



# Government Gazette

**REPUBLIC OF SOUTH AFRICA**

*Regulation Gazette*

No. 7780

Vol. 460

Pretoria

1

October

2003

**No. 25512**



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**GOVERNMENT NOTICE**

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**DEPARTMENT OF TRANSPORT**

No. R. 1375

1 October 2003

**AVIATION ACT, 1962 (ACT NO. 74 OF 1962)****TWENTY- FIRST AMENDMENT OF THE CIVIL AVIATION REGULATIONS, 1997**

The Minister of Transport has under section 22(1) of the Aviation Act, 1962 (Act No. 74 of 1962) made the Regulations in the Schedule hereto.

**SCHEDULE****Definition**

1. In these Regulations unless the context otherwise indicates "the Regulations" means the Civil Aviation Regulations, 1997, published by Government Notice No R.1219 of 26 September 1997 and Government Notice R.1255 of 17 October 1997, as amended by Government Notice No R. 1735 of 24 December 1997, Government Notice No R. 1041 of 14 August 1998, Government Notice No R. 1148 of 18 September 1998, Government Notice No R. 1664 of 14 December 1998 and Government Notice No R. 1702 of 31 December 1998, Government Notice No R. 1701 of 31 December 1998, Government Notice No R.639 of 21 May 1999, Government Notice No R. 170 of 17 February 2000, Government Notice No R. 171 of 18 February 2000, Government Notice No R. 558 of 22 June 2001, Government Notice No R. 559 of 30 August 2002, Government Notice No R. 1367 of 15 November 2002, Government Notice No R. 1368 of 15 November 2002, Government Notice No 1369 of 15 November 2002, Government Notice No R. 1370 of 15 November 2002, Government Notice No R. 1371 of 15 November 2002, Government Notice No R. 1372 of 15 November 2002, Government Notice No R.434 of 28 March and Government Notice No R.435 of 28 March 2003.

**Amendment of Regulation 1.00.1 of Part 1 of the Regulations**

2. Regulation 1.00.1 of the Regulations is herewith amended by –
  - (a) the insertion of the following definitions before the definition of "accelerate-stop distance available":
    - (i) **"ACAS current'**  
means that a pilot has either undergone ACAS II initial training or ACAS II renewal training within the prescribed period;"
    - (ii) **"ACAS cycle training'**  
means training conducted in accordance with an ACAS II syllabus by an approved ATO of which part of the tests and checks are subject to approval by the Commissioner";
    - (iii) **"ACAS initial training'**  
means training in accordance with the initial training component of an ACAS II syllabus;"
    - (iv) **"ACAS instructor'**  
means an appropriately rated flight Instructor who is an ACAS- current pilot;"

- (v) **"ACAS renewal training"**  
means training in accordance with the renewal training component of an ACAS II syllabus;"; and
  - (vi) **"ACAS syllabus"**  
means a syllabus of training in the use of ACAS II as published in Appendix I to TS 121.03.8A."
- (b) the insertion of the following definition after the definition of "air ambulance operation":
- "airborne collision avoidance system"** means an aircraft system based on secondary surveillance radar (SSR) transponder signals that operates independently of ground-based equipment to provide advice to the pilot on potential conflicting aircraft that are equipped with SSR transponders by issuing either a traffic alert, a traffic advisory or a traffic resolution;";  
and
- (c) the insertion of the following definition after the definition of "touch down area available":
- "traffic alert and collision avoidance system"** is the term used by the US FAA for US-developed ACAS equipment, a term also used *inter alia* by the New Zealand authorities;".

### Amendment of Regulation 1.00.2 of Part 1 of the Regulations

3. Regulation 1.00.2 of the Regulations is herewith amended by –

- (a) the insertion of the following abbreviations before the abbreviation **"AGL"**:
  - (i) **"ACAS"** means airborne collision avoidance system and in these Regulations unless the context indicates otherwise, refers to ACAS II; and
  - (ii) **"ACAS II"** means an airborne collision avoidance system meeting ICAO specifications;";
- (b) the insertion of the following abbreviations after the abbreviation **"AIP SUP"**:  
**"ALIM"** means altitude limit;";
- (c) the insertion of the following abbreviation after the abbreviation **"ARAC"**:  
**"ATMS"** means air traffic management system;";
- (d) the insertion of the following abbreviation after the abbreviation **"CDL"**:  
**"CPA"** means the closest part of approach;";
- (e) the insertion of the following abbreviation after the abbreviation **"IMC"**:  
**"LOFT"** means line-orientated flight training;";
- (f) the insertion of the following abbreviation after the abbreviation **"PBE"**:  
**"PF"** means pilot flying;";
- (g) the insertion of the following abbreviation after the abbreviation **"PIB"**:  
**"PNF"** means pilot not flying;";
- (h) the insertion of the following abbreviation after the abbreviation **"PPI"**:  
**"RA"** means resolution advisory;";

- (i) the insertion of the following abbreviations after the abbreviation "STOL":
- (i) "TA' means traffic advisory";
  - (ii) "TAS' means traffic avoidance system";
  - (iii) "TCAS' means traffic alert and collision avoidance system (USA/New Zealand)";
  - (iv) "TCAS I' means ACAS equipment meeting FAA TSO-C118 specifications";
  - (v) "TCAS II' means ACAS equipment meeting FAA TSO-C119 specifications; the equipment comes in two versions, namely 'version 6.04A' meeting TSO C119a specifications, and 'version 7' meeting both TSO-C119b and ICAO ACAS II specifications"

and

- (j) the insertion of the following abbreviation after the abbreviation "VOR":  
"ZTHR' means altitude threshold";

#### **Insertion of Regulation 43.02.19 into Part 43 of the Regulations**

4. The following Regulation is herewith inserted after Regulation 43.02.18 into Part 43 of the Regulations.

##### **"ACAS maintenance**

**43.02.19** Any person who carries out maintenance on airborne collision avoidance systems shall perform such maintenance as prescribed in Document SA-CATS-GMR."

#### **Amendment of Regulation 91.04.31 of Part 91 of the Regulations**

5. Regulation 91.04.31 of the Regulations is herewith amended by the substitution for the said regulation of the following regulation:

##### **"Airborne Collision Avoidance System**

**91.04.31** (1) As from 1 July 2003, whenever an aircraft is equipped with an airborne collision avoidance system (ACAS), such system shall –

- (a) function in accordance with the relevant provisions of Document SA-CATS-OPS 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.
- (2) Whenever an ACAS becomes unserviceable during flight when operation of ACAS is mandatory, the pilot-in-command of that aeroplane shall inform the responsible air traffic service unit as soon as is practical."

#### **Insertion of Regulation 91.07.30 into Part 91 of the Regulations**

6. The following Regulation is herewith inserted after Regulation 91.07.29 into Part 91 of the Regulations:

**"Airborne Collision Avoidance System Operations****91.07.30**

- (1) As from 1 July 2003 only an ACAS-current pilot may act as pilot-in-command of a South African registered aircraft during any period while an airborne collision avoidance system is activated. The mandatory activation of such system is prescribed in regulation 91.04.31.
- (2) When a flight crew receives an ATC traffic avoidance instruction that is in conflict with the resolution advisory message issued by the aircraft's approved ACAS, the ACAS resolution advisory takes priority over the ATC instruction.
- (3) Document SA-CATS-OPS 91 contains instructions in respect of ACAS operational use and event reporting.
- (4) For the purpose of this regulation, an ACAS-current pilot means a pilot who –
  - (a) completed within the immediately preceding 12 months initial ACAS II training; or
  - (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) completed within the immediately preceding 12 months on two or more days a session of ACAS II cyclic training.
- (5) ACAS II training shall be provided by the holder of an aviation training organisation, issued in terms of Part 141, or in terms of an approved ACAS training programme, as contemplated in Regulation 121.03.8A."

**Insertion of Regulation 121.02.11 into Part 121 of the Regulations**

7. The following Regulation is herewith inserted after Regulation 121.02.10 into Part 121 of the Regulations.

**"ACAS II qualification****121.02.11**

- (1) The operator of a commercial air transport aeroplane that is, in terms of these Regulations, required to be operated with an approved, serviceable airborne collision avoidance system (ACAS), shall ensure that the pilot-in-command of such aeroplane is an ACAS-current pilot.
- (2) For the purpose of this regulation, an ACAS-current pilot means a pilot who –
  - (a) completed within the immediately preceding 12 months ACAS II training; or
  - (b) within the immediately preceding 2 years completed ACAS training and subsequently completed ACAS II renewal training more than 9 months and less than 12 months after the earlier training; or

- (c) completed within the immediately preceding 12 months on two or more days a session of ACAS II cycling training;

as prescribed in regulation 121.03.8A.”.

#### **Insertion of Regulation 121.03.8A into Part 121 of the Regulations**

8. The following Regulation is herewith inserted after regulation 121.03.8 into Part 121 of the Regulations:

**“ACAS II training**

**121.03.8A**

- (1) The operator of a commercial air transport aeroplane that is required to be equipped with an approved, serviceable airborne collision avoidance system (ACAS II), shall establish and maintain an ACAS II training programme for the flight crew members in its employ.
- (2) The training programme, contemplated in sub-regulation (1) shall provide for either –
  - (a) (i) ACAS II initial training; and
  - (ii) ACAS II renewal training; or
  - (b) ACAS II cyclic training;

as prescribed in Document SA-CATS-OPS 121.”.

#### **Insertion of Regulation 121.05.15 into Part 121 of the Regulations**

9. The following Regulation is herewith inserted after Regulation 121.05.14 into Part 121 of the Regulations:

**“Airborne Collision Avoidance System**

**121.05.15**

- (1) (a) As from 1 July 2003, the operator of a turbine-engine commercial air transport aeroplane with a maximum certificated mass in excess of 15 000 kg or with a maximum approved passenger seating configuration in excess of thirty (30) passengers; or
- (b) as from 1 January 2005, the operator of a turbine-engine commercial air transport aeroplane of a maximum certificated mass in excess of 5 700 kg or with a maximum approved passenger seating configuration in excess of nineteen (19) passengers

shall not operate the aeroplane unless such aeroplane is equipped with a serviceable airborne collision avoidance system (ACAS) meeting ACAS II specifications, as prescribed in Document SA-CATS-OPS 121.

- (2) Notwithstanding the provisions of sub-regulation (1), such aeroplane may be flown –

- (a) for the purpose of moving the aeroplane to a place to have an approved but unserviceable ACAS that is fitted to the aeroplane repaired, removed, substituted or overhauled; or
  - (b) if the aeroplane is fitted with an approved ACAS that is unserviceable at the beginning of the flight –
    - (i) if not more than 10 days have passed since the ACAS became unserviceable, excluding the day of discovery, or for such shorter duration as prescribed by the authority responsible for a particular airspace; or
    - (ii) if the TA and RA are inoperative on the non-flying pilot side, the TA and RA elements and audio functions are operative on the flying pilot side, and on intercontinental flights the TA and RA functions are visible to the non-flying pilot.
- (3) Notwithstanding the provisions of sub-regulation (1)(b), such aeroplane may be flown, if on 31 December 2004, the aeroplane was fitted with a serviceable ACAS system not meeting ACAS II specifications. For such aeroplanes, upgrading to ACAS II specification shall be required only when the fitted system becomes unserviceable beyond reasonable repair.
- (4) The pilot-in-command of an aeroplane that is fitted with a serviceable ACAS system shall take all reasonable steps to ensure that the system is activated at all times during flight, and that its use is consistent with the conditions prescribed for the area of operation.
- (5) Whenever an ACAS becomes unserviceable during flight, the pilot-in-command of that aeroplane shall inform the responsible air traffic service unit as soon as practical.
- (6) The pilot-in-command of an aeroplane to which sub-regulation (2) applies shall inform the relevant air traffic service unit before take-off that the aeroplane does not have a serviceable ACAS, and that the intended flight is either –
  - (a) for the purpose of moving the aeroplane to a place to have an approved but unserviceable ACAS fitted to the aeroplane repaired, removed, substituted or overhauled; or
  - (b) if a foreign aeroplane, which is fitted with an approved ACAS that is unserviceable at the beginning of the flight, the unserviceability is permitted for the aeroplane under a law in force in the country or registry of the aeroplane: Provided that not more than 10 days may have passed since the ACAS became unserviceable, and the aeroplane has been in South African territory for not more than a total of 72 hours during those days.”.

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**Short title and commencement**

10. This Amendment is called the Twenty-First Amendment of the Civil Aviation Regulations, 1997 and shall come into operation on 1 October 2003.
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