



To: All SAMAA members.

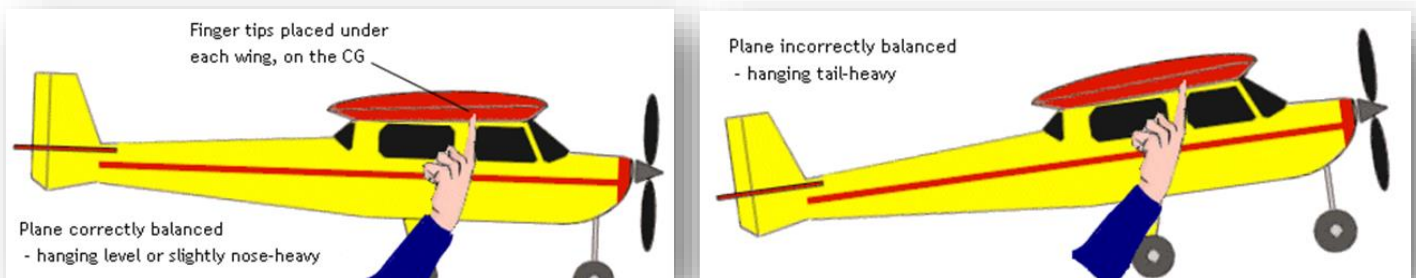
Date: 08 April 2024

## Centre of Gravity

Each RC airplane (as well as all other aircraft) possesses a designated center of gravity (CG). This point serves as the mean position where gravitational forces exert their influence on the plane, ensuring proper balance along the fore-aft axis.

Most airfoils have an aerodynamic *center* located around 25% - 33% of the mean aerodynamic chord (MAC) from the leading edge, so 25% is often used as a reference point on our *models*. Locating the CG at 25% is a safe bet for a maiden flight. Remember, it's always better to have a nose heavy *plane* than a tail heavy one.

A quick and easy method of **balancing RC planes**, if you don't have a special **plane balancing** tool, is this: Place the tips of your index or middle fingers under each wing, exactly on the line of the **CG** (i.e., the specified distance back from the leading edge of the wing or nose of the **plane**) and a couple of inches out ...

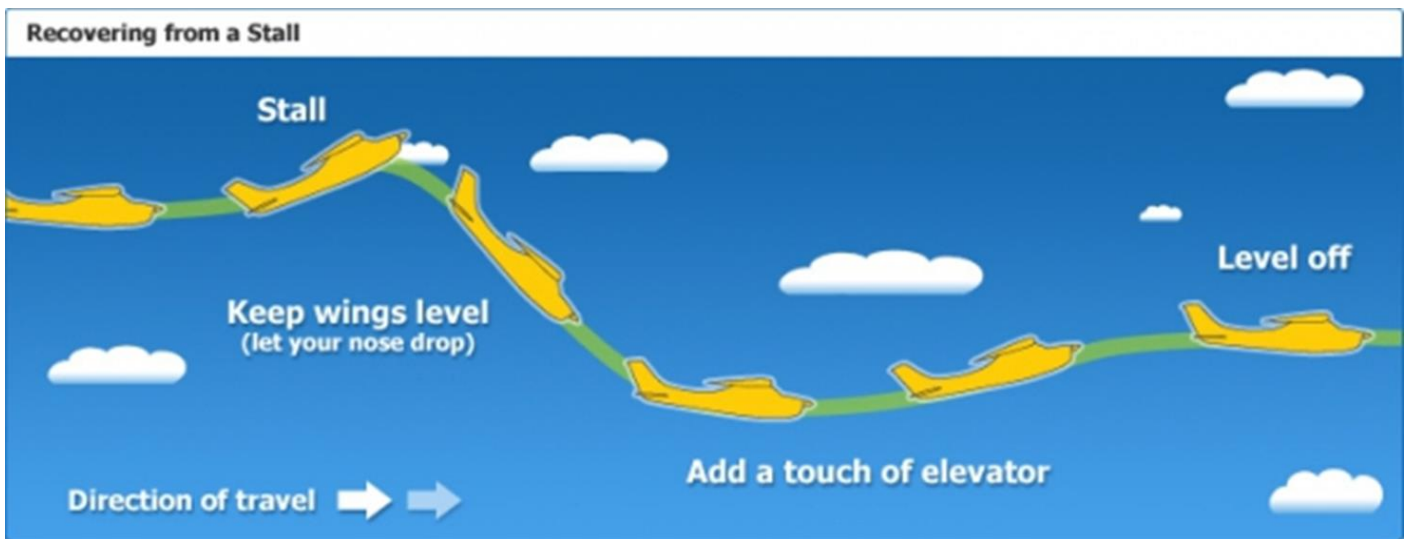
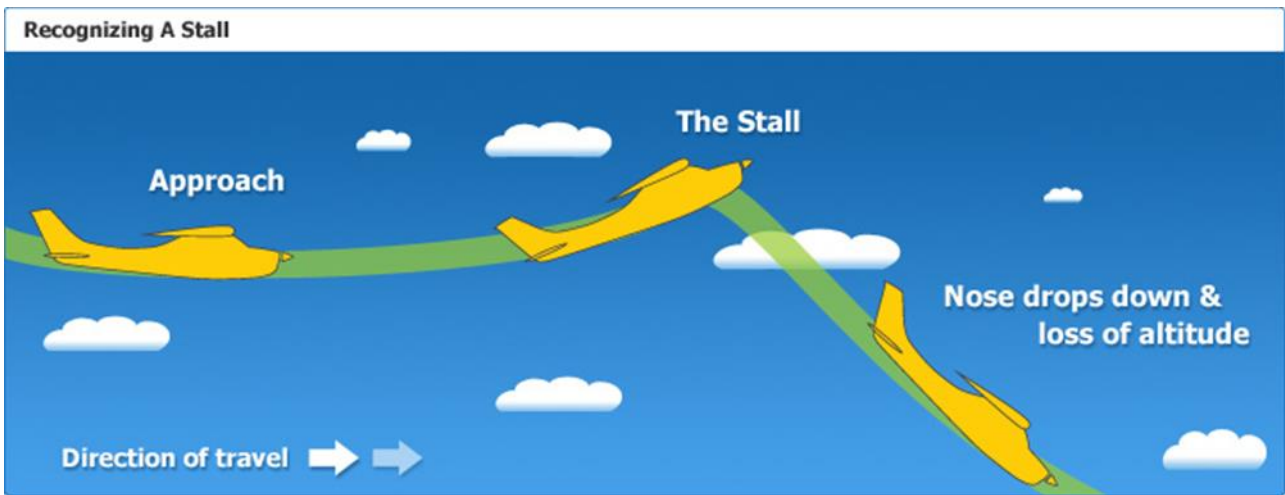


## Stalling

An **airplane stall** is an aerodynamic condition in which an **aircraft** exceeds its given critical angle of attack and is no longer able to produce the required lift for normal flight.

**Stall** occurs when a **plane** is under too great an angle of attack (the angle of attack is the angle between the **plane** and the direction of flight). Due to the **stall** the wing produces less lift and more drag; the increased drag **causes** the speed to decrease further so that the wing produces even less lift.

In situations where the **stall** angle is too high and the speed is too low, the **airplane** may not be able to **recover**, as it most likely would be falling down like a rock, but majority of the time, given enough altitude and speed, it is possible to correct the **stall**...Yes you **can recover from a stall**.



To **recover** from a **stall**, the pilot must push the nose down. Then the pilot must increase the engine power using the throttle. When air speed increases again, the pilot can level the wings and pull up to return the **aircraft** to normal **flight**.

### Model Aerobatics Association of South Africa (MAASA)

Precision Aerobatics is not just a sport; it's an addiction that requires discipline and precision. Like all addictive pursuits, you must experience it firsthand before you can truly understand its captivating hold.

You need to understand the rules of the sport which are defined by the FAI Sporting code and amended for local use in the MAASA Sporting Code. To become a proficient Aerobatic pilot takes years of practise and dedication but





# SAMAA *communiqué* #58

The South African Model Aircraft Association. CAA ARO #10  
Office 40 & 41, First floor, Meerhof Building, Meerzicht Office Park, 33 Kelly Road, Jet Park.  
Telephone 010-824-8343 e-mail admin@samaa.org.za www.samaa.org.za and www.samaa.co.za:89

the improvement to your flying skills will be immediately apparent and the self-satisfaction as each new skill is learnt and perfected will be on-going and can culminate in representing South Africa at the F3A World Championships.

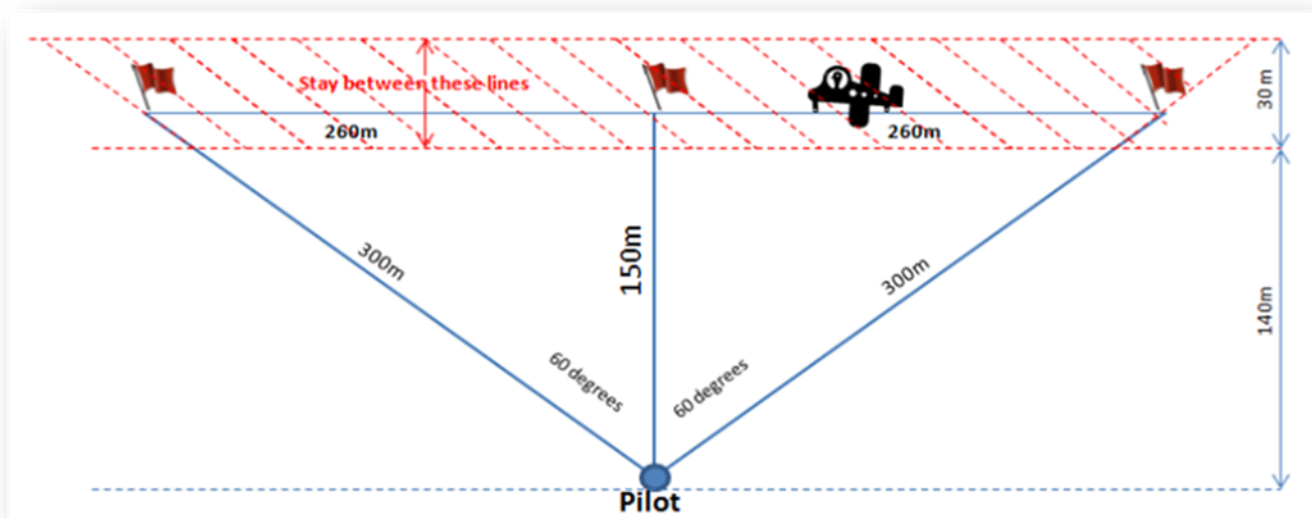
MAASA provides a basis for the uniform implementation of schedules, rules and regulations and judging criteria. MAASA has co-ordinated and established a formal framework for the development of aerobatic pilots from Sportsman class to International F3A together with suitable aerobatic schedules that are updated every two years.

All precision aerobatics is flown in an “aerobatic box”. This is an imaginary rectangle in the sky that is centred 150m in front of the pilot. It stretches 260m to the left and 260m to the right of the pilot and is 260m high.

Each of the classes; Sportsman, Advanced and Masters and F3A fly an aerobatic schedule. Each schedule is broken up into various manoeuvres and each manoeuvre is given a difficulty (K) factor.

Each class is designed to progressively teach you a new aspect of Aerobatics.

You may have observed Pattern pilots positioned alongside a runway, their gaze fixed ahead, where a set of white lines is painted on the ground before them. They are likely focused on the aerobatic box!



Once you have mastered the Sportsman class, you then move on to the other classes to perform end-box manoeuvres, precision snaps and spins, integrated manoeuvres, cross-box manoeuvres, mid box manoeuvres. In fact, most of the manoeuvres that you wish you could fly but don't have the courage to try.

You really do not need an expensive purpose-built pattern plane to get going. A stick, trainer or any other basic model is more than adequate. The plane does not matter that much, rather it is important to learn to fly in the aerobatic box and get satisfaction from acquiring the skills to progress from one class to the next. Patience and practise are key attributes of a Pattern pilot.

Classic or retro aerobatics harkens back to what many enthusiasts consider the golden age of R.C. Aerobatics—a simpler, more nostalgic era characterized by 60 size aerobatic planes reminiscent of jet-style designs. These aircraft, once the pinnacle of technology and sophistication, now offer a charming simplicity compared to modern counterparts.



For more information on MAASA visit <https://www.maasa.co.za/>

### **SAMAA at the Aero Club Awards**

In 2023, the Aero Club granted our request to incorporate SAMAA awards into their annual awards ceremony. It is an opportune moment to showcase the selfless contributions made by numerous members within our organization. We kindly urge you to submit your nominations.

It's important to note that this initiative will not impact the national colour awards; instead, it will further enhance the overall recognition of SAMAA and its dedicated members. Your participation is invaluable in celebrating the outstanding achievements within our community.

We have the following categories solely dedicated to our SAMAA members.

1. SAMAA Member of the year.
  - a. Senior
  - b. Junior
2. SAMAA youth developer of the year.
3. SAMAA Club group of the year.

Listed below are the awards categories for your reference. Please review these categories, discuss this between your Club / SIG committee's and submit your nominations with the relevant supporting documentation.



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The deadline for submissions and nominations is **Monday 30<sup>th</sup> September 2024**. To ensure a smooth process, kindly submit your nominations in time.

Thank you for your continued support and cooperation. We look forward to receiving your nominations.

## **1. SAMAA Member of the year. [Senior]**

Any Senior member who has -

1. Positively contributed to his/her club.
  - a. Special flying days.
  - b. Maintaining of Club infrastructure.
  - c. Promoting the hobby to the public.
2. Attending / promoting competitions.
3. Promoting proficiencies.

A citation must include sufficient detail of the noteworthy contribution.

## **2. SAMAA member of the year [Junior].**

Any Junior member who has -

1. Shown significant dedication and growth in same year.
2. Successfully attended various Competitions for the year.
3. Focused on more than one discipline.
4. Assisting other Juniors.
5. Positive outlook.

The citation must include sufficient detail of the noteworthy contribution.

## **3. SAMAA Youth Developer of the year.**

Any member who has -

1. Organized single or multiple events for the sole purpose of promoting model flying under the youth.
2. Took part in single or multiple events for the sole purpose of promoting model flying under the youth.
3. Have successfully gained sponsorship for the sole purpose of promoting model

flying under the youth.

The citation must include sufficient detail of the noteworthy contribution.

#### **4. SAMAA Club of the year.**

Any Club that has -

1. Hosted a Fly in for the year.
2. Hosted a club challenge for the year.
3. Attended 1 Fly out for the year.
4. Attended or hosted any competition for the year.
5. Always illustrates the Best "Spirit or Gees" throughout.

*The citation must include sufficient detail of the noteworthy contribution.*

#### **Recipients of 2023 SAMAA Aero Club Awards**



From L-R:

Burt Botha (previous Chairman SAMAA); Kobus Els (Senior SAMAA member of the year); Jonathan Heath (Junior SAMAA member of the year); Jan Sime (MGA representative for Special Interest Group (SIG) of the year); Phillip Lewis (SAMAA Youth Developer of the year) and Alec Groenewald (Chairman of SAMAA)



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## Relocation of the SAMAA Office

We're excited to announce that the SAMAA office will be relocating to a new and improved location at Parkdene Shopping Centre, Lancaster Road, Boksburg, effective from the 1st of May. This move represents a significant step forward for our organization, providing us with better facilities and accessibility. The new office space promises enhanced amenities and a more convenient location.

We believe this move will further strengthen our commitment to serving you with excellence and efficiency. <https://maps.app.goo.gl/HUsDaYfwAxs7VwLJA>



Aviation Recreation Organisation no. 010 of the SA Civil Aviation Authority  
Associate member of the Aero Club of South Africa. Affiliated to the Fédération Aéronautique Internationale.  
The SAMAA is a public-benefit organisation, PBO Reg. No. 930030082.  
2024 Committee: Alec Groenewald, Dirk Meyer, Charl Jooste Jnr, Linda Dold, Juanita Smith, Bob Skinner



## Sponsors of the 2024 SAMAA Combined Nationals

We extend our heartfelt gratitude to all our sponsors for their invaluable contributions.  
Your support means the world to us!



Safe Flying!

The SAMAA Management Committee.

Until Next Time...

