GENERAL NOTICE

NOTICE 20 OF 2010

PROPOSED AMENDMENT TO THE CIVIL AVIATION REGULATIONS, 1997

Under regulation 11.03.2(1)(a) of the Civil Aviation Regulations, the Chairperson of the Civil Aviation Regulations Committee (CARCOM) hereby publishes for comment the proposed amendments to the Civil Aviation Regulations, sub-regulation (3)1997, as set out in the schedules hereto. Any comments or representations on the proposed amendments should be lodged in writing with the Chairperson of the Regulations Committee, for attention Ms. Monica Sonjani or Mr. Herman Wildenboer, Private Bag 73 Halfway House, 1685, fax: (011) 545-1201, or e-mail at sonjanim@caa.co.za or wildenboerh@caa.co.za, before or on 11 February 2010.

SCHEDULE 1

PROPOSAL FOR THE AMENDMENT OF PART 12 OF THE CIVIL AVIATION REGULATIONS, 1997

PROPOSER:

South African Civil Aviation Authority Private Bag X73 Halfway House 1685

PROPOSER'S INTEREST

The proposer has been established in terms of the South African Civil Aviation Act, 1998, (Act No. 40 of 1998), to control and regulate civil aviation in South Africa and to oversee the functioning and development of the civil aviation industry, and, in particular, to control, regulate and promote civil aviation safety and security.

GENERAL EXPLANATORY NOTE

Words in strike through indicate deletions from the existing regulations Words underlined with a solid line indicate insertions in the existing regulations

- 1. PROPOSAL FOR THE SUBSTITUTION OF REGULATION 12.01.6 OF THE REGULATIONS
- 1.1 The following regulation is hereby substituted for regulation 12.01.6:

"Designation and Acceptance of an Accredited Representative

12.01.6 (1) The Commissioner may –

- (a) designate an accredited representative, for the purposes of investigating an accident or incident involving a South African registered aircraft in a territory of a contracting or non-contracting State; or
- (b) accept the accreditation or appointment of an accredited representative of the State of Registry, State of the Operator, State of Design or State of Manufacture for the purposes of <u>participating in investigating an accident</u> or incident involving a <u>South African or a foreign registered aircraft in the</u> territory of the Republic.
- (2) The conditions and requirements for and the rules, procedures and standards connected with a designation <u>or acceptance</u> referred to,shall be as prescribed in Document SA-CATS-ACCID and INCID.
- (3) An accredited representative designated <u>or accepted</u> in terms of subregulation (1)may participate in the investigation of the accident or incident under the control of the investigator-in-charge.
- (4) An accredited representative designated <u>or accepted</u> in terms of subregulation (1)may, under the control of the investigator-in-charge –
 - (a) visit the scene of the accident;
 - (b) examine the wreckage;
 - (c) obtain witness information and suggest areas of questioning:
 - (d) have access to all relevant evidence;
 - (e) receive copies of all relevant documents, books, notes, photographs, recordings and transcripts;
 - (f) participate in readouts of recorded media;
 - (g) participate in component examinations, technical briefings, tests and simulations and other investigative activities;
 - (h) participate in deliberations on the analysis, findings, cause or causes and safety recommendations; and
 - (i) make submissions in respect of the various elements of the investigation.
- (5) An accredited representative designated or accepted in terms of subregulation (1)shall not circulate, publish or give access to a draft report or any part thereof, or any documents obtained during an investigation of an accident or incident, without the express consent of the State which conducted the investigation, unless such reports or documents have already been published or released by the State conducting the investigation."

1.2 Motivation

The current regulation is not in line with the requirements of ICAO Annex 13 as it calls for the Commissioner to designate the Accredited Representative from other States. The CCA should only accept their designations from their states should they meet the requirements as stipulated in the CATS documents.

The objective of these provisions is to promote relations with foreign States in an event were South African registered aircrafts are involved in an occurrence in a foreign country. Participation of South Africa/SACAA in the investigation of those occurrences will speed up the process of investigation and victim identification.

This proposed regulation is an ICAO requirement and is not at present correctly stated in the regulations, and not clarifying it in CAR Part 12 will result in future findings by ICAO-AIG and/or FAA.

2. PROPOSAL FOR THE SUBSTITUTION OF REGULATION 12.01.7 OF THE REGULATIONS

2.1 The following regulation is hereby substituted for regulation 12.01.7:

"Designation of adviser"

- **12.01.7** (1) **(a)** The Commissioner may, in consultation with the accredited representative designate an adviser for the purpose of assisting the an accredited representative in the investigation of an accident or incident.
- (b) The Commissioner may accept an adviser from the State of Registry. State of the Operator, State of Design or State of Manufacture for the purpose of assisting an accredited representative in the investigation of an accident or incident.
- (2) An adviser designated in terms of sub-regulation (1) shall not circulate, publish or give access to a draft report or any part thereof, or any documents obtained during an investigation of an accident or incident, without the express consent of the State which conducted the investigation, unless such reports or documents have already been published or released by the State conducting the investigation.
- (2) An adviser designated in terms of sub-regulation (1) may, under the control of the investigator in charge and the supervision of the accredited representative
 - (a) visit the scene of the accident or incident:
 - (b) examine the wreckage:
 - (c) obtain information from witnesses and suggest areas for questioning;
 - (d) have access to all relevant evidence;
 - (e) receive copies of all relevant documents, books, notes, photographs, recordings and transcripts;
 - (f) participate in readouts of recorded media;
 - (g) participate in component examinations, technical briefings, tests and simulations and other investigative activities;
 - (h) participate in deliberations on the analysis, findings, cause or causes and safety recommendations; and
 - (i) make submissions in respect of the various elements of the investigation.
- (3) Should the Republic of South Africa be the State of Occurrence, the Commissioner may, in consultation with the investigator in charge, accept the designation or appointment of an adviser for the purpose of assisting the accredited representative in the investigation of an accident or incident.

(3)(4) The conditions and requirements for and the rules, procedures and standards connected with a designation referred to, shall be as prescribed in Document SA-CATS-ACCID and INCID.".

2.2 Motivation

This proposed regulation is an ICAO requirement and is not at present included in the regulations, and not having it incorporated on CAR Part 12 will result on future findings by ICAO-AIG and/or FAA.

The objective of these specifications is to promote efficiency, effectiveness and quality of the investigation and reporting on factual information in an investigation.

3. PROPOSAL FOR THE INSERTION OF REGULATION 12.01.8 INTO THE REGULATIONS

3.1 The following regulation is hereby inserted after regulation 12.01.7:

"Designation of experts"

- **12.01.8** (1) The Commissioner may appoint an expert, where a citizen of the Republic of South Africa is fatally injured or has suffered serious injuries in an aircraft accident or incident involving a foreign registered aircraft in the territory of another State.
- (2) The Commissioner shall inform the State of Occurrence of the intention to appoint experts to participate in the investigation of the occurrence.
- (3) The Commissioner may accept the appointment of an expert from any State, whose citizens were fatally injured or suffered serious injuries in a South African or a foreign registered aircraft accident or incident in the territory of the Republic.
- (4) The expert referred to in sub-regulation (3) may,under the control of the investigator-in-charge:
 - (a) visit the scene of the accident;
 - (b) have access to the relevant factual information;
 - (c) participate in the identification of the victims;
 - (d) <u>assist in questioning surviving passengers who are citizens of the</u> expert's State; and
 - (e) receive a copy of the final report.
- (5) An expert appointed in terms of sub-regulation (1) or accepted in terms of sub-regulation (3) shall not circulate, publish or give access to a draft report or any part thereof, or any documents obtained during an investigation of an accident or incident, without the express consent of the State which conducted the investigation, unless such reports or documents have already been published or released by the State conducting the investigation.

(6) The conditions, requirements, rules, procedures and standards connected with a designation or acceptance of an expert referred to in subregulations (1) and (3), shall be as prescribed in Document SA-CATS-ACCID and INCID.".

3.2 Motivation

This proposed regulation is an ICAO requirement and is not at present included in the regulations, and not having it incorporated on CAR Part 12 will result in future findings by ICAO-AIG and/or FAA. The objective of these provisions is to promote relations with foreign States in an event were South African citizens are involved in an occurrence in a foreign country, or where the citizens of a foreign country are involved in an accident in SA. Participation of South Africa/SACAA on the investigation of those occurrences will speed up the process of investigation and victim identification.

4. PROPOSAL FOR THE INSERTION OF REGULATION 12.01.9 INTO THE REGULATIONS

4.1 The following regulation is hereby inserted after regulation 12.01.8:

"Powers of the Investigator in Charge or an Investigator

12.01.9 (1) In addition to any other power granted to or duty imposed on an Investigator in Charge (IIC) or an Investigator under any part of the regulations, such IIC or Investigator may—

- (a) enter any premises for the purpose of investigation of any aircraft, aircraft factory, aerodrome, civil aviation related facility, aircraft component, aircraft equipment, license, certificate, permit, approval, authorization, register, book or document which he or she believes to be on such premises;
- (b) confiscate any thing, article, book, register, document, aircraft, aircraft component, aircraft equipment, license, certificate, permit, approval or authorizations, which he or she reasonably believes will assist in the investigation process;
- (c) recommend to the Commissioner for the grounding of any aircraft which he or she reasonably believes to be unsafe, not duly registered or not airworthy;
- (d) recommend to the Commissioner for the closure of any aviation related facility which he or she reasonably believes does not comply with the Act or the regulations;
- (e) request the pilot of an aircraft to furnish his or her name and address and any other particulars concerning his or her identity;
- (f) require any person on an aerodrome or in an aircraft, aircraft factory or civil aviation related facility to furnish his or her name and address and any other particulars concerning his or her identity and to furnish such information as is at his or her disposal concerning the identity of the pilot or owner of any aircraft, or the owner of any aerodrome, aircraft factory or civil aviation related facility;

- (g) request the owner or operator of an aircraft to furnish such information as may be necessary concerning the identity of the pilot of the aircraft at any time or during any particular period;
- (h) inspect or investigate an aircraft, or any part, component or equipment of such aircraft, for the purpose of ascertaining whether the provisions of the regulations or a technical standard are being complied with;
- (i) ascertain the mass of any aircraft with or without load;
- (j) call upon any person required by the regulations to be the holder of a license, certificate, permit, approval or authorization or, in the case of a flight crew member or an aircraft maintenance engineer, his or her log-book, for inspection or investigation within a reasonable time to be stipulated by such IIC or Investigator; and
- (k) call upon the owner, operator or pilot-in-command of any aircraft to produce or cause to be produced for inspection or investigation any license, certificate, manual, log-book or other document relating to the aircraft or crew,
- (2) Should it appear to any IIC or Investigator that any aircraft is intended or likely to be flown under circumstances where the flight would involve a contravention of the regulations, or will cause danger to persons in the aircraft or to persons or property on the ground, he or she may take such action to delay the flight or such other action as he or she may deem necessary for the purpose of causing the circumstances relating to the flight to be investigated or the aircraft to be inspected.
- (3) If a flight has been delayed in terms of sub-regulation (2), the aircraft shall not be operated until the Commissioner is satisfied that the regulations are being complied with and approves the operation of the aircraft, or until such alterations or repairs have been effected which the Commissioner deems necessary to render such aircraft fit for flight.".

4. Motivation

This proposed regulation is an ICAO requirement and is not at present included in the regulations, and not having it incorporated in CAR Part 12 will result in future findings by ICAO-AIG in 2007. We propose this in an attempt not to get a repeat finding which may result in a major finding. The objective of these specifications is to define the powers of investigators in terms as the investigators are currently given powers of an Authorized officer and this has resulted in a finding by ICAO AIG Audit in 2007.

PROPOSAL FOR THE RENUMBERING OF REGULATION 12.01.8

5.1 Regulation 12.01.8 of the Regulations is herewith renumbered as regulation 12.01.10:

"Establishment of confidential aviation hazard reporting system

- **12.01.10** (1) The designated body or institution referred to in regulation 12.01.2, shall establish a confidential aviation hazard reporting system to promote aviation safety or reduce the risk of accidents or incidents.
- (2) The requirements for and the procedures of a confidential aviation hazard reporting system and the manner in which such system shall be operated, shall be as prescribed in Document SA-CATS-ACCID and INCID.
- (3) Any person who exercises or has exercised any function in terms of the confidential aviation hazard reporting system, shall not disclose any information which he or she obtained in the performance of such function which could identify the originator of the notice referred to in regulation 12.02.5.".

5.2 Motivation

Aligning this regulation will make the Regulations more user-friendly.

6. PROPOSAL FOR THE AMENDMENT OF REGULATION 12.05.1 OF THE REGULATIONS

- 6.1 Regulation 12.05.1 of the regulations is hereby amended by the insertion of the following sub-regulation after sub-regulation (2):
 - "(3)(a) The Commissioner shall send a copy of the draft Final Report to the State that instituted the investigation and to all States that participated in the investigation, inviting their significant and substantiated comments on the report as soon as possible.
 - (b) The Commissioner shall send the draft Final Report of the investigation for comments to:
 - (i) the State of Registry;
 - (ii) the State of the Operator;
 - (iii) the State of Design; and
 - (iv) the State of Manufacture.
 - (c) The States referred to in paragraphs (a) and (b) shall be given a period of 60 days from the date of receipt of the draft Final Report, within which to make comments therein.
 - (d) The Commissioner shall give due consideration to any comments received within the period stated in paragraph (c) above and shall either amend the draft Final Report to include the substance of the comments received or, if desired by the State that provided comments, append the comments to the Final Report.
 - (e) If the Commissioner receives no comments within the period stated in paragraph (c) above, he or she shall prepare the Final Report.".

6.2 Motivation

The objective of this regulation is to invite States substantiated comments on a report within 60 days from the date of a transmittal letters.

This proposed regulation is an ICAO requirement and is not at present included in the regulations, and not having it incorporated on CAR Part 12 will result in future findings by ICAO-AIG and FAA.

7. PROPOSAL FOR THE INSERTION OF SUBPART 6 INTO PART 12 OF THE REGULATIONS

7.1 The following Subpart is hereby inserted after Subpart 5 of Part 12:

SUBPART 6: ACCIDENTS PREVENTION MEASURES

Voluntary incident reporting system

- 12.06.01 1) The Commissioner shall establish a voluntary incident reporting system which shall be non-punitive and afford protection to the source of information.
- (2) The Commissioner shall establish other safety data collection and processing systems to collect safety information that may not be captured by the incident reporting system mentioned in sub-regulation(2) above.

Database system

- 12.06.2 (1) The Commissioner shall establish an accident and incident database system to facilitate the effective analysis of information obtained, including the information obtained from the incident reporting system.
- (2) The database system referred to in sub-regulation (1) shall be in a standardized format to facilitate data exchange.

Analysis of data

- 12.06.03 (1) The Commissioner shall, following the identification of preventative actions required to address actual or potential safety deficiencies, and as part of the safety program, implement these actions and establish a process to monitor implementation and effectiveness of the processes.
- (2) The Commissioner shall analyse safety information based on risk assessment.
- (3) The Commissioner shall, in the analysis of the information contained in the database, identify safety matters considered to be of interest to other States and forward such safety information to that State as soon as possible.

(4) The Commissioner shall, if a safety recommendation is addressed to an organization in another State and in addition to safety recommendations arising from accidents and incident investigations, or other sources, including safety studies, forward such recommendation to that State's investigations authority.

Exchange of safety information

12.06.4 The Commissioner shall establish a safety information sharing network among all users of the aviation system and shall facilitate the free exchange of information on actual and potential safety deficiencies."

7.2 Motivation

This proposed regulation is an ICAO requirement and is not at present included in the regulations, and not having it incorporated on CAR Part 12 will result in future findings by ICAO-AIG and FAA. The objective of these specifications is to promote accident prevention by analysis of accident and incident data and by prompt exchange of information.

SCHEDULE 2

PROPOSAL FOR THE AMENDMENT OF PART 61 OF THE CIVIL AVIATION REGULATIONS. 1997

A. PROPOSER

J H Slabber P O Box 132 Wierda Park 0149 Cell. No. 082 322 0023 E Mail: astro@lantic.net

B. PROPOSER'S INTEREST

The proposer is a South African pilot engaged in general aviation in South Africa. The proposer holds a current Airline Transport Pilots Licence.

C. GENERAL EXPLANATORY NOTE:

Words in strike through indicate deletions from the existing regulations. Words underlined with a solid line indicate insertions in existing regulations.

8. PROPOSAL TO AMEND REGULATION 61.01.12 OF THE REGULATIONS

- 8.1 Regulation 61.01.12 is hereby amended by the substitution for sub-regulation (2) of the following sub-regulation:
 - "(2) A holder of a pilot licence who has attained the age of 65 years may not act as pilot <u>in command</u> of an aircraft engaged in international commercial air transport operations."

8.2 MOTIVATION

Regulation 61.01.12 (2) has been rephrased to make the curtailment of pilots of age 65 years or more only applicable to Pilot in Command engaged in International commercial air transport operations.

The amendment proposed is based on the fact that, the relevant ICAO regulation is a recommendation only. See ICAO Annex 1 2.1.10.2, below:

ICAO Regulation

The Annex 1 to the Convention on International Civil Aviation contains the Personnel Licensing requirements and the following curtailment/limitation of privileges:

- 2.1.10 Limitation of privileges of pilots who have attained their 60th birthday and curtailment of privileges of pilots who have attained their 65th birthday
- **2.1.10.1** A Contracting State, having issued pilot licences, shall not permit the holders thereof to act as pilot-in-command of an aircraft engaged in international commercial air transport operations if the licence holders have attained their 60th birthday or, in the case of operations with more than one pilot where the other pilot is younger than 60 years of age, their 65th birthday.
- **2.1.10.2 Recommendation.** A Contracting State, having issued pilot licences, should not permit the holders thereof to act as co-pilot of an aircraft engaged in international commercial air transport operations if the licence holders have attained their 65th birthday.

Note.— Attention is drawn to 1.2.5.2.3 on the validity period of Medical Assessments for pilots over the age of 60 who are engaged in commercial air transport operations.

SCHEDULE 3

PROPOSAL FOR THE AMENDMENT OF PART 1 AND PART 62 OF THE CIVIL AVIATION REGULATIONS, 1997

A. PROPOSER

The Aeroclub of South Africa Aeroclub House Hangar No. 4 Rand Airport Germiston

B. PROPOSER'S INTEREST

The proposer is responsible for the controlling and co-ordination of sporting aviation in the Republic of South Africa.

C. GENERAL EXPLANATORY NOTE:

Words underlined with a solid line indicate insertions into existing regulations. Words in strike through indicate deletions from existing regulations.

9. PROPOSAL FOR THE AMENDMENT OF REGULATION 1.00.1

9.1 Regulation 1.00.1 is hereby amended by the substitution for the definition of "conventional controlled microlight aeroplane of the following definition:

"Conventionally Controlled Microlight Aeroplane" means an aeroplane that is primarily controlled by manipulating its primary flight control surfaces by conventional methods excluding weight-shift control and of which these maximum take-off mass and other classification parameters are defined in document SA-CATS-NTCA as Technical Standard 24.01.2.E.2.

9.2 Motivation

To clearly differentiate this category of aeroplane from Weight Shift Controlled Microlight Aeroplane.

PROPOSAL TO AMEND REGULATION 1.00.1 OF THE REGULATIONS

Proposal 1.1

Proposed Regulation

"Conventionally Controlled Microlight Aeroplane means an aeroplane that is primarily controlled by manipulating its primary flight control surfaces by conventional methods excluding weight-shift control and of which these maximum take-off mass and other classification parameters are defined in document SA-CATS-NTCA as Technical Standard 24.01.2.E.2.

Motivation: To clearly differentiate this category of aeroplane from Weight Shift Controlled Microlight Aeroplane

SCHEDULE 2

PROPOSAL TO AMEND THE INDEX TO PART 62 OF THE REGULATIONS

Proposal: 2.1

Proposed Regulation

SUBPART 4: REQUIREMENTS FOR THE ISSUE OF A <u>CATEGORY-</u>, CLASS- OR TYPE RATING BY NAME FOR CONVENTIONAL CONTROLLED MICROLIGHT AEROPLANES

Motivation

To provide consistency within Part 62 and to create clear understanding of terminology.

Proposal: 2.2

Replacement of the section of the index with the following portion:

SUBPART 10:

REQUIREMENTS FOR THE ISSUE OF A <u>RECREATIONAL POST</u>
<u>MAINTENANCE TEST FLIGHT RATING AND A RECREATIONAL</u>
TEST PILOT RATING

62.10.1 General 62.10.2 Requirements

62.10.3 Experience

62.10.4 Application 62.10.5 Issuing

62.10.6 Privileges and Limitations

Motivation

To provide for the new proposed requirements for the issue of a test pilot rating

Proposal: 2.3

SUBPART 16: REQUIREMENTS FOR THE ISSUE OF A CATEGORY, CLASS OR TYPE RATING BY NAME FOR LIGHT SPORT AEROPLANES

Motivation: The regulation was changed erroneously in the 35th Amendment. There is no open class rating for light sport aeroplanes. There is confusion between a class rating and open class rating. Proposals have been made in this amendment to correct this.

SCHEDULE 3

PROPOSAL TO AMEND VARIOUS SUB PARTS OF PART 62 OF THE REGULATIONS

Proposal 3.4

To amend regulation 62.01.9 by the substitution of paragraph (2) for the following paragraph (2)

- proficiency check not later than 24 months since the issue of the licence or a previous proficiency check, as the case may be. In the case of hang-gliders and paragliders, the annual revalidation of the category rating shall be sufficient to confirm proficiency. The proficiency check, or the annual revalidation procedure, as the case may be, shall include a review of applicable regulations, NOTAMs and AlCs. The provisions of sub-regulations (5) and (6) shall apply mutatis mutandis in respect of the annual revalidation procedure.
 - (a) Where the holder of a National Pilot Licence in a particular category who has not maintained competency by passing the general proficiency check or an initial skills test in the same category of aircraft within the 24 months following the issue or revalidation of such licence, he or she shall comply with the following requirements

in the case where the maintenance of competency has lapsed for less than 24 months, he or she shall, in the same category for which he or she previously held a category endorsement be required to –

- (aa) undergo a minimum of one period of dual training of not less than one hour, and
- (bb) practice at least 1 hour solo flight including 3 take-offs and landings; and
 - (cc) pass a general proficiency check.
- (ii) in the case where the maintenance of competency has lapsed by more than 24 months, but less than 60 months, he or she shall be required to
 - (aa) rewrite the Air Law examination;
 - (bb) undergo a minimum of one period of dual training of not less than one hour, and
- (cc) practice at least 3 hours solo flight including 3 take-offs and landings, and
 - (dd) pass a general proficiency check.
 - (iii) in the case where the maintenance of competency has lapsed by more than 60 months he or she shall be required to;

(aa) rewrite the Air Law examination;
(bb) undergo a minimum of two periods of dual training of

less than 1 hour each and,
(cc) practice at least 3 hours solo flight including 5 take-offs
and landings, and
(dd) undergo a navigation exercise dual or under supervision
of 90 minutes or more including one full stop landing at a point other than departure or final destination, and
(ee) pass a general proficiency check.

Motivation:

To provide for sufficient re-currency training.

Current Regulation:

62.01.9 (2) The holder of a recreational pilot licence shall undergo a general proficiency check not later than 24 months since the issue of the licence or a previous proficiency check, as the case may be. In the case of hang-gliders and paragliders, the annual revalidation of the category rating shall be sufficient to confirm proficiency. The proficiency check, or the annual revalidation procedure, as the case may be, shall include a review of applicable regulations, NOTAMs and AICs. The provisions of sub-regulations (5) and (6) shall apply mutatis mutandis in respect of the annual revalidation procedure.

Proposal 3.5

To amend regulation 62.01.9 by the addition of paragraph (11)

62.01.9 (11) The holder of a lapsed or expired Pilots Licence issued in terms of Part 61 or Part 62 of the regulations, or where such holder may not exercise the privileges of his or her license due to non compliance with the currency requirement, may for the purpose of renewing his or her licence or rating as contemplated in paragraph (2) above, exercise the privileges of the Recreational Pilots Learner Certificate provided for in Part 62 of these regulations in the same category and class for which he or she holds such license, provided that the holder have an appropriate current medical certificate.

Motivation

The requirements for the issue of a Recreational Pilots Learner Certificate will have been satisfied by such regulation.

Proposal 3.7

PROPOSAL TO AMEND THE HEADING OF REGULATION 62.04

By changing the heading of the regulation by amending the wording "open class" in place of "class"

Requirements for the issue of an <u>open</u> class rating or type rating by name for conventionally controlled microlight aeroplanes

Motivation

To correct the terminology of the heading.

Proposal 3.9

PROPOSAL TO AMEND REGULATION 62.04.2(3) OF THE REGULATIONS

Substitution of the number "100" for "200" in subparagraph (3)

(3) An applicant for the issuing of an open category rating for conventional microlight aeroplanes shall have completed not less than 100 200 hours flight time as a pilot in command of a conventional microlight aeroplane, and hold at least five type ratings by name for conventional microlight aeroplanes.

Motivation

To increase the hourly requirement in the regulations for an open class rating. The current regulation only requires 100 hours.

Proposal 3.11

PROPOSAL TO AMEND THE HEADING OF REGULATION 62.04.7

By changing the heading of the regulation by amending the wording "open class" in place of "class"

Issuing of open category rating of type rating

Motivation

To correct the terminology of the heading.

Proposal 3.12

PROPOSAL TO AMEND REGULATION 62.04.6(1)

Substitution of "class rating" for "open class rating"

62.04.6 (1) An application for the issuing of a type rating by name or a <u>open</u> class rating for conventionally controlled microlight aeroplanes shall –

Motivation

To correct the terminology of the regulation

Proposal 3.13

PROPOSAL TO AMEND REGULATION 62.04.7

By the deletion of sub-paragraph (3).

(3) An applicant for the issuing of a class rating for conventional microlight aeroplanes shall have completed not less than 500 hours flight time as a pilot of a conventional microlight aeroplane, and hold at least five type ratings by name for conventional microlight aeroplanes.

Motivation

To avoid duplication of the paragraph which is already in regulation 62.04.2.

Proposal 3.14

PROPOSAL TO AMEND REGULATION 62.04.6 (2)

To amend Regulation 62.04.6 (2) by the replacement of the following paragraph (a) for paragraph (a) of the current regulation:

Proposed Regulation:

(a) Undergo a skills proficiency test with a Grade C, B or A instructor with the appropriate type or class rating wherein a high standard of vital action drill shall be required.

Motivation

To differentiate between testing the pilot's ability to fly the aircraft during a conversion to type and the new skills test which replaced the old flight test. The pilot is not required to complete a skills test form for the purpose of a conversion to type within a category.

Proposal 3.15

PROPOSAL TO AMEND THE HEADING OF REGULATION 62.05

By changing the heading of the regulation by amending the wording "open class" in place of "class"

Requirements for the issue of an <u>open</u> class rating or type rating by name for weight shift controlled microlight aeroplanes

Motivation

To correct the terminology of the heading.

Proposal 3.17

PROPOSAL TO AMEND REGULATION 62.05.2(3) OF THE REGULATIONS

Substitution of class with open category and substitution of the number "100" for "200" in subparagraph (3)

(3) An applicant for the issuing of an <u>open</u> class rating for weight shift controlled microlight aeroplanes shall have completed not less than 100 200 hours flight time as a pilot in command of a weight shift controlled microlight aeroplane, and hold at least five type ratings by name for weight shift controlled microlight aeroplanes.

Motivation

To correct terminology and increase the hourly requirement in the regulations for an open class rating. The current regulation only requires 100 hours.

Proposal 3.19

PROPOSAL TO AMEND REGULATION 62.05.6(1)

Substitution of "class rating" for "open class rating"

62.05.6 (1) An application for the issuing of a type rating by name or a <u>open</u> class rating for weight-shift controlled microlight aeroplanes shall —

Motivation

To correct the terminology of the regulation

Proposal 3.20

PROPOSAL TO AMEND THE HEADING OF REGULATION 62.05.7

By changing the heading of the regulation by amending the wording "open class" in place of "class"

Issuing of open class rating of type rating

Motivation

To correct the terminology of the heading.

Proposal 3.21

PROPOSAL TO AMEND REGULATION 62.05.7

By the deletion of sub-paragraphs (3) - (6)

Motivation

Regulation is duplicated.

Proposal 3.22

PROPOSAL TO AMEND REGULATION 62.09.1(1) OF THE REGULATIONS

The replacement of the current paragraph (a) with the following paragraph (a)

Proposed Regulation:

(a) be the holder of a valid national pilot license recreational pilot licence, or a valid pilot licence issued in terms of Part 61 of these Regulations; issued in terms of this Part

Motivation:

To correct the wording of the regulation.

Proposal 3.23

PROPOSAL TO AMEND REGULATION 62.09.2(b)(ii)

To amend 62.09.2(b)(ii) paragraph (aB) by correcting grammar and include an earlier omission:

Proposed Regulation:

(aB) have attended an approved paraglider flight instructor course and observing and assisting an appropriatelyed rated paraglider flight instructor whilst actively conducting training on training slopes for at least 10 days;

Motivation:

The addition of the word "instructor whilst actively conducting training" after the words "appropriated rated paraglider flight" for purposes of clarity.

Proposal 3.25

PROPOSAL TO AMEND REGULATION 62.09.5(2)(g) OF THE REGULATIONS

To amend regulation 62.09.5(2) by replacing the current paragraph (g) with the following paragraph:

Proposed Regulation:

- (g) in the case of a recreational flight instructor (paraglider, motorised paraglider, motorised paratrike):
 - (i) for a Grade C rating, two holders of a Grade B recreational flight instructor rating with a paraglider, motorised paraglider, or motorised paratrike rating, as applicable;
 - for a Grade B rating, the holder of a Grade A recreational flight instructor rating with a paraglider, motorised paraglider, or motorised paratrike rating, as applicable;
 - (iii) for a Grade A rating, a designated examiner with a paraglider, motorised paraglider, or motorised paratrike <u>rating</u>, as applicable;

Motivation:

To correct grammar in this paragraph.

Proposal 3.29

PROPOSAL TO AMEND REGULATION 62.10

Replacement of the entire subpart with the following:

SUBPART 10: REQUIREMENTS FOR THE ISSUE OF A RECREATIONAL POST MAINTENANCE TEST FLIGHT RATING AND A RECREATIONAL TEST PILOT RATING

General

- 62.10.1 (1) No person shall act as test pilot of an aircraft unless he is the holder of a valid pilot's licence with a test pilot's rating.
 - (2) Test flights may only be performed by suitably rated pilots; this means rated on the aircraft within a class or on type and rated as a test pilot.
 - (3) A test flight will be required as referred to below. Note that a systems acceptance flight, as defined below, is not a test flight and therefore the pilot in command does not require a test pilot rating. However, he must be rated as pilot in command for the class and type of aircraft. All test flights must be done in line with the manufacturer's requirements.
 - (4) The following definitions will apply to this part:
 - (a) "test flight" means a flight for the purpose of the issuing, validting or rendering effective an authority to fly for such aircraft;
 - (b) "initial test flight" means the first flight of an aircraft for the purpose of the initial validation of an experimental prototype or first of type

- or amateur built aircraft to be registered on the South African aircraft register.
- (c) "post maintenance test flight" means a flight for the purposes of investigative test flying to confirm the release to service following regular maintenance.
- (d) "systems acceptance flight" means a flight for the purpose of testing the operation or effective functioning of a system of an aircraft that does not affect the flying characteristics of the aircraft.

Requirements

62.10.2

- (1) In the case of an applicant applying for a recreational pilot licence with a post maintenance test flight rating in the categories weight shift controlled microlights, conventional controlled microlights, light sport aeroplanes, touring motor gliders and gyroplanes shall:
 - (a) hold at least a valid recreational pilot licence;
 - (b) be the holder of the appropriate aircraft category endorsement;
 - (c) be the holder of the appropriate aircraft class rating in that category;
 - (d) have at least 300 hours total flight time of which not less than 200 hours must be pilot in command in the category for which a test pilot rating is applied for;
 - (e) have acquired the experience referred to in regulation 62.10.3;
- (2) In the case of an applicant applying for a recreational pilot licence with a test pilot rating in the categories weight shift controlled microlight aeroplanes, conventional controlled microlight aeroplanes, light sport aeroplanes, touring motor gliders and gyroplanes shall:
 - (a) hold at least a valid recreational pilot licence;
 - (b) be the holder of the appropriate aircraft category endorsement;
 - (c) be the holder of the appropriate aircraft class rating in that category:
 - (d) have at least 700 hours total flight time of which not less than 500 hours must be pilot in command in the category for which a test pilot rating is applied for:
 - (e) have acquired the experience referred to in regulation 62.10.3;
- (3) Notwithstanding the provisions of sub-regulation (1) and (2), a holder of a Grade I or II test pilot rating issued by South African Civil Aviation

 Authority under Part 61 will have the same rights and privileges as a pilot issued with a test pilot rating under Part 62 for the categories light sport aeroplanes, conventional controlled microlight aeroplanes and touring motor gliders, but shall expressly exclude the categories weight shift controlled Microlight aeroplanes and Gyroplanes.

Experience

62.10.3 An applicant shall:

- (a) in the case of an application for a post maintenance test flight rating, attend the basic test flying techniques course as set out in SA-CATS-FCL 62;
- (b) In the case of an application for a test pilot rating, attend the advanced test flying techniques course as set out in SA-CATS-FCL 62.

Application

- An applicant for the issuing of a post maintenance test flight rating or a test pilot rating shall be made to the Commissioner or the organisation designated for the purpose in terms of Part 149, as the case may be, on form CA62.09 and is accompanied by:
 - (a) the appropriate fee prescribed in Part 187; and
 - (b) <u>a copy of his or her logbook, duly summarised, showing the required flying experience.</u>

Issuing

62.10.5 The Commissioner or the organisation designated for the purpose in terms of Part 149, as the case may be, shall endorse the applicant's National Pilot Licence with either a test pilot rating or a post maintenance test flight rating if the applicant complies with the requirements referred to in regulation 62.10.2.

Privileges and limitations

- 62.10.6 (a) The holder of a post maintenance test flight rating shall be entitled to act as pilot in command of an aircraft, in a category for which the pilot has a post maintenance test flight rating to conduct a post maintenance test flight, or proving flights.
 - (b) The holder of a test pilot rating shall be entitled to act as pilot in command of an aircraft to conduct test flights, post maintenance test flights, and initial test flights.

Motivation

To provide for regulations for the issue of a test pilot ratings.

Current regulation

SUBPART 10 REQUIREMENTS FOR THE ISSUE OF A TEST PILOT RATING

General

- **62.10.1** (1) The requirements for the issue of a test pilot rating shall mutatis mutandis be the requirements prescribed for the test ratings provided for in Subparts 27, 28, and 29 respectively of Part 61 of the regulations.
 - (2) Notwithstanding the provision of sub-regulation (1)—
 - (a) a test pilot rating may be issued to the holder of a valid recreational pilot licence, provided all other requirements for the issuing of the test pilot rating are met; and

(b) in the case of a Class II test pilot rating or a Class III postmaintenance test flight rating, if the applicant is the holder of a recreational pilot licence, the requirements for a medical certificate shall be as prescribed in regulation 62.01.10.

Privileges and limitations

- **62.10.2** (1) Where a Class I test pilot rating has been issued to the holder of a recreational pilot licence, the privileges of the rating may be exercised only in a non-type certificated aircraft for which he or she holds a valid category rating,
 - (2) Where a Class II or Class III test pilot rating has been issued to the holder of a recreation pilot licence, the privileges may be exercised only in a nontype certificated aircraft for which he or she holds a valid category rating, class rating or type rating.

Proposal 3.33

PROPOSAL TO AMEND REGULATION 62.16.2(c) OF THE REGULATIONS

By the replacement of the following paragraph (c) of regulation 62.16.2

Proposal

(c) 3-1 hours of dual and 2 hours of solo circuits and landings at a controlled airport.

Motivation To allow the practical application of the regulation while being cognisant of the additional pressure on controlled airports .

Proposal 3.36

GENERAL MATTERS - TERMINOLOGY (1)

PROPOSAL TO AMEND PART 62 OF THE REGULATIONS

Proposed Regulation:

To amend the Part 62 of the regulations throughout by replacing the words "microlight or light sport aeroplane" with "weight shift controlled microlight aeroplane, conventionally controlled microlight aeroplane or light sport aeroplane" including the plural thereof.

Motivation:

To correct the terminology throughout Part 62 of the regulations.

Current Regulation

The words "microlight or light sport aeroplane" are used throughout

Proposal 3.37

GENERAL MATTERS – TERMINOLOGY (2)

PROPOSAL TO AMEND REGULATION 62 OF THE REGULATIONS

To amend the wording throughout Part 62 of the regulations by replacing the words <u>"recreational pilot licence"</u> with the words <u>"National Pilot Licence"</u>

Proposed Regulation:

Use of the words "National Pilot Licence"

Motivation:

The licence issued is a National Pilot Licence and not a recreational pilot licence. It is also to create uniformity in the regulations.

Current Regulation:

Use of the words "recreational pilot licence"

SCHEDULE 4

PROPOSAL FOR THE AMENDMENT OF PART 139 OF THE CIVIL AVIATION REGULATIONS, 1997

A. PROPOSER

SACAA Private Bag X73 HALFWAY HOUSE 1685

B. PROPOSER'S INTEREST

The proposer has been established in terms of the South African Civil Aviation Act, 1998, (Act No. 40 of 1998), to control and regulate civil aviation in South Africa and to oversee the functioning and development of the civil aviation industry, and, in particular, to control, regulate and promote civil aviation safety and security.

C. GENERAL EXPLANATORY NOTE:

Words underlined with a solid line indicate insertions into existing regulations.

29. PROPOSAL FOR THE AMENDMENT OF REGULATION 139.02.5 OF THE REGULATIONS

- 29.1 Regulation 139.02.5 is hereby amended by the addition after sub-regulation (2) of the following sub-regulation:
 - "(3) The applicant shall ensure that the aerodrome manager complies with the education and experience requirements for airports above Category 3 as prescribed in Document SA-CATS-AH."

29.2 Motivation

We identified that most aerodromes do not comply with SACAA regulations and ICAO Annex 14 because airport managers do not have the necessary education and aviations skills and experience needed to manage the particular aerodrome. The functions of the aerodrome managers are as follows:

Management Functions

- Provides direct and general supervision to staff; reviews and evaluates performance;
- Oversees compliance with Civil Aviation Authority (CAA) regulations and procedures;
- Interprets CAA regulations and reports legitimate community complaints and wilful violations of regulations to CAA;
- Ensures compliance with applicable OSHA-Act requirements for employee safety;
- Forecasts trends in airport development and management and is involved in planning future airport development;
- Assures compliance and consistency with Airport Master Plan and airport Business Plan;
- Prepares pre-applications and applications for renewal of Aerodrome License with CAA;
- Attends applicable conventions, seminars and meetings to remain current with industry trends, issues, and regulations.

Administrative Functions

- Prepares annual airport budget, monitors expenses, and tracks revenues
- Provide information on airport operations, and to respond to questions related to aviation issues.

Demonstrated Skills to:

Effectively manage a municipal airport;

- prepare budgets and monitor expenditures;
- · effectively supervise and evaluate personnel;
- communicate clearly and effectively both orally and in writing;
- use patience, tact, and courtesy to handle customer complaints;
- work under the pressure of deadlines;
- analyze, research, and solve a wide range of problems;
- respond to emergencies and take appropriate action;
- keep informed regarding the latest aviation industry trends to forecast trends in airport development;
- operate personal computers for word processing and to create spreadsheets;
- · interpret CAA regulations and report violators;
- sound knowledge of ICAO regulations, procedures and practices will be an added advantage.

Ability to:

Effectively apply the knowledge and skills necessary for this position.

SCHEDULE 5

PROPOSAL FOR THE AMENDMENT OF PART 172 OF THE CIVIL AVIATION REGULATIONS, 1997

A. PROPOSER

Civil Aviation Authority Private Bag X73 Halfway House 1685

B. PROPOSER'S INTEREST

The proposer has been established in terms of the South African Civil Aviation Act, 1998, (Act No. 40 of 1998), to control and regulate civil aviation in South Africa and to oversee the functioning and development of the civil aviation industry, and, in particular, to control, regulate and promote civil aviation safety and security.

C. GENERAL EXPLANATORY NOTE

Words in strike through indicate deletions from the existing regulations Words underlined with a solid line indicate insertions in the existing regulations

30. PROPOSAL FOR THE AMENDMENT OF REGULATION 172.02.1

30.1 Regulation 172.02.1 is hereby amended by the addition in sub-regulation (1) after paragraph (g) of the following paragraphs:

- "(h) prohibited area;
- (i) restricted area;
- (i) danger area.".

30.2 Motivation

The Commissioner's powers to declare prohibited and restricted areas are captured in regulation 91.06.19 and 91.06.20, respectively, but not in Part 172 (Airspace and air traffic services). The declaration of danger areas is not mentioned.

31. PROPOSAL FOR THE SUBSTITUTION OF REGULATION 172.02.2

31.1 The following regulation is hereby substituted for regulation 172.02.2:

"Classification of airspace and level of service provision

- **172.02.2** (1) The Commissioner may classify airspace in accordance with the classes as prescribed in Document SA-CATS-ATS, for the purposes of providing air traffic services, and may also prescribe the type of air surveillance systems and the level of air traffic services to be implemented in such airspace.".
- (2) The Commissioner shall publish the classification of airspace in accordance with the AIRAC cycle in the AIP, AIP SUP or NOTAM.

31.2. Motivation

The levels of ATS provision are currently published by the Commissioner in the AIP ENR section. However, the current regulations do not empower the Commissioner to prescribe the level of ATS provision or the ATS surveillance systems to be implemented. This proposal addresses this shortcoming.

SCHEDULE 6

SCHEDULE 5

PROPOSAL FOR THE AMENDMENT OF PART 1 AND 178 OF THE CIVIL AVIATION REGULATIONS, 1997

A. PROPOSER

SACAA Private Bag X73 HALFWAY HOUSE 1685

B. PROPOSER'S INTEREST

The proposer has been established in terms of the South African Civil Aviation Act, 1998, (Act No. 40 of 1998), to control and regulate civil aviation in South Africa and to oversee the functioning and development of the civil aviation industry, and, in particular, to control, regulate and promote civil aviation safety and security.

C. GENERAL EXPLANATORY NOTE:

Words in strike through indicate deletions from existing regulations. Words underlined with a solid line indicate insertions in existing regulations.

12. PROPOSAL FOR AMENDMENT OF REGULATION 1.00.1 OF THE REGULATIONS

- 12.1 Regulation 1.00.1 is hereby amended by the insertion of the following definitions:
 - "Authorised Designer" means an organisation which is the holder of a valid Procedure Design Authorisation;
 - "authorised instrument approach procedure" means an instrument approach procedure that is either:
 - (a) <u>designed by a Certified Designer or Authorised Designer; or</u>
 - (b) <u>published in the IAIP or submitted to the Commissioner in terms of Part 178.</u>
 - "authorised instrument departure procedure" means an instrument departure procedure that is either:
 - (a) designed by a Certified Designer or Authorised Designer; or
 - (b) <u>published in the IAIP or submitted to the Commissioner in terms of Part</u> 178.

"Official of the Authority" means a person:

- (a) who is an authorised officer of the Authority; and
- (b) who meets the standards set out in the Manual of Standards for carrying out a validation flight check of a flight procedure.

- "Certified Designer" means an organisation which is the holder of a valid Procedure Design Certificate.
- "Chief Designer" means a person appointed as Chief Designer for the Certified Designer in terms of Part 178;
- "continental shelf" means the continental shelf of South Africa.
- "design work", in relation to a flight procedure, means any of the following work:
- (a) the designing of the procedure or any part of the procedure;
- (b) the verifying, maintaining, reviewing or amending of the procedure; or
- (c) the supervising of a person carrying out any work mentioned in paragraphs (a) or (b).
- "employee of a Certified Designer" includes a person who carries out design work on a flight procedure for the designer in the course of performing their duties for the designer and "employee of an Authorised Designer" has a corresponding meaning:
- "ICAO Doc. 8168 (PANS-OPS)" means Doc.8168-OPS/611 Volume II (Procedures for Air Navigation Services Construction of Visual and Instrument Flight Procedures) approved and published by decision of the Council of the International Civil Aviation Organisation, as amended;
- "Manual of Standards", means the document called `Manual of Standards (MOS) Part 178 Standards Applicable to the Provision of Flight Procedure Design', published by the Authority, from time to time.
- "Off-shore installation", means an installation that is erected on, or floating in the sea above, the continental shelf for the purposes of extracting, or exploring for, any natural resources.

"Operations manual":

- (a) <u>in relation to a Certified Designer, means the manual maintained by the designer under regulation 178.03.1; and</u>
- (b) <u>in relation to an Authorised Designer, means the manual maintained by</u> the designer under regulation 178.07.1.
- "Procedure Design Authorisation" is an authorisation that is granted by the Commissioner to an organisation in terms of Part 178.

"Procedure Design Certificate", is a certificate that:

- (a) is granted by the Commissioner to an organisation under this Part; and
- (b) certifies that the organisation is authorised to perform design work on a flight procedure of a type covered by the certificate subject to any conditions set out in the certificate;

"Qualified designer", in relation to a flight procedure, means an individual who:

(a) <u>is the holder, or an employee of the holder, of a Procedure Design</u>

<u>Certificate that authorises the holder to design flight procedures of the same type as the flight procedure concerned.</u>

<u>"specialised helicopter operations"</u>, means helicopter operations that involve the carriage of persons or cargo:

- (a) between:
 - (i) the coast of South Africa and an off-shore installation; or
 - (ii) two such installations; or
- (b) to or from the helipad of a hospital, or any other facility established to provide assistance in emergencies;

"Flight Procedure", means a flight procedure for use by an aircraft in descending below the lowest safe altitude or for use by an aircraft after take-off until the aircraft reaches:

- (a) the en-route lowest safe altitude; or
- (b) the minimum altitude at which the aircraft, on a minimum climb gradient of 3.3%, can turn to intercept the planned flight route while maintaining the necessary departure obstacle clearance requirements; or
- (c) <u>in a case where the aircraft has taken off from an aerodrome for which there is a radar control service in operation-- the minimum radar vector altitude.</u>

14. PROPOSAL FOR INSERTION OF PART 178 IN THE REGULATIONS

14.1 The following Part is hereby inserted in the Regulations:

PART 178: FLIGHT PROCEDURE DESIGN

Subpart 1 General 178.01.1 Applicability 178.01.2 Procedure Design Authorisation. 178.01.3 Design of flight procedures. 178.01.4 Qualified designer. Subpart 2 Certification as Certified Designer 178.02.1 Applications for Procedure Design Certificates.

178.02.2	Issuing of Procedure Design Certificates.
178.02.3	Duties of Holder of Certificate.
178.02.4	Validity of Procedure Design Certificate
Subpart 3	Requirements for Certified Designers.
178.03.1	Certified Designer Operations Manual.
178.03.2	Compliance with operations manual.
178.03.3	Standards for design of Flight Procedures.
178.03.4	Verification of Flight Procedures.
178.03.5	Validation of Flight Procedures.
178.03.6	Publication of Flight Procedures.
178.03.7	Radio navigation aids.
178.03.8	Maintenance of Flight Procedures.
178.03.9	Certified Designer facilities.
178.03.10	Certified Designer organisation.
178.03.11	Certified Designer personnel.
178.03.12	Supervisory personnel
178.03.13	Appointment of Chief Designer
178.03.14	Training and Checking programme
178.03.15	Safety Management System
178.03.16	Maintenance of Reference Materials
178.03.17	Documentation and Record Keeping.
178.03.18	Document and record control system.
Subpart 4	Chief Designer
178.04.1	Approval for appointment of Chief Designer.
178.04.2	Approval for appointment of acting Chief Designer

178.04.3	Appointments likely to have adverse effect on Aviation Safety.	
178.04.4	Chief Designer's functions and duties.	
178.04.5	Duration of approval.	
178.04.6	Withdrawal or suspension of approval of appointment.	
Subpart 5	Certified Designer Miscellaneous	
178.05.1	Organisational changes	
178.05.2	Discontinuing of design work on a particular type of Flight Procedure.	
178.05.3	Notification of a change to a Procedure Design Certificate the AIS Section of a variation to a Procedure Design Certificate	
178.05.4	Discontinuing of maintenance of a particular Flight Procedure.	
178.05.5	Transfer of maintenance responsibility.	
Subpart 6 Authorisation of an Authorised Designer.		
178.06.1	Applications for Procedure Design Authorisations.	
178.06.2	Criteria for the granting of Procedure Design Authorisations.	
178.06.3	Notice of Procedure Design Authorisation.	
178.06.4	Procedure Design Authorisations: Subject to conditions.	
178.06.5	Duration of Procedure Design Authorisations.	
178.06.6	Changing of Procedure Design Authorisation	
Subpart 7	Requirements for Authorised Designers.	
178.07.1	Authorised Designer Operations manual.	
178.07.2	Compliance with operations manual.	
178.07.3	Standards for the design of Flight Procedures.	
178.07.4	Off-shore installations.	
178.07.5	Maintenance of Flight Procedures.	
178.07.6	Personnel requirements.	
178.07.7	Maintenance of reference materials.	
178.07.8	Documentation and Record Keeping.	

178.11.1

Applicability of this Part.

178.07.9	Document and Record Control System.
Subpart 8	Authorised Designer Miscellaneous
178.08.1	Discontinuing of design work on particular types of Flight Procedures.
178.08.2	Discontinuing of maintenance of a particular Flight Procedure.
178.08.3	Transfer of maintenance responsibility.

Subpart 9 Performance of design work 178.091 Exceeding of the limitations of the Certified Designer's Procedure Design Certificate. 178.09.2 Exceeding of the limitations of Procedure Design Authorisation. Subpart 10 Application for, and granting of, Procedure Design Certificates and Procedure Design Authorisations and related matters. 178.10.1 Request for information. 178.10.2 Additional CAA requirements: Interview. 178.10.3 Demonstrations of equipment. 178.10.4 Granting of Procedure Design Certificate or Procedure Design Authorisation. 178.10.5 Information to be taken into account. 178.10.6 Granting of certificates or authorisations subject to conditions. 178.10.7 Decision making period. 178.10.8 Notice of decision. Charges for the granting of a Procedure Design Certificate/ Authorisation. 178.10.9 178.10.10 Return of certificate if Procedure Design Certificate is cancelled 178.10.11 Changing of Procedure Design Certificates Subpart 11 Change of Procedure Design Certificates and Procedure Design Authorisations.

- 178.11.2 Application for change.
- 178.11.3 Charges for the changing of a Procedure Design Certificate / Authorisation
- Subpart 12 Directions to amend Certified Designer's or Authorised Designer's Operations Manual.
- 178.12.1 CAA may direct amendments to designer's operations manual.
- Subpart 13 Suspension and cancellation of Procedure Design Certificates and Procedure Design Authorisations.
- 178.13.1 <u>Suspension or cancellation of Procedure Design Certificate or Procedure Design Authorisation by CAA.</u>
- 178.13.2 Cancellation at request of Certified Designer or Authorised Designer.

Subpart 14 Authorised Officers

- 178.14.1 CAA may appoint Authorised Officers.
- 178.14.2 <u>Identity card</u>.
- 178.14.3 Powers of Authorised Officer.
- 178.14.4 Charges for the Inspection of a certified / authorised procedure designer

SUBPART 1: GENERAL

Applicability

178.01.1 (1) This Part:

- (a) provides for the standards that apply to the design of flight procedures; and
- applies to organisations who want to become, or are, Certified Designers or Authorised Designers of flight procedures and certain employees of those organisations;
- (c) sets out certain rules that apply to the Authority in administering procedure design certificates and procedure design authorisations.
- (2) This Part does not apply to:
 - (a) the design of flight procedures for use by an aircraft in circumstances where one or more engines of the aircraft have become inoperative while it is on an IFR flight; and

(b) an organisation which carries out design work on such procedures.

Procedure design authorisation

- 178.01.2 A procedure design authorisation, is an authorisation that:
 - (a) is granted by the Commissioner to an organisation under this Part; and
 - (b) authorises the organisation to perform either of the following activities subject to any conditions set out in the notice to the organisation contemplated in regulation 178.06.3:
 - review or amend a flight procedure that is of a type covered by the authorisation and is for use by a South African registered aircraft operating at, or in the vicinity of, an aerodrome in a foreign country;
 - (ii) perform design work on a flight procedure that is of a type covered by the authorisation and is for use by a South African registered aircraft operating at, or in the vicinity of, an off-shore installation located no closer than 30 nm from the nearest land.

Design of flight Procedures

- 178.01.3 (1) An organisation may perform design work, other than work contemplated in sub-regulation (2) or (3), on a flight procedure for use by South African registered aircraft, or by foreign aircraft operating in South African airspace, if the organisation:
 - (a) is a Certified Designer whose procedure design certificate authorises the designer to perform design work on such a flight procedure; or
 - (b) is an employee of such a Certified Designer who performs the design work in the normal course of his or her duties.
- (2) An organisation may only review or amend a flight procedure that is for use by South African registered aircraft operating at, or in the vicinity of, an aerodrome in a foreign country if:
 - (a) the organisation is:
 - (i) a Certified Designer whose procedure design certificate authorises the designer to perform design work on such a fight procedure; or
 - (ii) an Authorised Designer whose Procedure Design Authorisation authorises the review or amendment of such a Flight Procedure; or
- (3) An organisation may only perform design work on a flight procedure that is for use by South African registered aircraft operating at, or in the vicinity of, an off-shore installation if:
 - (a) the organisation is:

- (i) a Certified Designer whose procedure design certificate authorises the designer to perform design work on such a flight procedure; or
- (ii) an Authorised Designer whose procedure design authorisation authorises the designer to perform design work on such a flight procedure; or
- (4) For the purposes of this regulation, the Authority is deemed to be an organisation referred to in sub-regulations (1) (a), (2) (a) (i) and (3) (a) (i).

Qualified designer

- 178.01.4 A qualified designer, in relation to a flight procedure, means an individual who:
 - (a) is the holder, or an employee of the holder, of a Procedure Design Certificate that authorises the holder to design flight procedures of the same type as the flight procedure concerned; and
 - (b) has successfully completed:
 - (i) a CAA approved course of training in the methods and practices contained in ICAO documentation applicable to flight procedure design, as listed in the Manual of Standards; and
 - (ii) any training for persons performing design work on Flight Procedures that is specified in the operations manual under which the qualified designer performs the designer's duties; and
 - (iii) has attended a CAA approved refresher course/workshop on the methods and practices contained in ICAO documentation applicable to flight procedure design, as listed in the Manual of Standards within the time period specified in the Manual of Standards; and
 - (c) <u>meets the experience requirements for performing the functions of</u> a qualified designer set out in the Manual of Standards.

SUBPART 2: CERTIFICATION AS CERTIFIED DESIGN

Applications for procedure design certificates

178.02.1 (1) An organisation shall apply for the issue of a procedure design certificate in the manner set out in this regulation.

- (2) The application:
 - (a) shall be made to the Commissioner on the appropriate form; and
 - (b) shall state the following:

- (i) the applicant's name and address; or
- (ii) if the applicant is incorporated, the applicant's name, registered address and Company Registration Number and the names and addresses of the Board of Directors and the people responsible for its management and control; and
- (c) shall contain or be accompanied by:
 - a written statement specifying the type or each type of flight procedure proposed to be covered by the procedure design certificate: and
 - (ii) a written statement setting out the name, qualifications and relevant experience of the individual who is proposed to be the Chief Designer for the applicant's organisation; and
 - (iii) a written statement setting out the qualifications and relevant experience of any other member of the applicant's personnel whose duties would, if the certificate were granted to the applicant, include performing design work under the certificate;
 - (iv) a copy of the Operations Manual under which the applicant proposes to design, or engage in design work on, flight procedures of the type or types concerned; and
 - (v) the fees prescribed in Part 187.
- (3) If an applicant was previously issued with a procedure design certificate, and the certificate was cancelled, the applicant shall include with the application any information to prove that the applicant would be in a position to comply with all requirements pertaining to the design of flight procedures of the type or types concerned.

Issuing of procedure design certificates

- 178.02.2 (1) The Commissioner shall issue the applicant with a procedure design certificate if the applicant complies with the requirements of Part 178.10.
- (2) The procedure design certificate issued in terms of sub-regulation (1) shall contain:
 - (a) the organisation's name and principal place of business;
 - (b) the type or each type of flight procedure covered by the certificate;
 - (c) any conditions applicable to it;
 - (d) the date when it comes into force; and
 - (e) any other information that the Commissioner considers necessary.
- (3) The Commissioner may issue a replacement certificate in the event that the original certificate is no longer correct or has been lost or destroyed.

Duties of holder of certificate

178.02.3 A Certified Designer shall comply with all conditions of the procedure design certificate.

Validity of procedure design certificate

178.02.4 (1) A procedure design certificate shall be valid for the period determined by the Commissioner.

(2) The certificate shall remain in force until it is suspended or cancelled.

SUBPART 3: REQUIREMENTS FOR CERTIFIED DESIGNERS

Certified Designer operations manual

178.03.1 (1) A Certified Designer shall, at all times, maintain an operations manual that meets the standards for operations manuals set out in the Manual of Standards.

- (2) A Certified Designer shall:
 - (a) keep the manual in a readily accessible form and place; and
 - (b) ensure that each employee of the designer whose duties include the performance of design work under the designer's procedure design certificate has ready access to the manual; and
 - (c) amend the manual whenever it is necessary to do so, to keep it in an upto-date form.
 - (d) provide a copy of the operations manual to the Commissioner for assessment and approval.
- (3) A Certified Designer shall ensure:
 - (a) that all amendments of the manual are incorporated in all copies of the manual kept by the Certified Designer; and
 - (b) that copies of the amendments are provided to the Commissioner within 5 days of such amendments being made.

Compliance with operations manual

178.03.2 A Certified Designer shall, in carrying out design work authorised under the designer's procedure design certificate, comply fully with their operations manual.

Standards for design of flight procedures

- 178.03.3 (1) A Certified Designer designing a flight procedure under the Certified Designer's procedure design certificate shall ensure that the procedure is designed in accordance with:
 - (a) any applicable standards set out or referred to in ICAO documentation applicable to flight procedure design, as listed in the Manual of Standards; and
 - (b) any applicable standards set out in the Manual of Standards.
- (2) If, apart from this sub-regulation, a Certified Designer is required to ensure that a flight procedure is designed in accordance with a standard set out or referred to in the ICAO documentation applicable to flight procedure design, as listed in the Manual of Standards, and a standard set out in the Manual of Standards, and it is not possible to comply with both standards, the designer is only required to ensure that the procedure is designed in accordance with the Manual of Standards.
- (3) If it is not possible for a designer to comply with either of the standards mentioned in sub-regulation (2), the designer shall apply to the Commissioner for exemption and such application for exemption must be accompanied by supporting Aeronautical Safety Study.

<u>Verification of flight procedures</u>

178.03.4 (1) A Certified Designer shall establish procedures for verifying flight procedures that it is authorised to design under the designer's procedure design certificate or on which the designer is authorised to perform design work.

(2) The verification procedures:

- (a) shall provide for two qualified designers to independently check the design or any subsequent design work on flight procedures which is performed under the Certified Designer's procedure design certificate; and
- (b) shall provide for one of the checks contemplated in paragraph (a) to be made by a qualified designer who did not perform the design work concerned.
- (3) In this regulation, a reference to verifying a flight procedure is a reference to the process of checking the procedure (including all data, computations, drawings, documentation and records for the procedure) in accordance with any applicable standards set out in the Manual of Standards.

Flight Validation of Flight Procedures

178.03.5 The Commissioner shall ensure that each flight procedure designed under the designer's procedure design certificate is flight validated by an authorised officer in accordance with the validation process and standards set out in the Manual of Standards.

Publication of flight procedures

178.03.6 A Certified Designer shall ensure that each flight procedure designed under the designer's procedure design certificate is forwarded to the Commissioner for ground and flight validation and quality control checking, prior to publication, together with a quality certificate signed by the Certified Designer's Chief Designer to the effect that the procedure is designed and verified in accordance with any applicable standards set out or referred to in ICAO documentation applicable to flight procedure design, as listed in the Manual of Standards. (2) A Certified Designer shall ensure that all procedures designed under its Procedure Design Certificate and which are not forwarded for publication in the IAIP are submitted to the Commissioner for record keeping purposes.

Radio navigation aids

178.03.7 A Certified Designer shall ensure that a flight procedure designed under the designer's procedure design certificate shall not make use of a ground-based radio-navigation aid other than one that is operated and maintained by a person certificated to do so in terms of Part 171.

Maintenance of flight procedures

- 178.03.8 (1) Subject to sub-regulation (2), a Certified Designer is responsible for maintaining, in accordance with the standards for the maintenance of flight procedures set out in the Manual of Standards, a flight procedure designed under the designer's procedure design certificate or for which that responsibility is transferred to the Certified Designer in terms of regulation 178.05.5.
- (2) The Certified Designer ceases to be responsible for the maintenance of the procedure:
 - (a) if the Certified Designer has notified the Commissioner in writing, that the designer has ceased to have that responsibility:
 - (i) on the day when the notice is given; or
 - (ii) if a later day is specified in the notice; on the later day; or
 - (b) if the Certified Designer's responsibility for the maintenance of the procedure is transferred to another Certified Designer in accordance with regulation 178.05.5; on the day when the responsibility is transferred; or
 - (c) if the Certified Designer has notified the Commissioner in writing and, if the procedure is published in the IAIP, the AIS Section, under regulation 178.05.2, that the designer has ceased to design the type of flight procedure concerned:
 - (i) on the day when the notice is given; or
 - (ii) if a later day is specified in the notice; on the later day; or
 - (d) if the Certified Designer's procedure design certificate is changed under Subpart 10 to exclude that type of procedure; on the day when the change takes effect; or
 - (e) if the Certified Designer ceases to be a Certified Designer; on the day when the designer ceases to be a Certified Designer.

(3) The Certified Designer will be responsible for ensuring that the maintenance for all active flight procedures be transferred to a Certified Designer before ceasing the maintenance responsibility of that procedure.

Certified Designer facilities

- 178.03.9 (1) A Certified Designer shall provide and maintain adequate facilities for carrying on design work on flight procedures under the designer's procedure design certificate, including:
 - (a) providing premises and equipment appropriate for the Certified Designer's employees to perform the design work taking into account the critical effect that human factors can have on the quality of the work of the employees; and
 - (b) ensuring that those employees have access to all necessary data for designing the procedures including but not limited to:
 - (i) accurate and current databases or charts detailing terrain and obstacle information; and
 - (ii) accurate and current navigation aid coordinate data; and
 - (iii) accurate and current aerodrome survey data.
- (2) A Certified Designer shall, if an aeronautical database and aeronautical data is utilised for designing a flight procedure under the designer's procedure design certificate, have, and put into effect, procedures approved by the Commissioner to ensure the integrity of the database and the data.

Certified Designer organisation

178.03.10 A Certified Designer shall, at all times, maintain an appropriate organisation with a sound and effective management structure to enable the designer to perform design work on flight procedures under the designer's procedure design certificate in accordance with these Regulations.

Certified Designer personnel

178.03.11 A Certified Designer:

- (a) shall employ a sufficient number of personnel to enable the designer to perform design work on flight procedures under the designer's procedure design certificate in accordance with these Regulations; and
- (b) shall ensure that those personnel:
 - (i) are suitably qualified and competent to perform their duties; and
 - (ii) are trained in accordance with the Manual of Standards and the designer's operations manual.

Supervisory personnel

178.03.12 A Certified Designer shall ensure that each employee who is occupying or acting in a supervisory position in the designer's organisation in relation to design work on flight procedures carried out under the designer's procedure design certificate, meets the standards for supervisory positions set out in the Manual of Standards.

Appointment of Chief Designer

178.03.13 A Certified Designer shall not perform design work on a Flight Procedure under the designer's Procedure Design Certificate unless:

- (a) The Certified Designer has appointed a person to be the Chief Designer for the designer's organisation; and
- (b) The appointment is approved in writing by the CAA and is in force; and
- (c) The functions of the Chief Designer are being carried out by the person or, if the Chief Designer is temporarily absent from duty, another duly appointed person:
 - (i) Who is appointed by the Certified Designer to act as Chief Designer; and
 - (ii) Whose appointment is approved by the CAA and is in force.

Training and checking programme

178.03.14 A Certified Designer shall provide training and checking programmes that are in compliance with ICAO documentation applicable to flight procedure design, as listed in the Manual of Standards, to ensure that the employees of the designer maintain their competence and are provided with ongoing training appropriate to their duties.

Safety management system

- 178.03.15 (1) A Certified Designer shall have, and put into effect, a safety management system that includes the policies, procedures, and practices necessary for managing design work on flight procedures carried out under the designer's procedure design certificate.
- (2) The safety management system shall be in accordance with the standards set out in the Manual of Standards.
- (3) The designer shall keep its safety management system under review and take any necessary corrective action to ensure that it operates in accordance with guidelines in the Manual of Standards.

Documentation and record keeping

178.03.17 (1) A Certified Designer shall keep documents and records of the types specified in the Manual of Standards.

- (2) A document or record shall be retained for as long as the Manual of Standards specifies for the particular type of document or record.
- (3) The designer shall, at the Commissioner's request, make the documents and records, or copies of them or extracts from them, available for inspection by the Commissioner.

Documentation and record control system

- 178.03.18 (1) A Certified Designer shallestablish, and put into effect, a system for controlling documents and records relating to the flight procedures on which the designer performs design work under the Certified Designer's procedure design certificate, including the policies and procedures for making, amending, preserving and disposing of those documents and records.
- (2) The system shall be in accordance with the standards set out in the Manual of Standards.
- (3) The documents and records shall include the documents and records required to be kept under this Part.

SUBPART 4: CHIEF DESIGNER

Approval for appointment of Chief Designer

- 178.04.1 (1) A Certified Designer shall not appoint a person as Chief Designer unless the appointment is approved in writing by the Commissioner.
- (2) To be appointed as Chief Designer, a person shall, at the time of appointment, meet the standards for the Chief Designer for a Certified Designer's organisation set out in the Manual of Standards.

Approval for appointment to as Acting Chief Designer

- 178.04.2 (1) A Certified Designer shall not appoint a person to act as Chief Designer for the Certified Designer unless the appointment is approved by the Commissioner.
- (2) To be appointed to act as Chief Designer, a person shall, at the time of appointment, meet the standards for the Acting Chief Designer for a Certified Designer's organisation set out in the Manual of Standards.

Chief Designer's functions and duties

178.04.4 The Chief Designer for a Certified Designer's organisation is responsible to the Certified Designer for the following:

- (a) ensuring that any design work on Flight Procedures that is performed under the designer's Procedure Design Certificate is carried on in accordance with these Regulations;
- (b) appointing persons as employees of the Certified Designer to perform design work on Flight Procedures under the designer's Procedure Design Certificate:
- (c) effectively managing work done in relation to those flight procedures by those persons:
- (d) issuing certificates as required by these regulations.

Validity of approval

- **178.04.5** (1) An approval under regulation 178.04.1 or 178.04.2 is valid until
 - (a) the appointment to which it relates ends; or
 - (b) it is withdrawn.
- (2) An approval is not valid during any period in which it is suspended.

Withdrawal or suspension of approval of appointment

- 178.04.6 (1) The Commissioner may, by notice in writing to a person appointed as the Chief Designer, or to act as the Chief Designer, for a Certified Designer's organisation, withdraw or suspend approval of the person's appointment if the continuing approval of the appointment would be likely to have an adverse effect on the safety of air navigation.
- (2) In deciding whether continuing approval of a person's appointment would be likely to have an adverse effect on the safety of air navigation, the Commissioner may take into account the matters mentioned in regulation 178.04.3.
- (3) The notice:
 - (a) shall set out the reasons for the withdrawal or suspension; and
 - (b) in the case of a suspension, shall specify the period of suspension or state when, or in what circumstances, it will end.
- (4) The Commissioner shall forward a copy of the notice to the Certified Designer.
- (5) If Commissioner suspends approval of a person's appointment, the person shall not carry out the functions of the appointment during the period of the suspension.
- (6) If Commissioner withdraws approval of a person's appointment:
 - (a) for the purposes of these Regulations, the appointment is considered as having ended immediately; and

(b) the person shall not continue to carry out the functions of the position to which the appointment relates.

SUBPART 5: CERTIFIED DESIGNERS - GENERAL

Organisational changes

178.05.1 A Certified Designer shall inform the Commissioner, in writing, of a change of circumstances that materially affects its capacity to design Flight Procedures under the designer's Procedure Design Certificate, or engage in any design work on that procedure, within 7 days after the change occurs.

<u>Discontinuing design work on Flight Procedures of a particular type</u>

- 178.05.2 (1) If a Certified Designer ceases to perform design work on Flight Procedures of a particular type, the Certified Designer shall give written notice to that effect to the Commissioner within 7 days after ceasing to perform the design work concerned.
- (2) Sub-regulation (1) does not apply if, having regard to the Certified Designer's circumstances, it is not reasonably practicable for the designer to give the the Commissioner at least 7 days notice and the notice is given as soon as is reasonably practicable.

Notification of a change to a Procedure Design Certificate

178.05.3 If a Certified Designer's Procedure Design Certificate is changed under subpart 10 to exclude a particular type of Flight Procedure and the designer has forwarded any procedures of that type to the Commissioner for validation, charting and publication in the IAIP, the designer shall give written notice to the Commissioner of the variation within 7 days after the day when the change takes effect.

Discontinuing maintenance of particular Flight Procedures

- 178.05.4 (1) If a Certified Designer ceases to be responsible for the maintenance of a Flight Procedure, the Certified Designer shall give written notice to that effect to the Commissioner within 7 days after ceasing to have that responsibility.
- (2) Sub-regulation (1) does not apply if, having regard to the Certified Designer's circumstances, it is not reasonably practicable for the designer to give the Commissioner at least 7 days notice and the notice is given as soon as is reasonably practicable.

Note: In relation to 178.05.4 (2), the Commissioner shall be the sole judge of what constitutes reasonably practicable.

Transfer of maintenance responsibility

- 178.05.5 (1) A Certified Designer may transfer the designer's responsibility for maintaining a Flight Procedure under regulation 178.03.8 to another Certified Designer who's Procedure Design Certificate authorises that designer to design flight procedures of the same type as the procedure concerned.
- (2) If a Certified Designer accepts responsibility for the maintenance of a Flight Procedure under this regulation, the designer:
 - (a) shall give written notice to the transferor to that effect; and
 - (b) shall give written notice of the transfer to the Commissioner within 14 days after the transfer.
- (3) A transfer takes effect on the day when the Certified Designer accepting responsibility for maintaining the procedure gives notice to the transferor under paragraph (2)(a) or, if a later day is specified in the notice, on the later day.
- (4) If a Certified Designer transfers the designer's responsibility for maintaining a Flight Procedure, the designer shall give written notice of the transfer to the Commissioner within 14 days after the transfer.

SUBPART 6: AUTHORISATION OF AN AUTHORISED DESIGNER

<u>Applications for Procedure Design Authorisations</u>

- 178.06.1 (1) An organisation shall apply for the grant of a Procedure Design Authorisation in the way set out in this regulation.
- (2) The application:
 - (a) shall be made, in writing, to the Commissioner; and
 - (b) shall state the following:
 - (i) the applicant's name and address; or
 - (ii) if the applicant is incorporated, the applicant's name, registered address and Company Registration Number and the names and addresses of the Board of Directors or the people responsible for its management and control; and
 - (c) shall contain or be accompanied by:
 - (i) a written statement specifying the activity mentioned in subparagraph 178.01.2(b)(i) or (ii) that is proposed to be authorised under the authorisation, including specifying the type or each type of Flight Procedure proposed to be covered by the authorisation; (ii) a written statement setting out the qualifications and relevant experience of each member of the applicant's personnel whose

- duties would, if the authorisation were granted to the applicant, include performing the design work concerned;
- (iv) a copy of the operations manual under which the applicant proposes to perform that activity; and
- (v) the fees as prescribed in Part 187.
- (3) If an applicant has previously been issued with a Procedure Design Authorisation, and the authorisation was cancelled, in addition to the information referred to in sub-regulation (2), the applicant shall include with the application any information to prove that the applicant could now comply with all requirements for pertaining to the design of Flight Procedures of the type or types concerned.

<u>Criteria for the granting of Procedure Design Authorisations</u>

178.06.2 For regulation 178.10.4, an organisation which has applied for the granting of a Procedure Design Authorisation shall, if the authorisation is granted, be able to comply with the requirements of Part 178.7.

Notice of Procedure Design Authorisation

- 178.06.3 If the Commissioner grants a Procedure Design Authorisation to an organisation under Part 178.10, CAA shall include in the notice of decision under that Part:
 - (a) a description of the activity authorised by the authorisation, including a statement setting out the type or each type of Flight Procedure concerned; and
 - (b) a statement setting out any conditions of the authorisation; and
 - (c) a statement setting out the date when it comes into force; and
 - (d) any other information that CAA deems necessary should be included.

Procedure Design Authorisations: Subject to conditions

178.06.4 An Authorised Designer shall comply with any conditions of the Procedure Design Authorisation set out in the notice mentioned in regulation 178.06.3.

Duration of Procedure Design Authorisation

- 178.06.5 (1) A Procedure Design Authorisation:
 - (a) comes into force on the date stated in the notice mentioned in regulation 178.06.3; and
 - (b) <u>remains in force unless it is cancelled.</u>
- (2) However, the authorisation is not valid during any period in which it is suspended.

Changing of Procedure Design Authorisation

178.06.6 (1) If an Authorised Designer wants to change a Procedure Design Authorisation or a condition of the Procedure Design Authorisation, application shall be made to the CAA, under Part 178.10, for that purpose.

- (2) The application shall contain, or have with it, a copy of the proposed change.
- (3) If CAA approves the application under Part 178.10, the change takes effect:
 - (a) if a day is specified in the written notice given to the applicant under Part 178.10: on that day; or
 - (b) if no day is specified: on the day when the notice is given to the applicant.

SUBPART 7: REQUIREMENTS FOR AUTHORISED DESIGNERS

Operations manual

178.07.1 (1) An Authorised Designer shall, at all times, maintain an operations manual that meets the standards set out in the Manual of Standards.

- (2) An Authorised Designer:
 - (a) shall keep the manual in a readily accessible form and place; and
 - (b) shall ensure that each employee of the designer whose duties include the performance of design work under the designer's Procedure Design Authorisation has ready access to the manual; and
 - (c) shall amend the manual whenever it is necessary to do so to keep it in an up-to-date form.
 - (d) provide a copy of the Operations Manual to the CAA for assessment and approval.
- (3) An Authorised Designer shall ensure:
 - (a) that all amendments of the manual are incorporated in all copies of the manual kept by the Authorised Designer; and
 - (b) that copies of the amendments are provided within 5 days to the CAA.

Compliance with operations manual

178.07.2 An Authorised Designer shall, in carrying on the activity authorised by the designer's Procedure Design Authorisation, comply with the designer's operations manual.

Standards for design of Flight Procedures

- 178.07.3 (1) An Authorised Designer designing a Flight Procedure under the Authorised Designer's Procedure Design Authorisation shall ensure that the procedure is designed in accordance with:
 - (a) any applicable standards set out or referred to in ICAO documentation applicable to flight procedure design, as listed in the Manual of Standards; and
 - (b) any applicable standards set out in the Manual of Standards.
- (2) If, apart from this sub-regulation, an Authorised Designer would be required to ensure that a Flight Procedure is designed in accordance with a standard set out or referred to in the ICAO documentation applicable to flight procedure design, as listed in the Manual of Standards, and a standard set out in the Manual of Standards, and it is not possible to comply with both standards, the designer is only required to ensure that the procedure is designed in accordance with the Manual of Standards.

Off-shore installations

- 178.07.4 (1) This regulation applies to an Authorised Designer who is authorised to perform design work on a Flight Procedure that:
 - (a) is of a type covered by the authorisation; and
 - (b) is for use by South African aircraft operating at, or in the vicinity of, an offshore installation located no closer than 30 nm from the nearest land.
- (2) The Authorised Designer shall ensure that a copy of each Flight Procedure designed under the designer's Procedure Design Authorisation is forwarded to the CAA.
- (3) The Authorised Designer shall ensure that a Flight Procedure designed under the designer's Procedure Design Authorisation does not require the use of a ground-based radio-navigation aid other than one that is operated and maintained by a person certificated to do so under Part 171.

Maintenance of Flight Procedures

- 178.07.5 (1) Subject to sub-regulation (2), an Authorised Designer is responsible for the maintaining, in accordance with the standards for the maintenance of Flight Procedures set out in the Manual of Standards, a Flight Procedure designed under the designer's Procedure Design Authorisation or a Flight Procedure for which that responsibility is transferred to the Authorised Designer under regulation 178.08.3.
- (2) The Authorised Designer ceases to be responsible for the maintenance of the procedure:

- (a) if the Authorised Designer has notified the CAA, under regulation 178.08.2, that the designer has ceased to have that responsibility:
 - (i) on the day when the notice is given; or
 - (ii) if a later day is specified in the notice: on the later day; or
- (b) if the Authorised Designer's responsibility for the maintenance of the procedure is transferred to a Certified Designer or another Authorised Designer under regulation 178.08.3: on the day when the responsibility is transferred; or
- (c) if the Authorised Designer has notified CAA, under regulation 178.08.1, that the designer has ceased to design the type of Flight Procedure concerned:
 - (i) on the day when the notice is given; or
 - (ii) if a later day is specified in the notice: on the later day; or
- (d) if the Authorised Designer's Procedure Design Authorisation is changed under Part 178.10 to exclude that type of procedure: on the day when the authorisation is changed; or
- (e) if the Authorised Designer ceases to be an Authorised Designer: on the day when the designer ceases to be an Authorised Designer.

Personnel Requirements

178.07.6 An Authorised Designer:

- (a) shall employ a sufficient number of personnel to enable the designer to perform the activity authorised by the designer's Procedure Design Authorisation in accordance with these Regulations; and
- (b) shall ensure that those personnel:
 - (i) are suitably qualified and competent to perform their duties: and
 - (ii) are trained in accordance with the Manual of Standards and the designer's operations manual.

Maintenance of Reference Materials

- 178.07.7 (1) An Authorised Designer shall maintain reference materials of the types specified in the Manual of Standards.
- (2) An Authorised Designer shall keep the reference materials fully amended and up-to-date and in a readily accessible form.
- (3) Each employee of the Authorised Designer who performs design work on a Flight Procedure under the Authorised Designer's Procedure Design Authorisation shall have ready access to the reference materials.

Authorised Designer Documentation and Record Keeping

- 178.07.8 (1) An Authorised Designer shall keep documentation and records of the types specified in the Manual of Standards.
- (2) A document or record shall be retained for as long as the Manual of Standards specifies for the particular kind of document or record.
- (3) The designer shall, at the CAA's request, make the documents and records, or copies of them or extracts from them, available for inspection by the CAA.

Authorised Designer Document and Record Control System

- 178.07.9 (1) An Authorised Designer shall establish, and put into effect, a system for controlling documents and records relating to the activity authorised under the Authorised Designer's Procedure Design Authorisation, including the policies and procedures for making, amending, preserving and disposing those documents and records.
- (2) The system shall be in accordance with the standards set out in the Manual of Standards.
- (3) The documents and records shall include the documents and records required to be kept under this Part.

SUBPART 8: AUTHORISED DESIGNERS MISCELLANEOUS

Discontinuing design work on Flight Procedures of a particular type

- 178.08.1 (1) If an Authorised Designer ceases to perform design work on Flight Procedures of a particular type, the Authorised Designer shall give written notice to the CAA to that effect within 7 days after ceasing to perform the design work concerned.
- (2) Sub-regulation (1) does not apply if, having regard to the Authorised Designer's circumstances, it is not reasonably practicable for the designer to give the CAA at least 7 days notice and the notice is given as soon as is reasonably practicable.

Note: In relation to 178.08.1 (2), the Commissioner shall be the sole judge of what constitutes reasonably practicable.

Discontinuing maintenance of Flight Procedures

- 178.08.2 (1) If an Authorised Designer ceases to be responsible for the maintenance of a Flight Procedure, the Authorised Designer shallgive written notice to the CAA to that effect within 7 days after ceasing to have that responsibility.
- (2) Sub-regulation (1) does not apply if, having regard to the Authorised Designer's circumstances, it is not reasonably practicable for the designer to give the CAA at least 7 days notice and the notice is given as soon as is reasonably practicable.

Note: In relation to 178.08.2 (2), the Commissioner shall be the sole judge of what constitutes reasonably practicable.

Transfer of maintenance responsibility

- 178.08.3 (1) An Authorised Designer may transfer the designer's responsibility for maintaining a Flight Procedure under regulation 178.07.5:
 - (a) to a Certified Designer whose Procedure Design Certificate authorises that designer to design Flight Procedures of the same type as the procedure concerned; or
 - (b) to another Authorised Designer whose Procedure Design Authorisation authorises that designer to design such a Flight Procedure.
- (2) If a Certified Designer or an Authorised Designer accepts responsibility for the maintenance of a Flight Procedure under this regulation, the designer:
 - (a) shall give written notice to the transferor to that effect; and
 - (b) shall give written notice of the transfer to the CAA within 14 days after the transfer.
- (3) A transfer takes effect on the day when the Certified Designer or Authorised Designer accepting responsibility for maintaining the procedure gives notice to the transferor under sub-regulation (2) or, if a later day is specified in the notice, on the later day.
- (4) If an Authorised Designer transfers the designer's responsibility for maintaining a Flight Procedure, the designer shall give written notice of the transfer to CAA within 14 days after the transfer.

SUBPART 9: PERFORMANCE OF DESIGN WORK

Exceeding the limitations of the Certified Designer's Procedure Design Certificate

178.09.1 A Certified Designer shall not perform design work on a Flight Procedure that is not of a type covered by the designer's Procedure Design Certificate.

Exceeding the limitations of Procedure Design Authorisation

178.09.2 An Authorised Designer shall not perform an activity mentioned in paragraph 178.01.2(b)(i) or (ii) unless that activity is authorised by the designer's Procedure Design Authorisation.

SUBPART 10:

APPLICATION FOR, GRANTING OF, PROCEDURE DESIGN CERTIFICATES AND PROCEDURE DESIGN AUTHORISATION AND RELATED MATTERS

Request for information

- 178.10.1 (1) If the CAA needs any information or other documentation to allow it to consider an application under this Part, the CAA may, by written notice, ask the applicant to forward it the information, document or a copy of the document, specified in the notice.
- (2) If the CAA asks for more information, documentation, or a copy of a document, under sub-regulation (1), the CAA needs not to begin to consider, or may stop considering, the application until the applicant forwards it the information, document or copy.

Additional CAA requirements: Interview

- 178.10.2 (1) The CAA may, by written notice, ask an individual who is an applicant under this Part to attend an interview at a place and time specified in the notice.
- (2) In the case of an applicant that is a organisation the CAA may, by written notice, ask the applicant, in writing, to have a specified officer or specified officers of the applicant attend an interview at a place and time specified in the notice.
- (3) CAA shall give to the applicant a copy of the record of any interview conducted under sub-regulation (1) or (2).
- (4) If the CAA makes a request under sub-regulation (1) or (2), the CAA need not begin to consider, or may stop considering, the application until the applicant complies with the notice.

Demonstrations of equipment

- 178.10.3 (1) The CAA may, by written notice, ask an applicant under this Part:
 - (a) to give a practical demonstration of the ability of the applicant to perform the design work sought under the application; or
 - (b) to demonstrate the operation of any facility or equipment to be used in the course of carrying on that work; or
 - (c) to allow the CAA to inspect the relevant facility or equipment (whether or not it is operating).
- (2) If the CAA asks an applicant to allow the CAA to inspect any relevant facility or equipment or asks an applicant to conduct a demonstration under sub-regulation (1), the CAA need not begin to consider, or may stop considering, the application until the applicant allows the inspection or conducts the demonstration.

Granting of Procedure Design Certificate or Procedure Design Authorisation

178.10.4 (1) Subject to regulation 178.10.5, if an applicant has applied for the granting of a Procedure Design Certificate or Procedure Design Authorisation in accordance with this Part, the CAA shall grant the certificate or the authorisation, if:

- (a) the applicant meets the criteria specified in this Part for the grant of the certificate or authorisation; and
- (b) any other requirements in relation to the applicant specified in these Regulations are satisfied; and
- (c) no provision of these Regulations forbids the CAA to grant the certificate or authorisation, or makes the applicant ineligible for the certificate or authorisation; and
- (d) granting the certificate or authorisation would not be likely to have an adverse effect on the safety of air navigation.
- (2) The CAA may grant a Procedure Design Certificate or Procedure Design Authorisation in respect of only some of the matters sought in the application.

Information to be taken into account

- 178.10.5 (1) In deciding whether granting a Procedure Design Certificate or Procedure Design Authorisation would be likely to have an adverse effect on the safety of air navigation, the CAA may take into account the factors stated in the Manual of Standards.
- (2) For the application of sub-regulation (1) in relation to an applicant that is a body corporate, references to the applicant include each of the officers (other than employees) of the applicant.
- (3) In making a decision on an application, CAA may take into account:
 - (a) anything in the application or in any other document submitted by the applicant; and
 - (b) the record of any interview under this Part; and
 - (c) anything else in its records about the applicant; and
 - (d) the results of any demonstration or inspection under this Part.
- (4) However, before taking into account anything in its records about an applicant, the CAA shall:
 - (a) tell the applicant, in writing, that it intends to do so, and the substance of what CAA intends to take into account; and
 - (b) invite the applicant, in writing, to make a written submission about the matter within a specified time.
- (5) If the applicant makes a written submission within the specified time, the CAA shall take the submission into account.
- (6) In deciding whether to grant a Procedure Design Certificate or a Procedure Design Authorisation to an applicant who was previously a Certified Designer or an

Authorised Designer and whose certification or authorisation was cancelled under this Part, CAA shall take into account:

- (a) the fact of the cancellation; and
- (b) the reasons for the cancellation given at the time of the cancellation; and
- (c) any information that the applicant submits to show that the applicant could now properly design Flight Procedures of the type or types to be covered by the certificate or authorisation.
- (7) However, in making a decision in relation to an applicant referred to in subregulation (6), the CAA is not obliged to reconsider, or inquire into the circumstances of, the cancellation.

Granting of certificates or authorisations subject to conditions

- 178.10.6 (1) The CAA may grant a Procedure Design Certificate or Procedure Design Authorisation subject to any condition that CAA considers necessary to impose in the interests of the safety of air navigation.
- (2) In particular, the CAA may grant a Procedure Design Certificate or Procedure Design Authorisation subject to a condition requiring its holder to permit an authorised officer (within the meaning given by Part 178.14) to exercise the powers of an authorised officer under that Part in relation to the certificate or authorisation.
- (3) However, such a condition is not taken to require the holder to permit the exercise of those powers:
 - (a) unless the authorised officer first shows his or her Authorised Officer identity book to the holder, or another person on behalf of the holder, if asked to do so by the holder or other person; or
 - (b) at a time other than during normal business hours.
- (4) Such a condition is not taken to authorise the authorised officer to use force to any extent in exercising those powers.
- (5) Annual and Ad Hoc inspections will be conducted at the discretion of the CAA.

Decision making period

- 178.10.7 (1) If the CAA does not make a decision about an application under this Part within 3 months after receiving it, the CAA is taken to have refused the application.
- (2) However, if CAA makes a request under regulation 178.10.1, 178.10.2 or 178.10.3, the time between when the CAA makes the request, and when the applicant conducts the demonstration, attends the interview, or gives the CAA the information or copy requested, does not count towards the period.
- (3) Also, if the CAA invites an applicant to make a written submission under subregulation 178.10.5(4), the time between when the CAA gives the invitation and when the applicant makes the submission does not count towards the period.

Notice of decision

- 178.10.8 (1) After making a decision on an application under this Part, the CAA shall notify the applicant in writing, as soon as practicable:
 - (a) of the decision; and
 - (b) if the decision was to refuse the application, or to grant the relevant Procedure Design Certificate or Procedure Design Authorisation subject to a condition not sought by the applicant: of the reasons for the decision.
- (2) If the CAA grants to an applicant a Procedure Design Certificate, sub-regulation (1) does not require the CAA to send to the applicant a separate notice of its decision.

Charges for the granting of a Procedure Design Certificate/ Authorisation

178.10.9 The charges applicable for the granting of a Procedure Design Certificate or Authorisation are contained in Part 187.

Return of certificate if Procedure Design Certificate cancelled

178.10.10 (1) An organisation which ceases to be a Certified Designer shall return any Procedure Design Certificate or replacement certificate issued to the organisation under this Part within 14 days after ceasing to be a Certified Designer.

Changing of Procedure Design Certificates

178.10.11 (1) If a Certified Designer wants to change a Procedure Design Certificate or a condition of it, application shall be made to CAA in writing.

- (2) The application shall contain, or have attached to it,
 - (a) a copy of the proposed change; and
 - (b) the fees as prescribed in Part 187.
- (3) If the CAA approves the application under Part 178.10, the change takes effect:
 - (a) if a day is specified in the written notice given to the applicant under Part 178.10, on that day; or
 - (b) if no day is specified, on the day when the notice is received by the applicant.

SUBPART 11:

CHANGE OF PROCEDURE DESIGN CERTIFICATES AND PROCEDURE DESIGN AUTHORISATIONS

Applicability of this Part

178.11.1 This Part applies in relation to changes of a Procedure Design Certificate or Procedure Design Authorisation (including imposing, removing or changing a condition applicable to the certificate or authorisation).

Application for change

- 178.11.2 (1) Part 178.2 and Part 178.10 apply in relation to an application to change a Certified Designer's Procedure Design Certificate except that the designer needs to forward to the CAA information, or documentation, that the designer has already given to CAA *only* if the information or documentation has changed since it was last given to the CAA.
- (2) Part 178.6 and Part 178.10 apply in relation to an application to change an Authorised Designer's Procedure Design Authorisation except that the designer needs to forward to the CAA information, or documentation, that the designer has already given to the CAA *only* if the information or documentation has changed since it was last given to the CAA.

Charges for the Changing of a Procedure Design Certificate/ Authorisation

<u>178.11.3</u> The charges applicable for the variation of a Procedure Design Certificate or Authorisation are contained in Part 187.

SUBPART 12: DIRECTIONS TO AMEND CERTIFIED DESIGNER'S OR AUTHORISED DESIGNER'S OPERATIONS MANUAL

CAA may direct amendments to designer's operations manual

- 178.12.1 (1) If necessary in the interests of the safety of air navigation, the CAA may, in writing, direct a Certified Designer or an Authorised Designer, within a period specified in the direction, to amend the designer's operations manual by:
 - (a) including in the manual the information or other requirements set out or described in the direction; or
 - (b) altering the information or other requirements in the manual in the manner set out in the direction.
- (2) The CAA may extend the period by written notice, before or after the end of the period referred to in sub-regulation (1).

SUBPART 13: SUSPENSION AND CANCELLATION OF PROCEDURE DESIGN CERTIFICATES AND PROCEDURE DESIGN AUTHORISATIONS

<u>Suspension or cancellation of Procedure Design Certificate or Procedure Design</u> Authorisation by CAA

- 178.13.1 (1) The CAA may, by written notice given to a Certified Designer or Authorised Designer, suspend or cancel the designer's Procedure Design Certificate or Procedure Design Authorisation if there are grounds for believing that the designer:
 - (a) has breached a condition of the certificate or authorisation; or
 - (b) has contravened a provision of this Part; or
 - (c) does not meet, or continue to meet, a requirement of this Part for getting or holding the certificate or authorisation; or
 - (d) has otherwise been guilty of conduct that renders the designer's continued holding of the certificate or authorisation likely to have an adverse effect on the safety of air navigation.
- (2) Before suspending or cancelling a Certified Designer's Procedure Design Certificate or an Authorised Designer's Procedure Design Authorisation, the CAA:
 - (a) shall give written notice to the designer of the facts or circumstances that, in the opinion of the CAA, amount to grounds for the suspension or cancellation of the certificate; and
 - (b) shall invite the designer to show cause in writing, within 30 days after the date of the notice, why the certificate or authorisation should not be suspended or cancelled; and
 - (c) shall take into account any written representations made, within the time allowed under paragraph (b), by or on behalf of the designer explaining why the certificate should not be cancelled.

Cancellation at request of Certified Designer or Authorised Designer

- 178.13.2 (1) Despite anything else in this Part, the CAA shall cancel a Certified Designer's Procedure Design Certificate or an Authorised Designer's Procedure Design Authorisation if asked to do so, in writing, by the designer subject to compliance with Part 178.05.2, 178.05.3, 178.05.4, 178.08.1, 178.08.2 and 178.08.3.
- (2) The cancellation takes effect when the request is forwarded to the CAA, or if a later day is stated in the request, on the later day.

SUBPART 14: AUTHORISED OFFICERS

CAA may appoint Authorised Officers

- 178.14.1 (1) The Commissioner may in terms of Section 5 (4) (a) of the Aviation Act, 74 of 1962, in writing, appoint an officer of the CAA as an authorised officer.
- (2) The instrument of appointment may:

- (a) describe the premises and activities in relation to which the Authorised Officer may use his or her powers under regulation 178.14.3; and
- (b) specify the duration of the appointment; and
- (c) specify that the appointment is subject to 1 or more conditions.

Authorised Officer Identity Book

- 178.14.2 (1) The CAA shall issue each Authorised Officer with an Authorised Officer Identity Book and card that includes a recent photograph of the Authorised Officer.
- (2) No more than 7 days after ceasing to be an Authorised Officer, a person shall return its Authorised Officer Identity Book and card to the CAA.

Powers of Authorised Officer

- 178.14.3 (1) The powers of an Authorised Officer are as defined in Part 13 of the CAR. and may exercise the powers to do any or all of the following:
 - (a) enter and inspect premises connected with, or used for the purposes of, design work that is carried on by, or for, a Certified Designer or Authorised Designer or where any documents or records relating to that work are kept;
 - (b) observe the practices and procedures of the Certified Designer or Authorised Designer (including the designer's employees) in carrying on design work under designer's Procedure Design Certificate or Procedure Design Authorisation;
 - (c) inspect the designer's facilities used for, or in relation to, that work;
 - (d) inspect and test any systems and equipment used for, or in relation to, that work;
 - (e) inspect any documents or records maintained, or required to be kept under this Part, by the designer in relation to that work;
 - (f) make a copy of any document or record that the Authorised Officer inspects.
 - (g) impound any documentation or data which is considered by the Authorised Officer to have a negative impact on air navigation safety.
- (2) However, an Authorised Officer may exercise his or her powers only:
 - (a) at premises connected with, or used for the purposes of, design work that is carried on by, or for, a Certified Designer or Authorised Designer or where any documents or records relating to that work are kept; and

- (b) if the designer, or a person on behalf of the designer, so requests: after the designer or person has been shown the Authorised Officer Book/card; and
- (c) during normal business hours; and
- (d) to ensure that design work is being carried on in accordance with these Regulations.
- (3) The cost of any copying carried out for the purposes of paragraph (1)(f) shall be carried by the Certified Designer or Authorised Designer.

Charges for the inspection of a Certified/Authorised Procedure Designer

178.14.4 The charges applicable for the inspection of a Certified/Authorised Procedure Designer are contained in Part 187.

15. PROPOSAL FOR INSERTION OF REGULATION 187.00.35A IN THE REGULATIONS

15.1 The following Regulation is hereby inserted in the regulations:

"Fees relating to Part 178

187.00.35A The following fees shall be payable upon application:

		R
(a)	For amendment of Procedure Design Certificate or Authorisation	250.00
(b)	For the inspection of an organisation for issuance of a Procedure Design Certificate or Authorisation per hour per inspection	525.00
(c)	For the issuing of a duplicate Procedure Design Certificate or Authorisation	500.00
(d)	For the issuing of a Procedure Design Certificate for - (regulation 178.02.3)	
	(i) Non-precision and APV approach design(ii) APV I approach design(iii) Precision and APV II approach design(iv) PBN	11,270.00 14,870.00 18,870.00 21,430.00
(e)	For the issuing of a Procedure Design Authorisation for - (regulation 178.06.3)	
	(i) Non-precision and APV approach design	11,270.00

(ii) APV I approach design 14,870.00(iii) Precision and APV II approach design 18,870.00(iv) PBN 21,430.00

16. MOTIVATION

ICAO PANS-Ops Doc 8168 Volume II (Part 1, Chapter 4, 4.1) requires that the State ensure that all published instrument flight procedures within its airspace can be flown safely by aircraft. Over and above ensuring the application of the technical criteria, the State is required to apply measures that control the quality of the process used to apply that criteria, which include regulations, air traffic monitoring, ground and flight validation. These measures shall ensure the quality and safety of the flight procedure product through review, verification, coordination and validation at appropriate points in the process of flight procedure design, so that corrections can be made at the earliest opportunity in the process.

Currently, the State has no legal framework in which to carry out the mandated oversight above.

Key to the provision of flight procedures is the qualification of flight procedure designers, as defined by ICAO Doc 9906 Quality Assurance Manual for Flight Procedure Design. Unlike other safety critical aviation functions in South Africa, the State has had until now, no legal authority to regulate the qualification or competence of flight procedure designers.

Part 178 defines the roles, responsibilities, requirements, and minimum standards for service providers applicable to flight procedure design. It also defines the regulatory framework for oversight of this safety critical function.