

Department of Aeronautical Engineering

Event Report – RC Flight Simulator Workshop

Date: 30th October 2025

Venue: 5th Floor Seminar Hall.

1.Introduction

The Department of Aeronautical Engineering at Gopalan College of Engineering and Management organized a **Workshop on RC Flight Simulator** on **30th October 2025**. The session was conducted to provide students with hands-on experience in remote-controlled (RC) aircraft simulation and flight dynamics.

The workshop aimed to enhance participants' understanding of aircraft control, stability, and performance through virtual simulation. It also encouraged students to develop practical skills in aeromodelling and flight operations, fostering innovation and technical excellence in the field of aerospace engineering.

The event was conducted under the guidance of **Dr. G. Purushotham**, Head of the Department, and coordinated by **Mr. Suprith M**, Faculty Organizer. The **student organizers** were **Suman E. G.** and **Owais Khan**, who led the team with great enthusiasm and coordination. The **student coordinators** were **Revati Nagendra M**, **Preeti V**, and **M. Siddartha**, who efficiently supported the smooth conduct of the workshop.



2. Welcome Address

To begin the session, we were honored to have with us Dr. G. Purushottam, who has always been a constant source of inspiration and guidance, motivating students to explore the practical and innovative aspects of aeronautics.

We also had with us the organizer of the workshop, Mr. M. Suprith, who played a key role in planning and guiding the entire session. He shared his insights and briefed the participants about the objectives and outcomes of the workshop.

3. Demonstration Session

As part of the workshop, a demonstration session was conducted to showcase the practical aspects of RC flight simulation and piloting skills. A video demonstration was presented, highlighting the RC piloting skills performed by a 7th semester student, which captured the attention and interest of all participants.



4. Technical Talk by Mr. M. Suprith

The workshop featured an engaging **technical talk** by **Mr. M. Suprith**, Faculty Organizer, who provided an in-depth explanation of various aspects related to **RC plane simulation, aerodynamics, and piloting skills.**

He elaborated on the **principles of flight**, including **lift, drag, thrust, and weight**, and explained how these forces interact to achieve stable and controlled flight. Participants were introduced to the **fundamentals of RC plane design**, such as wing configuration, control surfaces, and stability mechanisms.

Mr. Suprith also demonstrated the use of **RC flight simulators** as an effective training tool for developing **piloting skills**, allowing students to practice take-off, navigation, and landing maneuvers in a virtual environment. His session helped bridge the gap between theoretical learning and real-world aeronautical applications, inspiring students to explore further in the field of **aerospace engineering and aeromodelling**.



4. Technical Talk by Suman E. G. and Owais Khan

The technical talk was delivered by **Suman E. G. and Owais Khan**, who provided an insightful explanation of the **RC Plane Simulator** and its role in understanding **aerodynamics** and **piloting skills**. They discussed how the simulator replicates real-world flight behaviour in a virtual environment, allowing students to study the effects of **lift, drag, thrust, and gravity** safely and effectively. The session covered essential topics such as **flight control surfaces** — ailerons, elevators, and rudders — and their influence on aircraft stability and maneuvering. They also emphasized how RC simulation serves as a **cost-effective and risk-free learning platform**, helping students enhance their **technical knowledge, design understanding, and flight control proficiency** through hands-on virtual practice.

5. Hands-on Session on Phoenix RC and Pica Sim Software

The hands-on session was conducted by Suman E. G., Owais Khan, **M. Siddartha.**, Preeti V., and Revathi Nagendra M., who guided the participants through practical exercises using Phoenix RC and Pica Sim flight simulator software. The session allowed students to experience the real-time dynamics of RC flying in a controlled virtual environment, bridging the gap between theory and practical application.

Participants were introduced to the Phoenix RC simulator, a professional-grade platform known for its realistic graphics, accurate flight physics, and compatibility with various RC transmitters. Students practiced basic flight operations such as take-off, turning, hovering, and landing, gaining confidence in understanding control inputs and aircraft response.

They also explored Pica Sim, a lightweight and educational simulation tool designed to demonstrate aerodynamic principles and control behavior in different aircraft models. Under

the mentors' guidance, students experimented with various environmental conditions, wing configurations, and control surface settings, enhancing their analytical and piloting skills.

The session provided a valuable interactive learning experience, enabling students to apply aerodynamics concepts, improve flight precision, and develop a deeper appreciation for the complexities of aircraft stability and maneuverability.



6. Token of Appreciation

As a gesture of gratitude and recognition, Tokens of Appreciation were presented to Suman E. G., Owais Khan, and Revathi Nagendra M. for their dedicated efforts and valuable



contributions in organizing the RC Flight Simulator Workshop. Their teamwork, enthusiasm, and commitment played a key role in ensuring the smooth and successful conduct of the event.

7. Vote of Thanks

The session concluded with a Vote of Thanks delivered by Revati Nagendra M., who expressed heartfelt gratitude to Dr. G. Purushottam, Head of the Department of Aeronautical Engineering, for his constant encouragement and guidance. She also extended sincere thanks to Mr. M. Suprith, the Faculty Organizer, for his support and leadership in coordinating the workshop. Revati further appreciated all the faculty members, student organizers, and participants for their active involvement and contribution to the success of the RC Flight Simulator Workshop.



8. Hands-on Experience on RC Plane by 2nd Year Students

As part of the workshop, 2nd year Aeronautical Engineering students actively participated in a hands-on RC plane experience, where they explored the fundamentals of aircraft control and maneuvering. Under the guidance of the organizing team, students learned how to operate RC planes, understand control responses, and apply aerodynamic principles in real-time scenarios.

This interactive session provided them with an opportunity to connect theoretical concepts with practical flight operations, enhancing their understanding of stability, lift generation, and control coordination. The students enthusiastically engaged in flying demonstrations, gaining valuable exposure to realistic piloting challenges and technical handling of RC aircraft. The experience not only strengthened their practical skills but also ignited their curiosity and passion for aerospace innovation and model aircraft design.



Students list:

Chethan. S	1GD23AE012
ABHINAV S MOHAN	1GD24AE001
Amisha singh	1GD24AE003
Athira Praveen	1GD24AE004
Bharath gowda KR	1GD24AE006
D.vojaswi	1GD24AE010
Hasnath banu	1GD24AE012
M Hanishka	1GD24AE018
M HANISHKA	1GD24AE018
Madhan S	1GD24AE019
Navya Shree KS	1GD24AE024
Nethra M B	1GD24AE025
pavan.A	1GD24AE027
Plabanika Sahu	1GD24AE028
R.JAI MANOJ	1GD24AE030
Ranjeet Reddy	1GD24AE031
Rishanth R	1GD24AE032
Jason Jayaraj	1GD24AE033



Sahana Dattatraya Gaonkar	1GD24AE035
SAHANA.S	1GD24AE036
Saranya S	1GD24AE038
VAIJESH.K	1GD24AE045
Hariharan A	Lateral entry
Manjunath S	Lateral Entry
Manjunath S	Lateral Entry
Chandan Kumar	Lateral entry
Sahana D	1GD24AE034
SHRAVANI KS	1GD24AE040
Thanushree N	1GD24AE044
Shravya M	1GD24AE041
Keerthana.M	1GD24AE017
Hemashree M	1GD24AE013
Smithaharini H	1GD24AE042
Jeevan k	1GD24AE014
Chethan. R	1GD24AE009
P R Madhusudhana	1GD24AE026
Carol Sam	1GD24AE007
SHIVA KUMAR E	1GD24AE039
Yashwanth R	1GD24AE046
VAIJESH.K	1GD24AE045
Raghunath S L	1GD23AE037
Ranjeet Reddy	1GD24AE031
Chaithanya	1GD24AE008
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Prepared by,

Suprith M,

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