



GUARDIAN

DESIGN CONCEPT

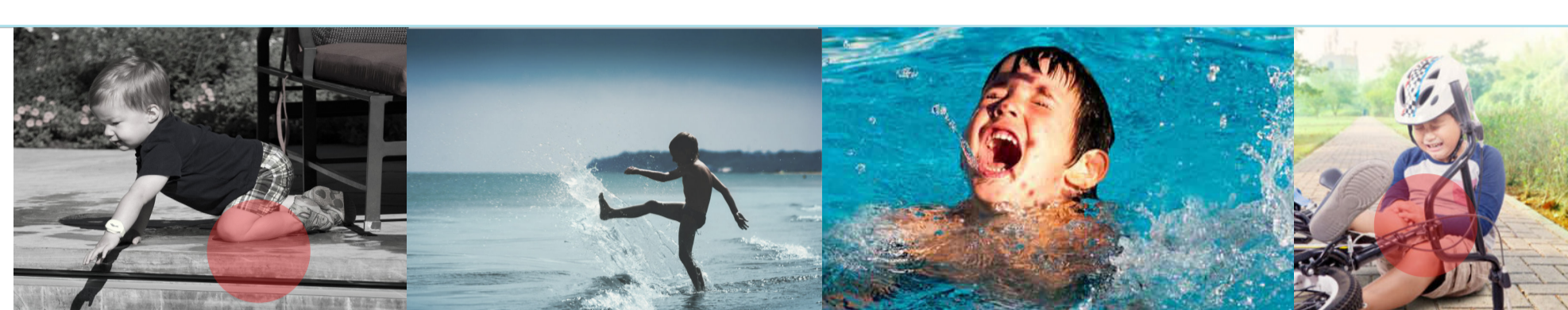
This project is designed for children. From the perspective of parents, the safety of their children is a main concern when they do some outdoor activities.

According to survey, nearly 300,000 children are lost every year in China. Especially, children who are between 2 and 5 years old are in a largest proportion about the children lost. Thus, park is the most likely lost place.

There are two reasons for that. one is that they are curious

about new toys and some interesting sounds, which results in losts. Another is they will be sentimental, flustered, scared and could howl when they can not find their parents. At this moment, they are easy to follow strangers.

Sharing drone is a good solution to settle this problem by tracking children when doing outdoor activities.



CHILDREN in the outside



PARENTS INTERVIEW

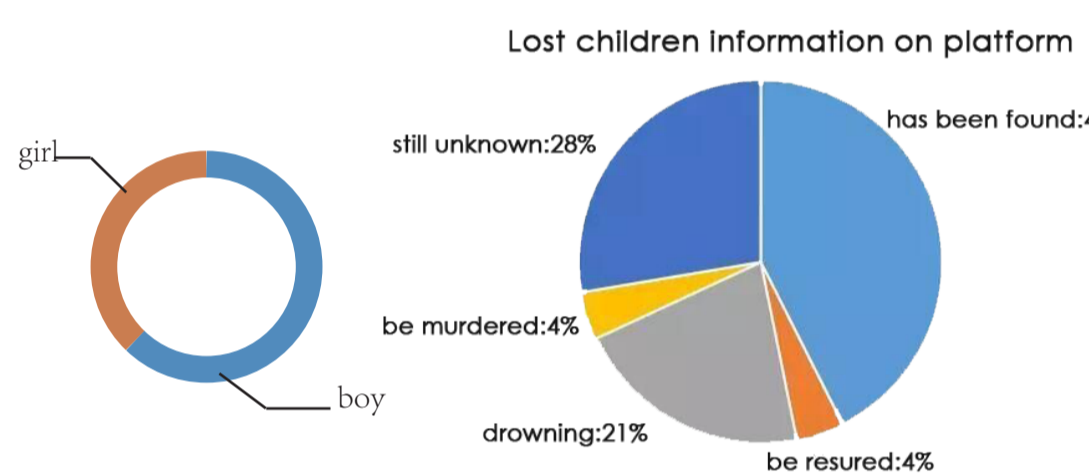
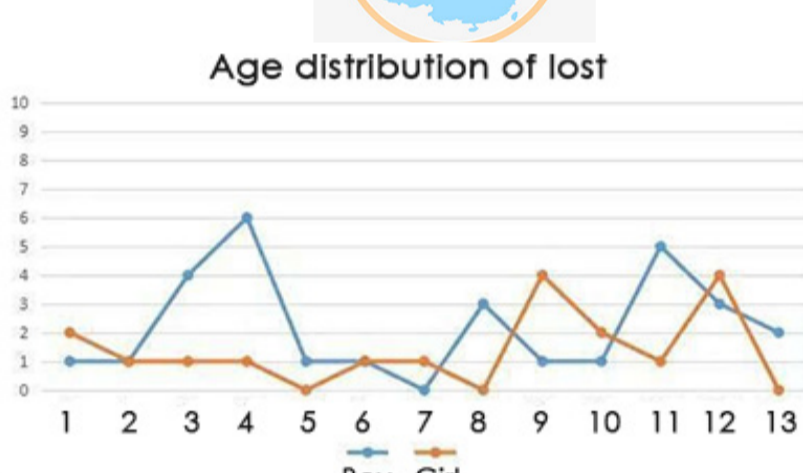
Most parents would take their children to parks where are nearby home

Abductor

What makes them worried most is children's safety.



Nearly 300,000 children are lost every year in China. The data was from the ministry of public security emergency release platform for missing children.



Observation

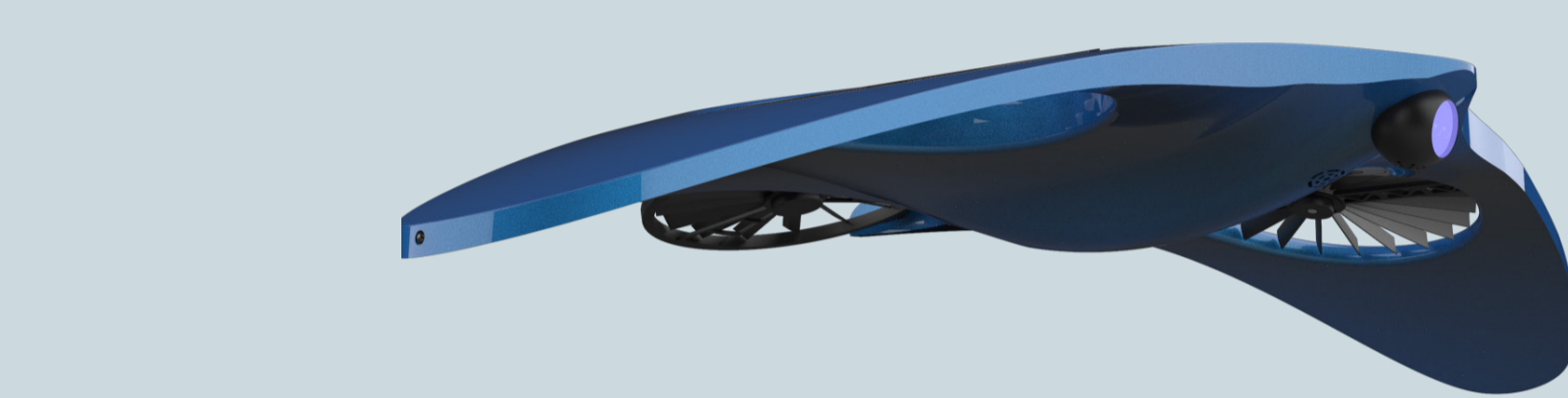
Generally, Portable drones have a more compact structure and foldable features



Professional aerial drones have more sensors and greater size and weight.



GUARDIAN



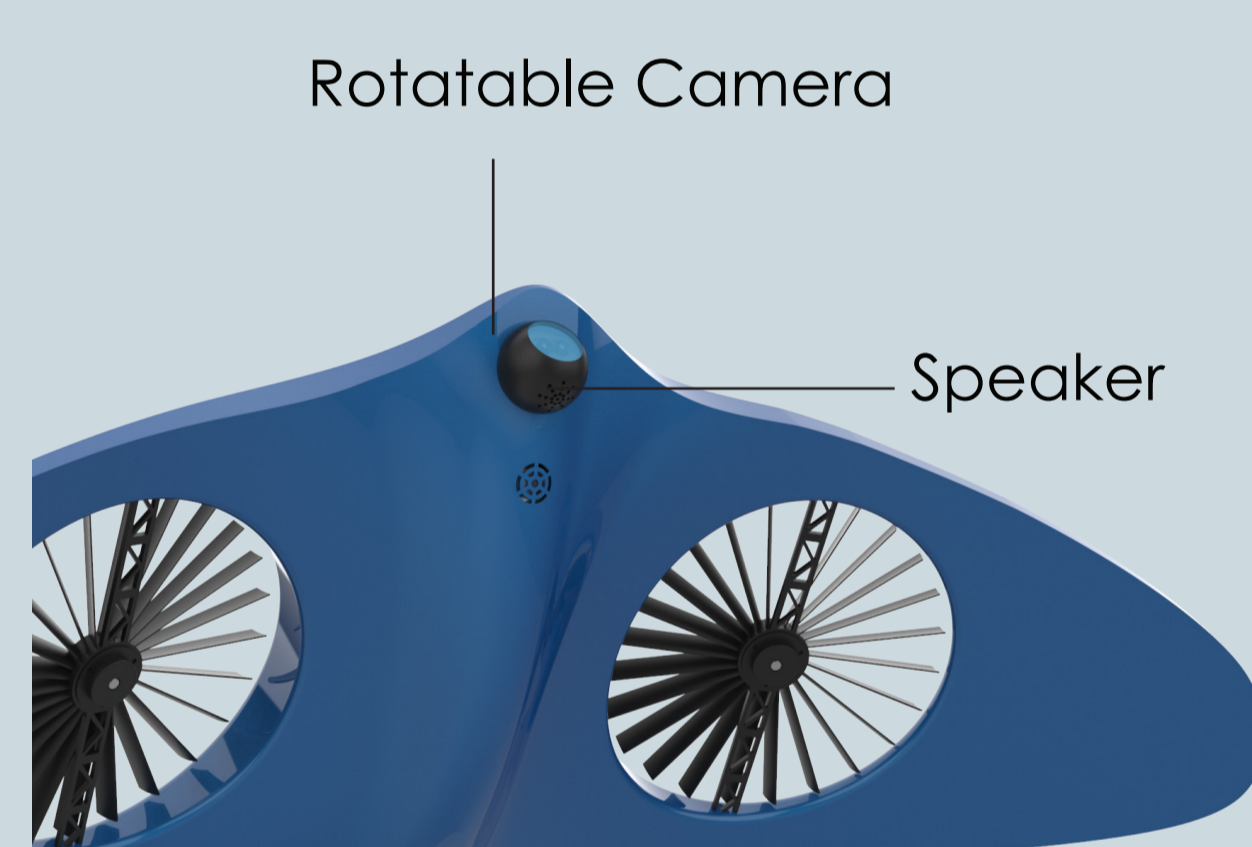
The guardian drone looks like a bird, with blue paint skin. The large body is aimed to prevent the blades from colliding, and to give children a sense of security as well.



Turbine Blades

Body with metallic paint

Blades with inclined angle



Rotatable Camera

Speaker

Infrared Sensor

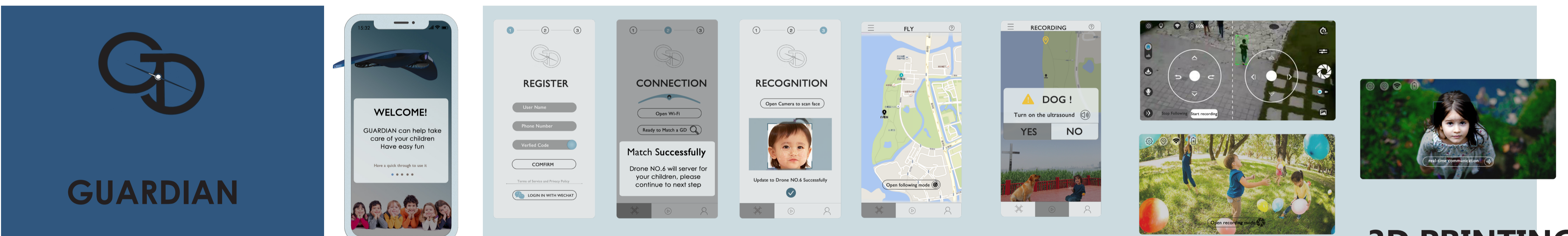
Ultrasonic dog prevention



180° Single axis rotor freedom

LED Light

Visual sensors

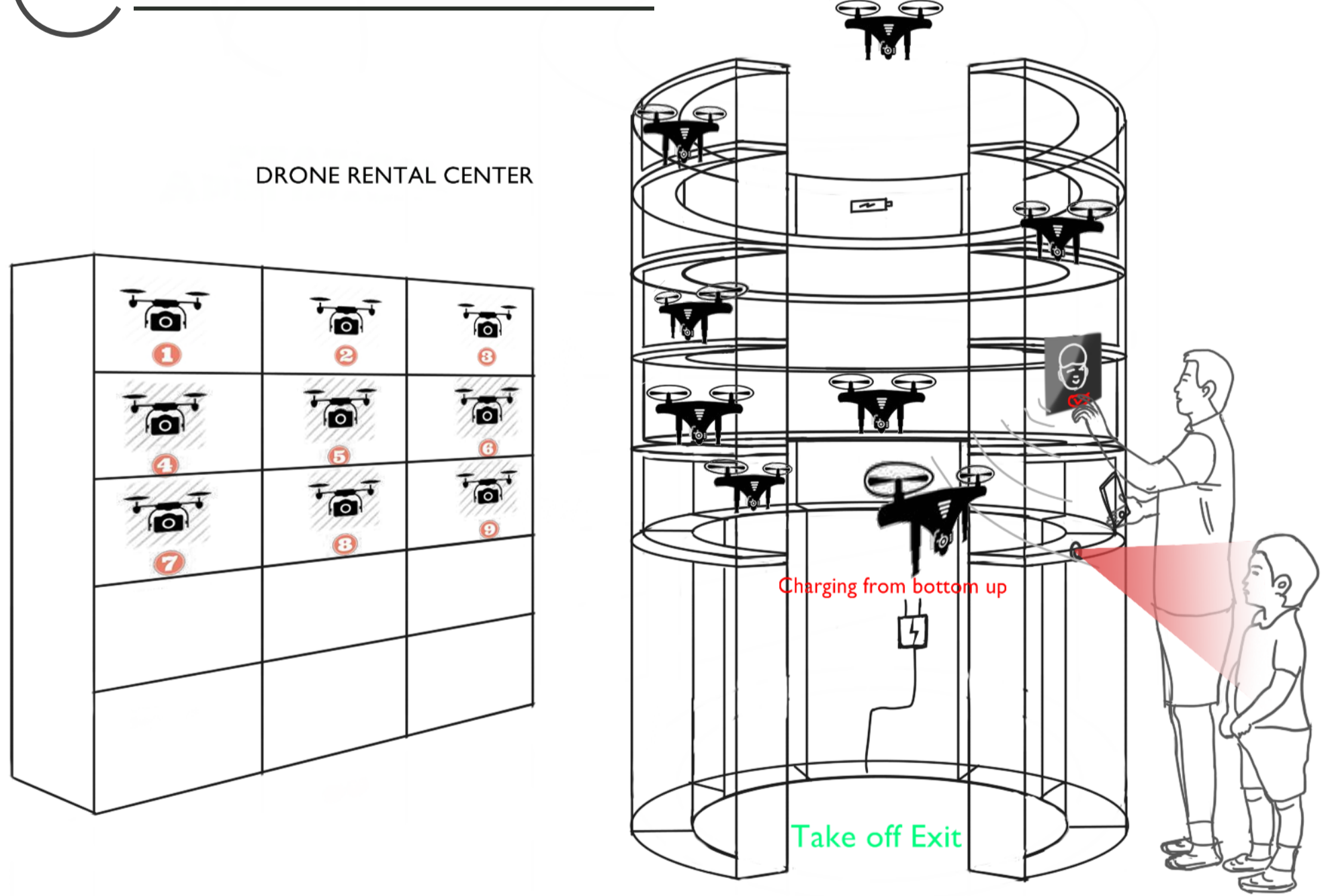


3D PRINTING

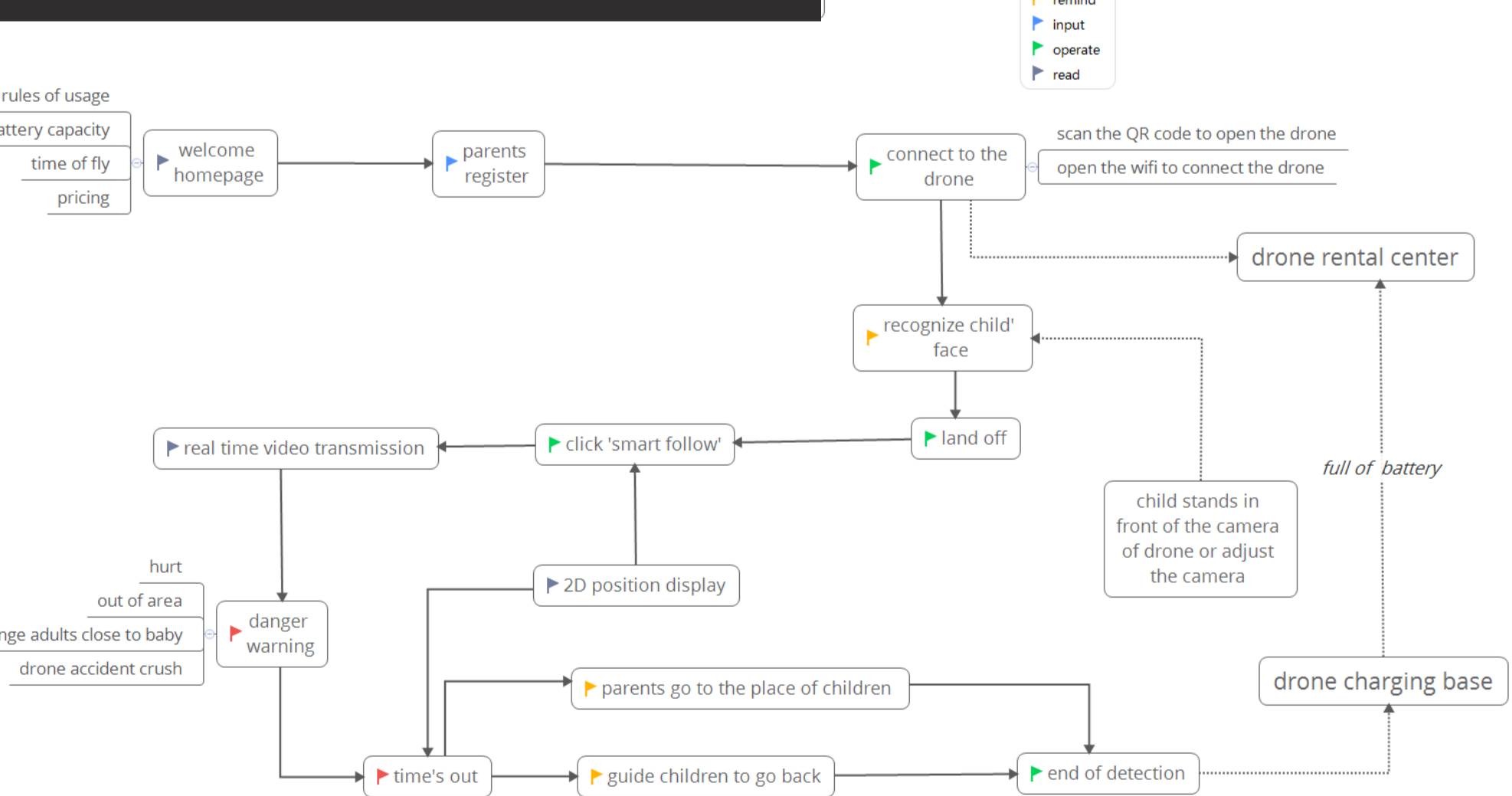


CNC MODEL

MIND MAPPING

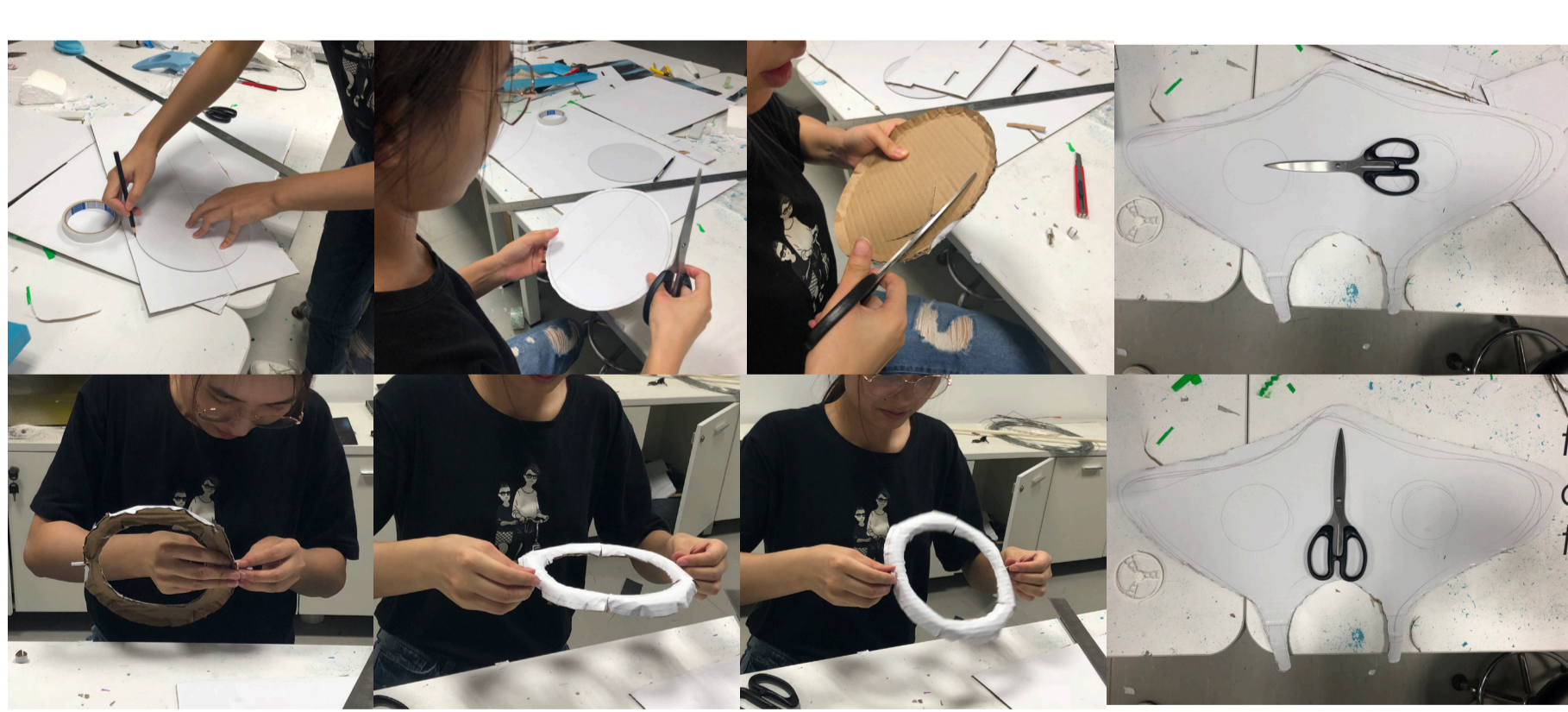


GUARDIAN DRONE SYSTEM

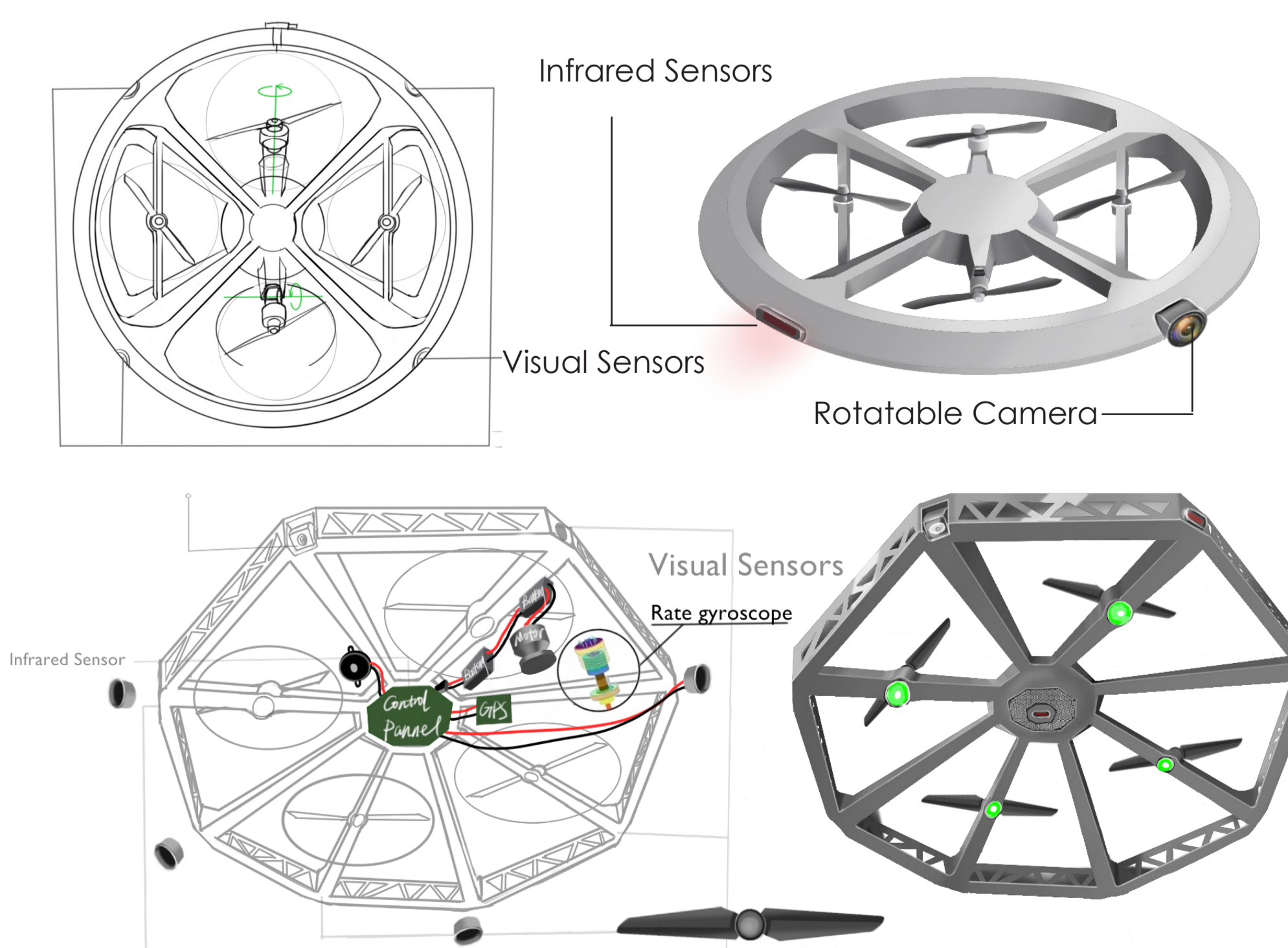


Confirm the feasibility of rotatable rear base

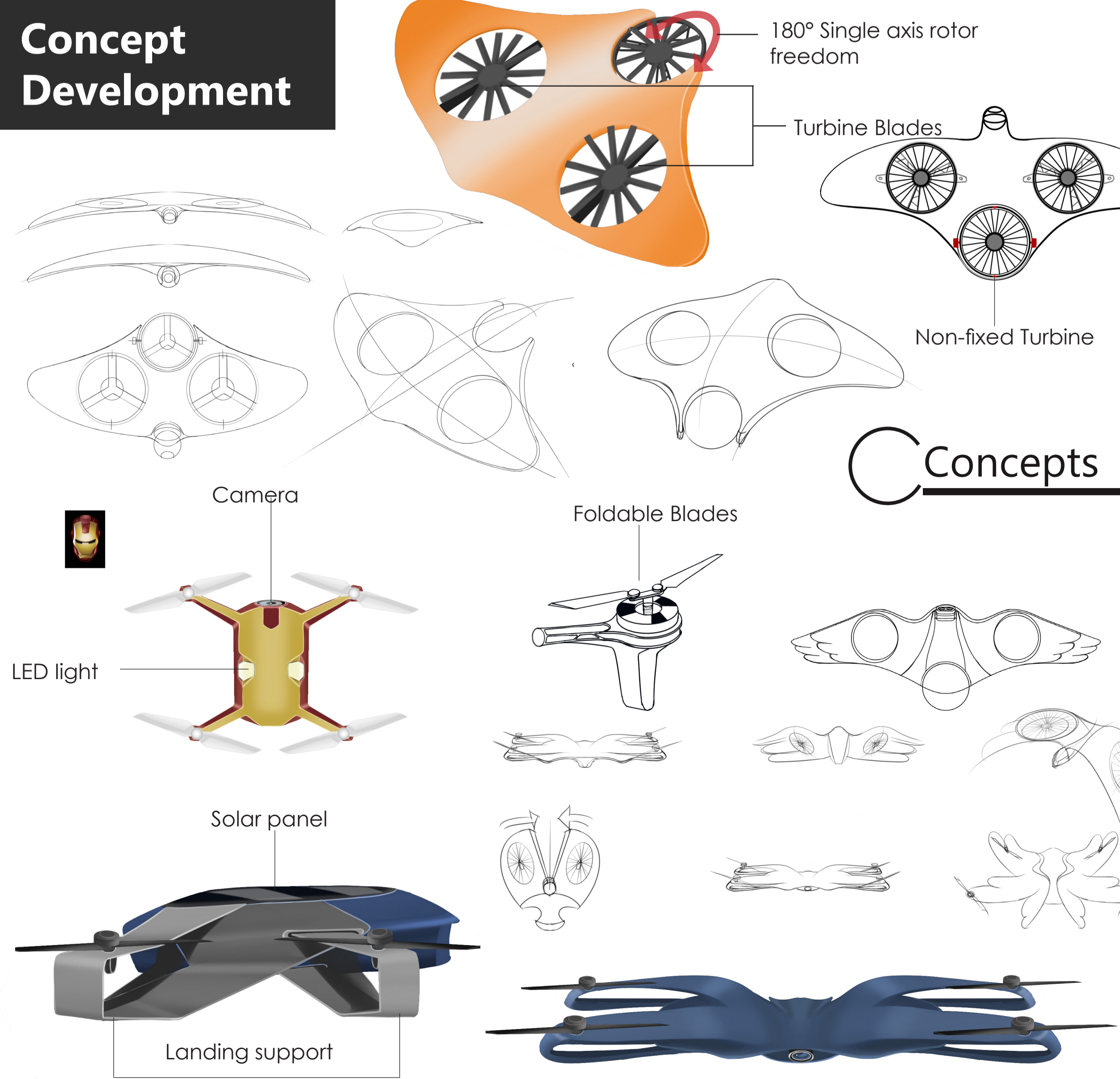
TESTING



Confirm the shape and size of the drone



Concept Development



180° Single axis rotor freedom

Turbine Blades

Non-fixed Turbine

Concepts

Camera

Foldable Blades

LED light

Solar panel

Landing support