# Super fast RC Hovercraft

Team name: INSPIRE

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IDEA: Our project may help in spying using wireless camera. It also help in rescuing because of its high speed when made on larger size.

COMPONENT: In making of hovercraft, we want to use EDF and one motor, motor for producing lift and EDF for propelling. The shape of base, we are planning pentagonal.

We don't know exactly what should be the rpm of main motor (producing lift in flight) as it should depend upon weight..

The material which we have thought for the base maybe either the same chloroplast as we used for RC plane or we may use balsa wood too as it would be stronger. The outer covering we decide would be of chloroplast.

For the skirting of hovercraft, we are planning to use either rubber tube, or terylene coated nylon...but our preference is for nylon because its water proof, light and smooth. May be  heavy duty garbage bag.

As per our planning we will use :-

STEP 1. Buy raw materials and electronics.

Electronics:

- EDF
- ESC
- Lithium battery
- 1 motor
- Pipe
- RC controller
- Chloroplast
- Balsa wood
- Terylene nylon

## Step 2: The Base and Mounting the EDF

The base is probably the easiest part in the build of the hovercraft. We did not want a rounded front end so we went with a sharp cut nose.

## Step 3: The Skirt and Air Splitting duct (directs air into skirt)

The Skirt is constructed of a heavy duty terylene nylon. Circular holes were cut in the center to release the air from the skirt.

## Step 4: Flippers and body

The flippers and body were made according to the size of hovercraft.

## Step 5: Electronics

The basic and most important part is done at last .The IC part and remote control part ,all the connections and testing will be done at last.

We think 6-7 thousand rupees  should be budget, mainly due to EDF ,ESC,RC controller and battery( we have RC plane motor though)..

Finally at the end of this project we will at least have an idea of

1: Aero modeling basics

2: fluid mechanics

3: general mechanism of RC model.

4: Basic electronics etc

- The new thing in this project is its speed which can be reach up to 50 km/h. This happens because of its EDF and its fluidic shape .
- Please give your suggestions and help to ensure that our proposal is accepted..