

SAILOR SAFARI

Event Description:-

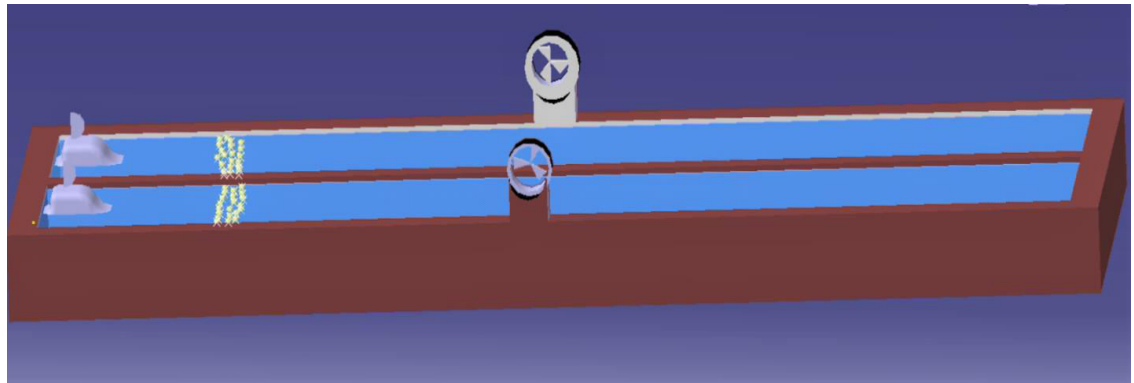
Are you fond of making paper boats during rainy season and love to compete as to which one goes faster? Then look no further as this Tecnoesis **ASME NIT Silchar Chapter** presents to you **Sailor Safari** where you need to design a small boat using any base material (e.g. wood, plastic bottle, etc.). The teams have to race amongst each other for the best time record. The boat which reaches the finish line in the least possible time will be declared as the winner.

Note- The organizers will be providing you with a single 150 rpm motor and a propeller for driving the boat. The participants' sole aim will be to work on the aerodynamics of the boat.

Problem Statement:-

During the races in knockout stages, the following obstacles will be added:

1. Winds opposing the motion of the boat will be there as the first obstacle to slow down the speed of boat. The design of the sail and the boat will be crucial to cross this obstacle.
2. The second obstacle will be water marbles which will be floating in water thereby slowing down the boat.
3. The third obstacle will be at last quarter of the track. The boat will have to survive the waves flowing in opposite direction to the flow of boat to reach the end point of the race.



Rough layout showing obstacle 1 and obstacle 2

Rules:-

1. Each team should consist of at least 2 and can have a maximum of 4 individuals.
2. The minimum dimension of boat should be 30 cm*15 cm.
3. While the maximum dimension of the boat should be 50cm*25cm
4. The boat's hull must touch the surface of water (i.e. you cannot build a hovercraft or submarines)
5. Only onboard power supply is allowed. Voltage difference should not exceed 12V.
6. There should be no backward mechanisms in the boat.
7. Boats cannot be constructed using readymade Lego kits or any readymade mechanism.
8. Violating these clause will lead to disqualification of the team.
9. Maximum boat weight -4 kg
10. Minimum boat weight – 2 kg
11. Two sails of 20 cm height and 10 cm width must be attached to the boat.

Judging criteria:-

1. Judging will be done on the basis of completion time.
2. +5 sec will be added as penalty to the completion time in case the boat strikes the track boundary.
3. In case, if the boat topples then number of obstacles crossed will be taken into consideration (Quarter, Semi and final match only) and in league stages if such situation occurs then that team will end up losing the match.

Scoring Criteria:-

1. Scores in the league stages will be awarded as per completion time.
2. Top 8 teams having the fastest time will enter the next stages.
3. In case of tie in league stages, the teams will have to face a tie breaker round in which they have to go through obstacles in lowest time possible.
4. In case of tie in Quarter, Semi-final or final matches there will be tie breaker round where additional weight will be attached to the boat and then face the obstacles, the team which will finish first will be declared as the winners.

- The above rules are liable to change if deemed necessary by the organizers at any point of time during the event and their decision will be considered to be final. No further argument shall be entertained.

Participants are expected to abide by the rules and should co-operate with the event organizers.

The decision of the judges shall be final, and no further argument shall be entertained.

Event Organizers and their details:-

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