbo-charged and supercharged piston engines with a power endorsement exceeding 200HP;
 - (vi) 02 C all non-certificated horizontally opposed turbo-normalised, turbocharged and supercharged piston engines;
 - (vii) 03 A makes or types of previously certified in-line piston engines;
 - (viii) 03 B all non-certificated in-line piston engines;
 - (ix) 04 A makes or types of previously certified radial engines;

- (x) 04 B all non-certificated radial engines;
- (xi) 05 A makes or types of previously certified turbine jet engines;
- (xii) 05 B all non-certificated turbine jet engines;
- (xiii) 06 all other engines not listed above, including automotive and non-aviation engines;
- (xiv) 07 -all two stroke engines;
- (xv) 08 makes or types of diesel and turbo diesel engines;
- (xvi) 09 all electrical engines;
- (xvii) 10 all sustainer and self-launch engines for gliders.
- (c) Endorsements relating to equipment and components installed in non-type certified aircraft are divided in the following groups and subgroups:
 - (i) Group W Endorsement- equipment
 - (aa) subgroup W1 = removal, refitting and inspections, holders of a TAP1, or
 - (bb) <u>subgroup W2 = removal and refitting, holders of a TAP 2.</u>
 - (cc) The , equipment and components to which subgroup W1 and subgroup 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
- (a) <u>Group X Endorsement instruments, avionics and equipment are endorsed in the following subgroups and classes:</u>
 - (aa) <u>subgroup X1 = removal, refitting, installation, repair, overhaul and</u> inspections, holders of a TAP1 or
 - (bb) <u>subgroup X2 = removal refitting, installation and inspections,</u> holders of a TAP1, or
 - (cc) subgroup X3 = removal and refitting, holders of a TAP2.
 - (dd) The instruments, avionics and equipment to which subgroups: 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

(b) Group P Endorsement- propellers and constant speed units

- (aa) subgroup P1; removal, refitting, installation, repair, overhaul and inspections, holders of a TAP1 with a group D endorsement, or
- (bb) subgroup P2; removal, refitting and inspections, holders of a TAP1 with a group C endorsement
- (dd) <u>subgroup P3; removal and refitting, holders of a TAP2 with</u> a group C endorsement.
- (ee) The propellers to which subgroups: 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

(c) Group E Endorsements- Rotors and Rotor hub assemblies

- (aa) subgroup E1; removal, refitting, installation, repair, overhaul and inspections, holders of a TAP1 with a Group D endorsement, or
- (bb) subgroup E2; removal, refitting and inspections, holders of a TAP1 with a group C endorsement, or
- (cc) subgroup E3; removal and refitting, holders of a TAP 2 with a group C endorsement.
- (ee) The Rotors and Rotor hub assemblies to which subgroups: E1, E2 and E3 apply, are classified as follows:
 - (i) Class G1: Gyrocopter
 - (ii) Class H1: Helicopter
- (d) Group S Endorsement- welding

- (aa) subgroup S1 = welding and inspections on welding as listed in sub paragraph (cc), holders of a TAP1.
- (bb) subgroup S2 = welding as listed in sub paragraph (cc), holders of a TAP 2.
- (cc) The groups of welding and inspections on welding to which subgroups: S1, and S2 apply, are classified as follows
 - (i) Class A: Gas Metal Arc Welding (GMAW) MIG / MAG CO2 welding
 - (ii) Class B: Gas Tungsten Arc Welding (GTAW) / TIG welding Argon welding
 - (iii) Class C: Flux Cored Welding (FCAW)
 - (iv) Class D: Shielded Metal Arc Welding (SMAW)
- (dd) Endorsed as applicable in the following classes of materials
 - (a) class 1: Aluminium frames or structures, or
 - (b) class 2: Steel frames or structures.
 - (c) class 3: Magnesium castings or structures, or
 - (d) class 4: Titanium frames or structures.

Currency

- **56.01.7** (1) Whilst a technical approved person certificate does not expire, the TAP endorsement booklet does, if its holder does not maintain currency by complying with the appropriate requirements prescribed in Part 56.02.8 (1)(b),
- (2) a TAP shall not exercise the privileges granted by the approval and endorsements.
- (3) Where the TAP certificate holder's failure to maintain currency, the TAP shall apply, as per an initial application, 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 their 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 or other substance having a narcotic or hallucinogenic effect; or
 - (b) consume alcohol or take any drug or other substance having a narcotic or hallucinogenic effect whilst carrying out maintenance on an aircraft, its components or equipment.

Language

<u>56.01.9</u> A technical approved person shall have sufficient ability in reading, writing, speaking and understanding the English language to enable them to adequately study the theory and write the theoretical examinations in order to carry out their responsibilities as a technical approved person.

Register of technical approved persons

<u>56.01.10</u> (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 –

<u>(a)</u>	the	full	name	of	the	ho	older	of	th	e	certific	cate;
(b)				ful	ll iden	tificati	ion	or	pass	port	nun	nber;
(c)	the	physical	and	postal	address	of	the	holder	of	the	certific	cate;
(d)	the	date on	which	the c	certificate	was	iss	ued, re	newe	d or	reiss	ued;
(e)	parti	iculars of	the qua	alificatio	ns, expe	rience	e and	d endors	seme	nts h	eld by	the
	cer	tificate	-		•						ho	lder;
(f)	deta	ils of the	physica	al place	e where	work	is p	erforme	d as	appli	cable;	and
(g)	the i	nationality	of the ho	older of	the certif	icate.		•	•	•		

- (3) The particulars referred to in regulation 56.01.10(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.

Responsibilities of certificate holder

<u>56.01.11</u>

- (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 referred to in document SA-CATS 56.

Training Facilities

<u>56.01.12</u>

Training as required by this Part shall only be provided by the holder of an approved training facility or organisation approved by the appropriate administrative authority in terms of Parts 51, 55, 58, 141, 145 or Part 148.

<u>Logbooks</u>

<u>56.01.13</u>

- (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 56.01.11(1) 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

<u>56.01.14</u>

- (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 a technical approved person or any of the endorsements reflected in the TAP endorsement booklet, the appropriate administrative authority must give the TAP a reasonable written notice of such non-compliance.
- (b)The appropriate administrative authority may then require the TAP to undergo remedial training, including a re-write of all 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 TAP 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 who has been duly notified in terms of regulation 56.01.14(1) 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 regulation 56.01.14(2) shall apply.
- (4) The holder of a lapsed or suspended TAP approval 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 approval, 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 until the conclusion of a thorough 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.

<u>SUBPART 2: Requirements for the Issue Technical Approved Person Certificate and</u> Endorsement Booklet

56.02.1 Requirements

- (1) An applicant for the issuing of a technical approved person certificate and endorsement booklet 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 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 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, AMO, original equipment manufacturer or their agent as approved by the appropriate administrative authority, towards an endorsement in the following categories, groups, sub-groups or classes and sub-classes:
 - (a) Group A, for airframes, or any combination of the airframes referred to in sub regulation 56.1.6(1)(a);
 - (b) Group C, for engines or any combination of engines, referred to in sub regulation 56.1.6(1)(b);

- (c) Group W, for equipment or any combination of equipment, referred to in sub regulation 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 sub regulation 56.1.6 (1)(c)(ii);
- (e) Group P, for propellers and constant speed units or any combination of propellers and constant speed units, referred to in sub regulation 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 sub regulation 56.1.6(1)(c)(iv);
- (g) Group S, for welding or any combination of the types of welding, referred to in sub regulation 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, AMO, original equipment manufacturer or their agent as approved by the appropriate administrative authority, towards an endorsement in the following groups:
 - (a) Group B, for aeroplanes, or any combination of aeroplanes, referred to in sub regulation 56.1.6 (1)(a);
 - (b) Group D, for engines or any combination of engines, referred to in sub regulation 56.1.6(1)(b).

Theoretical knowledge examination

- <u>56.02.3</u> The applicant for a TAP certificate and any of the categories, groups or class endorsements shall have successfully passed the online examinations referred to in documents SA-CATS 56
- (1) (a) An applicant who fails the online examinations 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 re-examination sitting after the prescribed time limits in regulation 56.02.3(2) 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) <u>of less than 55%, may apply in writing to be entered for an exam sitting after 12</u> 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 for which they are applying.
- (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 or type for which they are applying.
- (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/or practical examination by way of specialist instructors or examiners to determine the knowledge, experience and competence of the applicant.

Experience

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 a NTCA maintenance facility approved in terms of part 55 or a training facility

- approved in terms of Part 51, and 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, ATO, ATTC, an approved original aircraft manufacturer, an approved original equipment manufacturer, or any other organisation acceptable to the appropriate administrative authority.

Application for approval or amendment

- <u>56.02.5</u> (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) any 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) the hourly administration fee, if applicable, as prescribed in Part 187.
- (2) (a) Application for a special approval of a first of type issue, amendment or addition of a certificate or endorsement booklet 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 manufacturer's training course and passed an examination approved by the manufacturer, or
 - (b) shall provide proof and verifiable knowledge and experience on similar aircraft.

Issuing of certificate and endorsement booklet

- <u>56.02.6</u> (1) The appropriate administrative authority, shall issue a technical approved person with a certificate and the appropriate endorsement booklet if the applicant complies with the requirements referred to in regulation 56.02.5.
- (2) The certificate and endorsement booklet shall be issued in the prescribed format.
- (3) The certificate shall be accompanied by an endorsement booklet which shall specify all applicable endorsements 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 endorsement booklet 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 indefinitely, whereas the TAP endorsement booklet 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 endorsement booklet shall be valid for the period for which the existing booklet is valid.

Renewal of approved person endorsement booklet

- <u>56.02.8</u> (1) To renew a technical approved person endorsement booklet, the holder thereof shall:
- (a) within the 12 months preceding the date of expiry of the TAP endorsement booklet, 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 the TAP endorsement booklet, submit an application for renewal accompanied by:
 - (i) a certified copy of the TAP endorsement booklet held by the applicant; and
 - (ii) an original or certified record of experience contained in their logbook as proof of compliance with the provisions of regulation 56.02.8(1); and
 - (iv) an original or certified document as proof of having attended an approved continuous learning or refresher training programs required for the categories, group(s), class(es) or of endorsements held and being renewed.
 - (v) <u>a statement of compliance with the technical approved person programme's manual of procedures.</u>
 - (vi) the appropriate application fee as prescribed in Part 187.
- (2) The application for the renewal of the endorsement booklet shall be made on the prescribed form.
- (3) The appropriate administrative authority shall renew the endorsement booklet if the applicant complies with the requirements referred to in sub-regulation 56.02.8(1).
- (4) The endorsement booklet shall be renewed on the appropriate form as prescribed by the appropriate administrative authority.

Reissue

- <u>56.02.9 (1) (a) The holder of a technical approved person endorsement booklet 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 endorsement booklet.</u>
- (b) In the case where the endorsement booklet has expired for a period exceeding three years, the applicant shall, in addition to rewriting the airlaw examination, comply with the requirements prescribed sub-regulation 56.02.8;
- (2) Upon application for the re-issue of the expired endorsement booklet, the appropriate administrative authority shall reissue such endorsement booklet if the applicant complies with the requirements prescribed in sub-regulation 56.02.9(1).

- (3) The provisions of sub-regulations 56.02.5 and 56.02.6 shall apply with the necessary changes to an application referred to in sub-regulation 56.02.9(1).
- (4) the appropriate application fee as prescribed in Part 187.

56.02.10 Privileges and limitations

- (1) The holder of a technical approved person certificate:
 - (a) shall not 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 certified 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 quarantee the airworthiness of the aircraft;
 - (c) in the case where a technical approved person issues a release to service for a non-type certified 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 certified 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 and endorsement booklet.
- (2) (a) the holder of a TAP 3 certificate, may only perform basic maintenance and repairs on NTCA and its components under direct instruction and supervision of a valid TAP instructor approved for the purpose, in order to gain the required knowledge and experience towards obtaining a TAP2 certificate,.
 - (b) the holder of a TAP3 certificate shall not:
 - (i) perform any basic maintenance or repairs 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; or

	_	(iv)	perform any overhaul or modification work on an aircraft, its engine, components or equipment; or
		<u>(v)</u>	certify a release to service for any aircraft.
(3)	(a)		holder of a valid TAP 2 group A endorsement, may in accordance with TAP certificate and endorsement booklet:
		<u>(i)</u>	perform general maintenance and repairs in accordance with the endorsements and approvals, and
		<u>(ii)</u>	perform work which the maintenance schedule relating to the specified category, group and subgroup of aircraft endorsed on their TAP certificate requires; and
		<u>(iii)</u>	perform any adjustment of the specified category, group and subgroup 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;
	<u>(b)</u>	The h	nolder of a TAP 2 group A endorsement shall not:
		<u>(i)</u>	perform any inspection, overhaul or modification work to an aircraft, its engine, components or equipment; or
		<u>(ii)</u>	certify the release to service of the non-type certified aircraft following maintenance, repairs or an annual inspection for the purpose of the issue or renewal of an ATF.
<u>(4)</u>	(a)	The hol	der of a valid TAP 2 group C endorsement may in accordance with their rtificate:
		<u>(i)</u>	perform general maintenance on the group, sub-group of engine or engines in an aircraft; and
		<u>(ii)</u>	perform work which the maintenance schedule relating to the specified group, sub-group of engine or engines permits such holder to certify; and
		(iii)	perform any adjustment of the specified group, 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 certified 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 certify 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 sub-group W2 endorsement may in accordance with their TAP certificate:
 - (i) remove and refit such equipment as approved in their sub-group W and class endorsement.
 - (ii) perform annual checks on pitot and static systems on non-type certified aircraft
- (e) The holder of a valid TAP 2 certificate with a sub-group X3 endorsement may in accordance with their TAP certificate:
 - (i) remove and refit such equipment as specified by their sub-group X endorsement;
 - (ii) perform annual checks on pitot and static systems on non-type certified aircraft.
- (f) The holder of a valid TAP 2 certificate with a sub-group P3 endorsement may in accordance with their TAP certificate:
 - (i) remove and refit such equipment as specified in their sub-group P and class endorsement.
- (g) The holder of a valid TAP 2 with a sub-group E3 endorsement may in accordance with their TAP certificate:

- (i) remove and refit such equipment as specified by their sub-group E and class endorsement.
- (h) The holder of a valid TAP 2 with a sub-group S2 endorsement may in accordance with their TAP certificate:
 - (i) perform welding as specified by their sub-group S and class endorsement
- (5) the holder of a valid TAP 1 certificate with a group A and C endorsement, may in accordance with their TAP endorsement 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 certified aircraft, its components and equipment, and as may be required by a TAP 2, the constructor, owner or operator of a non-type certified 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 certified aircraft, in accordance with Part 24,
 - (e) complete and sign all applicable documents.
 - (f) perform inspections on non-type certified 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 certified aircraft in accordance with the requirements prescribed in Parts 24, 44, 51, 94, 96, 115 and 141 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;
 - (a) of a compass swing;
 - (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) of 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:
 - (i) 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) <u>all work performed in accordance with the maintenance schedule relating to the specified type of equipment;</u>
 - (c) <u>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.</u>
- (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) of a compass swing;
 - (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;
 - (i) Sub class G1, or
 - (ii) Sub class H1;
- (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 subgroup, 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 56.03.2;
 - (e) have passed the theoretical knowledge examination referred to in regulation 56.03.3; and
 - (f) have acquired the experience referred to in regulation 56.03.4.
- (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 TAP1 or 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 approved in terms of Part 55, AMO, training facility approved in terms of Part 51 or Part 141, 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 regulation 56.03.3(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 re-examination sitting after the prescribed time limits in Regulation 56.02.3(10) above have elapsed.

Experience

<u>56.03.4</u> 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 regulation 56.03.5(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 56.03.1(d), (e) and (f); and
 - (cc) the applicant's competency to exercise the privileges referred to in regulation 56.03.8;
 - (dd) the full aircraft maintenance and overhaul record of experience of the applicant; and
 - (ee) 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 TAP1 certificates are:
 - (i) a grade one TAP instructor who has held a TAP1 certificate with group B and/or D endorsement for an uninterrupted period of not less than 3 years in this category, and
 - (ii) a grade two TAP instructor who has held a TAP1 certificate with group A and C endorsements for an uninterrupted period of not less than 2 years in this category.
 - (iii) a TAP instructor for W, X, P, E or S groups shall be the holder of a TAP1 certificate endorsed with W1, X1, P1, E1 or S1 endorsements as applicable in the respective groups for an uninterrupted period of not less than 3 years.

<u>Issuing of Technical Approved Person instructor endorsement</u>

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

- (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 certified 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 TAPI 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

56.03.8 (1) The holder of a TAP instructor endorsement may exercise the following privileges—

- (a) provide theoretical and practical instruction to TAPs 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 regulation 56.03.9(1).
- (3) The appropriate administrative authority shall renew the TAPI endorsement if the applicant complies with the requirements referred to in regulation 56.03.9(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 (TAP-DE) Designation of TAP designated examiners

<u>56.04.1</u>

- (1) All persons considered for designation as TAP 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 TAP designated 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 TAP 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 regulation 56.04.1(1); and
 - (b) such examiner is authorised to exercise the privileges referred to in regulation 56.04.1(1) and to perform the duties specified on the TAP-DE certificate, only when explicitly instructed to perform such duties referred to in regulation 56.04.1(1) by the appropriate administrative authority.
- (5) The application to be considered for designation as referred to in regulation 56.04.1(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 TAP designated examiners.

Re-designation as TAP DE

56.04.2

- (1) An application for renewal as a TAP 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 TAP-DE after the expiry date.

Register of TAPDEs

- **56.04.3** (1) The appropriate administrative authority shall maintain a register of all TAPDEs.
- (2) The register referred to in regulation 56.04.3(1) shall contain the following details
 - (a) name; (b) privileges designation; category and of the held; and endorsements (c) licences and expiry date. (d)

MOTIVATION

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 (APs) 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 APs do not fall under the provisions of ICAO, whilst Part 66.4 provided a set of basic regulations for APs 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 (TAPs) for inclusion in the SA-CARS.

The current SACAA regulations do not provide for the certification of TAPs.

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 of existing regulations and unique differences of TAP.s 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.