(2) The medical officer may require the holder of a medical certificate whose certificate has been suspended in terms of this regulation, to undergo medical examination at the holder's expense, at a medical specialist chosen by the medical officer.

(3) A notice of the suspension of medical certificate contemplated in sub-regulation (1) must be given in writing, stating the reasons for the suspension.

(4) Notwithstanding sub-regulation (3), the medical officer may notify the holder of the medical certificate of the suspension otherwise than in writing: Provided that a written notification of such suspension is submitted to the holder immediately thereafter.

(5) A person whose medical certificate is suspended in terms of sub-regulation (1) may appeal to the Director against the suspension within 14 days from the date of the suspension.

(6) The provisions of regulation 185.00.6 apply, with the necessary changes, with regard to the appeal contemplated in sub-regulation (5).

(7) The holder of a medical certificate who succeeds in an appeal against the suspension shall be refunded the expenses referred to in sub-regulation (2).

Medical confidentiality

67.00.15 (1) Subject to the provisions of sub-regulation (2), all information provided by or on behalf of an applicant for a medical certificate, which is personal medical information, shall be confidential, and shall be used only in respect of the medical certificate and the entire medical certification process, unless otherwise authorised by the applicant.

(2) Any medical practitioner employed by the designated body or institution shall ensure the protection of information referred to in sub-regulation (1) which is kept by such designated body or institution: Provided that when medical information appears to be fraudulent, false or misleading, or when such medical information will jeopardise aviation safety, or when it is necessary for the purpose of an appeal in terms of regulation 67.00.13, the medical practitioner shall release to the Director such information for appropriate investigation and action

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SUBPART 1: GENERAL

Applicability

68.01.1 This Part applies to the issuing, revalidating and re-issuing of South African glider pilot licences and ratings; validation of foreign pilot licences and ratings issued by a Contracting State; conversion of foreign pilot licences and ratings issued by a Contracting State; and matters related thereto.

Authority to act as pilot

68.01.2 (1) No person shall act as the pilot of a glider whilst in or over any part of the Republic or the territorial waters thereof unless such person –

- holds a valid appropriate pilot licence and rating issued by the Director in terms of this Part; or
- (b) holds a valid pilot licence and rating issued by an appropriate authority and validated by the Director in terms of this Part; or
- (c) if the glider is of a foreign nationality, either -
 - (i) holds a valid pilot licence and rating issued by the appropriate authority of the State of Registry, provided such State is a Contracting State; or
 - (ii) has obtained the permission of the Director, if the State of Registry is not a Contracting State.

(2) The holder of a glider pilot licence shall not exercise any privileges other than the privileges granted by the appropriate licence and rating or validation held by such holder.

(3) The holder of a validation of a foreign pilot licence shall adhere to all the requirements and limitations prescribed by this Part in respect of the holder of a glider pilot licence when exercising the privileges of his or her validation as a glider pilot licence.

Ratings for glider pilots

68.01.3 The ratings for glider pilots are -

- (a) a class rating:
 - (i) conventional gliders (single and multi seat); with the following sub classes:
 - (aa) Long wing span flapped;
 - (bb) Short wing span flapped;
 - (cc) Short wing span un-flapped
 - (ii) self launch and sustainer gliders (single and multi seat).
- (b) a rating for special purposes:
 - (i) aerotug launch rating;
 - (ii) winch launch rating;
 - (iii) Auto tug;
- (c) glider instructor rating:
 - (i) Assistant glider pilots instructor rating; and
 - (ii) Glider pilots instructor rating;
- (d) touring motor glider rating issued in terms of Part 62.

Competency

68.01.4 (1) A holder of a glider pilot licence or rating shall not exercise the privileges granted by the licence or rating unless such holder maintains competency by complying with the appropriate requirements prescribed in these Regulations.

(2)(a) The holder of a glider pilot licence shall undergo a general proficiency check no later than 12 months from the date of initial issue, and thereafter within a period of 24 months of each previous proficiency check.

(b) The proficiency check, or the annual revalidation procedure, as the case may be, shall include a review of applicable regulations, NOTAMs and AICs.

(c) The provisions of sub-regulations (6) and (7) applies with the necessary changes in respect of the annual revalidation procedure.

(3) Where the holder of a glider pilot licence has not maintained competency by passing the general proficiency check or an initial skills test within the 24 months following the issue or revalidation of a glider pilot licence, he or she shall comply with the following requirements –

- (a) where the maintenance of competency has lapsed for less than 24 months, he or she shall, in the same class for which he or she previously held a class endorsement be required to –
 - (i) undergo a minimum of one period of dual training of not less than one hour;

- (ii) practice at least 1 hour solo flight; and
- (iii) pass a general proficiency check.
- (b) 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 -
 - (i) rewrite the Air Law examination;
 - undergo a minimum of two periods of dual training of not less than one hour;
 - (iii) practice a minimum of 3 hours solo flight; and
 - (iv) pass a general proficiency check;
- (c) where the maintenance of competency has lapsed by more than 60 months, the licence holder shall be required to comply with the initial issue requirements of regulation 68.03.2.

(3) The proficiency check, referred to in sub-regulation (2), may be conducted by a glider instructor who is the holder of the appropriate class and sub-class rating.

(4) The proficiency check shall consist of a skills test without the need for a cross country flight test as defined in Document SA-CATS 68, to be conducted in an glider of the class and subclass for which he or she is licensed.

(5) (a) The person, conducting the proficiency check, shall enter the outcome of the proficiency check in the pilot's logbook and sign it accordingly, and submit the relevant test report to the Director, or to the organisation designated for the purpose in terms of Part 149 of the Regulations, as the case may be.

(b) The test report, referred to in paragraph (a), shall be countersigned by the pilot, and the pilot concerned shall be provided with a copy thereof.

(6) Where a pilot fails a proficiency check -

- (a) the pilot shall undergo corrective training with a flight instructor, other than the person who conducted the failed proficiency check, before submitting himself or herself for a retest;
- (b) no retest shall be conducted without a letter of recommendation by the flight instructor referred to in paragraph (a).

(7) (a) The holder of a glider pilot licence shall pay annually the applicable currency fee as prescribed in Part 187 on the anniversary date of his or her licence.

(b) The holder shall submit, together with the currency fee, a summary of his or her logbook for the previous 12 months in the format prescribed in Document SA-CATS 68 unless if during the preceding 12 months a six-monthly or annual summary was submitted as part of an application for the issue, renewal or reissue of *a* rating.

(8) (a) If the Director, or the organisation designated for the purpose in terms of Part 149, as the case may be suspects that a person, licensed in terms of this Part, has failed to maintain the

minimum standard required to exercise the privileges of the glider pilot licence or any of the ratings that he or she holds, the Director or the said organisation may, after having afforded the licence holder an opportunity to respond, give in writing the licence holder reasonable notice of such suspicion.

(b) The Director or the said organisation may then require the person to undergo, by a date specified by the Director or the said organisation, the skill test or all or some of theoretical knowledge examinations prescribed in this Part in respect of such licence or rating.

(9) Should the tests or examinations, referred in sub-regulation (8), show that the standard of the licence or rating holder is below that required for the licence or rating concerned, the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall suspend the holder from exercising all or any of the privileges of that licence or rating until such time as the holder can show that he or she is again able to meet the skill or theoretical knowledge requirements for that licence or rating.

(10) if the person, who has been duly notified in terms of sub-regulation (8), fails without reasonable cause to present himself or herself by the specified date to undergo the test or examination prescribed, his or her standard shall be deemed to be below that required for the ficence or rating concerned and the provisions of sub-regulation (9) shall with the necessary changes apply.

(11) The holder of a lapsed or expired glider pilot licence issued in terms of this Part, may for the purpose of renewing his or her licence or rating as contemplated in this Part, exercise the privileges of the glider student pilot licence provided for in this Part, provided that the holder has an appropriate current medical certificate.

Medical fitness

68.01.5 (1) An applicant for, or holder of, a glider pilot licence shall hold an appropriate valid medical certificate issued in terms of Part 67 of these Regulations, and he or she shall submit a copy thereof to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.

- (2) The holder of a glider pilot licence issued in terms of this Part shall-
 - (a) not exercise the privileges of that licence -
 - (i) unless that person
 - (aa) holds an appropriate valid medical certificate or medical fitness certificate, as the case may be; and
 - (bb) complies with all medical endorsements on that medical certificate or medical fitness certificate;
 - (ii) while he or she is aware of having a medical deficiency that would make him or her unable to meet the medical standards for his or her medical certificate or medical fitness certificate, until he or she has been assessed medically fit again by an aviation medical examiner designated in terms of Part 67 (in the case of the holder of a medical certificate, referred to in sub-

regulation (1), or by a general medical practitioner (in the case of the holder of a medical fitness certificate, referred to in sub-regulation (2).

Language

68.01.6 The applicant for a glider pilot licence, shall have demonstrated his or her ability to use the English language as set out in Document SA-CATS 68.

Logging of flight time

68.01.7 (1) The holder of a glider pilot licence shall maintain a record of all his or her flight time and instruction time. Electronic logbooks may be used, provided that the electronic data is printed onto paper at least every 90 days and the printed pages are filed sequentially in a binder.

(2) The form and information to be contained in the logbook, referred to in sub-regulation (1), and the manner in which such logbook shall be maintained, are as prescribed in Document SA-CATS 68.

(3) (a) Entries in pilot logbooks shall be made within seven days after the completion of the flight to be recorded.

(b) Where a pilot is engaged in flight operations away from the base where the pilot logbook is kept normally, the periods specified in paragraph (a) may be extended to 48 hours after return to base.

(4) Pilot logbooks shall be retained by their holders for at least 60 months from the date of the last flight recorded therein.

(5) Flight time during which the holder of a glider pilot licence is -

- receiving dual instruction shall be logged as dual flight time, and shall include a record of the air exercises undertaken;
- (b) the designated PIC shall be logged as PIC time.

(6) The holder of a student glider pilot licence may log as solo flight time only the flight time when the learner is the sole occupant of the glider.

(7) A glider flight instructor shall log the time spent in an glider occupying a pilot seat with access to the controls, whilst acting as a flight instructor, as flight instructor time, and may log all flight time whilst acting as such as PIC time.

(8) A glider flight instructor, acting as an examiner while occupying a pilot seat with access to the flight controls, may log all flight time whilst acting as such as PiC, and shall make the entry EXAMINER in the remarks column. Such time shall not be logged as flight instructor time.

Recognition and validation of pilot licences and ratings issued by an appropriate Authority of a Contracting State

68.01.8 (1) (a) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may recognize, through validation, pilot licences and ratings issued by

or on behalf of an appropriate authority of a Contracting State where the standard of such foreign licences or ratings is deemed to be equivalent to, or higher than, the South African standard, and on the basis of competence by the holder.

(b) Document SA-CATS 68 contains a list of Contracting States of which the licences and ratings issued by or on behalf of the appropriate authority are deemed to be of a standard equal to, or higher than, those issued by or on behalf of the Authority.

(2) (a) Validation of such foreign licences shall apply for flights in a South African registered glider, where such privileges are required for a limited period, not to exceed one year.

- (b) Purposes for which a certificate of validation may be issued include:
 - (i) to exercise the privileges of a glider pilot licence in a South African registered glider;
 - (ii) to conduct demonstration flights in a South African registered glider;
 - (iii) to conduct endorsement training of South African flight crew; or
 - (iv) to participate in sporting or competition events, organised by or under the auspices of sections of the recognised national aero sport body.

(c) The privileges of the validated foreign licence may not be exercised in commercial air transport operations.

(3) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may deem it necessary for an applicant for a validation to undergo additional theoretical or practical assessments to ensure compatibility with the relevant South African licensing standards.

Application for and issuing of a validation of a foreign pilot licence and ratings

68.01.9 (1) The holder of a licence or rating, similar to, or higher than, a pilot licence issued in terms of this Part, issued by or on behalf of the appropriate authority of a Contracting State, who desires to exercise the privileges of such licence or rating as PIC of a South African registered glider, may apply to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, in the appropriate prescribed form, for a validation of such pilot licence or rating.

(2) No validation shall be considered if the applicant has –

- (a) been refused a South African pilot licence or validation before; or
- (b) had a South African pilot licence or validation revoked in the past.

for reasons other than failing a skill test, a proficiency test, or a theoretical knowledge test.

(3) Where, in the opinion of the Director or the designated organisation, the requirements for the issue of a pilot licence by a particular Contracting State are lower than those set by the Republic, the Director or the designated organisation may direct that the applicant meets the higher requirement before granting a validation.

(4) A pilot licence and rating issued by or on behalf of an appropriate authority of a Contracting State may be validated by the Director or the designated organisation –

- (a) subject to the same restrictions which apply to such pilot licence and rating;
- (b) subject to such conditions and limitations as the Director or the designated organisation may deem necessary in the interest of aviation safety;
- (c) in accordance with and subject to the requirements and conditions as prescribed in Document SA-CATS 68; and
- (d) in the appropriate prescribed form; but
- (e) to permit privileges not in excess of the equivalent South African glider pilot licence or rating.
- (5) The application for a validation referred to in sub-regulation (1) shall be accompanied by -
 - (a) the appropriate fee as prescribed in Part 187;
 - (b) a certified true copy of the pilot licence and rating to which the validation refers;
 - (c) a certified true copy of a valid medical certificate or valid medical fitness certificate;
 - (d) a certified true copy of the radiotelephony certificate (if applicable), or, in the case where the Contracting State does not prescribe such certificate for its licence holders, certified proof that the applicant has passed a practical skill test with an approved radio licence examiner;
 - (e) a summary of the applicant's logbook, certified by the applicant to be a true reflection of the hours flown; and
 - (f) any other document prescribed in Document SA-CATS 68.

(6) The minimum knowledge, experience and skill requirements for the issue of a Certificate of Validation for the various pilot licences and ratings are those prescribed in Document SA-CATS 68 for the South African glider pilot licence and associated ratings.

(7) Where a proficiency check or skills test is required, such test shall be undertaken in an glider of the class or type for which a certificate of validation is sought.

(8) The holder of a validation shall comply with all the applicable provisions prescribed in these regulations.

(9) None of the privileges of an additional rating may be exercised in terms of the certificate of validation before the appropriate authority as applicable has endorsed such privileges on the applicant's foreign pilot's licence however, due regard shall be given to the provision of regulation 68.01.8(2)(c).

(10) The period of validity of a certificate of validation shall be the lesser of -

- (a) twelve months calculated from the date of issue of such certificate of validation; or
- (b) the period of validity of the pilot licence and rating to which the validation applies;

(11) In exceptional cases, such as demonstration flights or specific instruction on glider new for the Republic, the Director or the designated organisation may consider the validation of a foreign licence to meet short-term operational requirements by exempting the applicant from all

or some of the requirements of this Part, subject to conditions set by him, her or it for the particular situation.

Documentation

68.01.10 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall ensure that a glider pilot licence and rating is issued in such a manner that the validity thereof may readily be determined by any appropriate authority.

Register of licences

68.01.11 (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall maintain a register of all glider pilot licences and ratings issued or validated in terms of this Part.

(2) The register shall contain the following particulars -

- (a) the full name of the holder of the licence;
- (b) date of birth;
- (c) the postal and residential address of the holder of the licence;
- (d) the number of the licence;
- (e) the date on which the licence was issued or validated;
- (f) particulars of the ratings held by the holder of the licence;
- (g) the nationality of the holder of the licence; and
- (h) in the case of a validation, the authority that issued the validated licence or rating.

(3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence or rating is issued or validated.

(4) The register shall be kept in a safe place at the office of the Director or of the designated organisation.

(5) A copy of the register shall be furnished by the Director or the designated organisation on payment of the appropriate fee as prescribed in Part 187 to any person who requests the copy: Provided that postal and residential addresses may not be divulged to third parties, except to law enforcement officers or on instruction of the Courts.

Aviation training providers

68.01.12 Any *ab initio* training required by this Part shall be provided only by the holder of an ATO approval issued in terms of Part 141.

Payment of currency fee

68.01.13 (1) The holder of a glider pilot licence shall pay the currency fee as prescribed in Part 187, applicable to the type of licence, on the anniversary date of the licence to either the Authority or to the organisation designated for the purpose in terms of Part 149, as the case may be.

(2) Where applicable, the payment referred to in sub-regulation (1) shall be accompanied by the summary of the last 12 months flying in a glider.

Radiotelephony certificates

68.01.14 (a) A holder of a glider pilot licence may also be required to be the holder of a radiotelephony licence as contemplated in section 31 of the Electronic Communications Act, 2005 (Act No. 36 of 2005).

(b) The requirements for their issue are prescribed in Document SA-CATS 68.

SUBPART 2: GLIDER STUDENT PILOT LICENCE

Requirements for a student glider pilot licence

68.02.1 (1) An applicant for the issuing of a student glider pilot licence shall-

- (a) be not less than 14 years of age;
- (b) hold a valid medical certificate appropriate to the category of licence ultimately being trained for issued in terms of Part 67;
- (c) have successfully completed the training referred to in regulation 68.02.2; and
- (d) have passed the theoretical knowledge examination referred to in regulation 68.02.3.

Training

68.02.2 An applicant for the issuing of a student glider pilot licence shall have successfully completed the appropriate training as prescribed in Document SA-CATS 68.

Theoretical knowledge examination

68.02.3 An applicant for the issuing of a student glider pilot licence shall have passed the appropriate written examination as prescribed in Document SA-CATS 68, within the 90 days immediately preceding the date of application.

Certificate of competency

68.02.4 (1) If the student glider pilot, in terms of these Regulations, is required to operate radio apparatus while flying solo, a student glider pilot licence may be issued to the applicant who is not in the possession of a certificate of proficiency (aeronautical), provided that he or she is the holder of a certificate of competency issued in three phases prior to solo flight as prescribed in subparagraphs (b)(i), (ii) and (iii) below by the holder of a flight instructor rating, wherein it is certified that –

- (a) the applicant has undergone basic training in the use of the radio apparatus installed in the glider in which he or she is being trained; and
- (b) the applicant is considered capable of operating such radio apparatus satisfactorily to undertake solo flights –
 - (i) within the circuit area of the aerodrome or approved site where the training flights originate and terminate;
 - (ii) within the associated general flying area of such aerodrome of approved site;

(iii) on cross-country flights.

(2) The basic training and knowledge requirements to be met shall be based on the communication syllabus prescribed in document SA-CATS 68.

(3) The certificate of competency referred to in sub-regulation (1) shall be valid for as long as the glider student pilot licence is valid.

Application for student glider pilot licence

68.02.5 (1) An application for the issuing of a student glider pilot licence shall -

- (a) be made to the Director or the organisation, designated for the purpose in terms of Part 149, as the case may be, in the appropriate form as prescribed by the Director; and
- (b) be accompanied by -
 - (i) original or certified proof of -

(aa) the identity of the applicant; and

- (bb) the age of the applicant;
- (ii) a valid medical certificate issued in terms of Part 67;
- (iii) if applicable, the valid restricted or higher grade radiotelephony operator's certificate or the certificate of competency referred to in regulation 68.02.4;
- (iv) original or certified proof that the applicant has passed the theoretical knowledge examination referred to in regulation 68.02.3;
- (vi) two recent passport size photographs of the applicant; and
- (vii) the appropriate fee prescribed in Part 187.

Issuing of student glider pilot licence

68.02.6 (1) (a) The Director or the organisation, designated for the purpose in terms of Part 149, as the case may be, shall issue a student glider pilot licence if the applicant complies with the requirements referred to in regulation 68.02.1.

(2) A student glider pilot licence shall be issued in the format, as prescribed in Document SA-CATS 68.

(3) Upon the issuing of a student glider pilot licence the holder thereof shall forthwith affix his or her signature in ink in the space on the certificate provided for such purpose.

Period of validity

68.02.7 A student glider pilot licence shall be valid for the period for which the holder thereof is the holder of a valid medical certificate issued in terms of Part 67: Subject to the payment of annual currency fee.

Privileges and limitations of student glider pllot licence

68.02.8 (1) The holder of a valid student glider pilot licence shall be entitled to fly solo only for the purpose of training for the applicable glider licence or rating –

- (a) in the type of glider in which he or she is undergoing training;
- (b) after being authorised thereto and while under supervision, as prescribed in subregulation (2);
- (c) without carrying any passengers;
- (d) in VMC by day.
- (e) on a flight other than an international flight

(2) A student glider pilot shall not fly solo unless authority is granted for a flight, or for a sequence of flights, as prescribed in the relevant practical training course syllabus in Document SA-CATS 68, by the holder of a flight instructor rating who is to supervise the solo flight. The authority shall be in writing and be issued in his or her presence at the time when such flight or sequence of flights is about to commence.

(3) A student glider pilot shall not fly solo in the circuit unless he or she has successfully completed the practical training and theoretical knowledge examinations as prescribed in Document SA-CATS 68, and his or her logbook has been endorsed to fly solo in the circuit.

(4) A student glider pilot shall not fly solo outside of the circuit or in the general flying area unless he or she has successfully completed the practical training and theoretical knowledge examinations as prescribed in sub-regulation (3) above and in Document SA-CATS 68, and his or her logbook has been endorsed to do so.

(5) A student glider pilot shall not fly solo on a cross-country flight unless he has successfully completed the practical training and theoretical knowledge examinations as prescribed in sub-regulations (3) and (4) above and in Document SA-CATS 68, and his or her logbook has been endorsed to do so.

(6) (a) Except in an emergency, no student glider pilot shall land or take-off in an glider from an area other than an aerodrome or an approved site.

(b) If a student glider pilot does execute an emergency landing in an glider in an area other than an aerodrome or an approved site, only the holder of a glider pilot licence with the appropriate class rating, or another pilot approved for the purpose, may fly the glider from the area.

Crediting of flight time

66.02.9 A student glider pilot shall be entitled to be credited in full with all solo and dual instruction flight time towards the total flight time requirement for the initial issue of a glider pilot licence.

SUBPART 3: REQUIREMENTS FOR THE ISSUE OF A RATING BY NAME FOR GLIDERS

68.03.1 An applicant for the issuing of a rating by name for gliders shall -

- (a) be not less than 16 years of age;
- (b) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical);
- (c) have acquired the experience referred to in regulation 68.02.2;
- (d) have successfully completed the training referred to in regulation 68.02.3;
- (e) have passed the theoretical knowledge examination referred to in regulation 68.02.4;
- (f) have successfully passed the skills test referred to in regulation 68.02.5; and
- (g) hold at least a valid class 4 medical certificate issued in terms of Part 67.
- (h) be a member of an approved aviation recreation organization

Experience

68.03.2 (1) An applicant for the issuing of an initial class rating by name for conventional gliders shall have completed not less than 40 flights as a pilot of a conventional glider which shall include –

- (a) a minimum total of 20 solo flights, and
- (b) a minimum of 10 flights accumulated per launch method; and
- (c) a minimum of 6 hours of solo flight, of which;
 - (i) one flight must be at least two hours;
 - (ii) one flight if minimum 30 minutes flight time, with
 - (aa) the launch not exceeding 3000 ft AGL of the intended landing site; and
 - (bb) an ascend of at least two times the launch height.

(2) An applicant for the issuing of an initial class rating by name for self launch or sustainer gliders shall have completed not less than 40 flights as a pilot of a self launch or sustainer gliders which shall include –

- (a) a minimum total of 20 solo flights,
- (b) a minimum of 10 flights accumulated on self launch or sustainer assisted gliders; and

- (c) a minimum of 6 hours of solo flight, of which;
 - (i) one flight if minimum 30 minutes flight time continuous engine off, with -
 - (aa) shutdown not exceeding 3000 ft AGL of the intended landing site;
 - (bb) an ascend of at least two times the launch (engine off) height.

(3) An applicant for the issuing of an initial or additional rating by name for touring motor gliders as the case may be, shall have completed the requirements as per Subpart 17 of Part 62.

(4) An applicant for the issuing of an additional sub-class rating by name, in the applicable class shall have completed not less than ~

- (a) minimum total of 1 flight, including 1 solo flight; and
- (b) one flight of minimum 30 minutes flight time
- (5) Notwithstanding the provisions of sub-regulations (1) and (2), to obtain a first class rating for a glider, an applicant may be credited with dual instruction flights on a touring motor glider, accumulated as the holder of a licence issued in terms of Part 62 in the category touring motor gliders, towards the minimum total flights required.
- (6) Notwithstanding the provisions of sub-regulation (1), (2) and (4), in the case of an applicant with reasonable experience in another other class who wants to obtain a class rating for gliders, they will have to complete not less than:
 - (a) minimum total of 1 flight, including 1 solo flight; with
 - (b) one flight of 30 minutes flight time.

(7) Notwithstanding the provisions of sub-regulations (1), (2) and (4), in the case of an applicant with extensive experience as the holder of a pilot licence issued in terms of Part 61 or Part 62, the requirements may be relaxed, for a glider first class rating, to the minimum requirements according to sub-regulation (5) at the discretion of the flight instructor who conducts the skills test.

Training

68.03.3 An applicant for the issuing of an class rating by name for gliders shall have successfully completed the appropriate training as prescribed in Document SA-CATS **68**.

Theoretical knowledge examination

68.03.4 (1) An applicant for the issuing of an class rating by name for gliders shall have passed the appropriate written examination as prescribed in Document SA-CATS 68.

(2) Notwithstanding the provisions of sub-regulation (1), the applicant with extensive experience, who is the holder of a pilot licence issued in terms of Part 61 or Part 62 endorsed with the categories weight shift controlled microlight aeroplane, conventionally controlled microlight aeroplane, gyroplane, light sport aeroplane or touring motor glider may be given credit for any theoretical examination at the discretion of the testing instructor.

(3) Notwithstanding the provisions of sub-regulation (2), the applicant who is the holder of a national pilot licence endorsed for the category weight shift controlled microlight aeroplane or gyroplane must write "principles of flight".

Skills test

68.03.5 (1) An applicant for the issuing of an initial class rating by name for gliders shall have demonstrated to the Chief Flying instructor, the ability to perform, as PIC of a glider, the procedures and manoeuvres as prescribed in Document SA-CATS 68, with a degree of competency appropriate to the privileges granted to the holder of a glider pilot licence.

(2) The applicant shall undergo the skills test, referred to in sub-regulation (1), within 12 months of passing the theoretical knowledge examination referred to in regulation 68.02.4 and within 60 days immediately preceding the date of application.

Ratings for special purposes for a glider pilot licence

68.03.6 (1) The ratings for special purposes associated with a glider pilot licence are -

- (a) aerotug launch rating
- (b) winch launch rating;
- (c) auto tug;
- (d) glider instructor rating
 - (i) Assistant Glider Instructor rating; and
 - (ii) Glider Instructor rating

(2)(a) The holder of glider pilot licence may be issued with an aerotug launch rating if -

- the pilot has completed both the theoretical knowledge examinations and skills test, referred to in regulations 68.02.4 and 68.02.5, specific to the aerotug launch method; and
- (ii) a minimum of 40 flights, including 20 solo flights and 10 aerotug launches, have been completed.

(b) The holder of an aerotug launch rating may act as pilot of a glider being launched by the aerotug method.

(3)(a) The holder of glider pilot licence may be issued with a winch launch rating if -

- the pilot has completed both the theoretical knowledge examinations and skills test, referred to in regulations 68.02.4 and 68.02.5, specific to the winch launch method; and
- (ii) a minimum of 40 flights, including 20 solo flights and 10 winch launches, have been completed.

(b) The holder of a winch launch rating may act as pilot of a glider being launched by the winch launch method.

(4)(a) The holder of glider pilot licence may be issued with a auto tug launch rating endorsement if -

- the pilot has completed both the theoretical knowledge examinations and skills test, referred to in regulations 68.02.4 and 68.02.5, specific to the auto tug launch method; and
- (ii) a minimum of 40 flights, including 20 solo flights and 10 auto tug launches, have been completed.

(b) The holder of a auto tug launch rating may act as pilot of a glider being launched by the auto tug launch method.

Application

68.03.7 An application for the issuing of an class rating by name for gliders shall -

- (a) be made to the Director or to the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form; and
- (b) be accompanied by -
 - (i) a valid application for the issue of such licence;
 - (ii) certified proof that the requirements prescribed in regulation 68.02.1 or 68.02.7, if applicable, have been complied with; and
 - (iii) the appropriate fee as prescribed in terms of Part 187 or by the organisation designated for the purpose in terms of Part 149, as the case may be, provided that the fees set by the latter may not exceed those prescribed in Part 187.

lssuing

68.03.8 (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall issue an class rating by name for gliders if the applicant complies with the requirements referred to in regulation 68.03.1.

(2) An class rating by name for gliders shall be issued in the format prescribed in Document SA-CATS 68.

Period of validity

68.03.09 An class rating by name for gliders shall be valid for as long as the glider pilot licence itself remains valid, provided that the privileges of the class rating or sub-class rating shall not be exercised by the holder thereof unless he or she complies with the provisions of regulation 68.03.11.

Privileges and limitations

68.03.10 The holder of an class rating by name for gliders shall be entitled to act as PIC of glider for which he or she is rated by name, provided it is not operated for the provision of an air service, --

(a) within Class F and Class G airspace;

- (b) within controlled airspace unless -
 - prior permission has been obtained from the responsible ATSU to enter such airspace;
 - (ii) a two-way radio communication as the ATSU may require, is established;
 - (iii) continuous radio watch is maintained; and
 - (iv) while within an aerodrome traffic zone, the appropriate radio position reporting procedure is complied with.

Maintenance of competency

68.03.11 The holder of a class rating by name for gliders shall not act as PIC of a glider unless he or she –

- (a) has acted as PIC of a glider for a minimum of 5 hours flight time or 10 flights in the 12 months immediately preceding the intended flight and such minimum flight time may include check flights or flights undertaken by the pilot whilst receiving training appropriate to the class or sub-class of glider; or
- (b) has passed a skills test with an appropriately rated flight instructor within 90 days immediately preceding the intended flight; and
- (c) if transporting a passenger, has within the 90 days immediately preceding the flight on which such passenger is to be transported, as PIC, has executed not less than three flights.

SUBPART 4: GLIDER PILOTS INSTRUCTOR RATINGS

General

68.04.1 (1) The applicant for the issue of a glider pilots instructor rating shall -

- (a) be the holder of a valid glider pilot licence issued in terms of this Part
- (b) hold at least a valid Class 4 medical certificate issued in terms of Part 67;
- (c) have acquired the experience referred to in regulation 68.04.2;
- (d) have successfully completed the training referred to in regulation 68.04.3;
- (e) have passed the theoretical knowledge examination referred to in regulation 68.04.4;
- (f) have undergone the skills test referred to in regulation 68.04.5; and

Experience

68.04.2 The applicant for the issuing of a glider pilots instructor rating have the following experience –

- (a) for an assistant glider pilots instructor rating:
 - (i) hold a glider class rating
 - (ii) has completed 300 solo flights on gliders or 100 gliding hours total;
 - (iii) has completed a skills test with the Chief Flying Instructor of the relevant approved glider training organisation for the launch methods required; and
 - (iv) obtains approval from the foregoing Chief Flying Instructor.
- (b) for a glider pilots instructor rating:
 - (i) hold a glider class rating
 - (ii) has completed 600 solo flights on gliders or 200 gliding hours total;
 - (iii) has completed 200 flights or 100 hours total as an assistant glider instructor;
 - (iv) has completed a skills test with the Chief Flying Instructor of the relevant approved glider training organisation for the launch methods required; and
 - (v) obtains approval from the foregoing Chief Flying Instructor.

Training

68.04.3 The applicant for the issuing of a glider pilots instructor rating shall have successfully completed the appropriate training as prescribed in Document SA-CATS 68.

Theoretical knowledge examination

68.04.4 The applicant for the issuing of a glider pilots instructor rating shall have passed the appropriate written examination as prescribed in Document SA-CATS 68.

Skills test

68.04.5 (1) The applicant for the issuing of a glider pilots instructor rating shall have demonstrated to an appropriately rated flight instructor the ability to perform as a flight instructor the procedures and Application

manoeuvres as prescribed in Document SA-CATS 68 with a degree of competency appropriate to the privileges granted to the holder of a glider pilots instructor rating.

(2) The skills test, referred to in sub-regulation (1), shall be demonstrated in a glider for which the glider pilots instructor rating is sought.

(4) The applicant shall undergo the skill test, referred to in sub-regulation (1), within 12 months of passing the theoretical knowledge examination, referred to in regulation 68.03.4, and within the 90 days immediately preceding the date of application.

68.04.6 An application for the issue of glider pilots instructor rating shall be made to the Director or, if applicable, the organisation designated for the purpose in terms of Part 149 of the Regulations, as the case may be, on the appropriate form, as prescribed in document SA-CATS 68, and be accompanied by --

- (a) a valid licence reference number, held by the applicant;
- (b) the original or certified proof that the applicant has passed the theoretical knowledge examination, referred to in regulation 68.03.4;
- (c) the skill test report as prescribed in Document SA-CATS 68; and
- (d) the appropriate fee as prescribed in Part 187 of the Regulations.

Issuing of the glider pilots instructor rating

68.04.7 The Director, or, if applicable, the organisation designated for the purpose in terms of Part 149 of the Regulations, as the case may be, shall issue the appropriate glider pilots instructor rating if the applicant complies with the requirements referred to in regulation 68.03.1, on the appropriate prescribed form.

Privileges and limitations

68.04.8 The holder of a valid glider pilots instructor rating shall be entitled to conduct flight instruction for reward under the auspices of an appropriately rated ATO, approved in terms of Part 141 of these Regulations, in an glider for which he or she holds a valid class rating by name, to the extent of the privileges of the particular glider pilots instructor rating held as follows –

(a) in the case of a assistant glider pilot instructor -

- conduct ab initio training conducted by an approved glider training organisation, such as ground-handling exercises, daily-and pre-flight inspection training, duty officer training, etc
- (ii) provide official introductory flights;
- (iii) presenting theoretical lectures;
- (iv) mark exams and sign application forms;
- (v) conduct and supervise basic and medium advanced upper-air flight training, including launch and landings;
- (vi) conduct theoretical and technical examinations, perform a skills test, perform type rating training and issue additional type ratings;
- (vii) supervise and authorize follow-on solo flights for the holders of glider student pilot licence, within gliding distance of the airfield, or outside with specific permission from a glider pilot instructor.
- (b) in the case of a glider pilot instructor rating -
 - (i) exercise all the privileges of a assistant glider pilot instructor rating;
 - (ii) conduct all stages of flight training;
 - (iii) authorize first solo flights of holders of glider student pilot licence;
 - (vi) conduct all levels of theoretical training;

- (v) conduct theoretical and technical examinations, a skill test, and issue a class rating; and
- (iv) may take full authority at the training organization in the absence of an appointed chief flight instructor.

Renewal

68.04.9 To renew a glider pilots instructor rating -

- have attended an approved flight instructor refresher seminar, as prescribed in Document SA-CATS 68, within the two years immediately preceding the date of expiring of such rating;
- (b) have logged within 12 months immediately preceding the date of expiry, a minimum of 5 flight hours and a total 10 flights PIC; and
 - have provided 30 instruction launches in the three years preceding the expiry date, of which 15 launches should be within 12 months immediately preceding the date of expiry of such rating; or
 - (ii) within the 90 days immediately preceding the date of expiry of the rating have undergone the skill test referred to in regulation 68.04.5.

SUBPART 5: REQUIREMENTS FOR THE ISSUE OF A GLIDER POST MAINTENANCE AND REPAIR TEST FLIGHT RATING AND A GLIDER TEST FLYING RATING

General

68.05.1 (1) No person shall act as test pilot of a glider unless he or she is the holder of a valid pilot's licence with a glider test pilot's rating.

(2) Test flights may only be performed by pilots rated on the glider within a class and rated as a glider test pilot.

(3) For a systems acceptance flight, the PIC must be rated as PIC for the class and type of glider and all test flights must be done in line with the manufacturer's requirements.

Requirements

68.05.2 (1) An applicant for a glider pilot licence with a post maintenance test flight rating shall

- hold at least a valid glider pilot licence;
- (b) be the holder of the appropriate glider class rating;
- have at least 300 hours total flight time of which not less than 200 hours must be PIC of a glider;
- (d) have acquired the experience referred to in regulation 68.05.3;

- (2) An applicant for a glider pilot licence with a test pilot rating shall
 - hold at least a valid glider pilot licence;
 - (b) be the holder of the appropriate glider class rating;
 - (c) have at least 700 hours total flight time of which not less than 500 hours must be PIC of a glider;
 - (d) have acquired the experience referred to in regulation 68.05.3;

Experience

- 68.05.3 An applicant shall -
 - (a) in the case of an application for a glider post maintenance test flight rating, attend the basic test flying techniques course as set out in SA-CATS 68;
 - (b) In the case of an application for a glider test pilot rating, attend the advanced test flying techniques course as set out in SA-CATS 68.

Application

68.05.4 An application for the issuing of a glider post maintenance test flight rating or a glider test pilot rating shall be made to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, on the appropriate prescribed form and accompanied by –

- (a) the appropriate fee prescribed in Part 187; and
- (b) a copy of the applicant's logbook, duly summarised, showing the required flying experience.

Issuing

68.05.5 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall endorse the applicant's glider pilot licence with either a glider test pilot rating or a glider post maintenance test flight rating if the applicant complies with the requirements referred to in regulation 68.05.2.

Privileges and limitations

68.05.6 (1) The holder of a glider post maintenance test flight rating shall be entitled to act as PIC of a glider, in a class for which the pilot has a glider post maintenance test flight rating to conduct a post maintenance test flight, or proving flights.

(2) The holder of a glider test pilot rating shall be entitled to act as PIC of a glider to conduct test flights, post maintenance test flights, and initial test flights.

PART 69: FREE BALLOON PILOT LICENCE

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General

SUBPART 1: General

Applicability

69.01.1 This Part applies to the issuing, revalidating and re-issuing of South African free balloon pilot licences and ratings; validation of foreign pilot licences and ratings issued by a Contracting State; conversion of foreign pilot licences and ratings issued by a Contracting State; and matters related thereto.

Authority to act as pilot of a balloon

69.01.2 (1) No person shall act as the pilot of a balloon whilst in or over any part of the Republic or the territorial waters thereof unless such person –

- (a) holds a valid appropriate pilot licence and rating issued by the Director or body designated for the purpose as the case may be in terms of this Part; or
- (b) holds a valid pilot licence and rating issued by an appropriate authority and validated in terms of this Part; or
- (c) if the balloon is of a foreign nationality, either --
 - holds a valid pilot licence and rating issued by the appropriate authority of the State of Registry, provided such State is a Contracting State; or
 - (ii) has obtained the permission of the Director or body designated for the purpose as the case may be, if the State of Registry is not a Contracting State.

(2) The holder of a free balloon pilot licence shall not exercise any privileges other than the privileges granted by the appropriate licence and rating or validation held by such holder.

(3) The holder of a validation of a foreign pilot licence shall adhere to all the requirements and limitations prescribed by this Part in respect of the holder of a free balloon pilot licence when exercising the privileges of his or her validation as a free balloon pilot.

Ratings for free balloon pilots

69.01.3 (1) The ratings for free balloon pilots are as follows -

- (a) Class rating:
 - Class 1 For balloons up to 120,000 ft³
 - (ii) Class 2 For balloons of 120,001 ft³ and up to 240,000 ft³
 - (iii) Class 3 For balloons of 240,001 ft³ and up to 360,000 ft³

- (iv) Class 4 For balloons of 360,001 ft³ and more.
- (b) Rating for special purposes:
 - (i) Commercial balloon pilot rating.

Competency

69.01.4 (1) No holder of a free balloon pilot licence or rating shall exercise the privileges granted by the licence or rating unless such holder maintains competency by complying with the appropriate requirements prescribed in these Regulations.

(2) (a) The holder of a free balloon pilot licence shall pay annually the applicable currency fee as prescribed in Part 187 on the anniversary date of his or her licence.

(b) The fee referred to in paragraph (a) shall be accompanied by a summary of the holder's logbook in the format prescribed in Document SA-CATS 69.

(c) Notwithstanding the provision of paragraph (a), no summary shall be required to accompany the currency fee if during the preceding 12 months a six-monthly or annual summary was submitted as part of an application for the issue, renewal or reissue of a rating.

(3)(a) If the Director, or the organisation designated for the purpose in terms of Part 149, as the case may bet suspects that a person, licensed in terms of this Part, has failed to maintain the minimum standard required to exercise the privileges of the free balloon pilot licence or any of the ratings that he or she holds, the Director or the said organisation may, after having afforded the licence holder an opportunity to respond, give in writing the licence holder reasonable notice of such suspicion.

(b) The Director or the said organisation may then require the person to undergo, by a date specified by the Director or the said organisation, the skill test or all or some of theoretical knowledge examinations prescribed in this Part in respect of such licence or rating.

(4) Should the tests or examinations, referred in sub-regulation (3), show that the standard of the licence or rating holder is below that required for the licence or rating concerned, the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall suspend the holder from exercising all or any of the privileges of that licence or rating until such time as the holder can show that he or she is again able to meet the skill or theoretical knowledge requirements for that licence or rating.

(5) If the person, who has been duly notified in terms of sub-regulation (3), fails without reasonable cause to present himself or herself by the specified date to undergo the test or examination prescribed, his or her standard shall be deemed to be below that required for the licence or rating concerned and the provisions of sub-regulation (4) shall with the necessary changes apply.

Medical fitness

69.01.5 (1) An applicant for, or holder of, a free balloon pilot licence shall hold an appropriate valid medical certificate issued in terms of Part 67 of these Regulations, and he or she shall

submit a copy thereof to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be.

- (2) The holder of a free balloon pilot licence issued in terms of this Part shall-
 - (a) not exercise the privileges of that licence
 - (i) unless that person -
 - (aa) holds an appropriate valid medical; and
 - (bb) complies with all medical endorsements on that medical certificate;
 - (ii) while he or she is aware of having a medical deficiency that would make him or her unable to meet the medical standards for his or her medical certificate, until he or she has been assessed medically fit again as required in terms of Part 67.

Language

69.01.6 The applicant for a free balloon pilot licence, to be issued under this Part, shall have demonstrated his or her ability to use the English language as set out in Document SA-CATS 69.

Logging of flight time

69.01.7 (1) The holder of a free balloon pilot licence shall maintain a record of all his or her flight time and instruction time. Electronic logbooks may be used, provided that the electronic data is printed onto paper at least every 90 days and the printed pages are filed sequentially in a binder.

(2) The form and information to be contained in the logbook, referred to in sub-regulation (1), and the manner in which such logbook are maintained, shall be as prescribed in Document SA-CATS 69.

(3) (a) Entries in pilot logbooks shall be made within seven days after the completion of the flight to be recorded.

(b) Where a pilot is engaged in flight operations away from the base where the pilot logbook is kept normally, the period specified in paragraph (a) may be extended to 48 hours after return to base.

(4) Pilot logbooks shall be retained by their holders for at least 60 months from the date of the last flight recorded therein.

(5) Flight time during which the holder of a free balloon pilot licence is -

- (a) receiving dual instruction shall be logged as dual flight time, and shall include a record of the air exercises undertaken;
- (b) the designated PIC shall be logged as PIC time.

(6) A person who is completing training towards a free balloon pilot licence may log as solo flight time only the flight time when the learner is the sole occupant of the aircraft.

(7) A free balloon instructor shall log the time spent in an aircraft occupying a pilot seat with access to the controls, whilst acting as a flight instructor, as flight instructor time, and may log all flight time whilst acting as such as PIC time.

(8) A free balloon instructor, acting as an examiner while occupying a pilot seat with access to the flight controls, may log all flight time whilst acting as such as PIC, and shall make the entry 'EXAMINER' in the remarks column. Such time shall not be logged as flight instructor time.

Recognition and validation of pilot licences and ratings issued by an appropriate Authority of a Contracting State

69.01.8 (1) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may recognise through validation pilot licences and ratings issued by or on behalf of an appropriate authority of a Contracting State where the standard of such foreign licences or ratings is deemed to be equivalent to, or higher than, the South African qualification being sought as listed in Document SA-CATS 69, and on the basis of competence by the holder.

(2) (a) Validation of such foreign licences shall apply for flights in South African aircraft, for a limited period, not exceeding one year.

- (b) Purposes for which a certificate of validation may be issued include:
 - (i) to exercise the privileges of a free balloon pilot licence in a South African registered aircraft;
 - to conduct demonstration flights in a South African registered aircraft;
 - (iii) to conduct endorsement training of South African flight crew; or
 - (iv) to participate in sporting or competition events, organised by or under the auspices of sections of the recognised national aero sport body.
- (c) The privileges of the validated foreign licence may not be exercised in commercial air transport operations.

(3) The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, may deern it necessary for an applicant for a validation to undergo additional theoretical or practical assessments to ensure compatibility with the relevant South African licensing standards.

Application for and issuing of a validation of a foreign pilot licence and ratings

69.01.9 (1) The holder of a licence or rating, similar to, or higher than, a free balloon pilot licence issued in terms of this Part or issued by or on behalf of the appropriate authority of a Contracting State, who desires to exercise the privileges of such licence or rating as PIC of a South African registered aircraft, may apply to the Director or the organisation designated for the purpose in terms of Part 149, as the case may be, in the appropriate prescribed form, for a validation of such pilot licence or rating.

- (2) No application for validation shall be considered by the Director if the applicant has -
 - (a) been refused a South African pilot licence or validation before; or
 - (b) had a South African pilot licence or validation revoked in the past,

for reasons other than failing a skill test, a proficiency test, or a theoretical knowledge test.

(3) Where, in the opinion of the Director or the designated organisation, the requirements for the issue of a pilot licence by a particular Contracting State are lower than those set by the Republic, the Director or the designated organisation may direct that the applicant meets the higher requirements before granting a validation.

(4) (a) A pilot licence and rating issued by or on behalf of an appropriate authority of a Contracting State may be validated-

- subject to the same restrictions which apply to such pilot licence and rating;
- subject to such conditions and limitations as the Director or the designated organisation may deem necessary in the interest of aviation safety;
- (iii) in accordance with and subject to the requirements and conditions as prescribed in Document SA-CATS 69; and
- (iv) in the appropriate prescribed form.

(b) The validation referred to in paragraph (a) shall not permit privileges in excess of the equivalent South African free balloon pilot licence or rating.

(5) The application for a validation referred to in sub-regulation (1) shall be accompanied by -

- (a) the appropriate fee as prescribed in Part 187;
- (b) a certified true copy of the pilot licence and rating to which the validation refers;
- (c) a certified true copy of a valid medical certificate or valid medical fitness certificate;
- (d) a certified true copy of the radiotelephony certificate (if applicable), or, in the case where the Contracting State does not prescribe such certificate for its licence holders, certified proof that the applicant has passed a practical skill test with an approved radio licence examiner;
- (e) a summary of the applicant's logbook, certified by the applicant to be a true reflection of the hours flown; and
- (f) any other document that may be prescribed in Document SA-CATS 69.

(6) The minimum knowledge, experience and skill requirements for the issue of a Certificate of Validation for the various pilot licences and ratings are those prescribed in Document SA-CATS 69 for the South African free balloon pilot licence and associated ratings.

(7) Where a proficiency check or skills test is required, such test shall be undertaken in a balloon of the class or type, appropriate to the free balloon pilot licence class for which a certificate of validation is sought.

(8) The holder of a validation shall comply with all the applicable provisions prescribed in these regulations.

(9) Subject to regulation 69.01.8(2)(c), the privileges of an additional rating may not be exercised in terms of the certificate of validation before the appropriate authority has endorsed such privileges on the applicant's foreign pilot's licence.

(10) The period of validity of a certificate of validation shall be the lesser of -

- (a) twelve months calculated from the date of issue of such certificate of validation; or
- (b) the period of validity of the pilot licence and rating to which the validation applies;

(11) In exceptional cases, such as demonstration flights or specific instruction on balloons new for the Republic, the Director or the designated organisation may consider the validation of a foreign licence to meet short-term operational requirements by exempting the applicant from all or some of the requirements of this Part, subject to conditions set by him, her or it for the particular situation.

Documentation

69.01.10 The Director or the organisation designated for the purpose in terms of Part 149, as the case may be, shall ensure that a free balloon pilot licence and rating is issued in such a manner that the validity thereof may readily be determined by any appropriate authority.

Register of licences

69.01.11 (1) The Director, or the organisation designated for the purpose in terms of Part 149, as the case may be, shall maintain a register of all free balloon pilot licences and ratings issued or validated in terms of this Part.

(2) The register shall contain the following particulars -

- (a) the full name of the holder of the licence;
- (b) date of birth;
- (c) the postal and residential address of the holder of the licence;
- (d) the number of the licence;
- (e) the date on which the licence was issued or validated;
- (f) particulars of the ratings held by the holder of the licence;
- (g) the nationality of the holder of the licence; and
- (h) in the case of a validation, the authority that issued the validated licence or rating.

(3) The particulars referred to in sub-regulation (2) shall be recorded in the register within seven days from the date on which the licence or rating is issued or validated.

(4) The register shall be kept in a safe place at the office of the Director or of the designated organisation.

(5) A copy of the register shall be furnished by the Director or the designated organisation on payment of the appropriate fee as prescribed in Part 187 to any person who requests the copy: Provided that postal and residential addresses may not be divulged to third parties, except to law enforcement officers or on instruction of the Courts.

69.01.12 Any *ab initio* training required by this Part shall be provided only by the holder of an ATO approval issued in terms of Part 141.

Payment of currency fee

69.01.13 (1) The holder of a free balloon pilot licence shall pay the currency fee as prescribed in Part 187, on the anniversary date of the licence.

(2) Where applicable, the payment referred to in sub-regulation (1) shall be accompanied by the summary as prescribed by regulation 69.01.13.

Radiotelephony certificates

69.01.14 (a) A holder of a free balloon pilot licence may also be required to be the holder of a radiotelephony licence as contemplated in section 31 of the Electronic Communications Act, 2005 (Act No. 36 of 2005).

(b) The requirements for their issue are prescribed in Document SA-CATS 69.

SUBPART 2: REQUIREMENTS FOR THE ISSUE OF A FREE BALLOON PILOT LICENCE

69.02.1 (1) An applicant for a free balloon pilot licence shall -

- (a) be 17 years or older;
- (b) hold a valid Class 4 medical certificate, issued in terms of Part 67;
- (c) hold at least a valid restricted certificate of proficiency in radiotelephony (aeronautical);
- (d) have successfully completed the training referred to in regulation 69.02.3;
- have successfully passed the theoretical knowledge examination referred to in regulation 69.02.4;
- (f) have undergone the skills test referred to in regulation 69.02.5; and
- (g) be a member of an approved aviation recreation organization.

Experience

69.02.2 An applicant for a free balloon pilot licence shall have completed -

- (a) not less than 16 hours free flying under instruction in a balloon of maximum volume of 120 000 ft³ (3 400 m³);
- (b) a minimum of eight flights;
- (c) a minimum of two tethers;
- (d) a minimum of afternoon flight;
- (e) a minimum of one fast flight (10 knots);
- (d) 10 balloon flights as part of the retrieve crew.

Training

69.02.3 An applicant for the issuing of a free balloon pilot licence shall have successfully completed the appropriate training as prescribed in Document SA-CATS 69.

Theoretical knowledge examination

69.02.4 An applicant for the issuing of a free balloon pilot licence shall have passed the appropriate written examinations as prescribed in Document SA-CATS 69 within a period of 12 months and have passed the last theoretical knowledge examination within six months preceding the skills test for a free balloon pilot licence.

Skills test

69.02.5 (1) An applicant for the issuing of a free balloon pilot licence shall have demonstrated to a licensed balloon pilot approved for such supervision by an organisation designated by the Director or body designated for the purpose as the case may be within 30 days of the last period of dual instruction the ability to perform, as PIC of a free balloon pilot, the procedures and manoeuvres as prescribed in Document SA-CATS 69, with a degree of competency appropriate to the privileges granted to the holder of a free balloon pilot licence.

(2) The skills test referred to in sub-regulation (1) shall be conducted in a balloon with a maximum capacity of 120 000 ft³ (3 400 m³).

Application for and issue of a free balloon pilot licence

69.02.6 (1) An application for a free balloon pilot licence must be made to the Director or body designated for the purpose as the case may be, on the appropriate prescribed form within 30 days of the practical skills test.

(2) The application referred to in sub-regulations (1) must be accompanied by --

- (a) at least a valid Class 4 medical certificate, issued in terms of Part 67;
- (b) the applicant's flying logbook proving that the applicant has completed the practical training referred to in regulation 69.02.3, and summarized in the format as prescribed Document SA-CATS 69;
- (c) proof that the applicant has passed the theoretical knowledge examination referred to in regulation 69.02.4;
- (d) valid restricted or higher grade radiotelephony operator's certificate;
- (e) skills test report;
- (f) two recent passport-size photographs of the applicant;
- (g) the appropriate fee as prescribed in Part 187; and
- (h) proof of membership of the relevant approved aviation recreation organization.

(3) The Director or body designated for the purpose as the case may be must issue a free balloon pilot licence if he or she is satisfied that the applicant complies with the requirements referred to in regulation 69.02.1.

(4) A free balloon pilot licence must be issued in the appropriate prescribed format .

(5) The holder of a free balloon pilot licence must, upon receipt of the licence, immediately affix his or her signature thereon in ink in the space provided for such purpose.

Renewal of a free balloon pliot licence

69.02.7 An applicant for the renewal of a free balloon pilot licence shall submit to the Director or body designated for the purpose as the case may be every two years –

- the relevant application on the appropriate form as prescribed by the Director or body designated for the purpose as the case may be;
- (b) his or her logbook showing that he or she has completed not less than two ascends with an average duration of one hour within the 12 months immediately preceding the date of the application;
- (c) the appropriate fee as prescribed in Part 187;
- (d) proof of membership of the relevant approved aviation recreation organization; and
- (e) copies of the last 2 pages of the logbook containing entries indicating a record of flight times including an annual summary indicting flight time per class and total time as well as certified copies of any endorsements entered into the logbook in the preceding 12 months.

Privileges and limitations of a free balloon pilot licence

69.02.8 (1) The holder of free balloon pilot licence may not exercise the privileges of that licence unless he or she –

- (a) is in possession of at least a valid Class 4 medical certificate, issued to him or her in terms of Part 67;
- (b) has submitted a copy of the medical certificate to the licensing authority, as required in (a); and
- (c) has renewed his or her licence in the preceding 12 months in terms of regulation 69.02.7.

(2) The holder of a free balloon pilot licence may -

(a) act as co-pilot of any free balloon on which a co-pilot is not a requirement;

- (b) not act as PiC of any balloon that is carrying passenger or freight for reward or hire, unless the requirements for the issue of a commercial free balloon ratings are met by complying with Subpart 69.03;
- act as a PIC of a free balloon in the course of his or her own or employer's (c) business, provided that -
 - (i) the flight is only incidental to that business or employment; and
 - the balloon does not carry passengers or freight for reward or hire. (ii)

Period of validity of a free balloon pilot licence

69.02.9 A free balloon pilot licence is valid for period of two years provided that it may be renewed in terms of regulation 69.02.7.

Maintenance of competency

69.02.10 The holder of a of a free balloon pilot licence shall not act as PIC of a free balloon carrying passengers unless he or she -

- has in the 90 days immediately preceding the flight carried out a flight of at least 45 (a) minutes duration; and
- (b) completed not less than 3 take-offs and landings which can be done in one flight.

Class ratings for free balloon pilot licence

69.02.11 (1) The class ratings by name for special purposes associated with free balloon pilots are:

- Class 1 For balloons up to 120,000 ft³ (a)
- Class 2 For balloons of 120,001 ${\rm ft}^3$ and up to 240,000 ${\rm ft}^3$ Class 3 For balloons of 240,001 ${\rm ft}^3$ and up to 360,000 ${\rm ft}^3$ (b)
- (c)
- Class 4 For balloons of 360,001 ft³ and more. (d)
- (2)An applicant for the issue of a class rating by name for free balloons shall -
 - (a) undergo a proficiency test with a licensed balloon pilot, approved for such supervision by an organisation designated by the Director or body designated for the purpose as the case may be, with the appropriate class rating wherein a high standard of vital action drill shall be required;
 - under direct supervision of a licensed balloon pilot, approved for such supervision (b) by an organisation designated by the Director or body designated for the purpose as the case may be, in the case of a single person balloon, perform at least 3 take-offs and 3 landings which may be done in one flight;
 - (c) perform any other exercise considered necessary;and

- (c) the take-offs and landings referred to in (b);
- (d) pass the technical examinations as prescribed in Document SA-CATS 69.

SUBPART 3: FREE BALLOON COMMERCIAL PILOT LICENCE

General

69.03.1 (1) The commercial operation of free balloons is regulated by Part 136.

(2) The operator of a commercial air transport balloon shall establish and maintain a ground and flight training programme for flight crew members in his or her employ.

(3) The provisions of this subpart shall apply in respect of full-time and part-time employed flight crew members.

Requirements for free balloon commercial pilot licence

69.03.2 An applicant for the issuing of a free balloon commercial pilot licence shall -

- (a) be not less than 21 years of age;
- (b) hold at least a valid Class 1 medical certificate issued in terms of Part 67;
- (c) hold at least a valid restricted radiotelephony operator's certificate;
- (d) hold a valid free balloon pilot licence issued in terms of this Part;
- (e) have acquired the experience referred to in regulation 69.03.3;
- (f) have successfully completed the training referred to in regulation 69.03.4;
- (g) have passed the theoretical knowledge examination referred to in regulation 69.03.5; and

Experience

69.03.3 (1) A flight crew member employed by the operator of a commercial air transport free balloon shall have successfully completed the initial training and skills tests as prescribed in terms of this Part through an approved ATO and –

- (a) be the holder of a free balloon pilot licence;
- (b) be the holder of a valid Class 1 medical certificate;
- (c) for free balloons up to 120,000 cu ft, -
 - have a minimum of 100 hours as PIC of any free balloon plus a minimum of 5 hours of experience on supervised operational flights; and
 - be the holder of a valid flight competence certificate for any hot air balloon up to 120,000 cu ft issued by an approved examiner;
- (d) for free balloons of 120,001 cu ft and up to 240,000 cu ft, have -
 - a minimum of 200 hours as PIC of any free balloon plus a minimum of 5 hours of experience on supervised operational hot air balloon flights on a hot air balloon of 120,000 cu ft or more; and

- (ii) be the holder of a valid flight test certificate for any hot air balloon up to 240,000 cu ft issued by an approved examiner;
- (e) for free balloons of 240,001 cu ft and up to 360,000 cu ft, -
 - (i) have a minimum of 300 hours as PIC of any free balloon of which a minimum of 100 hours must have been on balloons mentioned in paragraph
 (d) plus a minimum of 5 hours of experience on supervised operational hot air balloon flights on a hot air balloon of 240,000 cu ft or more; and
 - (ii) be the holder of a valid flight test certificate for any hot air balloon up to 360,000 cu ft issued by an approved examiner; and
- (f) for free balloons of 360,001 cu ft and more -
 - (i) have a minimum of 400 hours as PIC of any free balloon, of which 300 hours should be on free balloons 120,000 cu ft and greater (of which a minimum of 100 hours must have been on balloons mentioned in paragraph (e)) plus a minimum of 5 hours of experience on supervised operational hot air balloon flights on a hot air balloon of 360,001 cu. ft. or more; and
 - (ii) be the holder of a valid flight test certificate for any hot air balloon issued by an approved examiner.

Training

69.03.4 An applicant for the issuing of a free balloon commercial pilot licence shall have successfully completed the appropriate training as prescribed in Document SA-CATS 69.

Theoretical knowledge examination

69.03.5 An applicant for the issuing of a free balloon commercial pilot licence shall have passed the appropriate written examination as prescribed in Document SA-CATS 69.

Conversion training

69.03.6 The operator of a commercial air transport free balloon shall ensure that -

- (a) a flight deck crew member completes a type or class conversion course in accordance with the applicable requirements prescribed in terms of this Part, when changing from one type or class of balloon to another type or class for which a new type or class rating is required; and
- (b) a flight deck crew member completes the operator's type conversion course before commencing unsupervised operational flying
 - when changing to a balloon for which a new type or class rating is required; or
 - (ii) when employed by such operator.

Recurrent training and checking

69.03.7 (1) The operator of a commercial air transport free balloon shall ensure that --

- each flight deck crew member undergoes recurrent training and checking and that all such training and checking is relevant to the type or variant of balloon on which the flight deck crew member is licensed to operate;
- (b) a recurrent training and checking programme is included in the operations manual referred to in regulation 136.04.2; and
- (c) recurrent training is conducted by -
 - (i) a competent person, in the case of ground and refresher training; and
 - (ii) competent personnel in the case of emergency and safety equipment training and checking.

(2) The operator shall ensure that, in the case of the operator proficiency check referred to in sub-regulation (1)(a), each flight deck crew member undergoes such checks to demonstrate his or her competence in carrying out normal, abnormal and emergency procedures.

(3) Upon successful completion of the operator proficiency check referred to in subregulation (1)(a), the operator shall issue a certificate of competency to the flight deck crew member concerned, which certificate shall be valid for a period of twelve calendar months calculated from the last day of the calendar month in which such certificate is issued.

(4) The operator shall ensure that, in the case of emergency and safety equipment training and checking, each flight deck crew member undergoes training and checking on the location and use of all emergency and safety equipment carried.

(5) Upon successful completion of the emergency and safety equipment check referred to in sub-regulation (4), the operator shall issue a certificate of competency to the flight deck crew member concerned, which certificate shall be valid for a period of 12 calendar months calculated from the last day of the calendar month in which such certificate is issued.

(6) The operator shall ensure that, in the case of ground and refresher training, each flight deck crew member undergoes training every 12 calendar months.

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SUBPART 1: GENERAL PROVISIONS

Applicability

91.01.1 (1) Subject to the provisions of sub-regulation (2), this Part applies to -

- (a) aircraft operated within the Republic;
- (b) aircraft registered in the Republic and operated internationally;
- (c) persons acting as crew members of aircraft registered in the Republic; and
- (d) persons who are on board an aircraft operated under this Part.

(2) Additional rules to, and exemptions from, the provisions of this Part, are prescribed, in respect of -

- (a) the conveyance of dangerous goods, in Part 92;
- (b) corporate aviation operations, in Part 93;
- (c) operation of non-type certificated aircraft, in Part 94;
- (d) commercial operation of non-type certificated aircraft, in Part 96;
- (e) parachuting operations, in Part 105;
- (f) aeroplanes engaged in commercial air transport operations carrying more than 19 passengers, in Part 121;
- (g) helicopters engaged in commercial air transport operations, in Part 127;
- (h) helicopters engaged in external-load operations, in Part 133;
- aeroplanes engaged in commercial air transport operations carrying 19 or fewer passengers, in Part 135;
- (j) operations of balloons, in Part 136;
- (k) aircraft engaged in aerial work operations, in Part 137; and
- (I) aircraft engaged in air ambulance operations, in Part 138.

Authority of PIC and crew members

91.01.2 All persons on board an aircraft shall obey all lawful commands given by the PIC or a crew member of the aircraft for the purpose of ensuring the safety and security of such aircraft, of persons or property carried therein or good order and discipline on board the aircraft.

Authorisation of personnel to taxi aeroplanes

91.01.3 No owner or operator of an aeroplane shall permit the taxiing of, and no person shall taxi, an aeroplane on the movement area of an aerodrome unless the person at the controls of the aeroplane –

- (a) is the holder of a valid pilot licence; or
- (b) has received instruction in the taxiing of an aeroplane from, and has been declared competent to taxi an aeroplane by, the holder of a flight instructor rating or, in the case of a foreign aeroplane, a person authorized by an appropriate authority; and
- (c) if the person uses a radio apparatus, such person is authorized to use the radio apparatus; and
- (d) is conversant with the aerodrome layout, routes, signs, markings, lighting, air traffic service signals and instructions, phraseology and procedures, if required, and is able to conform to the standards required for safe aeroplane movements at such aerodrome: Provided the aeroplane does not enter the manoeuvring area in a case where radio communication is mandatory.

Search and rescue information

91.01.4 The PIC or in the case of an aircraft engaged in commercial air transport operations, the operator, shall ensure that all essential information concerning the search and rescue services in the area over which it is intended that the aircraft will be flown, is available on board the aircraft.

Information on emergency and survival equipment

91.01.5 (1) The owner or operator of an aircraft shall have available for immediate communication to rescue coordination centres, a list containing information regarding the emergency and survival equipment carried on board the aircraft.

(2) The minimum information to be contained in the list referred to in sub-regulation (1) is prescribed in Document SA-CATS 91.

Method of carriage of persons

91.01.6 No person shall be in any part of an aircraft in flight which is not a part designed for the accommodation of persons, unless temporary permission has been granted by the PIC to access such part of the aircraft –

- (a) for the purpose of taking action necessary for the safety of such aircraft or of any person, animal or goods therein; and
- (b) in which cargo or stores are carried, being a part which is designed to enable a person to have access thereto while such aircraft is in flight.

Admission to flight deck

91.01.7 (1) No person other than the assigned flight deck crew shall be carried on the flight deck of a South African registered aircraft except with the permission of the PIC.

(2) The admission of any person to the flight deck shall not interfere with the operation of the aircraft.

(3) Any person carried on the flight deck shall be made familiar with the applicable safety equipment and pertinent operational procedures.

Unauthorised carriage

91.01.8 No person shall conceal himself, herself or cargo on board an aircraft.

Portable electronic devices

91.01.9 (1) Subject to the provisions of sub-regulation (2), no owner, operator or PIC of an aircraft or person shall permit the operation of, or operate on board the aircraft during flight time, any portable electronic device which may adversely affect the performance of the systems and equipment of the aircraft.

(2) The provisions of sub-regulation (1) does not apply to -

- (a) a heart pacemaker;
- (b) a hearing aid;
- (c) a portable voice recorder;
- (d) an electric shaver;
- (e) portable equipment used to sustain life or similar equipment with the ability to generate an electrical charge for the purpose of pacing or resuscitation; or
- (f) any other portable electronic device, the operation of which -
 - (i) in the case of an aircraft engaged in a commercial air transport operation, the operator; or
 - (ii) in the case of an aircraft engaged in an operation other than a commercial air transport operation, the PIC,

has determined will not cause interference with the systems and equipment of the aircraft in which it is to be used.

(3) A portable electronic device referred to in sub-regulation (2)(c), (d) or (f) shall not be used by any person during the critical phases of flight.

Endangering safety

91.01.10 (1) No person shall, through any act or omission --

- (a) endanger the safety of an aircraft or person therein; or
- (b) cause or permit an aircraft to endanger the safety of any person or property.

(2) No person shall cause, by any means, a beam of light or other energy source, either visible or not, to be emitted towards any aircraft or air traffic control tower or any person therein such that there would be the potential for causing blindness or otherwise adversely affecting the ability of such person to safely carry out his or her duties.

Preservation of documents and records

91.01.11 The owner or operator of an aircraft who is required to retain any of the documents and records for the specified period referred to in Subpart 3, shall retain such documents for such specified period irrespective of the fact that such owner or operator, before the expiry of such period, ceases to be the owner or operator of the aircraft.

Use of time

91.01.12 (1) For the purposes of reporting and recording time, Coordinated Universal Time (UTC) shall be used and shall be expressed in hours and minutes and, when required, seconds of the 24-hour day beginning at midnight.

(2) A time check shall be obtained from an air traffic services unit, if possible, prior to operating a controlled flight and at such other times during the flight as may be necessary.

(3) Wherever time is utilized in the application of data link communications, it shall be accurate to within 1 second of UTC.

Additional flight crew member equipment

91.01.13 A flight crew member assessed as fit to exercise the privileges of a licence, subject to the use of suitable correcting lenses, shall have a spare set of the correcting lenses readily available when exercising those privileges.

Carriage of dangerous goods

91.01.14 The owner or operator of an aircraft shall not carry dangerous goods during flight time unless such goods are carried in accordance with the provisions of Part 92.

Passenger intoxication and unruly behaviour

91.01.15 (1) No person may board an aircraft while under the influence of alcohol or any psychoactive substance such that the safety of the aircraft or its occupants is, or is tikely to be, endangered.

(2) No person may consume alcohol or any psychoactive substance while on board an aircraft if, as a result of such consumption, the effects are, or are likely to, endanger the safety of the aircraft or its occupants.

(3) No person may act in any manner that will, or is likely to, endanger the aircraft or its occupants.

Psychoactive substances

91.01.16 (1) Subject to sub-regulation (2), no person shall act in the capacity of any crew member, ground support, servicing or maintenance personnel, or perform any function or participate in any decision-making process that could affect aviation safety, where such person is, or is likely to be impaired by any psychoactive substance.

(2) Where a medication that may be considered to be a psychoactive substance has been prescribed by a medical doctor, the duties in sub-regulation (1) may be undertaken provided an aviation medical examiner so designated in terms of Part 67 certifies what duties may be safely accomplished while taking such medication.

(3) A person who has been prescribed medication that may adversely affect performance or is otherwise of the opinion that his or her performance may be impaired through the use of medication or combinations of medication shall so inform the operator.

SUBPART 2: CREW

Crew composition and qualifications

91.02.1 (1) The number and composition of the flight crew shall not be less than the number and composition specified in the AFM referred to in regulation 91.03.2 or any other document defining the certification of the aircraft.

(2) In the case of aircraft originally certified with a passenger seating capacity greater than 19 and not involved in commercial air transport operations, the Director may require the inclusion of cabin crew members for the safe operation of the aircraft. The complement, training and checking requirements of such crew members are prescribed in Document SA-CATS 91.

(3) The flight crew members and, if applicable, the cabin crew members, shall –

- (a) be competent and qualified to perform the duties assigned to them;
- (b) hold the appropriate valid crew licences, ratings and certificates; and
- (c) have the ability to speak and understand the language used for aeronautical radiotelephony communications for the routes being flown.

(4) The flight crew shall include at least one flight crew member who holds a valid radiotelephony operator licence or an equivalent document issued by an appropriate authority, authorising such member to operate the type of radio transmitting equipment to be used.

(5) In the case of a multi-pilot crew, the owner or operator shall designate one pilot among the flight crew as PIC of the aircraft and the PIC may delegate the conduct of the flight to another suitably qualified pilot.

(6) The owner or operator shall ensure that each flight and cabin crew member meets the requirements of sub-regulation (3).

(7) Where the Director has determined the need for cabin crew members as prescribed in sub-regulation (2), the owner or operator of that aircraft shall –

- (a) ensure each cabin crew member is seated and secured in the seat prescribed by regulation 91.04.14(2) during take-off, landing or as otherwise directed by the PIC; and
- (b) ensure each cabin crew member receives training prior to his or her first flight in that aircraft and annual recurrent training thereafter.

Crew member emergency duties

91.02.2 (1) The owner or operator and, where appropriate, the PIC of a multi-crew aircraft shall assign to each crew member concerned, the necessary functions to be performed in an emergency or a situation requiring emergency evacuation.

(2) The functions referred to in sub-regulation (1) shall be such as to ensure that any reasonably anticipated emergency can be adequately dealt with and shall take into consideration the possible incapacitation of individual crew members.

Crew member responsibilities

91.02.3 (1) No person shall act as a crew member of an aircraft -

- (a) whilst using any psychoactive substance which may affect his or her faculties in any manner that may jeopardize safety;
- (b) if the crew member knows or suspects that he or she is suffering from or, having due regard to the circumstances of the flight to be undertaken, is likely to suffer from fatigue to such an extent that it may endanger the safety of the aircraft or its occupants; or
- (c) if the crew member is in any doubt of being able to accomplish his or her assigned duties on board the aircraft.
- (2) No crew member shall -
- (a) consume any alcohol less than 8 hours prior to commencing standby for operational duty or commencing operational duty, which operational duty shall be deemed to commence at the specified reporting time, if applicable;
- (b) commence an operational duty period while the concentration of alcohol in his or her blood, is more than 0,02 gram per 100 millilitres; or
- (c) consume alcohol during flight duty or whilst on standby, or within eight hours after an accident or reportable incident involving the aircraft, unless the accident or incident was not related to his or her duties.

(3) No person shall act as a flight crew member of an aircraft if, prior to each flight, the expected flight time exceeds, or is likely to exceed, the permissible aggregate of –

- (a) for all flying -
 - (i) for pilots not subject to an approved flight time and duty period scheme, 10 hours within a 24 hour period;
 - (ii) 400 hours, during the preceding 90 days;
 - (iii) 700 hours, during the preceding six months; or
 - (iv) 1000 hours, during the preceding 12 months;
- (b) in the case of flight instructors conducting ab initio or any training towards an initial rating or licence, six hours within one calendar day: Provided that, for the purposes of computing flight time in meeting the limitation referred to in paragraph (a)(i), each flight hour spent in such training shall be deemed to be one and one-half (1½) hours flight time;
- (c) as part of a multi-pilot crew for a flight to be undertaken wholly or partly under IFR -
 - (i) 120 hours, during the preceding 30 days; or
 - (ii) 300 hours, during the preceding 90 days; or
- (d) as the sole pilot of an aircraft for a flight to be undertaken wholly or partly under IFR,100 hours during the preceding 30 days.

(4) No person shall act as a cabin crew member of an aircraft for which the Director has determined the need for cabin crew members, as prescribed in regulation 91.02.1(2), if prior to

each flight the expected flight time exceeds, or is likely to exceed, the permissible aggregate of --

- (a) 400 hours, during the preceding 90 days;
- (b) 700 hours, during the preceding six months; or
- (c) 1000 hours, during the preceding 12 months.

Recency

91.02.4 (1) A pilot shall not act as PIC of an aircraft, or second-in-command (SIC) of an aircraft required to be crewed by more than one pilot, carrying passengers by day, unless such pilot has personally, within the 90 days immediately preceding the flight, carried out either by day or by night at least three take-offs and three landings in the same class or, if a type-rating is required, type or variant of aeroplane, and in the case of a helicopter three circuits including three take-offs and three landings in the same type of helicopter as that in which such flight is to be undertaken. The landings required by this sub-regulation may be completed in a FSTD approved for the purpose. In the case of a tail-wheel aeroplane, each landing shall be carried out to a full stop.

(2) A pilot shall not act as PIC of an aircraft, or SIC of an aircraft required to be crewed by more than one pilot, carrying passengers by night, unless the pilot has personally, within the 90 days immediately preceding the flight, carried out at least three take-offs and three landings by night in the same class or, if a type-rating is required, type or variant of aeroplane, and in the case of a helicopter three circuits including three take-offs and three landings in the same type of helicopter as that in which such flight is to be undertaken. The landings required by this sub-regulation may be completed in a FSTD approved for the purpose. In the case of a tail-wheel aeroplane, each landing shall be to a full stop.

(3) Where the take-off and landing requirement referred to in sub-regulations (1) and (2) have been satisfied in a multi-engine aircraft, the requirement shall be deemed to have been met in respect of single-engine aircraft as well.

(4) A pilot shall not act as PIC or SIC of an aircraft on an instrument approach to an aerodrome in IMC unless the pilot has, within the 90 days immediately preceding such approach procedure or procedures established by the Director or an appropriate authority –

- (a) executed at least two approaches in an aircraft or a FSTD approved for the purpose or a combination of aircraft and FSTD approved for the purpose, either under actual or simulated conditions, with reference to flight instruments only; or
- (b) undergone the appropriate skill test as prescribed in regulation 61.15 of Part 61 of these Regulations.

Crew members at duty stations

91.02.5 (1) In the case of a multi-crew aircraft -

(a) each crew member shall be at his or her assigned station or seat, properly secured by all seat belts and shoulder harnesses provided, during take-off and landing and whenever deemed necessary by the PIC in the interests of aviation safety: Provided that the shoulder harness of a flight crew member not occupying a pilot seat may be unfastened if it interferes with the performance of his or her duties, but the seat belt must remain fastened;

- (b) each crew member shall keep his or her seat belt fastened while at his or her assigned station, during phases of the flight, other than the phases referred to in paragraph (a);
- (c) each flight crew member required to be on flight deck duty, shall be at his or her assigned station, during take-off and landing;
- (d) all flight crew members on flight deck duty shall remain at their assigned stations during all phases of the flight other than the phases referred to in subparagraph (c): Provided that -
 - a flight crew member may leave his or her assigned station, in the course of the performance of his or her duties with regard to the operation of the aircraft or for physiological needs; and
 - (ii) at least one suitably qualified pilot remains at the controls of the aircraft at all times; and
- (e) the PIC or, where applicable, the operator shall ensure that flight and, if applicable, cabin crew members do not perform any activities during critical phases of the flight other than those required for the safe operation of the aircraft.

(2) In the case of a single-pilot aircraft, the PIC shall, during all phases of the flight, remain at the controls of the aircraft.

Laws, regulations and procedures

91.02.6 (1) The PIC of an aircraft shall be familiar with the laws, regulations and procedures pertinent to the performance of his or her duties, prescribed for the areas to be traversed, the aerodromes to be used and the air navigation facilities relating thereto and shall ensure that other members of the flight crew are familiar with such laws, regulations and procedures as are pertinent to the performance of their respective duties in the operation of the aircraft.

(2) Subject to sub-regulation (3), the PIC of an aircraft shall comply with the regulations contained in this Part unless they conflict with the rules published by the State having jurisdiction over the territory over flown: Provided that if any regulation of this Part is more restrictive and may be followed without violating the rules of that State, it shall be complied with.

(3) In an emergency situation which endangers, or is likely to endanger the aircraft, persons on board such aircraft, or persons or property on the surface, the PIC shall take any action which he or she considers necessary under the circumstances.

(4) If a PIC deviates from any law, regulation or operational procedure in an emergency situation referred to in sub-regulation (3), he or she shall notify the appropriate authority of the State within or over the territory of which the deviation occurs, of such deviation without delay.

(5) If the appropriate authority of the State within or over the territory of which the deviation occurs, requests the PIC to submit a report on such deviation, the PIC shall submit the report containing full details of the deviation –

- (a) to such appropriate authority, within the period specified by such appropriate authority,; and
- (b) if the deviation occurred in a foreign State, to the Director, within 10 days from the date on which such report is requested by the appropriate authority of such State,.

Dutles of PIC regarding flight preparation

91.02.7 (1) The PIC of an aircraft shall not commence a flight unless he or she is satisfied that -

- (a) the aircraft is airworthy;
- (b) the instruments and navigation, communication and other equipment required for the particular type of operation to be undertaken, are installed and are serviceable and functioning correctly, except as provided for in the MEL, if any;
- (c) the aircraft has been released to service in accordance with Part 43;
- (d) the mass of the aircraft at any time does not exceed the MCM calculated from the performance information provided in the AFM referred to in regulation 91.03.2, in terms of which the operating limitations referred to in Subpart 9 are complied with;
- (e) the load carried by the aircraft is properly secured, fit to be conveyed in accordance with Part 92 and is so distributed that the centre of gravity is within the limits prescribed in the AFM referred to in regulation 91.03.2;
- (f) an ATS flight plan, referred to in regulation 91.03.4, has been properly completed and filed with the appropriate ATSU, if such flight plan is required in terms of regulation 91.03.4;
- (g) all the documents and forms required to be carried on board are carried as specified in regulation 91.03.1;
- (h) a check has been completed indicating that the operating limitations referred to in Subpart 8 will not be exceeded;
- the search and rescue information, referred to in regulation 91.01.4, is available on board;
- (j) the requirements in respect of fuel, oil, oxygen, weather, minimum safe altitudes, aerodrome operating minima and availability of alternate aerodromes for the route being flown and any likely alternatives, whether flown under instrument or VFR, are complied with;
- (k) the aerodrome operating minima are not less than the operating minima of the aerodrome being operated to or from, established by the appropriate authority of the State in which the aerodrome is located, unless such appropriate authority approves lower aerodrome operating minima;
- (I) current and suitable IFR or VFR, as applicable, charts and related publications required to –
 - (i) depart the place of origin;

- (ii) operate on the route to the destination, or other route that a flight could reasonably be expected to be diverted to; and
- (iii) arrive at the destination or any alternate,

are carried on board;

- (m) the external surfaces are checked prior to take-off for any deposit which might adversely affect the performance or controllability of the aircraft, unless otherwise permitted in the AFM referred to in regulation 91.03.2, and if such deposit is found, to have it removed;
- (n) according to the information available to him or her --
 - (i) in respect of an aeroplane, the condition of the runway intended to be used will not prevent a safe take-off at departure or a safe landing at the destination aerodrome or alternate aerodrome, as applicable; and
 - the weather at the departure and arrival aerodromes and en route, including any possible alternate aerodromes or routes, will not preclude safe completion of the flight;
- (o) the RVR or visibility in the take-off direction of the aircraft is equal to, or better than, the applicable minimum;
- (p) the flight crew members are properly qualified for the specific operation to be undertaken, except that for commercial air operations, the air operator shall ensure that the flight crew are properly qualified;
- (q) an adequate and suitable aerodrome is available for take-off, en route and destination, should it become inadvisable to continue to or land at the destination aerodrome; and
- (r) if flight in RVSM airspace is contemplated
 - (i) the aircraft has been approved for RVSM operations;
 - (ii) the crew has been trained and is otherwise qualified for the flight;
 - (iii) the minimum required equipment pertaining to height-keeping and alerting systems is installed and serviceable; and
 - (iv) no airframe or operating restrictions prevent operation in the particular RVSM airspace.
- (2) The PIC of an aircraft shall ---
- (a) not commence a flight unless he or she has ascertained through the relevant NOTAM), A(C, IAIP or IAIP Supplement that the aerodromes, navigation aids and communication facilities are adequate for the manner in which the flight is to be conducted;
- (b) prior to take-off from an aerodrome at which an ATSU is in operation, determine through the aeronautical information services available from the unit or any other reliable source, that the unserviceability of any aerodrome, navigation aids or communication facilities required for such flight, will not prejudice the safe conduct of the flight; and

(c) advise an ATSU, as soon as it is practical to do so, of any inadequate facilities encountered in the course of operations.

(3) Where a load and trim sheet is required in terms of these regulations, the load and trim sheet shall be acceptable to and countersigned by the PIC before a flight commences: Provided that if the load and trim sheet is submitted to the PIC by electronic data transfer, commencement of the flight shall be deemed to be the acceptance thereof by such PIC.

Duties of PIC regarding flight operations

91.02.8 (1) The PIC of an aircraft shall, whether manipulating the controls or not, be responsible for –

- (a) the operation, safety and security of the aircraft, crew members, passengers and cargo in accordance with these Regulations while he or she is in command;
- (b) operational control of the aircraft unless otherwise provided for in terms of Part 93, 121, 127 or 135 under an approved operational control system;
- (c) the conduct of crew members and passengers carried; and
- (d) the maintenance of discipline by all persons on board.
- (2) The PIC of the aircraft shall have the authority-
- (a) to give such commands he or she deems necessary in the interest of the safety of the aircraft, persons or property; and
- (b) to disembark any person or cargo which in his or her opinion, represents a potential hazard to the safety of the aircraft, persons or property.
- (3) The PIC of the aircraft shall ensure that all passengers are informed as to -
- (a) when and how oxygen equipment is to be used, if the carriage of oxygen is required;
- (b) the location and use of life jackets or equivalent individual flotation devices, where the carriage thereof is required;
- (c) the location and method of opening emergency exits;
- (d) when seat belts are to be fastened;
- (e) when smoking is prohibited;
- (f) when portable electronic devices may be used;
- (g) the existence and location of the passenger safety features card, if carried on board; and
- (h) before take-off, the location and general manner of use of the relevant emergency equipment carried for collective use and, when an emergency arises, instruct the passengers to take such emergency action as may be appropriate.
- (4) The PIC of an aircraft shall –

- (a) ensure that the pre-flight inspection has been carried out, and that the checklists, and where applicable, the flight deck procedures and other instructions regarding the operation of the aircraft, the limitations contained in the AFM referred to in regulation 91.03.2 or equivalent certification document, are fully complied with at the appropriate times during a flight;
- (b) decide whether or not to accept an aircraft with unserviceabilities allowed by the CDL or MEL, where applicable;
- (c) determine that aircraft performance will permit the take-off and departure to be carried out safely;
- (d) ensure that, before take-off and landing and whenever, by reason of turbulence, any emergency occurring during a flight or whenever deemed necessary in the interest of aviation safety the precaution is considered necessary, the PIC shall ensure that –
 - (i) all persons on board the aircraft are secured in their seats by means of the seat belts or shoulder harnesses provided; and
 - equipment and baggage are properly secured and all exit and escape paths are unobstructed.
- (e) when replanning, whilst in flight, to proceed along a route or to a destination other than the route or destination originally planned, shall amend the OFP, if such a plan was required in terms of regulation 91.02.7(1)(f), and notify the nearest ATSU of such change;
- (f) not continue towards the aerodrome of intended landing unless the latest available information indicates that at the expected time of arrival, a landing can be effected at that aerodrome or at least one destination alternate aerodrome, in compliance with the operating minima established in accordance with regulation 91.07.5;
- (g) report any accident or incident involving the aircraft in accordance with Part 12, unless the PIC is incapacitated or an operator has established another means of reporting accidents or incidents, in which case the operator shall initiate the report;
- (h) report any dangerous goods accident or incident involving the aircraft in accordance with Part 92;
- (i) if the aircraft is endangered in flight by a near collision with any other aircraft or object, faulty air traffic procedure or lack of compliance with applicable procedures by an ATSU or a flight crew member or a failure of ATS facilities, submit an ATS incident report as prescribed by regulation 12.02.2;
- (j) record any technical defect and the exceeding of any technical limitation which occurred while he or she was responsible for the flight, in the flight folio;
- (k) if a potentially hazardous condition such as bird accumulation, an irregularity in a ground or navigation facility, meteorological phenomena, a volcanic ash cloud or a greater than normal radiation level is observed during flight, notify an ATSU as soon as possible;

(I) if the aircraft is equipped with an ELT, prior to engine shut-down at the end of each flight as part of the post-flight checks, tune the VHF receiver to 121,5 MHz to listen for ELT

activation. If the ELT has been activated inadvertently as the result of a hard landing or for other reasons, this shall be reported-

- (i) immediately through the nearest ATSU to the rescue coordination centre; and
- (ii) in the appropriate flight log as maintenance may be required before it is returned to service; and
- (m) report any occurrence of height keeping errors encountered in a RVSM environment, as prescribed in paragraph (7) of section 8 of technical standard 91.07.31 of Document SA-CATS 91.
- (5) The PIC of the aircraft shall ensure that --
- (a) breathing oxygen is available to crew members and passengers if flights in a nonpressurised aircraft are contemplated above 10 000 feet and up to 12 000 feet in excess of 120 minutes intended flight time, or above 12 000 feet; and
- (b) breathing oxygen is carried in sufficient quantities for all flights at such altitudes where a lack of oxygen might result in impairment of faculties of crew members or harmfully affect passengers.
- (6) The PIC of the aircraft shall not -
- (a) require a crew member to perform any duties during a critical phase of the flight, except those duties required for the safe operation of the aircraft;
- (b) permit any activity during a critical phase of the flight which could distract any crew member from the performance of his or her duties or which could interfere in any way with the proper conduct of those duties; and
- (c) commence a flight in the event a crew member is incapacitated by any cause such as injury, fatigue, sickness or the effects of any psychoactive substance or continue a flight beyond the nearest suitable aerodrome in the event of a flight crew member becoming unable to perform any essential duties as a result of fatigue, sickness or lack of oxygen.
- (7) The PIC of an aircraft which is being subjected to unlawful interference -
- (a) shall notify the appropriate ATSU of this fact, any significant circumstances associated therewith and any deviation from the current flight plan necessitated by the circumstances, in order to enable the ATSU to give priority to the aircraft and to minimize conflict with other aircraft;
- (b) shall attempt to land as soon as practicable at the nearest suitable aerodrome or at a dedicated aerodrome assigned by the appropriate authority unless considerations aboard the aircraft dictate otherwise; and
- (c) immediately following the incident unless unable, in which case the owner or operator of the aircraft shall report the act of unlawful interference with the operation of the aircraft or the authority of the PIC –

- (i) if the act of unlawful interference occurs within the Republic, to the Director; or
- (ii) if the act of unlawful interference occurs within or over the territory of a foreign State, to the appropriate authority of the State and the Director.

(8) The PIC of an aircraft, that is equipped with a flight deck door, shall ensure that at all times from the moment the passenger entry doors are closed in preparation for departure until they are opened on arrival, that the flight deck door is closed and locked from within the flight deck.

SUBPART 3: DOCUMENTATION AND RECORDS

Documents to be carried on board

91.03.1 The owner or operator of an aircraft shall ensure that the following documents, or certified true copies thereof, are carried on board the aircraft on each individual flight –

- (a) If the aircraft is engaged in an international flight
 - (i) the certificate of registration;
 - the certificate of airworthiness or, for non-type certificated aircraft, an authority to fly;
 - (iii) the appropriate licence and medical certificate of each crew member;
 - (iv) the general declaration;
 - (v) the aircraft radio station licence;
 - (vi) if passengers are carried, the passenger manifest, unless the information is included in the general declaration referred to in subparagraph (iv);
 - (vii) if cargo is carried, a manifest and detailed declaration of the cargo;
 - (viii) the certificate of release to service;
 - (ix) the navigation log when a navigator is carried;
 - (x) the AFM, referred to in regulation 91.03.2, or an equivalent document, which document shall include the statements referred to in technical standard 91.07.31 5(5)(a) of Document SA-CATS 91, if flight in RVSM airspace is contemplated;
 - (xi) the mass and balance report;
 - (xii) the flight folio;
 - (xiii) the MEL, if applicable;
 - (xiv) the noise certificate, if such certificate has been issued for the type of aircraft; and
 - (xv) a list of visual signals and procedures for use by intercepting and intercepted aircraft;
 - (xvi) if a flight in RVSM airspace is contemplated -

- (aa) a valid RVSM licence endorsement issued by the Director; and
- (bb) if applicable, a valid RVSM operational approval for the particular RVSM airspace; and
- (xvii) where applicable, a licence to operate air services, FOP or equivalent document giving authority for the flight.
- (b) if the aircraft is engaged in a domestic flight --
 - (i) the certificate of registration;
 - (ii) the certificate of airworthiness;
 - (iii) the appropriate licence and medical certificate of each crew member;
 - (iv) the aircraft radio station licence;
 - (v) the certificate of release to service;
 - (vi) the AFM referred to in regulation 91.03.2 or an equivalent document;
 - (vii) the mass and balance report;
 - (viii) the flight folio;
 - (ix) the MEL, if applicable;
 - (x) the noise certificate, if such certificate has been issued for the type of aircraft;
 - (xi) the list of visual signals and procedures for use by intercepting and intercepted aircraft; and
 - (xii) the licence to operate the service, if required

Aircraft flight manual

91.03.2 (1) The owner or operator of an aircraft shall keep an approved AFM for each aircraft of which he or she is the owner or operator and shall keep such manual current with amendments and implement changes issued by an appropriate authority.

(2) The flight crew members of the aircraft shall, on each flight, operate such aircraft in accordance with the AFM, unless an unforeseen emergency dictates otherwise.

Aircraft checklist

91.03.3 (1) The owner or operator of an aircraft shall establish and make available to the flight crew and other personnel in his or her employ needing the information, a checklist system for the aircraft, to be used by such flight crew and other personnel for all phases of the operation under normal, abnormal and emergency conditions.

(2) The PIC shall ensure the checklists used on board the aircraft are complied with and utilised having due regard to human factors principles.

(3) The checklists required in terms of sub-regulation (1) shall be designed having due regard to human factors principles as prescribed in Document SA-CATS 91.

Air traffic service flight plan and associated procedures

91.03.4 (1) The owner or operator of an aircraft shall ensure that an ATS flight plan is completed if required in terms of sub-regulation (4).

(2) The items to be contained in the ATS flight plan shall be as prescribed Document SA-CATS 91.

(3) The ATS flight plan shall be filed with the appropriate ATSU unless other arrangements have been made for submission of repetitive flight plans and such unit shall be responsible for transmitting such ATS flight plan to all ATSUs concerned with the flight.

- (4) The ATS flight plan shall be filed in respect of --
- (a) all flights to be conducted in controlled or advisory airspace: Provided that this requirement shall not apply in respect of –
 - a local flight;
 - (ii) a flight crossing an airway or advisory routes at right angles; or
 - (iii) a VFR flight entering or departing from an aerodrome traffic zone or control zone, from or to an unmanned aerodrome and where no other controlled or advisory airspace will be entered during the flight;
- (b) an international flight;
- (c) all flights undertaken in terms of a Class 4 or Class II licence issued in terms of the Air Services Licensing Act, No. 115 of 1990 or the International Air Services Act, No. 60 of 1993;
- (d) any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate the provision of flight information, alerting and search and rescue services; and
- (e) any flight within or into designated areas, or along designated routes, when so required by the appropriate ATS authority to facilitate coordination with appropriate military units or with ATSUs in adjacent States in order to avoid the possible need for interception for the purpose of identification.

(5) An ATSU may instruct a flight for which an ATS flight plan is required in terms of subregulation (4) and for which an ATS flight plan has not been filed, to clear or to remain clear of controlled airspace, and not to cross the border of the Republic or to enter its airspace until such time as the required ATS flight plan has been filed.

(6) Unless otherwise authorized by the responsible ATSU, an ATS flight plan for a flight to be conducted in controlled or advisory airspace, shall be filed --

- (a) for domestic flights, at least 30 minutes before departure;
- (b) for international flights, at least 60 minutes before departure; or
- (c) if filed during flight while outside controlled or advisory airspace for a flight to be conducted in such airspace, it shall be filed with the responsible ATSU at least 10

minutes before the aircraft is estimated to reach the intended point of entry into the controlled or advisory airspace or the point of crossing the airway or advisory route.

(7) The PIC of an aircraft operating an IFR or controlled VFR flight shall ensure that all changes which become applicable to an ATS flight plan before departure or in flight are reported, as soon as practicable, to the responsible ATSU. For other VFR flights, changes regarding fuel endurance or total number of persons carried on board shall, as a minimum, be reported.

(8) If an ATS flight plan has been filed with an ATSU prior to departure, and is not activated with an ATSU within one hour of original estimated time of departure or amended estimated time of departure, the ATS flight plan shall be regarded as cancelled and a new ATS flight plan shall be filed.

(9) Where an ATSU is not in operation at the aerodrome of intended landing, a report of arrival as prescribed in Document SA-CATS 91 shall be submitted to an ATSU, by the quickest means of communication available, immediately after landing, in respect of a flight for which an ATS flight plan was submitted and not as yet closed or for which search and rescue notification was requested and designated with a particular ATSU.

(10) When communication facilities at the arrival aerodrome are inadequate and alternate arrangements for the handling of arrival reports on the ground are not available, the PIC shalt, prior to landing the aircraft or immediately thereafter, if practicable, transmit to the appropriate ATSU, a message comparable to an arrival report, in respect of a flight for which an ATS flight plan was submitted and not as yet closed or for which a search and rescue notification was requested with a nominated ATSU.

(11) Subject to the provisions of sub-regulation (12), the PIC shall ensure that the aircraft adheres to the current ATS flight plan filed for a controlled flight, unless a request for a change has been made and accepted by the ATSU responsible for the controlled airspace in which the aircraft is operating, or unless an emergency situation arises which necessitates immediate action, in which event the responsible ATSU shall, as soon as circumstances permit, be notified of the action taken and that such action was taken under emergency authority.

(12) In the event of a controlled flight inadvertently deviating from its current ATS flight plan, the following action shall be taken –

- (a) if the aircraft is off track, action shall be taken forthwith to adjust the heading of the aircraft to regain track as soon as practicable;
- (b) if the average true airspeed at cruising level between reporting points varies, or is expected to vary, from that given in an ATS flight plan by approximately five per cent of the true airspeed, the responsible ATSU shall be so informed;
- (c) if the estimated time at the next applicable reporting point, flight information regional boundary, or aerodrome of intended landing, whichever comes first, is found to be in error in excess of three minutes from that notified to the responsible ATSU, a revised estimated time shall be notified to such ATSU as soon as possible; or
- (d) if the aircraft deviates from its altitude, action shall be taken forthwith to correct the altitude of the aircraft.

(13) When an automatic dependent surveillance (ADS) agreement is in place, the ATSU shall be informed automatically via data link whenever changes occur beyond the threshold values stipulated by the ADS event contract.

(14) If prior to departure it is anticipated that, subject to a reclearance in flight, a decision may be taken to proceed to a revised destination aerodrome, the appropriate ATSUs shall be so notified by the insertion in the flight plan of information concerning the revised route, where known, and the revised destination. The revised destination shall be subject to the fuel and oil provisions of regulation 91.07.12.

Flight folio

91.03.5 (1) The owner or operator of a South African registered aircraft shall ensure that the aircraft carries a flight folio or any other similar document which meets the requirements of and contains the information as prescribed in Document SA-CATS 91, at all times.

(2) The flight folio shall be kept up-to-date and maintained in a legible manner by the PIC.

(3) All entries shall be made immediately upon completion of the occurrence to which they refer.

(4) In the case of maintenance being undertaken on the aircraft, the entry shall be certified by the person taking responsibility for the maintenance performed.

(5) The owner or operator shall retain the flight folio for a period of five years calculated from the date of the last entry therein.

Fuel record

91.03.6 (1) The owner of operator of an aircraft shall maintain fuel records for each flight undertaken by the aircraft under the control of such owner or operator.

(2) The PIC of the aircraft shall enter the fuel and oil records referred to in sub-regulation (1) in the flight folio.

Certificate of release to service

91.03.7 (1) No owner or operator of an aircraft shall operate -

- (a) a South African registered aircraft without holding a valid certificate of release to service signed by the holder of an appropriately rated AME licence or AMO approval; or
- (b) a foreign alrcraft without holding a valid certificate, equivalent to the certificate referred to in paragraph (a), issued by an appropriate authority.
- (2) The owner or operator shall –
- (a) ensure that one copy of the certificate of release to service or equivalent certificate is carried on board the aircraft to which it relates and, in the case of a South African registered aircraft, a second copy shall be filed at the normal station of the aircraft; and
- (b) retain the certificate of release to service for a period of 12 months calculated from the date of issue of such certificate of release to service.

Flight recorder records

91.03.8 (1) The owner or operator of an aircraft on which a flight recorder is carried, shall --

- (a) in the case of an accident or incident involving such aircraft, preserve the original recording, as retained by the flight recorder, for a period of not less than 60 days calculated from the date of the accident or incident, or until permission for disposal of such recording has been given by the investigator-in-charge or an appropriate authority, whichever is the latter date; and
- (b) when the Director so directs, preserve the original recording, as retained by the flight recorder, for a specified period calculated from the date of such direction.

(2) If an aircraft is required under this Part to be fitted with a FDR, the owner or operator of the aircraft shall –

- (a) have the recording for the period of operating time as required by sub-regulations (1)(a) and (b): Provided that for the purpose of testing and maintaining a FDR one hour of the oldest recorded material at the time of testing may be erased;
- (b) keep a recording of at least one representative flight made within the preceding 12 months which includes a take-off, climb, cruise, descent, approach and landing, together with a means of identifying the recording with the flight to which it relates; and
- (c) keep a document which represents the information necessary to retrieve and convert the stored data into engineering units.

(3) The owner or operator of an aircraft on which a flight recorder is carried shall, within a reasonable time after being requested to do so by the Director or an appropriate authority, produce any recording made by such flight recorder which is available or has been preserved.

(4) A CVR recording may be used for purposes other than for the investigation of an accident or incident only with the consent of all the flight crew members concerned.

(5) The FDR recordings may be used for purposes other than the investigation of an accident or incident which is subject to mandatory reporting, only when such recordings are –

- (a) used by the owner or operator for airworthiness or maintenance purposes only;
- (b) de-identified; or
- (c) disclosed under secure procedures.

Logbooks

91.03.9 (1) The following logbooks shall be kept in respect of South African registered aircraft and in respect of other specified equipment for the purpose of recording therein the maintenance history of the equipment to which each relates –

- (a) an aircraft logbook for each aircraft;
- (b) an engine logbook for each aircraft engine; and

(c) a propeller logbook for each propeller.

(2) The provisions of sub-regulation (1) shall not apply to aircraft which do not qualify for the issue of a certificate of airworthiness.

(3) Logbooks to be kept in terms of sub-regulation (1) shall conform to such format as the Director may from time to time prescribe in an AIC.

(4) (a) Logbooks should preferably be kept at the aircraft's base of operation.

(b) Details in respect of maintenance carried out while away from base shall be transferred to the appropriate logbook or logbooks within 48 hours after the return of the aircraft to its base of operation or entered within 48 hours on completion of any maintenance performed on the aircraft or installed equipment at a base other than its base of operation.

(5) All logbooks to be kept and maintained in terms of the preceding sub-regulations shall on demand be made available at all times for inspection by an authorised officer.

(6) The logbooks required to be kept in accordance with this Part shall be preserved in a safe place at all times and for a period of 6 (six) months after the date of destruction of the airframe, engine or propeller for which they were kept.

(7) Logbooks shall not be carried in the aircraft to which they relate unless the aircraft is flown to a place where the logbooks are required for compliance with maintenance to the aircraft. Where a logbook is carried on board an aircraft, a suitable record of the last inspection performed shall be maintained at the base of operation of the aircraft.

(8) Entries in the logbooks required to be kept in accordance with this Part shall be made and signed by the holder of an appropriate licence or by a person approved by the Director, except that matters that could not have come to the notice of the holder of an appropriate licence holder or an approved person, shall be entered and signed by the PIC.

(9) Any record kept for the purpose of compiling a logbook or any other technical data relating to the airworthiness of an aircraft or component shall be produced when called for in the event of any inspection or investigation.

(10) All entries made in logbooks shall furnish the information and particulars provided for in the relevant logbook.

(11) When repairs to an aircraft, aircraft engine or component or fixed or removable equipment have been required in consequence either of damage caused by a forced landing or of defects which have occasioned a forced landing or any other incident, the entry or entries made in the relevant logbook or books in respect of such repairs shall state that they have been so required and shall identify the forced landing or incident in question.

(12) The logbooks referred to in this Part shall be kept up to date and maintained in ink in a legible manner and reasonable condition and in accordance with the "instructions for use" in the relevant logbook.

(13) In the event that required maintenance records have been lost or destroyed, alternative proof should be provided that the tasks in question have been performed.

SUBPART 4: INSTRUMENTS AND EQUIPMENT

Use and installation of instruments and equipment

91.04.1 (1) Instruments on an aircraft which are used by a pilot shall be arranged in such a manner that the pilot can see their indications readily from his or her station, with the minimum practicable deviation from the position and line of vision which he or she normally assumes when looking forward along the flight path.

(2) If a single instrument or item of equipment in an aircraft is required to be operated by more than one pilot, such single instrument or item of equipment shall be installed in such a manner that it can be readily seen and operated from each pilot station.

(3) An aircraft shall be equipped with means for indicating the adequacy of the power being supplied to the required flight instruments.

(4) Placards and instrument markings, containing those operating limitations required by the type certificate or by regulation to be visible to the flight crew, shall be displayed in the aircraft.

(5) An operator shall ensure that a flight does not commence unless the instruments and equipment required under the Regulations are functioning and are in a condition for safe operation of the kind being conducted, except as provided for in a MEL.

- (6) The operator shall not be required to obtain approval for the --
- (a) fuses referred to in regulation 91.04.2;
- (b) intrinsically safe electric torches referred to in regulation 91.04.3(1)(d);
- (c) accurate time piece referred to in regulations 91.04.4 and 91.04.5;
- (d) first aid equipment referred to in regulation 91.04.16;
- (e) megaphones referred to in regulation 91.04.24; and
- (f) survival equipment referred to in regulation 91.04.29.

Circuit protection devices

91.04.2 (1) No owner or operator of an aircraft in which fuses are used, shall operate the aircraft unless there are spare fuses available for use in flight equal to at least ten per cent or three, whichever is the greater, of the number of fuses of each rating required for complete circuit protection, which spare fuses shall be accessible to the flight crew during flight.

(2) If the ability to reset a circuit breaker or replace a fuse is essential to safety in flight, such circuit breaker or fuse shall be located and identified in such a manner that it can be readily reset or replaced in flight.

(3) No person shall deactivate a circuit breaker in flight other than in accordance with the aircraft flight manual referred to in regulation 91.03.2.

Aircraft operating lights

91.04.3 (1) No owner or operator of an aircraft shall operate such aircraft by night unless, in addition to the equipment specified in regulation 91.04.5(1), the aircraft is equipped with –

- (a) serviceable navigation lights;
- (b) either -
 - (i) two serviceable landing lights; or
 - (ii) one single serviceable landing light housing with two separately energized filaments;
- (c) a serviceable rotating beacon or strobe light; and
- (d) a serviceable electrical torch for each required crew member, readily accessible to such crew member when seated at his or her designated station.
- (2) Power supplied from the electrical system of the aircraft shall -
- (a) provide adequate illumination for all instruments and equipment, used by the flight crew and essential for the safe operation of the aircraft; and
- (b) be adequate to provide illumination in all passenger compartments, if any,

(3) No owner or operator of a helicopter shall operate the helicopter by night unless such helicopter is equipped with –

- (a) in the case of a flight by night within 10 nautical miles, a light or lights providing adequate illumination both forward and downward to facilitate safe approaches, landings and take-offs; or
- (b) in the case of a flight by night of more than 10 nautical miles, two landing lights or a single light having two separately energised filaments which are capable of providing adequate illumination both forward and downward to facilitate safe approaches, landings and take-offs.

(4) No owner or operator of a seaplane or an amphibious aircraft shall operate the seaplane or amphibious aircraft unless it is equipped with –

- (a) the instruments and equipment referred to in sub-regulation (1), (2) or (3), as the case may be; and
- (b) when operating on water by night, display lights to conform with the International Regulations for Prevention Collisions at Sea.

(5) The navigation lights to be displayed by aircraft by night, on the water or on the manoeuvring area of an aerodrome, shall be as prescribed in technical standard 91.06.10 of Document SA-CATS-OPS 91.

Flight, navigation and associated equipment for aircraft operated under VFR

91.04.4 No owner or operator of an aircraft shall operate the aircraft in accordance with VFR, unless such aircraft is equipped with the following functioning equipment –

- (a) a magnetic compass;
- (b) an accurate time-piece showing the time in hours, minutes, and seconds;
- (c) a sensitive pressure altimeter with a subscale setting, calibrated in hectopascal, adjustable for any barometric pressure setting likely to be encountered during flight;
- (d) an airspeed indicator;
- (e) if so required for use in designated airspace, a pressure-altitude reporting transponder, unless authorised by the responsible ATSU; and
- (f) if to be operated by night, a chart holder in an easily readable position which can be illuminated.

Flight, navigation and associated equipment for aircraft operated under IFR

91.04.5 (1) No owner or operator of an aircraft shall operate the aircraft in accordance with IFR, unless such aircraft is equipped with functioning navigation equipment appropriate to the route to be flown and –

- (a) a magnetic compass;
- (b) an accurate time-piece showing the time in hours, minutes and seconds;
- (c) for large aeroplanes, two independent sensitive pressure altimeter systems with subscale settings, calibrated in hectopascal, adjustable for any barometric pressure setting likely to be encountered during flight and for all other aircraft, one sensitive pressure altimeter with subscale settings, calibrated in hectopascal, adjustable for any barometric pressure setting likely to be encountered during flight;
- (d) an airspeed indicator system with heated pitot tube or equivalent means for preventing malfunctioning due to either condensation or icing;
- (e) a vertical-speed indicator;
- (f) a stabilised direction indicator;
- (g) a turn-and-bank indicator, or a turn co-ordinator incorporating a slip indicator;
- (h) an attitude indicator and for large aeroplanes for which an individual certificate of airworthiness was first issued after 1 January 1975, an emergency power supply, independent of the main electrical generating system, for the purpose of operating and illuminating, for a minimum period of 30 minutes, an attitude indicator, clearly visible to the PIC. The emergency power supply shall be automatically operative after the total failure of the main electrical generating system and clear indication shall be given on the instrument panel that the attitude indicator(s) is being operated by emergency power;

- a means of indication, in the cockpit or in the flight deck, the outside air temperature in degrees Celsius;
- a chart holder in an easily readable position which can be illuminated for operations by night;
- (k) a means of measuring and displaying whether the supply of power to the gyroscopic instruments is adequate; and
- (I) a pressure-altitude reporting transponder.

(2) No owner or operator shall operate in RVSM airspace unless the aircraft is equipped as specified in technical standard 91.04.34 of Document SA-CATS 91.

(3) No owner or operator of a large pressurised aeroplane shall operate the aeroplane when carrying passengers at night or under IMC unless it is equipped with operative weatherdetecting equipment capable of detecting thunderstorms whenever the aeroplane is being operated in areas where such conditions may be expected to exist along the route.

Additional equipment for single-pilot operation under IMC or at night

91.04.6 (1) No owner or operator of an aircraft shall conduct single-pitot operations in an aircraft under IMC or at night unless such aircraft has been certificated for single-pilot operations and –

- (a) the single pilot flying is equipped with a headset with boom microphone or equivalent and has a transmit button positioned in such a way that it may be operated without the pilot having to remove his or her hands from the control wheel, joy stick or cyclic stick;
- (b) the aircraft is equipped with a means of displaying charts that enables them to be readable in all ambient light conditions;
- (c) if the aircraft is flown under IMC, such aircraft has been certificated for single pilot IFR operations and is equipped with a serviceable automatic flight control system with at least altitude hold and heading mode; or
- (d) in the case of a helicopter, if it is flown at night under VMC, such helicopter is equipped with a serviceable automatic flight control system with at least attitude and heading mode or similar equipment: Provided that this requirement shall not apply to a helicopter operated in the circuit of the aerodrome of departure or over densely populated, welllighted areas in accordance with the provisions of regulation 91.06.32(2) but not higher than 3 500 feet above the prescribed minimum height.

(2) Nothing in this regulation shall be construed as meaning that a flight under IFR or at night for the purpose of flight instruction conducted by an appropriately rated flight instructor would be a single-pilot operation, or that such a training flight, if conducted in terms of any of the Parts 93, 121, 127 or 135 would be required to be operated by two qualified pilots.

Mach number indicator

91.04.7 No owner or operator of an aircraft with speed limitations expressed in terms of Mach number shall operate the aircraft unless such aircraft is equipped with a Mach number indicator.

Radio altimeter

91.04.8 No owner or operator of a helicopter shall operate the helicopter on a flight over water at a distance from land corresponding to more than 10 minutes at normal cruise speed, unless such helicopter is equipped with a radio altimeter with an audio voice warning or other aural means of notifying the flight crew when operating below a preset height and with a visual warning capable of alerting the flight crew when operating below a preset height selectable by the flight crew.

Equipment for operations in icing conditions

91.04.9 (1) No owner or operator of an aircraft shall operate the aircraft in forecast or actual icing conditions unless such aircraft is certificated and equipped to operate in icing conditions.

(2) The owner or operator shall not operate the aircraft in forecast or actual icing conditions by night unless such aircraft is equipped with a means to illuminate or detect the formation of ice.

(3) The means of illumination referred to in sub-regulation (2), shall be of a type which does not cause glare or reflection which may handicap flight deck crew members in the performance of their duties.

Flight recorders

91.04.10 (1) For the purposes of this regulation, any reference to the initial date of a type certificate or certificate of airworthiness means the first time that type certificate or certificate of airworthiness was issued for that aircraft type.

(2) No owner or operator shall operate an aircraft engaged in international general aviation operations which –

- (a) is an aeroplane with a MCM exceeding 27 000 kg for which the individual certificate of airworthiness was first issued on or after 1 January 1989 unless such aeroplane is equipped with a Type I FDR that complies with the requirements prescribed in Document SA-CATS 91;
- (b) is an aeroplane with a MCM exceeding 5 700 kg for which the individual certificate of airworthiness was first issued on or after 1 January 2005 unless such aeroplane is equipped with a Type IA FDR that complies with the requirements prescribed in Document SA-CATS 91;
- (c) is a helicopter with a MCM exceeding 7 000 kg, or having a passenger seating configuration of more than nineteen, for which the individual certificate of airworthiness was first issued on or after 1 January 1989 unless such helicopter is equipped with a Type IV FDR that complies with the requirements prescribed in Document SA-CATS 91; or
- (d) is a helicopter with a MCM exceeding 3 180 kg for which the individual certificate of airworthiness is first issued after 1 January 2016 unless such helicopter is equipped with a Type IVA FDR that complies with the requirements prescribed in Document SA-CATS 91.

(3) A turbine-engine aeroplane with a MCM exceeding 27 000 kg of which the prototype was type certificated by an appropriate authority after 30 September 1969, may not be operated in general aviation operations within the Republic of South Africa unless such aeroplane is equipped with a Type II FDR that complies with the requirements prescribed in Document SA-CATS 91.

- (4) No owner or operator shall operate –
- (a) an aeroplane with a MCM exceeding 5 700 kilograms and to which an individual certificate of airworthiness was first issued on or after 1 January 1987;
- (b) a turbine engine aeroplane to which an individual certificate of airworthiness was first issued before 1 January 1987 and is of a type for which the prototype was certified by an appropriate authority after 30 September 1969, which is an aeroplane with a MCM exceeding 27 000 kilograms; or
- (c) a helicopter with a MCM exceeding 7 000 kilograms,

unless such aeroptane or helicopter is equipped with a CVR which complies with the requirements prescribed in Document SA-CATS 91.

(5) No owner or operator shall operate a turbine engine aeroplane for which a type certificate was first issued on or after 1 January 2016 and required to be operated by more than one pilot unless such aeroplane is equipped with either a CVR or a CARS.

(6) No owner or operator shall operate an aircraft for which the individual certificate of airworthiness is first issued on or after 1 January 2016 and which is required to be fitted with a CVR or for aeroplanes, a CARS, unless the CVR or CARS, as applicable, is provided with an independent power source that complies with the requirements prescribed in Document SA-CATS 91.

(7) No owner or operator shall operate an aircraft for which the individual certificate of airworthiness was first issued on or after 1 January 2016, which utilises any data link communications and is required to carry a CVR, unless all data link communications messages to and from the aircraft are recorded on a data link recorder (DLR) or other flight recorder. The minimum recording duration shall be equal to the duration of the CVR and shall be correlated to the recorded cockpit audio.

(8) No owner or operator shall operate an aircraft which is modified on or after 1 January 2016 to install and utilise any data link communications and is required to carry a CVR, unless the data link communications messages are recorded on a DLR or other flight recorder.

(9) The FDR required by this regulation shall be capable of retaining the information recorded during at least –

(a) in the case of an aeroplane, the last 25 hours of its operation; or

(b) in the case of a helicopter, the last 10 hours of its operation.

(10) The CVR or CARS required by this regulation shall be capable of retaining information recorded during at least the last 30 minutes of the aircraft's operation until 1 January 2016, and thereafter during at least the last 2 hours of its operation;

(11) No owner or operator shall use the following mediums to record any information or data required to be recorded by this regulation –

- engraving metal foil, photographic film and analogue using frequency modulation (FM) in FDRs;
- (b) from 1 January 2016, magnetic tape in FDRs and magnetic tape and wire in CVRs.
- (12) The flight recorder shall not be switched off during flight.

(13) Each flight recorder installed in an aircraft shall be located and installed in such a manner that maximum practicable protection is provided, in order that, in the event of an accident or incident, the recorded data may be recovered in a preserved and intelligible state. Flight recorders shall meet the installation, crashworthiness and fire protection specifications prescribed in Document SA-CATS 91.

(14) The owner or operator of the aircraft shall ensure that retrieving the recorded data from the storage medium will be readily possible.

(15) The PIC, owner or operator shall ensure, to the extent possible, in the event the aircraft becomes involved in an accident or incident, that --

- (a) all related flight recorder records, and if possible the associated flight recorders, are preserved and retained in safe custody pending their disposition to the accident or incident investigation team;
- (b) the flight recorders are deactivated upon completion of flight time following an accident or incident; and
- (c) the flight recorders are not reactivated before their disposition to the accident or incident investigation team.

(16) An owner or operator shall ensure that the quality assurance programme of the organisation responsible for the maintenance of his or her aircraft includes verification of the measurement range, recording interval and accuracy of parameters on installed flight recorder equipment.

(17) An owner or operator shall ensure that documentation concerning parameter allocation, conversion equations, periodic calibration and other serviceability/maintenance information is maintained by the organisation responsible for the maintenance of his or her aircraft. The documentation shall be sufficient to ensure that accident investigation authorities have the necessary information to read out the data in engineering units.

(18) The owner or operator of the aircraft shall --

- (a) conduct daily and annual inspections of each flight recorder as specified in Document. SA-CATS 91; and
- (b) record and retain the results of such check for a period of five years calculated from the date of such check.
- (19) The CVR and FDR referred to in this regulation may be combined.
- (20) An aircraft may commence a flight with the FDR inoperative: Provided that –

- (a) for aircraft with an approved MEL, the aircraft is operated in accordance with that MEL and such MEL incorporates the provisions of paragraph (b) below; or
- (b) for aircraft without an approved MEL -
 - the aircraft shall not depart from an aerodrome where repairs or replacements to such FDR can be made;
 - (ii) the aircraft does not exceed six further consecutive flights with the FDR unserviceable;
 - (iii) not more than 48 hours have elapsed since the FDR became unserviceable; and
 - (iv) any CVR is combined with the FDR.
- (21) An aircraft may commence a flight with the CVR or CARS inoperative: Provided that -
- (a) for aircraft with an approved MEL, the aircraft is operated in accordance with such MEL; or
- (b) for aircraft without an approved MEL -
 - the aircraft shall not take-off from an aerodrome where repairs or replacements to such CVR can be made;
 - (ii) the aircraft does not exceed six further consecutive flights with the CVR unserviceable;
 - (iii) not more than 48 hours have elapsed since the CVR became unserviceable; and
 - (iv) any FDR required to be carried, is operative, unless the FDR is combined with a CVR.

Seats, seat safety belts, harnesses and child restraint devices

91.04.11 (1) No owner or operator of an aircraft shall operate the aircraft unless such aircraft is equipped, as applicable, with --

- (a) a seat or berth for each person who is aged two years or more;
- (b) a safety belt with or without a diagonal shoulder strap, or a safety harness, for use in each passenger seat for each passenger who is aged two or more;
- (c) a safety belt for use in each passenger berth;
- (d) a child restraint device for each passenger who is less than two years of age;
- (e) a safety harness for each flight crew member seat, incorporating a device which will automatically restrain the occupant's torso in the event of rapid deceleration; and
- (f) a safety harness for each cabin crew member seat:

Provided that a safety belt with one diagonal shoulder strap is permitted if the fitting of a safety harness is not reasonably practical.

(2) Seats for cabin crew members shall, where possible, be located near floor-level emergency exits and additional cabin crew member seats required shall be located such that a cabin crew member may best be able to assist passengers in the event of an emergency evacuation. Seats shall be forward or rearward facing within 15° of the longitudinal axis of the aircraft.

(3) If the PIC cannot see all the passenger seats in the aircraft from his or her own seat, a means of indicating to all passengers and cabin crew members that seat belts should be fastened, shall be installed.

(4) All safety hamesses and safety belts shall have a single point release.

Stowage of articles, baggage and cargo

91.04.12 No owner or operator of an aircraft shall operate the aircraft unless all articles, baggage and cargo carried on board, except those items in use by either the flight crew or by passengers, if such use is not prohibited in the interest of the safety of the aircraft or its occupants, are placed –

- (a) in a manner which prevents movement likely to cause injury or damage and does not obstruct aisles and exits; or
- (b) in stowages designed to prevent movement likely to cause injury or damage.

First aid and universal precaution kits

91.04.13 (1) No owner or operator of an aircraft used in general aviation operations shall operate the aircraft unless such aircraft is equipped with the first aid kit consisting of the medical supplies as prescribed in Document SA-CATS 91.

(2) The owner or operator shall carry out periodical inspections of the first aid kit to ensure that, as far as practicable, the contents thereof are in a condition necessary for their intended use.

(3) The contents of the first aid kit shall be replenished at regular intervals, in accordance with instructions contained on their labels, or as circumstances require.

(4) The first aid kit shall be readily accessible to the crew or passengers.

(5) No owner or operator of an aircraft used in general aviation operations for which the maximum certificated passenger seating is 20 or more and on which is carried a cabin attendant shall operate the aircraft unless such aircraft is equipped with universal precaution kits specified in Document SA-CATS 91.

(6) The contents of the universal precaution kits shall be as prescribed in Document SA-CATS 91.

First aid oxygen

91.04.14 (1) No owner or operator of an aircraft in respect of which the carriage of a cabin crew member is required in terms of this Part, shall operate the aircraft unless such aircraft is equipped with the appropriate supply of first aid oxygen prescribed in Document SA-CATS 91.

(2) The conditions, rules, requirements, procedures or standards for first aid oxygen shall be as prescribed in Document SA-CATS 91.

Supplemental oxygen in case of pressurised aircraft

91.04.15 (1) No owner or operator of a pressurised aircraft shall operate the aircraft unless such aircraft is equipped with the supplemental oxygen as prescribed in Document SA-CATS 91 and such oxygen may be used continuously whenever the circumstances for which its supply has been prescribed prevail.

(2) No owner or operator of a pressurised aircraft shall operate the aircraft above 25 000 feet unless all flight crew members have available at their flight duty station a quick-donning type of oxygen mask which will readily supply oxygen upon demand.

Supplemental oxygen in case of non-pressurised aircraft

91.04.16 (1) No owner or operator of a non-pressurised aircraft shall operate the aircraft at altitudes between 10 000 feet and 12 000 feet for longer than 120 minutes intended flight time, or above 12 000 feet, unless such aircraft is equipped with the supplemental oxygen as prescribed in Document SA-CATS 91 and such oxygen may be used continuously whenever these circumstances prevail.

(2) The conditions, rules, requirements, procedures or standards for supplemental oxygen shall be as prescribed in Document SA-CATS 91.

Flight crew protective breathing equipment

91.04.17 (1) No person shall operate a pressurised aeroptane or an unpressurised aeroptane with a MCM exceeding 5 700 kilograms and a maximum approved passenger seating configuration of more than 19 seats, at altitudes above 12 000 feet, unless such aeroptane –

- (a) is equipped with equipment to protect the eyes, nose and mouth of each flight crew member while on flight deck duty and to provide oxygen for a period of at least 15 minutes;
- (b) has sufficient portable protective breathing equipment to protect the eyes, nose and mouth of all cabin crew members required to be carried in terms of this Part and to provide breathing gas for a period of at least 15 minutes; and
- (c) if no cabin crew member is carried, is equipped with portable protective breathing equipment to protect the eyes, nose and mouth of one member of the flight crew and to provide breathing gas for a period of at least 15 minutes.

(2) The supply for protective breathing equipment may be provided by supplemental oxygen referred to in regulation 91.04.15 or 91.04.16.

(3) Protective breathing equipment intended for use by flight deck crew, shall be conveniently located on the flight deck and be easily accessible for immediate use by each required flight deck crew member at his or her assigned duty station.

(4) Protective breathing equipment intended for use by cabin crew shall be installed adjacent to each required cabin crew member duty station. (5) Additional, easily accessible portable protective breathing equipment shall be provided and located at, or adjacent to, the hand fire extinguishers: Provided that where the fire extinguisher is located inside a cargo compartment, the protective breathing equipment shall be stowed outside, but adjacent to, the entrance to such compartment.

(6) Protective breathing equipment, while in use, shall not prevent communication, where required.

Hand-held fire extinguishers

91.04.18 No owner or operator of an aircraft shall operate the aircraft unless such aircraft is equipped with the appropriate hand-held fire extinguishers as prescribed in Document SA-CATS 91.

Crash axes and crowbars

91.04.19 (1) No owner or operator of an aeroplane with a MCM exceeding 5 700 kilograms or a maximum approved passenger seating configuration of more than nine seats, shall operate the aeroplane unless such aeroplane is equipped with at least one crash axe or crowbar located on the flight deck.

(2) If the maximum approved passenger seating configuration is more than 200 seats, an additional crowbar shall be carried in the aeroplane and located out of sight in or near the most rearward galley area.

Marking of break-in points

91.04.20 The owner or operator of an aircraft shall ensure that, if areas of the fuselage suitable for break-in by rescue crews in emergency, are marked on the aircraft, such areas shall be marked in accordance with the requirements as prescribed in Part 47.

Megaphones

91.04.21 No owner or operator of an aircraft with a maximum approved passenger seating configuration of more than 60 seats and which is carrying one or more passengers, shall operate the aircraft unless such aircraft is equipped with the appropriate portable battery-powered megaphones as prescribed in Document SA-CATS 91.

Emergency lighting

91.04.22 No owner or operator shall operate the aircraft unless such aircraft is equipped with the appropriate emergency lighting system as prescribed in Document SA-CATS 91.

Emergency locator transmitters

91.04.23 (1) Except as provided in sub-regulation (3), no owner or operator of an aircraft specified in Document SA-CATS 91 shall operate such aircraft unless it is equipped with one or more approved ELTs.

(2) The number and type of ELTs, the manner in which these shall be carried, the specifications to which they shall adhere, the frequencies on which they shall be able to transmit and the manner in which they shall be maintained are prescribed in Document SA-CATS 91.

(3) The following aircraft are exempted from the requirement prescribed in sub-regulation (1) -

- (a) aircraft engaged in flights remaining within a radius of 50 nautical miles from their point of departure;
- (b) aircraft engaged in the aerial application of chemicals or other substances for agricultural purposes, and on flights incidental thereto;
- (c) a new aircraft on a flight for a purpose associated with its manufacture and preparation for delivery, but not when on its delivery flight;
- (d) an aircraft flown for the purpose of moving it to a place to have an approved ELT fitted, or a fitted ELT repaired, removed or overhauled: Provided that only the required flight crew members may be carried on board;
- (e) an aircraft of which the ELT has been temporarily removed for inspection, repair, modification or replacement: Provided the necessary logbook entries have been made, a placard stating "ELT not installed or carried" has been installed in a position easily visible to the flight crew, and a period of 90 days is not exceeded;
- (f) aircraft certified for research and development purposes;
- (g) aircraft used for showing compliance with regulations, or in crew training, air racing, air display or market surveys;
- (h) aircraft with an approved seating configuration of not more than one person;
- aircraft operated in terms of Part 94; and
- (j) any aircraft on a flight or a series of flights for which an exemption in writing has been granted by the Director.

(4) The Director shall maintain a register of all aircraft equipped with 406 MHz ELTs, which shall contain the following particulars -

- (a) the nationality and registration marks of the aircraft;
- (b) particulars of the manufacturer's designation and serial number of the aircraft;
- (c) the full name and contact details of the registered owner of the aircraft;
- (d) the make and model number/s of the ELT/s;
- (e) the 15-digit Unique Identification Number (UIN) provided by the manufacturer of the ELT, or the aircraft's Mode S transponder code; and
- (f) the name/s and contact details of the person/s who know/s the aircraft's itinerary and who may be contacted 24 hours a day.
(5) On the payment of the appropriate fee as prescribed in Part 187, an excerpt of the ELT register shall be furnished to any person who requests such an excerpt.

(6) For the registration, deregistration and changing of an ELT, the fee as prescribed in Part 187 is payable.

Life jackets and other flotation devices

91.04.24 (1) No person -

- (a) shall operate an aeroplane other than an aeroplane referred to in paragraph (b) --
 - (i) when flying over water and beyond gliding distance of land in the case of the aeroplane not capable of continuing the flight to an aerodrome with the critical power-unit becoming inoperative at any point along the route or any planned diversion;
 - (ii) when taking off or landing at an aerodrome where the take-off or approach path is so disposed over water that in the event of an incident, there would be a likelihood of a ditching,

unless such aeroptane is equipped with a flotation device or a life jacket containing a survivor locator light, for each person on board, stowed in a position easily accessible, with safety belt fastened, from the seat or berth of the person for whose use it is provided, and an individual infant flotation device, containing a locator survival light for use by each infant on board;

- (b) shall operate a seaplane or amphibious aeroplane unless such seaplane or amphibious aeroplane is equipped with –
 - (i) a flotation device or a life jacket containing a survivor locator light, for each person on board, stowed in a position easily accessible, with safety belt fastened, from the seat or berth of the person for whose use it is provided, and an individual infant flotation device, containing a survivor locator light, for use by each infant on board; and
 - (ii) life jackets, other than the life jackets referred to in subparagraph (i), for 20 per cent of the number of persons on board such seaplane or amphibious aeroplane, located in the passenger compartment near the emergency exits and readily accessible;
- (c) shall operate a helicopter over water beyond autorotative distance from land, other than only for take-off and initial climb, or final approach and landing, unless -
 - each person on board is wearing a life jacket containing a survivor locator light; and
 - (ii) an individual infant flotation device containing a locator survival light for use by each infant on board, stowed in a position easily accessible for the person in which care the infant is; and
- (d) shall operate a free balloon or airship over a body of water that may pose a risk of drowning to any person on board such free balloon or airship unless the operator has

put in place appropriate floatation devices or alternative drowning preventative measures.

(2) No person shall operate the following helicopters over water unless such helicopter is certificated as an amphibian helicopter or for ditching or is equipped with permanent or rapidly deployable emergency flotation equipment –

- (a) a performance Class 3 helicopter operating below a height that would permit the helicopter to complete an autorotation to a landing on land in the event of an engine failure;
- (b) a performance Class 1 or 2 helicopter operating in a hostile environment more than 10 minutes from land that would be unable to maintain flight to a suitable landing site in the event of an engine failure; or
- (c) a performance Class 1 helicopter operating in a non-hostile environment at a distance from land equivalent to 30 minutes at normal cruising speed or 50 nautical miles, whichever is the lesser:

Provided that in the case of aerial spraying operations over water, the owner or operator may apply to the Director for an exemption in terms of Part 11.

(3) Sea state shall be an integral part of ditching information.

Life rafts and survival radio equipment for extended over-water flights

91.04.25 No person shall operate an aircraft over water at a distance equivalent to 30 minutes at normal cruising speed or 50 nautical miles, whichever is the lesser, away from land unless such aircraft –

- (a) is equipped with life rafts sufficient to accommodate all persons on board; and
- (b) is equipped with the survival equipment and complies with the provisions as prescribed in Document SA-CATS 91.

Survival equipment

91.04.26 No person shall operate an aircraft over areas where search and rescue would be especially difficult, unless such aircraft is equipped with the appropriate survival equipment and complies with the provisions as prescribed in Document SA-CATS 91.

Seaplanes, amphibious aeroplanes and amphiblous helicopters

91.04.27 No person shall operate a seaplane, amphibious aeroplane or amphibious helicopter on water, unless it is equipped with –

- (a) a sea anchor and other equipment necessary to facilitate mooring, anchoring or manoeuvring such seaplane, amphibious aeroplane or amphibious helicopter on water, appropriate to its size, mass and handling characteristics; and
- (b) equipment for making the sound signals prescribed in the International Regulations for Preventing Collisions at Sea, where applicable.

Airborne collision avoidance system

91.04.28 (1) Except as otherwise provided for in Part 121 and Part 135, no person may operate a turbine-engine aerophane of a maximum certificated take-off mass in excess of 15 000 kg or authorized to carry more than 30 passengers, for which the individual certificate of airworthiness was first issued after 1 January 2007, unless such aerophane is equipped with an ACAS that meets the specifications prescribed in Document SA-CATS 91.

(2) No person shall operate an aeroplane required to be equipped with ACAS unless he or she has completed the training and checking as specified in Document SA-CATS 91.

- (3) ACAS training shall be provided through an approved training programme.
- (4) Whenever an aircraft is equipped with an ACAS, such system shall –
- (a) meet the specifications in, and function in accordance with, the relevant provisions of Document SA-CATS 91; and
- (b) when serviceable, be activated at all times during flight in all airspace, including oceanic, international, foreign and domestic airspace, even if in terms of these regulations the carriage of ACAS equipment is not compulsory for that particular type of aircraft or the type of operation.

(5) Whenever an ACAS becomes unserviceable during flight when operation of ACAS is mandatory, the PIC of that aeroplane shall inform the responsible ATSU as soon as is practical.

(6) No pilot may act as PIC of a South African-registered aircraft during any period while an ACAS is activated unless such pilot is ACAS-current.

(7) When a flight crew receives a traffic avoidance instruction from an ATSU that is in conflict with the resolution advisory message issued by the aircraft's approved ACAS, the ACAS resolution advisory takes priority over the ATSU instruction.

(8) Document SA-CATS 91 contains instructions in respect of ACAS operational use and event reporting.

- (9) For the purpose of this regulation, an ACAS-current pilot means a pilot who, -
- (a) within the immediately preceding 12 months, completed initial ACAS II training;
- (b) within the immediately preceding two (2) years, completed initial ACAS training and subsequently completed ACAS II renewal training more than 9 months and less than 12 months after the earlier training; or
- (c) within the immediately preceding 12 months, completed a session of ACAS II cyclic training.

Cabin pressurisation

91.04.29 No person shall operate a pressurized aeroplane, for which the individual certificate of airworthiness was first issued on or after 1 January 1990, above 25 000 feet unless such aeroplane is equipped with a device to provide positive warning to the flight crew of any dangerous loss of pressurization.

Terrain awareness and warning systems

91.04.30 (1) Within six months from the commencement of these Regulations, a turbineengine aeroplane of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers operating according to the IFR shall be equipped with a TAWS which has a predictive terrain avoidance function that meets the requirements specified in Document SA-CATS 91.

(2) A TAWS installed in turbine-engine aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg or authorized to carry more than nine passengers for which the individual certificate of airworthiness was first issued after 1 January 2011 shall provide, as a minimum, warnings of at least the circumstances specified in Document SA-CATS 91.

(3) Except as provided in sub-regulation (4), each TAWS required by sub-regulation (1) shall be functioning properly prior to flight.

- (4) An aircraft may be operated without a functioning TAWS -
- (a) as provided for in an approved MEL; or
- (b) if repairs cannot be effected at the aerodrome last operated into, the aircraft is flown by the most direct routing to the nearest facility where the repairs can be made.

(5) A TAWS shall automatically provide a timely and distinctive warning to the flight crew when the aeroplane is in potentially hazardous proximity to the earth's surface.

RVSM operations

91.04.31 (1) Except as provided in an ATSU clearance to climb or descend through RVSM) airspace to or from levels above the RVSM flight level band, no PIC shall enter RVSM airspace unless –

- (a) a valid RVSM approval certificate has been issued for such aircraft;
- (b) the prescribed minimum RVSM equipment is serviceable; and
- (c) the flight crew has successfully completed the RVSM training as prescribed in Document SA-CATS 91.

(2) The requirements for the issue of an RVSM approval certificate, including minimum equipment, maintenance and crew training requirements, are those as specified in Document SA-CATS 91.

(3) An application for an RVSM approval certificate for a South African registered aircraft shall be made to the Director in the format prescribed in Document SA-CATS 91 and shall be accompanied by –

- (a) in the case of a commercial air transport operator, two copies of the proposed relevant amendments to --
 - (i) the operations manual;
 - (ii) the aircraft maintenance schedule; and
 - (iii) the maintenance control manual; and
- (b) in the case of a general aviation operator, the aircraft maintenance schedule.

(4) In considering an application, contemplated in sub-regulation (3), the Director may conduct the investigation deemed necessary to ascertain that the applicant has complied with the requirements prescribed in Document SA-CATS 91 for RVSM operations.

(5) If the Director is not so satisfied, he or she shall notify the applicant thereof, stating the reasons in the notification, and grant the applicant the opportunity to rectify any shortcoming within a determined period, after which period the Director may grant or refuse the application concerned.

(6) If the Director is satisfied that the applicant has complied with the relevant requirements, the RVSM approval certificate shall be issued in the format as prescribed in Document SA-CATS 91.

(7) The Director shall maintain a register of all RVSM approval certificates issued in terms of this regulation and –

- (a) the register shall contain the following particulars -
 - (i) the make, model and registration marks of the aircraft;
 - the full name of the owner of the aircraft or, if a licensed air operator, the name of the licence holder and the air service licence number;
 - (iii) the postal address of the certificate holder; and
 - (iv) the date on which the certificate was issued;
- (b) the particulars, referred to in paragraph (a), shall be recorded in the register within 30 days from the date on which the certificate is issued by the Director;
- (c) the register shall be kept in a safe place at the office of the Director or location he or she may approve; and
- (d) a copy of the register may be furnished by the Director, on payment of the appropriate fee as prescribed in Part 187, to any person who requests the copy.

(8)(a) If a RVSM approval certificate is lost, stolen, damaged or destroyed, the holder thereof, or an AMO approved under Part 145 and responsible for the servicing and maintenance of the aircraft, may apply to the Director for the issue of a duplicate of the RVSM approval certificate.

- (b) An application referred to in paragraph (a), shall --
 - (i) be made in the appropriate form as prescribed in Document SA-CATS 91; and
 - (ii) be accompanied by -
 - (aa) the data package referred to in section 6 of Technical Standard 91.07.31 in Document SA-CATS 91; and
 - (bb) the appropriate fee as prescribed in Part 187.

(9) The holder of an RVSM approval certificate endorsed for operations within RVSM airspace shall –

- (a) report within 24 hours to the Director any occurrence involving poor height-keeping in an RVSM environment as specified in Document SA-CATS 91; and
- (b) make an effective, timely response to each height-keeping error.

(10) An owner or operator authorised to operate in RVSM airspace shall ensure that as a minimum each aeroplane type grouping of its fleet shall have their height-keeping performance monitored at least once every two years or within intervals of 1 000 flight hours per aeroplane, whichever period is longer, as defined in Document SA-CATS 91.

(11) The monitoring requirements specified in sub-regulation (10) may be met through the use of data obtained from any air traffic services regional monitoring programme.

SUBPART 5: COMMUNICATION AND NAVIGATION

Communication equipment

91.05.1 (1) Except with prior written approval by the Director, no aircraft shall be operated in designated airspace or under IFR unless such aircraft is equipped with radio communication equipment capable of –

- (a) two-way communication at any time during the flight on such frequencies as may be prescribed by the appropriate authority; and
- (b) receiving meteorological information at any time during flight.

(2) The radio communication equipment referred to in sub-regulation (1) shall be capable of providing for communication on the aeronautical emergency frequency 121.5 MHz.

(3) All flight crew members involved in large aeroplane operations and who are required to be on flight deck duty shall communicate through boom or throat microphones below the transition level/altitude.

(4) The radio communication equipment in the aircraft shall be installed and be of a type as prescribed in Document SA-CATS 91.

(5) The provisions of this regulation shall not be applicable to a parachute, a hang-glider or a paraglider.

Navigation equipment

91.05.2 (1) No person shall operate an aircraft unless such aircraft is equipped with navigation equipment enabling it to proceed in accordance with its flight plan, including approaches at the planned destination or any alternate aerodromes, and the appropriate ATS requirements: Provided that the provisions of this regulation shall not apply to flights operated in accordance with VFR, if such flights can be accomplished by visual reference to landmarks. Such landmarks for helicopter operations shall be no further apart than 60 nautical miles.

(2) The aircraft shall be equipped as prescribed in Document SA-CATS 91 and with sufficient navigation equipment to ensure that in the event of the failure of one item of equipment at any stage of the flight, the remaining equipment enables such aircraft to proceed with such flight and installed such that the failure of any single unit required for either navigation or communications purposes or both will not result in the failure of another unit required for navigation or communications purposes.

(3) No person shall operate an aircraft in airspace where minimum navigation performance or performance-based navigation specifications apply, unless the aircraft is equipped with navigation equipment that meets the performance specifications as prescribed in Document SA-CATS 91.

(4) In an aircraft required to be operated by two pilots, the navigation equipment referred to in sub-regulation (3) shall be visible and usable by each pilot seated at his or her duty station.

(5) No person may use inertial navigation or reference systems for navigation unless approved under Parts 93, 121, 127 or 135, as applicable.

(6) No person may operate an aircraft under IFR using any system required for navigation unless such system is maintained, checked and inspected under an approved procedure.

(7) An owner or operator shall not use a navigation system based on electronic data unless

- (a) procedures are implemented that ensure the timely distribution and insertion of current and unaltered electronic navigation data to all aircraft that require it;
- (b) the source of the data is -
 - (i) the manufacturer of the aircraft;
 - (ii) the manufacturer of the navigation system; or
 - a supplier satisfactory to the manufacturer of the aircraft or navigation system or to the Director; and
- (c) procedures are implemented to verify the accuracy and validity of the data received.

Use of global navigation satellite system

91.05.3 (1) No person shall operate an aircraft using a GNSS as a means of navigation unless -

- (a) the GNSS equipment meets the airworthiness criteria prescribed in Document SA-CATS 91;
- (b) all flight crew members required by regulation or the type certificate of the aircraft being flown have received the training and checking specified in Document SA-CATS 91; and
- (c) the procedures specified in Document SA-CATS 91 are followed.

(2) In order to fly published RNAV (GNSS) arrivals, departures and approach procedures; the PIC shall ensure that –

- (a) the air navigation routes to be flown are contained in the database of the aircraft; and
- (b) the information contained in the aircraft database is current.

(3) The PIC shall fly the instrument departure of a FMS equipped aircraft without the capability of manually setting the course direction indicator (CDI), with the aid of a flight director.

(4) Helicopter-only RNAV (GNSS) departure procedures shall be flown at 70 knots or (ess.

(5) Upon clearance for the approach by the appropriate ATSU, the pilot shall select the appropriate aerodrome, the runway approach procedure and the initial approach fix on the RNAV system to determine the validity of the RAIM for such approach.

Operational criteria for use of RNAV/BARO VNAV systems

91.05.4 (1) No person may conduct RNAV/BARO vertical navigation (VNAV) operations unless approved by the Director in terms of the operational provisions specified in Document SA-CATS 91.

(2) An aircraft equipped with a RNAV/BARO VNAV system approved by the Director for the appropriate level of RNAV/BARO VNAV operations, may be used to conduct RNAV/BARO VNAV approaches if –

- (a) the RNAV/BARO VNAV equipment is serviceable;
- (b) the aircraft and aircraft systems are appropriately certified for the intended RNAV/BARO VNAV approach operations and the aircraft is equipped with an integrated LNAV system with an accurate source of barometric altitude; and
- (c) the VNAV altitudes and all relevant procedural and navigational information are retrieved from a current navigation database whose integrity is supported by approved appropriate quality assurance measures.

SUBPART 6: RULES OF THE AIR

Division One: Flight Rules

Landing on roads

91.06.1 No person shall use a public road as a place of landing or take-off in an aircraft, except --

- (a) in the case of an emergency involving the safety of the aircraft or its occupants;
- (b) for the purpose of saving human lives; or
- (c) when involved in civil defence or law-enforcement operations: Provided that at all times reasonable care is taken for the safety of others with due regard to the prevailing circumstances.

Dropping objects, spraying or dusting

91.06.2 Except in an emergency or unless granted special permission by the Director or approved by an ATSU, no article shall be dropped from an aircraft in flight other than –

- (a) fine sand or clean water used as ballast; or
- (b) chemical substances for the purpose of spraying, dusting or cloud seeding.

Picking up objects

91.06.3 The PIC of an aircraft in flight shall not permit objects to be picked up except with the prior written approval of the Director.

Towing

91.06.4 The PIC of an aircraft in flight shall not permit anything to be towed by the aircraft except with the prior written approval of the Director.

Operation of vehicle- or vessel-towed aircraft

91.06.5 (1) Except with the prior written approval of the Director and subject to such conditions as he or she may impose, an aircraft which is intended, for purposes of flight, to be towed by a vehicle or vessel traveiling on the surface or to be moored on the surface, shall not –

- (a) be flown higher than 150 feet above the surface on which the towing vehicle or vessel is travelling or to which such aircraft is moored;
- (b) be flown closer than five nautical miles from the boundary of an aerodrome; or
- (c) take-off from, land on or be flown above any public road.

(2) The provisions of sub-regulation (1)(a) and (b) shall not apply to the winching or towing of gliders at the aerodrome of departure.

Proximity and formation flights

91.06.6 (1) No person shall operate an aircraft in formation flight while carrying passengers for commercial purposes or, except as provided in sub-regulation (2), –

- (a) in such proximity to other aircraft so as to create a collision hazard;
- (b) in formation flight, except by arrangement with the PIC of each aircraft in the formation; or
- (2) Formation flight in controlled airspace may be approved by an ATSU: Provided that --
- (a) the formation operates as a single aircraft with regard to navigation and position reporting;
- (b) separation between aircraft in the flight shall be the responsibility of the flight leader and the pilots-in-command of the other aircraft in the flight and shall include periods of transition when aircraft are manoeuvring to attain their own separation within the formation and during join-up and breakaway; and
- (c) a distance not exceeding 1 km (0.5 NM) laterally and longitudinally and 30 m (100 ft) vertically from the flight leader shall be maintained by each aircraft.
- (3) Formation flight for display purposes may be approved by the Director.

Right of way

91.06.7 (1) An aircraft which has the right-of-way, shall maintain its heading and speed, but nothing in these provisions shall relieve the PIC of an aircraft from the responsibility of taking such action as will best avert collision, including collision avoidance manoeuvres based on resolution advisories provided by ACAS equipment.

(2) An aircraft which is obliged, by the provisions of this Subpart, to keep out of the way of another aircraft, shall avoid passing over or under the other aircraft, or crossing ahead of such aircraft, unless passing well clear, taking into account the effects of wake turbulence.

(3) When two aircraft are approaching head-on or approximately so and there is danger of collision, each aircraft shall alter its heading to the right.

(4) When two aircraft are converging at approximately the same level, the aircraft which has the other aircraft on its right, shall give way, except in the following circumstances –

- (a) power-driven heavier-than-air aircraft shall give way to airships, gliders and balloons;
- (b) airships shall give way to gliders and balloons;
- (c) gliders shall give way to balloons;
- (d) power-driven aircraft shall give way to aircraft which are -
 - (i) seen to be towing other aircraft or objects;
 - (ii) carrying an underslung load or are engaged in winching operations; and

(iii) being towed or tethered.

(5) An aircraft which is being overtaken has the right-of-way and the overtaking aircraft, whether climbing, descending or in horizontal flight, shall keep out of the way of the overtaken aircraft by altering its heading to the right, and no subsequent change in the relative positions of the two aircraft shall absolve the overtaking aircraft from its obligation until such aircraft is entirely past and clear: Provided that where a right-hand circuit is being followed at an aerodrome, the overtaking aircraft shall alter its heading to the left.

(6) An aircraft in flight or operating on the ground or water, shall give way to other aircraft landing or on final approach to land.

(7) When two or more heavier-than-air aircraft are approaching an aerodrome for the purpose of landing, the aircraft at the higher level shall give way to the aircraft at the lower level, but –

- (a) the latter aircraft shall not take advantage of this provision to cut in front of another aircraft which is on final approach to land, or to overtake such aircraft; and
- (b) power-driven heavier-than-air aircraft shall give way to gliders in all circumstances.

(8) An aircraft about to take-off, shall not attempt to do so until there is no apparent risk of collision with other aircraft.

(9) An aircraft which is aware that another aircraft is compelled to fand, shall give way to such aircraft.

(10) For the purposes of this regulation, an overtaking aircraft is an aircraft which approaches another aircraft from the rear on a line forming an angle of less than 70 degrees with the plane of symmetry of the latter aircraft, and will therefore be in such position with reference to the other aircraft, that by night it should be unable to see either of the other aircraft's wingtip navigation lights.

Following line features

91.06.8 An aircraft flying at or below 1 500 feet above the surface and following a power line, a road, a railway line, a canal, a coastline or any other line feature within one nautical mile of such line feature, shall fly to the right of such line, road, railway line, canal, coastline or other line feature, except when the aircraft is instructed to do otherwise by an ATSU.

Aircraft speed

91.06.9 (1) Unless otherwise authorised by the Director, no person shall, outside controlled airspace and below flight level 100, fly an aircraft at an indicated air speed of more than 250 knots.

(2) Unless otherwise authorised or required by an ATSU, no person shall fly an aircraft within a control zone or an aerodrome traffic zone at an indicated air speed of more than --

- (a) 160 knots, in the case of a reciprocating-engine aircraft; or
- (b) 200 knots, in the case of a turbine-powered aircraft:

Provided that if the minimum safe indicated air speed for a particular flight is greater than the maximum indicated air speed prescribed in this regulation, the aircraft may be flown at the minimum safe indicated air speed.

Lights to be displayed by aircraft

91.06.10 (1) Except as provided by sub-regulation (4) and unless the aircraft was initially type-certificated without such lights or is a non-type certificated aircraft approved without such lights, all aircraft shall display –

- (a) while operating in flight during the day and at all times at night, anti-collision lights intended to attract attention to the aircraft;
- (b) while operating during night, navigation lights intended to indicate the relative path of the aircraft to an observer;
- (c) while operating on the movement area of an aerodrome, lights intended to attract attention to the aircraft, as specified in the IAIP; and
- (d) while operating with engines running on the movement area of an aerodrome, display a rotating beacon to indicate that fact.
- (2) Except as provided by sub-regulation (4) --
 - (a) all aircraft moving on the movement area of an aerodrome during night shall display navigation lights intended to indicate the relative path of the aircraft to an observer; and
 - (b) unless stationary and otherwise adequately illuminated, all aircraft on the movement area of an aerodrome during night shall display lights intended to indicate the extremities of their structure.

(3) In respect of sub-regulations (1) (b) and (2) (a), other lights shall not be displayed if they are likely to be mistaken for these lights.

(4) A pilot shall be permitted to switch off or reduce the intensity of any flashing lights fitted to meet the requirements of sub-regulations (1), (2) and (3) if they do or are likely to –

- (a) adversely affect the satisfactory performance of duties; or
- (b) subject an outside observer to harmful dazzle.

(5) The lights which shall be displayed by aircraft by day, night, on water or on the manoeuvring area of an aerodrome, are prescribed in Document SA-CATS 91.

Taxi rules

91.06.11 (1) Aircraft which are landing or taking off, shall be given right of way by other aircraft and by vehicles.

(2) An aircraft shall, after landing, unless otherwise authorised or instructed by an ATSU, be moved clear of the runway in use, as soon as it is safely possible to do so.

(3) A vehicle which is towing an aircraft shall be given right of way by vehicles and by other aircraft which are not landing or taking off.

(4) An aircraft shall be given right of way by a vehicle which is not towing an aircraft.

(5) An aircraft or vehicle which is obliged by the provisions of this regulation to give right of way to another aircraft, shall, if necessary in the circumstances in order to do so, reduce its speed or stop.

(6) If danger of collision exists between an aircraft or vehicle and another aircraft or vehicle, such of the following procedures as may be appropriate in the circumstances, shall be applied:

- (a) When the two are approaching head-on or nearly head-on, each shall turn to the right;
- (b) when one is overtaking the other, the one which is overtaking shall keep out of the way of the other by turning to the right, and no subsequent change in the relative positions of the two shall absolve the one which is overtaking from this obligation, until it is finally past and clear of the other;
- (c) when the two are converging, the one which has the other on its right, shall give way to the other and shall avoid crossing ahead of the other unless passing well clear of it.

(7) A vehicle moving along a runway or taxiway, shall as far as practicable keep to the right side of the runway or taxiway.

(8) When an aircraft is being towed, the person in charge of the towing vehicle shall be responsible for compliance with the provisions of this regulation.

(9) An aircraft operated on a controlled aerodrome shall not taxi on the manoeuvring area without clearance from the aerodrome control tower and shall comply with any instructions given by that unit.

(10) An aircraft taxiing on the manoeuvring area of an uncontrolled aerodrome shall taxi in accordance with the ground control procedures which may be in force at such aerodrome.

(11) While taxiing, an aircraft shall -

- (a) stop and hold at all runway-holding positions unless otherwise authorized by the aerodrome control tower; and
- (b) stop at all lighted stop bars and may proceed further when the lights are switched off.

(12) Nothing in this regulation shall relieve the PIC of an aircraft or the person in charge of a vehicle, from the responsibility for taking such action as will best aid to avert collision.

Operation on and in vicinity of aerodrome

91.06.12 (1) The PIC of an aircraft operated on or in the vicinity of an aerodrome, shall be responsible for compliance with the following rules –

(a) observe other aerodrome traffic for the purpose of avoiding collision;

- (b) conform with or avoid the pattern of traffic formed by other aircraft in operation;
- (c) make all turns to the left when approaching for a landing and after taking off, unless otherwise instructed by an ATSU, or unless a right hand circuit is in force: Provided that a helicopter may, with due regard to other factors and when it is in the interest of safety, execute a circuit to the opposite side;
- (d) land and take off, as far as practicable, into the wind unless safety, the runway configuration or air traffic considerations dictate that a different direction is preferable, or unless otherwise instructed by an ATSU; and
- (e) fly across the aerodrome or its environs at a height of not less than 2 000 feet above the level of such aerodrome: Provided that if circumstances require such PIC to fly at a height of less than 2 000 feet above the level of the aerodrome, he or she shall conform with the traffic pattern at such aerodrome.

(2) If an aerodrome control tower is in operation, the PIC shall also, whilst the aircraft is within the aerodrome traffic zone –

- (a) maintain a continuous radio watch on the frequency of the aerodrome control tower responsible for providing aerodrome control service at the aerodrome, establish two way radio communication as necessary for aerodrome control purposes and obtain such clearances for his or her movements as may be necessary for the protection of aerodrome traffic; or
- (b) if this is not possible, keep a watch for and comply with such clearances and instructions as may be issued by visual means.

(3) If an aerodrome flight information service unit is in operation, the PIC shall also, whilst the aircraft is within the aerodrome traffic zone –

- (a) maintain a continuous radio watch on the frequency of the aerodrome flight information service unit responsible for providing aerodrome flight information service at the aerodrome, establish two-way radio communication as necessary for aerodrome flight information service purposes and obtain information in respect of the surface wind, runway in use and altimeter setting and in respect of aerodrome traffic on the manoeuvring area and in the aerodrome traffic zone; or
- (b) if this is not possible, keep a watch for visual signals which may be displayed or may be issued by the aerodrome flight information service unit.

(4) An aircraft which is unable to communicate by radio shall, before landing at an aerodrome, make a circuit of the aerodrome for the purpose of observing the traffic, and reading such ground markings and signals as may be displayed thereon, unless it has the consent of the appropriate ATSU to do otherwise.

Signals

91.06.13 (1) The PIC of an aircraft in flight shall, upon observing or receiving any of the signals as prescribed in Document SA-CATS 91, take such action as may be required by the interpretation of the signal as prescribed in Document SA-CATS 91.

(2) No person may perform the functions of a signalman unless trained and qualified to carry out such functions as contained in Document SA-CATS 91.

(3) Any person acting as a signalman shall be responsible for providing the standard marshalling signals, as prescribed in Document SA-CATS 91, to aircraft in a clear and precise manner.

Water operations

91.06.14 (1) When two aircraft or an aircraft and a vessel are approaching one another and there is a risk of collision, the aircraft shall proceed with careful regard to existing circumstances and conditions including the limitations of the respective craft.

(2) An aircraft which has another aircraft or a vessel on its right shall give way so as to keep well clear.

(3) An aircraft approaching another aircraft or a vessel head-on, or approximately so, shall alter its heading to the right to keep well clear.

(4) An aircraft or vessel which is being overtaken has the right of way, and the one overtaking shall aiter its heading to keep well clear.

(5) Aircraft landing on or taking off from the water shall, insofar as practicable, keep well clear of all vessels and avoid impeding their navigation.

(6) All aircraft on the water shall display lights between sunset and sunrise as prescribed in technical standard 91.06.10 of Document SA-CATS 91.

(7) In areas in which the International Regulations for Preventing Collisions at Sea are in force, aircraft operated on the water shall comply with the provisions thereof.

Reporting position

91.06.15 (1) The PIC of an aircraft -

- (a) flying in controlled airspace;
- (b) flying in advisory airspace; or
- (c) on a flight for which alerting action is being provided,

shall ensure that reports are made to the responsible ATSU, as soon as possible, of the time and level of passing each compulsory reporting point, together with any other required information, and he or she shall further ensure that position reports are similarly made in relation to additional reporting points, if so requested by the responsible air traffic service unit and that, in the absence of designated reporting points, position reports are made at the intervals specified by the responsible air traffic service unit or published by the Director in terms of Part 175 for that area.

(2) Controlled flights providing position information to the appropriate ATSU via data link communications shall only provide voice position reports when requested.

Mandatory radio communication in controlled airspace

91.06.16 The PIC of an aircraft shall ensure that before the aircraft enters a controlled airspace, two-way radio contact is established with the responsible ATSU on the designated radio frequency, and shall ensure, while the aircraft is within, and until it leaves, the controlled airspace, that continuous radio watch is maintained and that such further two-way radio communication as such ATSU may require, is established: Provided that –

- (a) the ATSU may permit an aircraft not capable of maintaining continuous two-way radio communication, to fly in the control area, TMA, control zone or aerodrome traffic zone for which it is responsible, if traffic conditions permit, in which case the flight shall be subject to such conditions as such ATSU deems necessary to ensure the safety of other air traffic; and
- (b) in the case of radio failure, a flight for which an air traffic service flight plan was filed and activated by the ATSU on receipt of a departure time, may continue in controlled airspace if the communication failure procedures specified in Document SA-CATS 91 are complied with.

Mandatory radio communication in advisory airspace

91.06.17 The PIC of an aircraft shall ensure that before the aircraft approaches or enters an advisory airspace –

- (a) two-way radio communication with the responsible ATSU is established on the designated radio frequency;
- (b) if such communication is not possible, two-way radio communication is established with any ATSU which is capable of relaying messages to and from the responsible ATSU; or
- (c) if such communication is not possible, broadcasts are made on the designated radio frequency giving information on the aircraft's intention to enter the airspace, and such PIC shall ensure that, while the aircraft is within the advisory airspace and until it departs therefrom, a continuous radio watch is maintained on the designated radio frequency and that -
 - such further two-way radio communication as the responsible ATSU may require, is established with any other ATSU which is capable of relaying messages to and from such responsible ATSU;
 - (ii) If such communication is not possible, such further two-way radio communication is established with any other ATSU which is capable of relaying messages to and from the responsible ATSU, as such responsible ATSU may require; or
 - (iii) if such communication is not possible, broadcasts are made on the designated radio frequency giving information on passing reporting points and when leaving the airspace concerned: Provided that –
 - (aa) an aircraft maintaining a Selcal watch while operating within an advisory route in the Johannesburg flight information region and whose Selcal call-

sign has been communicated to the Johannesburg flight information centre, shall be deemed to be maintaining a continuous radio watch; and

(bb) in the case of a radio failure, a flight for which an air traffic service flight plan was filed and activated by an ATSU on receipt of a departure time, may continue in advisory airspace if the communication failure procedures specified in technical standard 91.06.16 of Document SA-CATS 91 are comptied with.

Compliance with rules of air and air traffic control clearances and instructions

91.06.18 (1) The operation of an aircraft either in flight or on the movement area of an aerodrome shall be in compliance with the general operating rules in this Part and, in addition, when in flight, either with the VER or the IER.

- (2) The pilot of an aircraft shall -
- (a) comply with any air traffic control clearance which is obtained, unless the pilot obtains an amended clearance;
- (b) operate the aircraft in accordance with any instruction issued by an ATSU in an area in which an air traffic control service is provided; and
- (c) when deviating from an air traffic control clearance or instruction, notify the ATSU of the deviation, as soon as practicable.

(3) The pilot of an aircraft shall include the information specified in Document SA-CATS 91 when requesting a deviation from an air traffic control clearance or flight planned altitude or route.

(4) Nothing in these Regulations shall relieve the PIC of an aircraft from the responsibility of taking such action, including collision avoidance manoeuvres based on resolution advisories by ACAS equipment, as will best avert a collision.

Prohibited areas

91.06.19 (1) The Director may, by notice in the IAIP, declare any area to be a prohibited area and shall, when so declaring an area to be a prohibited area –

- (a) specify a height above the ground surface of such area; or
- (b) specify an altitude in respect of such area, as the Director may deem expedient, in the notice in question.
- (2) No person shall fly any aircraft whatsoever in the air space above a prohibited area
 - (a) below the height specified in terms of sub-regulation (1)(a); or
 - (b) below the altitude specified in terms of sub-regulation (1)(b), as the case may be, in respect of the prohibited area in question.

Restricted areas

91.06.20 (1) The Director may by notice in the IAIP declare any area to be a restricted area and shall, when so declaring an area to be a restricted area, specify in the notice in question –

(a) the nature and extent of the restriction applicable in respect of the area in question; and

(b) the authorisation under which flights in such restricted area shall be permitted.

(2) No person shall, in contravention of a restriction contemplated in sub-regulation (1)(a), fly any aircraft to which the said restriction applies, in any restricted area, unless the flight in question has been permitted by virtue of an authorisation contemplated in sub-regulation (1)(b).

Division Two: Visual flight rules

Visibility and distance from cloud

91.06.21 (1) Every VFR flight shall be so conducted that the aircraft is flown with visual reference to the surface by day and to identifiable objects by night and at no time above more than three eighths of cloud within a radius of five nautical miles of such aircraft and –

 (a) in the case of aircraft excluding helicopters operating under conditions of visibility and distance from cloud equal to, or greater than, the conditions specified in tables 1 and 2 –

| Airspace | Forward Flight visibility | Distance from clouds | Ground visibility and ceiling |
|--|---------------------------------|--|--|
| Control zones | Five km | Horizontally: 600 metres Vertically: 500 feet | No aircraft shall take-off from, land al, or approach to land at an aerodrome or fly within the control zone when the ground visibility at the aerodrome concerned is less than five km and the ceiling is less than 1 500 feet. ⁴⁴ |
| Within an aerodrome traffic zone (which does not also comprise a control zone or part of a control zone) | Five km | Horizontally: 600 metres Vertically: 500 feet | No aircraft shall take-off from, land at or approach to land at an aerodrome or fly within the aerodrome traffic zone when the ground visibility within such aerodrome traffic zone is less than five km and the ceiling is less than 1 500 feet. |

Table 1

Table 2

In Airspaces other than those specified in Table 1

| Airspace class | Altitude band | Forward Flight visibility | Distance from cloud |
|----------------|--|---------------------------|--|
| CFG | At and above 10,000 feet above MSL | 8 km | 1 500 m horizontally 1 000 ft vertically |
| CFG | Below 10,000 feet AMSL and above 3,000ft above MSL, or above 1,000 feet above terrain, whichever is the higher | 5 km | 1 500 m horizontally 1 000 ft ivertically |
| с | At and below 3,000 feet above MSL, or | 5 km | 1 500 m horizontally 1 000 ft vertically |
| FĠ | 1,000 feet above terrain, whichever is the higher | 5 km | Clear of cloud and with the surface in sight |

Provided that the minima specified in Table 1 are not applicable when:

- (i) entering or leaving a CTR and the flight has received clearance from an ATSU to operate under Special VFR minima as prescribed in regulation 91.06.22; or
- (ii) entering or leaving an ATZ on a cross-country flight; and
- (iii) a pilot in the aircraft maintains two-way radio communication with the aerodrome control tower or aerodrome flight information service unit, in which case the pilot may leave or enter the aerodrome traffic zone when the ground visibility is equal to or greater than five km and the ceiling is equal to or higher than 500 feet.
- (b) in the case of helicopters, under conditions of visibility and distance from cloud equal to, or greater than, those conditions specified in Tables 3 and 4:

Table 3

| Airspace | Flight visib(lity | Distance from clouds | Ground visibility and ceiling |
|---------------|-------------------|---|---|
| Contral zones | 2500m | Horizontally 300 metres Vertically: Clear of cloud | Except when operating under a SVf'R clearance no helicopter shall take-off from, land at, or approach to land at an aerodrome or fly within the control zone when the ground visibility at the aerodrome concerned is less than 2500 metres and the ceiling is less |

| | | | than 600 feet. |
|--|-------|--|--|
| Wilhin an aerodrome traffic zone (which does not also comprise a control zone or part of a control zone) | 2500m | Horizontally: 300 metres Vertically: Clear of cloud | No helicopter shall take-off from, land at, or approach to land at an aerodrome or fly within the aerodrome traffic zone when the ground visibility at the aerodrome concerned is less than 2500 m and the ceiling is less than 600 feet. |

Table 4

In Airspaces other than those specified in Table 3

| Airspace class | Altitude band | Flight visibility | Distance from cloud |
|----------------|---|--|--|
| CFG | At and above 10,000 feet above MSL | 8 km | 1 500 m horizontally 1 000 ft vertically |
| CFG | Below 10,000 ft AMSL and above 3,000 feet above MSL, or above 1,000 feet above terrain, whichever is the higher | 5 km | 1 500 m horizontalły 1 000 ft vertically |
| С | At and below 3,000 feet above MSL, or 1,000 feet | 2500m | 1 500 m horizontally 1 000 ft vertically |
| FG | above terrain, whichever is the higher | 1500m unless in accordance with (iii) below. | Clear of cloud and with the surface in sight |

Provided that:

- (i) the limitations as contained in table 3 shall not prevent a helicopter from conducting hover-in-ground-effect or hover-taxi operations within the confines of a controlled aerodrome or heliport, if the visibility is not less than 100 m;
- (ii) the minima specified in table 3 are not applicable when a helicopter is entering or leaving a CTR or ATZ and the flight has received clearance from an ATSU to operate under Special VFR minima as prescribed in regulation 91.06.22; and
- (iii) helicopters shall be permitted to operate in less than 1 500 m flight visibility outside of controlled airspace, if manoeuvred at a speed that will give adequate opportunity to observe other traffic or any obstacles in time to avoid collision.

- (2) VFR flight is not permitted
 - (a) at transonic or supersonic speed; or
 - (b) in Class A airspace.

Special VFR weather minima

91.06.22 (1) A PIC of an aeroplane may only conduct Special VFR operations in weather conditions below the conditions prescribed in regulation 91.06.21 within a control zone (CTR) –

- (a) under the terms of an air traffic control clearance;
- (b) by day only;
- (c) with a cloud ceiling of at least 600 feet and visibility of at least 1 500m, measured from the aerodrome reference point;
- (d) when the Special VFR flight will not unduly delay an iFR flight;
- (e) if the aeroplane is equipped with two way radio equipment capable of communicating with an ATSU on the appropriate frequency; and
- (f) if leaving the control zone, in accordance with instructions issued by an ATSU prior to departure.

(2) A PIC of a helicopter may only conduct Special VFR operations in weather conditions below the conditions prescribed in regulation 91.06.21 within a CTR or ATZ –

- (a) under the terms of an air traffic control clearance;
- (b) (i) by day; or
 - (ii) by night with a cloud ceiling of at least 300 feet;
- (c) when clear of clouds;
- (d) with a forward flight visibility of at least 800 metres;
- (e) if the helicopter will be operated at such a speed that the pilot has adequate opportunity to observe any obstructions or other traffic in sufficient time to avoid collisions;
- (f) if the flight can be conducted in accordance with regulation 91.06.32 with regard to minimum heights; and
- (g) when the Special VFR flight will not unduly delay an IFR flight.

VFR flight determination and weather deterioration

91.06.23 (1) The PIC of an aircraft operating outside a control zone or an aerodrome traffic zone is responsible to ascertain whether or not weather conditions permit flight in accordance with VFR.

(2) Whenever weather conditions do not permit a pilot to maintain the minimum distance from cloud and the minimum visibility required by VFR, the pilot shall –

- (a) if in controlled airspace, request an amended clearance enabling the aircraft to continue in VMC to the nearest suitable aerodrome, or to leave the airspace within which an ATC clearance is required;
- (b) if no clearance in accordance with paragraph (a) can be obtained, continue to operate in VMC and land at the nearest suitable aerodrome, notifying the appropriate ATC unit of the action taken;
- (c) if operating within a control zone, request authorization to operate as a special VFR flight; or
- (d) request clearance to operate in accordance with the IFR.

Division Three: Instrument Flight Rules

Compliance with IFR

91.06.24 A flight conducted above flight level 200 shall be flown in compliance with IFR as prescribed in this Subpart.

Aircraft equipment

91.06.25 Aircraft shall be equipped with suitable instruments and radio navigation apparatus appropriate to the route to be flown and in accordance with the provisions of Subpart 5.

Change from IFR flight to VFR flight

91.06.26 (1) The PIC of an aircraft who elects to change the conduct of flight of the aircraft from compliance with IFR to compliance with VFR shall, if a flight plan was submitted for the flight, notify the ATSU concerned that the IFR flight is cancelled and communicate to such ATSU the intended changes to be made to the current flight plan.

(2) When an aircraft operating under IFR is flown in or encounters VMC, the PIC shall not cancel its IFR flight unless it is anticipated, and intended, that the flight will be continued for a reasonable period in uninterrupted VMC.

IFR procedures

91.06.27 (1) Unless otherwise authorised by the responsible ATSU, aircraft flown in compliance with the rules contained in this Division, shall comply with IFR procedures applicable in the relevant airspace.

(2) Unless otherwise authorized by the appropriate ATS authority, or directed by the appropriate air traffic control unit, controlled flights shall, insofar as practicable –

- (a) when on an established ATS route, operate along the defined centre line of that route; or
- (b) when on any other route, operate directly between the navigation facilities and/or

points defining that route.

(3) An aircraft operating along an ATS route segment defined by reference to VHF omnidirectional radio ranges shall change over for its primary navigation guidance from the facility behind the aircraft to that ahead of it at, or as close as operationally feasible to, the changeover point, where established.

(4) Subject to the provisions of regulation 91.06.25, the PIC of an aircraft may execute, or endeavour to execute, a cloud-break or let-down procedure at an aerodrome or nominate an aerodrome as an alternate aerodrome: Provided that the requirements relating to cloud-break or let-down procedures and to flights under IMC, as published by the Director in the NOTAM, can be complied with.

Division Four: Specific Provisions Regarding Aircraft

Foreign military aircraft

91.06.28 No foreign military aircraft shall fly over or land in the Republic except on the express invitation or with the express permission of the Minister, but any such aircraft so flying over or landing in the Republic shall be exempt from these Regulations to such extent and on such conditions as are specified in the invitation or permission.

Identification and interception of aircraft

91.06.29 (1) No person shall institute in-flight surveillance against, give an interception signal in connection with or give an instruction to land to a civilian aircraft suspected to be in contravention of the Act except –

- (a) on instruction by the Minister, the Director, an authorized officer or authorized person; or
- (b) if the person is a member of the South African Police Services or South African National Defence Force, acting within the course and scope of his or her duties; and
- (c) the in-flight surveillance, interception signal or instruction to land is in the public interest.

(2) The in-flight surveillance, interception signal or instruction to land must be executed in a manner that does not unduly affect aviation safety.

(3) The intercepted aircraft must follow out the instructions of the intercepting aircraft as prescribed in Document SA-CATS 91.

(4) When the aircraft is intercepted, the pilot-in command (PIC) must immediately establish radio contact with the intercepting aircraft on 121,5 MHz.

(5) If the intercepting aircraft cannot establish radio contact with or contact in any other practical way the intercepted aircraft, visual signals as prescribed in Document SA-CATS 91 must be used.

(6) The PIC of analycraft flying in South African airspace when intercepted shall comply with the procedures specified in this regulation.

(7) The PIC of an aircraft flying in foreign airspace when intercepted shall comply with the interception procedures of that country.

Division Five: Air Traffic Rules

ATS procedures

91.06.30 The PIC of an aircraft to be operated in controlled airspace shall -

- (a) ensure that an ATS flight plan is submitted and changes thereto are notified as prescribed in regulation 91.03.4;
- (b) ensure that radio contact is established with the responsible ATSU and that radio communication is maintained as prescribed in regulation 91.06.16 except where such communication is accomplished using air data link; and
- (c) for flight in controlled airspace, obtain and comply with air traffic control clearances and instructions: Provided that –
 - (i) the PIC of an aircraft may deviate from an air traffic control clearance in exceptional circumstances, but such deviation shall be reported to the responsible ATSU as soon as possible; and
 - (ii) the PIC of an aircraft may propose an amendment to an air traffic control clearance, but such amendment shall not be applied until acceded to by the responsible ATSU.

Priority

91.06.31 (1) An ATSU may, with regard to arrivals and departures, give priority to aircraft operating in accordance with ATS flight plan clearance over aircraft not so engaged.

(2) However, an ATSU shall give priority to certain flights regardless of whether such flight is operating on an ATS flight plan or not, if the PIC has notified the ATSU that –

- (a) the aircraft is in a state of emergency, or the PIC has declared a distress or MAYDAY situation; or
- (b) the PIC has declared an urgency or PAN situation; or
- (c) the PIC has stated that there is a critically ill person on board the aircraft, or the flight is operated as an emergency air ambulance flight and the type of flight has been annotated accordingly in the flight plan; or
- (d) the PIC has declared that the aircraft is in a state of minimum fuel.

(3) An ATSU shall, with regard to flight operations and provided that there is no priority in force in terms of sub-regulation (2), give priority to aircraft -

- (a) engaged in the transportation of the President or Deputy President; or
- (b) engaged in the transportation of any visiting Head of State or foreign government official recognised by the South African government as qualifying for priority services; or

(c) engaged in operations related to national security, humanitarian emergencies, public safety emergencies or any other operation that the Director authorises as qualifying for priority services.

(4) An aerodrome operator shall, with regard to arrivals, departures and passenger movements and provided that there is no priority in force in terms of sub-regulation (2), give priority to aircraft -

- (a) engaged in the transportation of the President or Deputy President; or
- (b) engaged in the transportation of any visiting Heads of State or foreign government official recognised by the South African government as qualifying for priority services; or
- (c) engaged in operations related to national security, humanitarian emergencies, public safety emergencies or any other operation that the Director authorises as qualifying for priority services.

(5) Whenever an aircraft has requested a clearance involving priority in terms of subregulations (2), (3) or (4), a report explaining the necessity for such priority shall be submitted by the pilot-in command if requested by the Director, the appropriate ATSU or the appropriate airfield operator.

Division Six: Heights and Instrument Approach and Departure Procedures

Minimum heights

91.06.32 (1) Except when necessary for taking off, or landing, or except with prior written approval of the Director, no aircraft –

- (a) shall be flown over congested areas or over an open-air assembly of persons at a height less than 1 000 feet above the highest obstacle, within a radius of 2 000 feet from the aircraft;
- (b) when flown elsewhere than specified in paragraph (a), shall be flown at a height less than 500 feet above the ground or water, unless the flight can be made without hazard or nuisance to persons or property on the ground or water and the PIC operates at a height and in a manner that allows safe operation in the event of an engine failure; and
- (c) shall circle over or do repeated overflights over an open-air assembly of persons at a height less than 3 000 feet above the surface.

(2) A helicopter shall be permitted to be flown at heights less than those prescribed in subregulation (1)(a), provided that-

- (a) the operation is conducted without hazard to persons and property on the ground or water; and
- (b) the PIC operates at a height and in a manner that allows safe operation in the event of an engine failure.

(3) Except when necessary for take-off or landing, or with the express permission of the Director, an aircraft shall at night, in IMC or when operated in accordance with IFR, be flown –

- (a) at a height of at least 1 000 feet above the highest terrain or obstacle where the height of such terrain or obstacle does not exceed 5 000 feet above sea level within five nautical miles of the aircraft in flight; or
- (b) at a height of at least 2 000 feet above the highest terrain or obstacle located within five nautical miles of the aircraft in flight where the height of such terrain or obstacle exceeds 5 000 feet above sea level: Provided that within areas determined by the Director the minimum height may be reduced to 1 000 feet above the highest terrain or obstacle located within 5 nautical miles of the aircraft in flight, and provided furthermore that the aircraft is flown in accordance with such procedures as the Director may determine.

(4) The PIC of an aircraft shall, in addition to the requirements of this regulation, comply with any attitude restrictions prescribed for the area or route to be operated within or over.

Semi-circular rule

91.06.33 (1) Unless otherwise directed by an ATSU, the PIC of an aircraft in level flight shall fly at an altitude or flight level, as appropriate, selected according to magnetic track from the table as prescribed in Document SA-CATS 91.

(2) Aircraft flown in accordance with VFR at a height of less than 1 500 feet above the surface, shall not be required to comply with the provisions of sub-regulation (1), unless if otherwise directed by an ATSU.

(3) A flight conducted from flight level 200 and above, shall be flown in compliance with IFR.

Aerodrome approach and departure procedures

91.06.34 (1) When an instrument approach to, or instrument departure from, an aerodrome is necessary, the PIC of an aircraft shall use the instrument approach and departure procedure as published by the Director in the AIC, IAIP, IAIP Supplement or NOTAM or otherwise approved by the Director.

(2) No person flying an aircraft may execute, or endeavour to execute an instrument approach or instrument departure at an aerodrome unless --

- (a) the provisions of regulation 91.06.25 are complied with;
- (b) the flight is conducted in accordance with procedures for instrument approach or instrument departure authorised by the Director for the specific aerodrome and manoeuvre to be executed;
- (c) the requirements for flights conducted under IMC authorised by the Director are complied with; and
- (d) where applicable, has received a clearance for the approach from the relevant air traffic services unit.

(3) No PIC of an aircraft under IFR may nominate an aerodrome as an alternate aerodrome unless –

- (a) there is a procedure for an instrument approach authorised by the Director, if the forecast for the alternate is IMC;
- (b) the aircraft complies with the requirements of regulation 91.06.25; and
- (c) there is reasonable certainty that the requirements for flights conducted under IMC will be complied with.

SUBPART 7: FLIGHT OPERATIONS

Routes and areas of operation

91.07.1 The owner or operator of an aircraft shall ensure that -

- (a) operations are only conducted along such routes or within such areas, for which approval or authorisation has been obtained, where required, from the appropriate authority concerned;
- (b) all flights are planned and conducted in accordance with any mandatory routings that have been published for any airspace being operated in, unless otherwise authorised in an air traffic control clearance;
- (c) the performance of the aircraft intended to be used, is adequate to comply with minimum flight altitude requirements; and
- (d) the instruments and equipment of the aircraft intended to be used, comply with the minimum requirements for the planned operation and will enable the flight crew to control the flight path of the aircraft, carry out any required procedural manoeuvres and observe the operating limitations of the aircraft in the expected operating conditions.

Minimum flight altitudes

91.07.2 (1) No pilot shaft operate an aircraft at altitudes below --

- (a) altitudes, established by the owner or operator, which provide the required terrain clearance, taking into account the operating limitations referred to in Subpart 8; and
- (b) the minimum altitudes referred to in Subpart 6;

except when necessary for take-off and landing.

(2) The method of establishing minimum flight altitudes referred to in sub-regulation (1)(a) is prescribed in Document SA-CATS 91.

(3) Where the minimum flight altitudes established by the appropriate authority of a foreign State are higher than the minimum flight altitudes prescribed in this regulation, the minimum flight altitudes established by such appropriate authority shall apply in respect of a South African registered aircraft flying in the airspace of the foreign State concerned.

Use of aerodromes

91.07.3 (1) No pilot shall use, and no owner or operator shall authorise the use of, an aerodrome as a destination or alternate destination aerodrome, unless such aerodrome is adequate for the type of aircraft and operation concerned.

(2) Except in an emergency, no pilot of an aircraft shall take-off or land by night, unless the place of take-off or landing is equipped with night flying facilities.

Helicopter landings and take-offs

91.07.4 (1) No pilot of a helicopter shall land at or take-off from any place unless the place is so situated to permit the helicopter, in the event of an emergency arising during such landing or take-off, to fand without undue hazard to persons or property on the surface.

(2) No pilot of a helicopter shall land on, or take-off from, any building, structure or place in the area of jurisdiction of a local government, unless such building, structure or place has been approved for the purpose by the Director: Provided that this restriction shall not apply –

- (a) to a helicopter landing on, or taking off from, a building, structure or place within an industrial area, a commercial warehouse area or an open farm land which is suitable for such purposes and in respect of which helicopter the PIC is the holder of a valid CPL or ATPL (helicopter) or, in the case of the holder of a PPL (helicopter), with the written permission of the Director, unless specifically prohibited by the local government; or
- (b) to a helicopter engaged in an emergency medical service operation referred to in Part 138, or undertaking of a flight necessary for the exercising of any power in terms of any law.
- (3) The PiC of a helicopter shall ensure that any place used for landing, take-off or hover –
- (a) shali have -
 - (i) physical characteristics;
 - (ii) obstacle limitation surfaces; and
 - (iii) visual aids,

commensurate with the ambient light conditions and the characteristics of the helicopter being operated;

- (b) allows the helicopter to operate clear of obstacles and without causing nuisance to third parties through its rotor wash; and
- (c) has a surface area suitable for touch-down and lift-off.

(4) A local government may after consultation with the Director, extend the scope of the provisions of sub-regulation (2)(a) to include other places in its area of jurisdiction.

(5) The Director may, in the interests of aviation safety, impose conditions or institute restrictions as to the use of any building, structure or place for the landing or take-off of helicopters, or require special flight procedures to be adopted at, or special routes to be followed to or from, such building, structure or place by helicopters, and the Director may