

## **APPENDIX C Aerobatic Rating Syllabus and Forms**

### **AEROBATIC RATING FORM**

The task of issuing these ratings was given by the SACAA to the Sport Aerobatic Club of South Africa (SAC), which is a Section of the Aero Club of South Africa (AeCSA) and the rating is administered by SACC on behalf of SAC.

Requirements for the issue of an aerobatic rating:

1. The candidate must be a member of the SAC.
2. The candidate must be a member of the Aero Club.
3. A suitably qualified person must sign out the candidate having completed the required exercises.
4. Successful candidates will be issued with an Aerobatic Rating.
5. The candidate must lodge this form with SACAA who will issue him with the rating card.
6. The candidate must pay SACAA the required fee for the rating.
7. The candidate must be in possession of a valid licence issued under Part 61 or Part 62 by the SACAA.

**N.B. It is the responsibility of the candidate to comply with the above**

Renewal of aerobatic ratings:

1. The applicant must be a fully paid up member of the Aero Club of SA.
2. The applicant must be a fully paid up member of the SAC.
3. The applicant must be in possession of a valid licence issued under Part 61 or Part 62 by the SACAA.
4. The applicant must be current and entitled to a rating as per the data on the SAC website. On expiry of a rating, which is valid only at the Graduate level, the candidate must comply with the requirements for the initial issue of an Aerobatic Rating.
5. The applicant must pay SACAA the required fee for the renewal.

Lapse or suspension of the aerobatic rating:

1. The SAC committee reserves the right to suspend any aerobatic rating as issued by SACAA, subject to the requirements as contemplated in the Promotion of Administrative Justice Act.
2. The aerobatic rating as approved by the SAC and issued by SACAA, automatically lapses should the pilots' license lapse or become invalid for whatever reason.
3. The aerobatic rating as approved by the SAC and issued by SACAA, will automatically become invalid should the pilot fail to renew his membership to the Aero Club and the SAC.

General Regulations, Rules and Considerations with respect to aerobatic ratings

1. Graduate ratings need to be confirmed by obtaining a score of average 70% at a SAC contest or before a Board of Judges within twelve months of date of issue.
2. Graduate Ratings allows the pilot to practice for and compete at the "Sportsman" level at any SAC aerobatic contest. In order to progress from class to class i.e. from "Sportsman" up to "Intermediate", to "Advanced" and to "unlimited", a pilot will have to attain a percentage of 70% or better in the class he or she is currently competing in to qualify for a higher class.
3. A pilot who has not competed at his level for one year shall automatically revert to the next lower level. This means that an "Advanced" pilot, for example, who fails to compete at the Advanced level for one year may now compete at the Intermediate level only for the following year. This rule may be waved at the discretion of the Contest Director or the SAC committee.
4. All contest participation will be recorded on the SAC records and published on the website.

5. A list of pilots, sanctioned by the SAC committee, who may give aerobatic instruction for the SAC is published from time to time.
6. Aerobatic instructors as appointed by the SAC may not charge for their services and must be rated on the type of aircraft, they give instruction on.
7. Instructors completing the attached forms are urged to do so in as much detail as possible since this form will be kept on record at SACAA. The knowledge and skills imparted in these early aerobatic sessions will form the foundation of the student's aerobatic career. These forms are open to inspection by SACAA and the committee of the SAC.
8. The rating issued is for the purposes of solo aerobatic practice and competition flight only. This rating is not valid for aerobatic displays, formation aerobatics, military aerobatics, or aerobatics in jets, helicopters, turbine powered aircraft, micro lights, gliders, gyrocopters, and any light single or twin-engine aircraft not specified for aerobatic flight by its manufacturer.
9. A separate Display Authorization is required for the purpose of display flying.
10. These rules, regulations and considerations may be amended from time to time. It is the responsibility of the holder of an aerobatic rating issued by the SAC to keep abreast of any changes or new developments.
11. This rating confers the privilege of aerobatic flight on the holder. By the same token there exist certain responsibilities. Some of these include: good airmanship, safe flying practices at all times, remaining current, supporting the club and its activities, setting an example to other pilots by being totally professional in one's approach to the sport and flying in general, never practicing new figures or manoeuvres at insufficient altitude.
12. Check list: The student should have: This form and the Aerobatic Training Record card.
13. The attached syllabus and rating form is based on the SAC Manual of Procedure as approved by SACAA a copy of which may be requested from the SAC Committee.

Ideally, a complete aerobatic instruction course should consist of a minimum of six sessions:

They are:

- Safety
- Spins
- Loops
- Stall turns
- Rolls and flying inverted
- Solo linked sequence of Spin, Loop, and Stall turn, Roll.

## AEROBATIC SYLLABUS AND RATING FORM

SOUTH AFRICAN



Section/division: Licencing  
Telephone number: 011-082-1000

Fax Number:

Form Number: CA 183-333  
011-082-1100

Physical address: Ikhaya Lokundiza, 16 Treur Close, Waterfall Park, Bekker Street, Midrand, Gauteng

Postal address: Postnet Suite 118, Private Bag X1037, Germiston 1400

Website:  
[www.caa.co.za](http://www.caa.co.za)

### DETAILS OF BANK ACCOUNT FOR PAYMENT OF PRESCRIBED FEE

Bank: Standard Bank of SA Ltd  
Branch: Brooklyn, Pretoria Branch Code: 011245  
Account Number: 013007971

### COMPULSORY CLIENT PAYMENT CODE (to be completed on deposit slip)

Service/transaction	Over the counter payments	EFT, Internet, Wire, Electronic payments
Fees: See CAR Part 187.00.10		

## APPLICATION FOR AEROBATIC QUALIFICATION - INITIAL

### AEROBATIC RATING FORM

The task of issuing these ratings was given to the Aero Club of SA who in turn delegated this responsibility to the Sport Aerobatic Club (SAC).

#### Requirements for the issue of an aerobatic rating:

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2. The candidate must be a member of the Aero Club.
3. A suitably qualified person must sign out the candidate having completed the required exercises.
4. Successful candidates will be issued with an Aerobatic Rating.
5. The candidate must lodge this form with the SACAA who will issue him with the rating card.
6. The candidate must pay the SACAA the required fee for the rating.
7. The candidate must be in possession of a valid licence issued under Part 61 or Part 62 by the CAA or the SACAA as the case may be.

#### N.B. It is the responsibility of the candidate to comply with the above

#### Renewal of aerobatic ratings:

1. The applicant must be a fully paid up member of the Aero Club of SA.
2. The applicant must be a fully paid up member of the SAC.
3. The applicant must be in possession of a valid licence issued under Part 61 or Part 62 by the CAA. the SACAA as the case may be.
4. The applicant must be current and entitled to a rating as per the data on the SAC website. On expiry of a rating, which is valid only at the Graduate level, the candidate must comply with the requirements for the initial issue of an Aerobatic Rating.
5. The applicant must pay the SACAA the required fee for the renewal.

#### Lapse or suspension of the aerobatic rating:

1. The SAC committee reserves the right to suspend any aerobatic rating as issued by the SACAA, subject to the requirements as contemplated in the Promotion of Administrative Justice Act.
2. The aerobatic rating as approved by the SAC and issued by the SACAA is valid for 24 months from date of issue.
3. The aerobatic rating as approved by the SAC and issued by the SACAA, automatically lapses should the pilots' license lapse or become invalid for whatever reason.
4. The aerobatic rating as approved by the SAC and issued by the SACAA, will automatically become invalid should the pilot fail to renew his membership to the Aero Club, the SAC and the FAI Sporting License.

#### General Regulations, Rules and Considerations with respect to aerobatic ratings

1. Graduate ratings need to be confirmed by obtaining a score of average 70% at an SAC contest or before a Board of Judges within twelve months of date of issue.
2. Graduate Ratings allows the pilot to practice for and compete at the "Sportsman" level at any SAC aerobatic contest. In order to progress from class to class i.e. from "Sportsman" up to "Intermediate", to "Advanced" and to "unlimited", a pilot will have to attain a percentage of 70% or better in the class he is currently competing in.

3. A pilot who has not competed at his level for one year shall automatically revert to the next lower level. This means that an "Advanced" pilot, for example, who fails to compete at the Advanced" level for one year may now compete at the Intermediate" level only for the following year. This rule may be waived at the discretion of the Contest Director or the SAC committee.
4. All contest participation will be recorded on the SAC records and published on the website.
5. A list of pilots, sanctioned by the SAC committee, who may give aerobatic instruction for the SAC, is published from time to time.
6. Aerobatic instructors as appointed by the SAC may not charge for their services and must be rated on the type of aircraft they give instruction on.
7. Instructors completing the attached forms are urged to do so in as much detail as possible since this form will be kept on record at the SACAA. The knowledge and skills imparted in these early erobatic sessions will form the foundation of the student's aerobatic career. These forms are open to inspection by the SACAA and the committee of the SAC.
8. The rating issued hereunder is for the purposes of solo aerobatic practice and competition flight only. This rating is not valid for aerobatic displays, formation aerobatics, military aerobatics, or aerobatics in jets, helicopters, turbine powered aircraft, micro lights, gliders, gyrocopters, and any light single or twin-engined aircraft not specified for aerobatic flight by its manufacturer.
9. A separate Display Authorization is required for the purpose of display flying.
10. These rules, regulations and considerations may be amended from time to time. It is the responsibility of the holder of an aerobatic rating issued by the SAC to keep abreast of any changes or new developments.
11. This rating confers the privilege of aerobatic flight on the holder. By the same token there exist certain responsibilities. Some of these include: good airmanship, safe flying practices at all times, remaining current, supporting the club and it's activities, setting an example to other pilots by being totally
12. professional in one's approach to the sport and flying in general, never practicing new figures or manoeuvres at insufficient altitude.
13. Check list: The student should have: This form and the Aerobatic Training Record card.  
The attached syllabus and rating form is based on the SAC Manual of Procedure as approved by the SACAA, a copy of which may be requested from the SAC Committee.

**Ideally, a complete aerobatic instruction course should consist of a minimum of six sessions:**

They are:

- Safety
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- Stall turns
- Rolls and flying inverted
- Solo linked sequence of Spin, Loop, and Stall turn, Roll.

### AEROBATIC SYLLABUS AND RATING FORM

Full Name	
Home Address	
Telephone Nu	
Email address	
License number	
Expiry Date	
Instructor	

#### LESSON 1: Safety in the briefing:

1. Civil Aviation Regulations pertaining to aerobatic flight
2. Briefing on aircraft type

3. Pre-Flight procedures
4. Parachute use
5. Pre aerobatic procedures
6. Unusual attitudes and the correct recovery procedure
7. A short review of gyroscopic effects, slip stream, stalling (including high speed stall)
8. A short discussion on aerobatics in general

**In the air:**

The instructor shall demonstrate to the student: (provided the aircraft is cleared for the manoeuvre by the manufacturer)

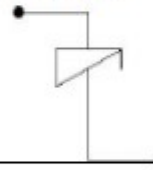
- Stalling erect
- Inverted flight
- Stalling inverted
- Slow flight
- Steep turns
- Spinning upright
- Spinning inverted
- High speed stall
- Positive flick roll (Snap roll)
- Loop
- Straight roll (aileron roll)
- Stall turn (hammer head)
- Linked sequence of: one turn spin, loop, stall turn and roll
- Recovery from unusual attitudes.

During this lesson and, if the student is up to it after demonstration of the above, the instructor should give the student a chance to practice recovery from unusual attitudes. It is a good idea to revise the recovery procedure at every session.

**UNUSUAL ATTITUDES**

**LESSON 2: Spinning**

The student must be able to enter and recover from an upright spin. The student must be able to recognize and recover from an inverted spin.



<b>SIGNATURE OF INSTRUCTOR</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>
<b>SIGNATURE OF STUDENT</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>

**LESSON 3: Loop**


The student must be made aware of the radius of the loop, entry speed required and any other inherent dangers in flying loops or part loops. Particular attention must be drawn to the possibility of exiting the loop lower than entering it and of the danger of flicking out of the loop at the top.



<b>SIGNATURE OF INSTRUCTOR</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>


<b>SIGNATURE OF STUDENT</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>

**LESSON 4: Stall Turn**  
 The student must be made aware of the possibility that the result of a badly executed stall turn may be an inverted flat spin. He should know how to recognise this and how to recover from the situation, before an inverted flat spin has developed.



<b>SIGNATURE OF INSTRUCTOR</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>
<b>SIGNATURE OF STUDENT</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>

**LESSON 5: Roll**  
 The student must be made aware that unless flown very well, rolls may result in a loss of altitude.



<b>SIGNATURE OF INSTRUCTOR</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>
<b>SIGNATURE OF STUDENT</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>

**LESSON 6: Linked Sequence**  
 The student must demonstrate to the instructor that he is capable of flying solo, a linked sequence of: Spin, loop, stall turn and roll, in a safe and controlled manner.

<b>SIGNATURE OF INSTRUCTOR</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>
<b>SIGNATURE OF STUDENT</b>	<b>NAME IN BLOCK LETTERS</b>	<b>DATE</b>

**Note:** This Aerobatic Rating Form, completed and signed by both instructor and student, needs to be submitted to the SACAA, 011 0821000, Hangar 50, Rand Airport for their processing.