Aeromodelling Simulation Event Report

Event Name: Aeromodelling Simulation

Organized by: Aeromodelling Club, MNIT Jaipur

Date: November 2, 2025 to November 3, 2025

Venue: MIIC , MNIT Jaipur

Participants: Students from multiple years, Club Members, Faculty Advisors

Introduction

The Aeromodelling Club organized an engaging event titled **"Aeromodelling Simulation"** aimed at introducing participants to the fundamentals of aircraft design and model development. Aeromodelling, as a multidisciplinary hobby and engineering application, helps students understand the principles of aerodynamics, stability, structural design, and fabrication techniques.The event provided students with a hands-on experience of designing an aircraft model using digital tools and simulating its performance before attempting physical fabrication.

Objectives

The key objectives of the Aeromodelling Simulation event were:

- To introduce students to the basics of aeromodelling, aircraft design, and fundamental flight principles.
- To teach participants how to create aircraft layouts and drawings using **AutoCAD**.
- To demonstrate the complete workflow of turning a digital design into a physical model using **aero-ply sheet cutting**.
- To help students understand flight behaviour through simulations and encourage creative, hands-on learning.

Event Highlights

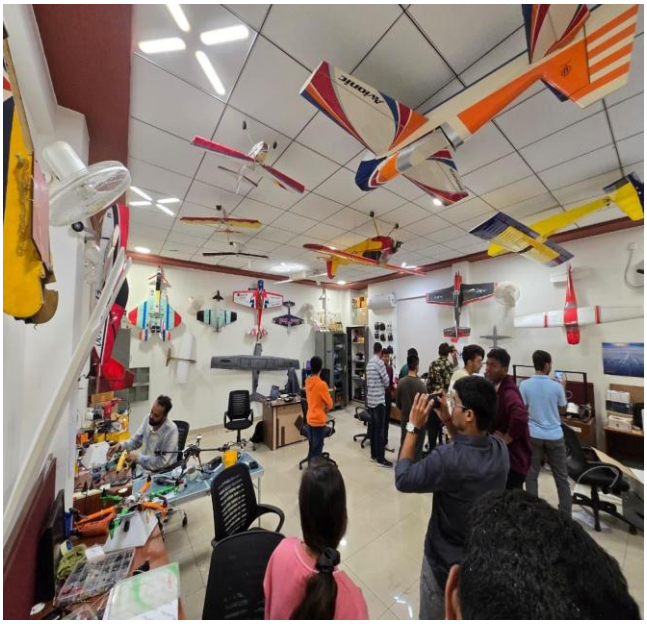
- A simple introduction to aeromodelling, aircraft parts, and basic flight concepts was given to help everyone understand the fundamentals.
- A live **AutoCAD demonstration** showed how to draft a complete aircraft model, including wings, fuselage, and tail design.
- Participants learned how the digital design is converted into physical components through **aero-ply sheet cutting and shaping techniques**.
- Simulations were used to show how different design choices affect flight performance, followed by an interactive Q&A session.

Learning Outcomes

- Gained a basic understanding of aerodynamics, aircraft structure, and flight stability.
- Learned to draft simple aircraft models using **AutoCAD** with proper dimensions.
- Understood material handling and fabrication steps, especially **aero-ply sheet cutting and shaping**.
- Developed design-thinking skills by analyzing simulation results and understanding how design changes affect flight.

Media and Documentation

Comprehensive documentation was created through high-quality photographs and videos of the exhibited models and presentations. These materials were shared across social media and club platforms to raise awareness and attract further interest in aeromodelling and aviation.



Conclusion

The **Aeromodelling Simulation** event turned out to be a fun and productive learning experience for everyone. Participants got a practical introduction to designing aircraft models and understood the workflow right from drafting to fabrication. The combination of hands-on explanation, simulations, and material demonstrations made the event engaging and easy to follow.
Overall, it was a successful session that sparked curiosity and motivated students to take part in future aeromodelling activities and workshops.