Background

On December 17, 1903, two brothers, Wilbur and Orville Wright, became the first humans to fly a controllable, powered aeroplane. To unravel the mysteries of flight, the Wright brothers built and experimented extensively with model gliders. Gliders are aircrafts without motors or a power source. Building and flying gliders helped the Wright brothers learn and understand the importance of weight and balance in aeroplanes.

Who can participate?

The Contest is open to students of all secondary schools in Mauritius as follows:

Category 1: Grade 10
Category 2: Grade 12

Participants should work in teams of Four students under the guidance of ONE Supervising Teacher/Mentor. Students who have opted for Science/ Mathematics/ Design and Technology and even non-science subjects (Art/Languages and Social Sciences) are invited to participate as long as they are interested in making a model glider.

Aims

To enable students to use science process skills to explore ideas, design concepts and techniques in aviation through practical application of basic aerodynamics.

Objectives

1. Enable students to develop, construct and fly their own model gliders.
2. Encourage students to explore ideas and come up with solutions by working in teams.
3. Develop creativity and innovation among young people.
4. Give students the opportunity to participate in fun activities related to Science and Technology.

The Process

STEP 1 - Register

Interested teams of 4 Students have to register online through the RGSC Website: rgsc.govmu.org.

Preliminary details or sketches of your projected design are not required at this stage.

Deadline for ONLINE Registration:

Thursday 14 February 2019

STEP 2 - Attend a Workshop

All teams will be requested to attend a workshop at the Rajiv Gandhi Science Centre by the end of February 2019.

Design and construction parameters with the selection of materials will be explained and advice on the general aerodynamic layout of the models will be available from experienced pilots and model aircraft designers. Most importantly for the competition, wingspan and weight limits will be set.

STEP 3 - Send Progress Details

Teams will send their progress details to the RGSC latest by Friday 29 March 2019. A Template will be provided.

STEP 4 - Fly your model Glider

The Preliminaries of the Model Glider Competition will be held by mid of May 2019, while the finals will be held by the first week of June 2019. Selected teams will be invited to display and fly their models. The venue will be confirmed.
Judging will take into account

1. Originality of the design and neatness of construction. The use of commercial kits or published plans is not allowed, the design must be your own.

2. Flying performance: Each team will be allowed three hand-launched flights, of which the flight which achieves the longest distance will score.

Rules and Regulations

1. Each team should consist of 4 students of Grade 10 or Grade 12 in the respective category.

2. A maximum of 4 teams per schools per category will be accepted.

3. A glider has no engine. No radio or other forms of remote control are permitted.

4. Supervising teachers should mentor students from the beginning to the finals of the project.

5. All up weight of the model in flying conditions, including its nose weight, must be between 50g and 200g. The lower limit (50g) will rule out paper planes or balloons and the upper (200g) will prevent dangerous flying bricks. The models measured wingspan (again as ready to fly) must be between 60 cm and 100 cm. Wingspan means the extent of the lifting surfaces of the model. The overall length of the glider must not exceed 80 cm.

6. Although balsa wood and doped tissue or plastic covering is an obvious choice, any construction materials may be used, as long as the weight limits are observed. A foam/plastic known as "Depron", which is available locally, is a recommended alternative. (The cost of a completed model will be very unlikely to exceed Rs. 500).

7. Team leader's name and school name should be on the model.

Winning teams of each category will be awarded prizes as follows:
First Prize: Cash prize Rs 8000 + shield
Second Prize: Cash Prize of Rs 4000 + shield

Participants of Model Glider Competition 2018

Winners of Model Glider Competition 2018

Open to students of all secondary schools
- Category I: Grade 10
- Category 2: Grade 12

Deadline For Online Registration:
14 February 2019
on website: rgsc.govmu.org

Scan for details

Complete the Online Registration Form on the
RGSC Website: rgsc.govmu.org
For more details please visit our website on rgsc.govmu.org or aasm.mu

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