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Module: M5X01365-1

Transport Futures

Throughout history and the automotive world. Humans have always depicted us taking to the skies, similarly to the birds they saw doing so freely. From winged single manned aircrafts that used bird like structures to hot air balloons and floating cities. I am one of those that still predicts we will take to the air, and with the rapid advancements of modern technology and understanding, we can finally do it efficiently for the everyday person. The skies are no longer for those who see it as a hobby or workplace, but for the everyday person wanting to get to work or to freight being delivered to the customers door. This is the future of personal air transportation.

Future problems require future thinking. With the ever-growing concern about climate change and how we all have a role to play, whilst also enjoying our own personal space whilst commuting to work, a radical project is needed to push us there. The design will be of module drones for both civilians and freight.

What –

The drones will be of multiple sizes and configurations depending on the users need. The users will never own the vehicle, but they are able to pay a monthly subscription to use them whenever they please. These drones will be powered by a heavily advanced electric motor, driven by A.I.. Putting all these together, you have a limited production vehicle that is only used when necessary, preventing it from being left unused as most cars are every single day. Are easily modifiable by machines to accommodate for more demand and use almost all recycled material. The A.I. prevents a need for new licenses for the users and it will be a safe alternative as you will not be in control. You will have already pre-selected your pickup and destination through either a phone app or a computer brain implant.

The benefits of this design will be reducing the amount of material used during production as you will be building less vehicles for more people. This reduces the carbon footprint from the manufacturing standpoint, and due to the high percentage of recycled material, will be easily recycled after its lifespan. The module sections will also reduce the need of creating unwanted vehicles. This is because they can switch from a four-seater to a single without any human interaction.

This drone will also be able to carry both 20 and 40 ft containers. This will be achieved through the drones different modules and adjustment variations. It is vastly greener to create one single design and production line of drones due to the manufacturing costs, space needed and materials. With a singular design, it can go from freight deliveries to people transportation in little to no time through the easy exchange of modules.

Design spec-

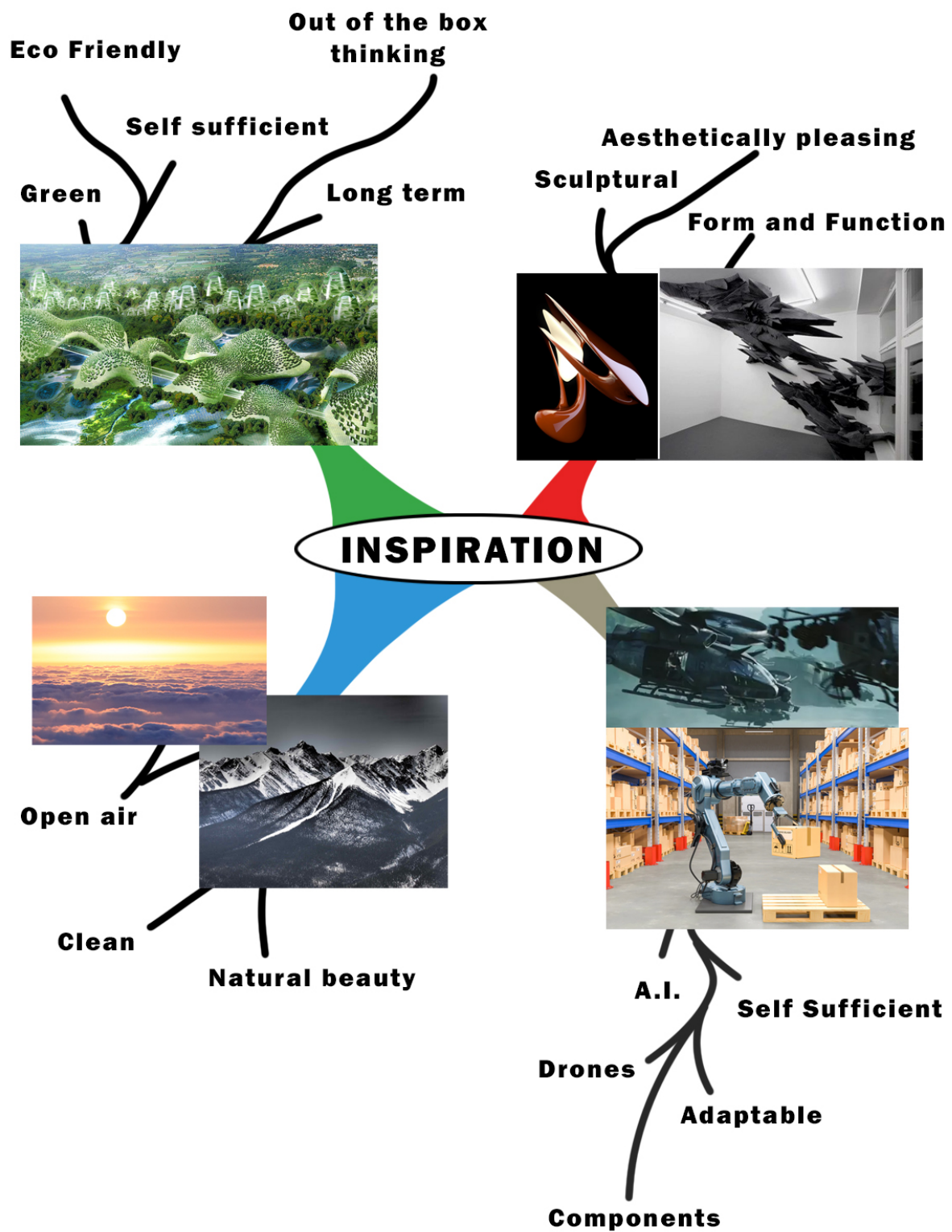
Module.

Configurable.

Recycled material.

City of the future.

Impressive user experience



Reading List and References

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Insider (2021) *Drone technology uses and applications for commercial, industrial and military drones in 2021 and the future*. Available at: <https://www.businessinsider.com/drone-technology-uses-applications?r=US&IR=T> (Accessed: 7 March 2021).



AIO

A I R - I S - O P E N

WHAT IS AIO?

**AIO IS A FUTURE PERSONAL AND FREIGHT
TRANSPORTATION MODEL**

**EACH DRONE IS MODULE CONTROLLED FOR
EASY ADJUSTMENT AND CUSTOMISATION**

**NEW CITY INFRASTRUCTURE FOR AN ECO
FRIENDLY PLANET AND EFFICIENCY**

**SUBSCRIPTION BASED SERVICE WITH NO
OWNERSHIP**

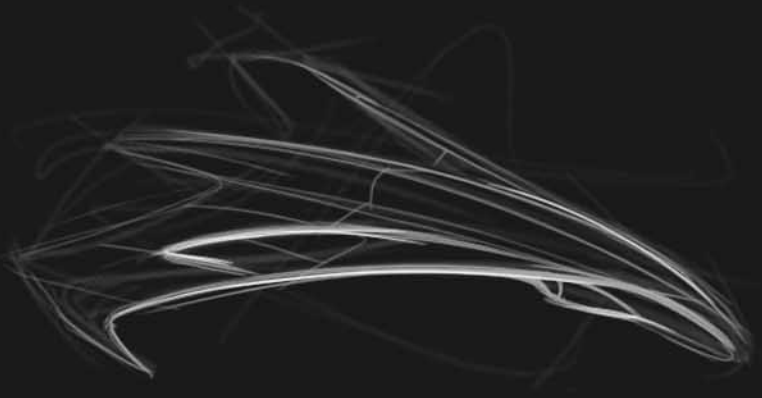
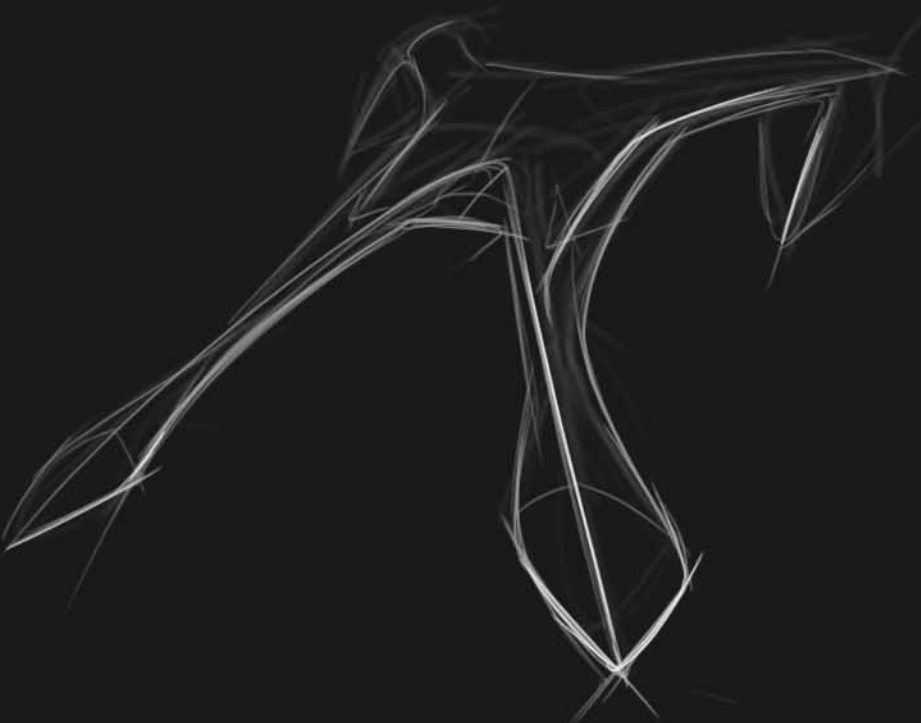
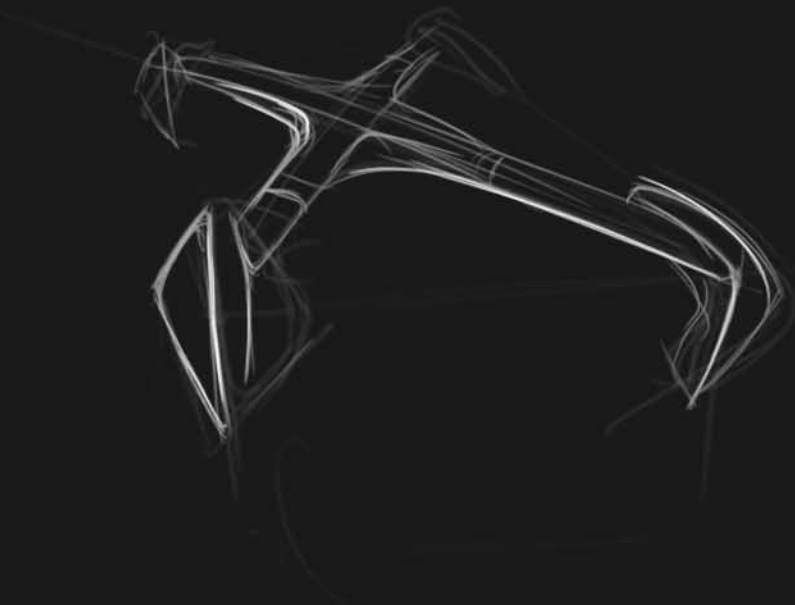
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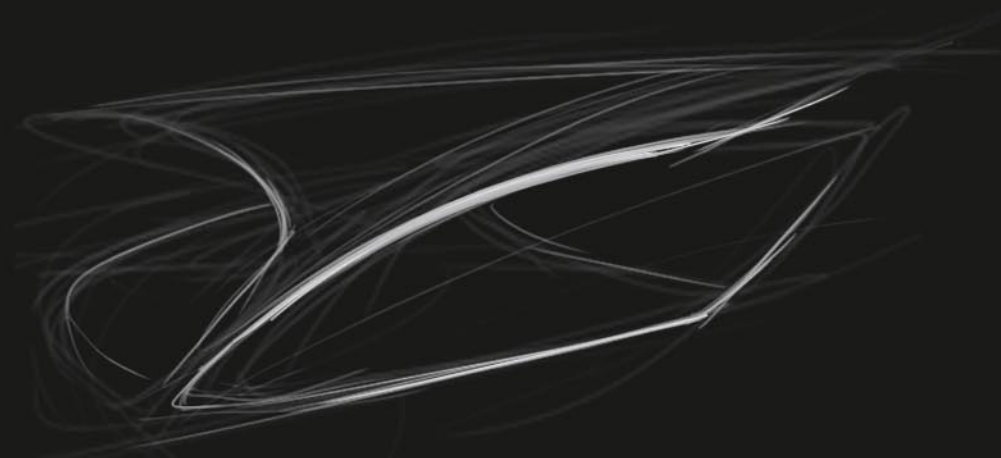
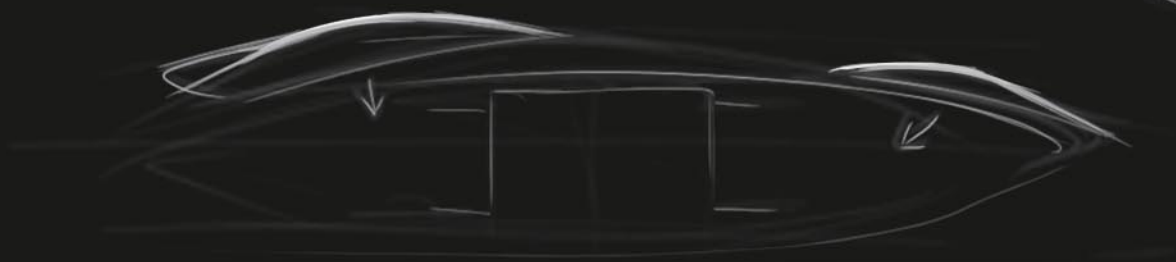
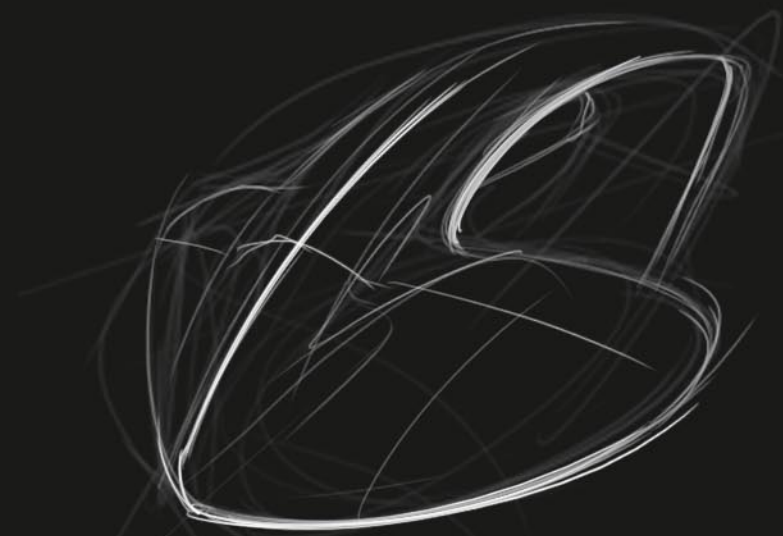


FORM IDEATION



FORM REFINEMENT



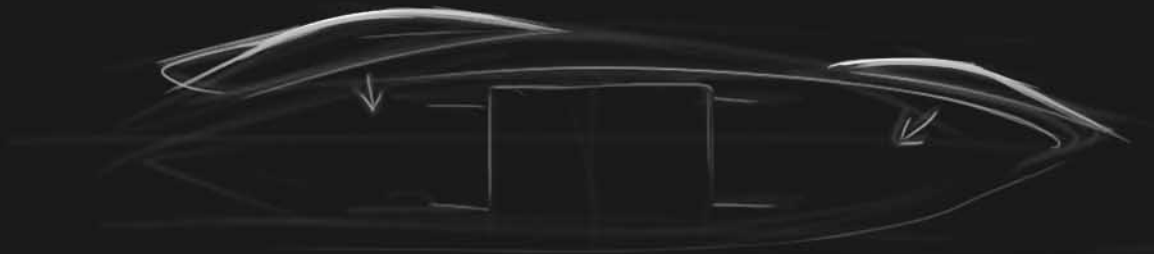
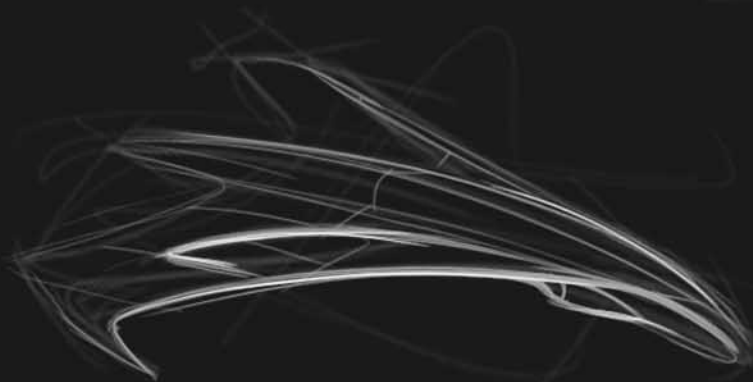


THE CONCEPT



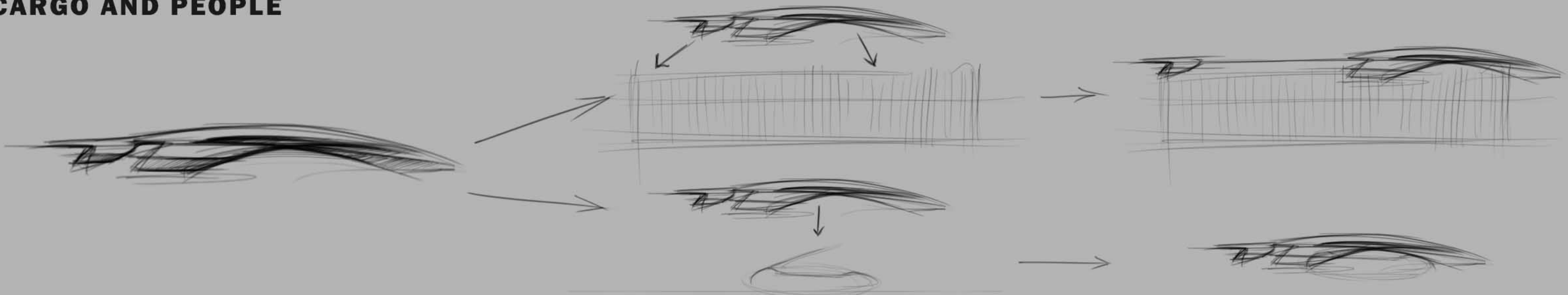
**EXTRUDING REAR TO CARRY LARGER OBJECTS
(SUCH AS 40FT CONTAINERS)**

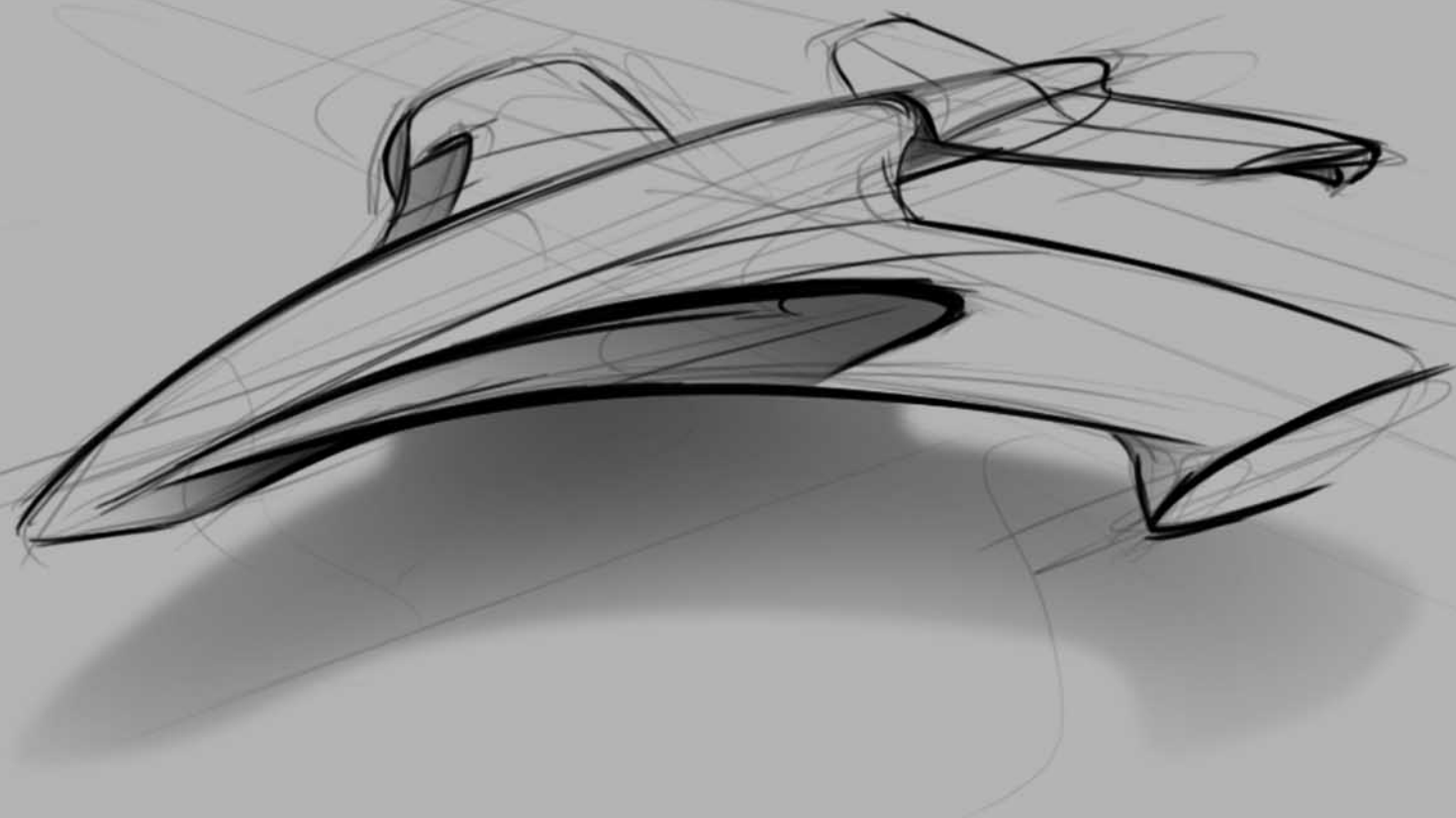
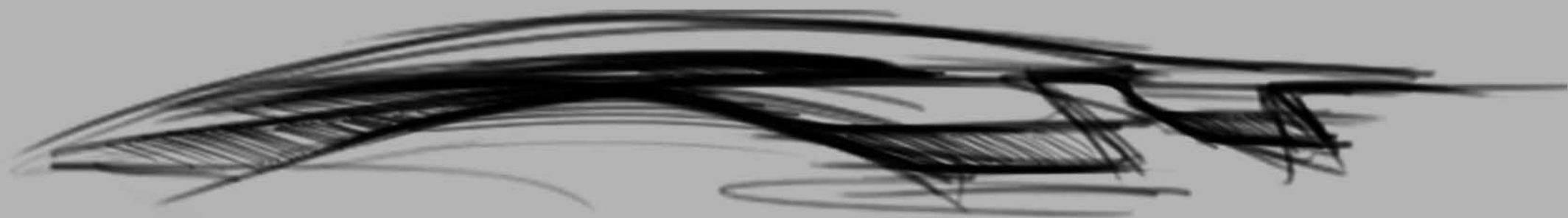
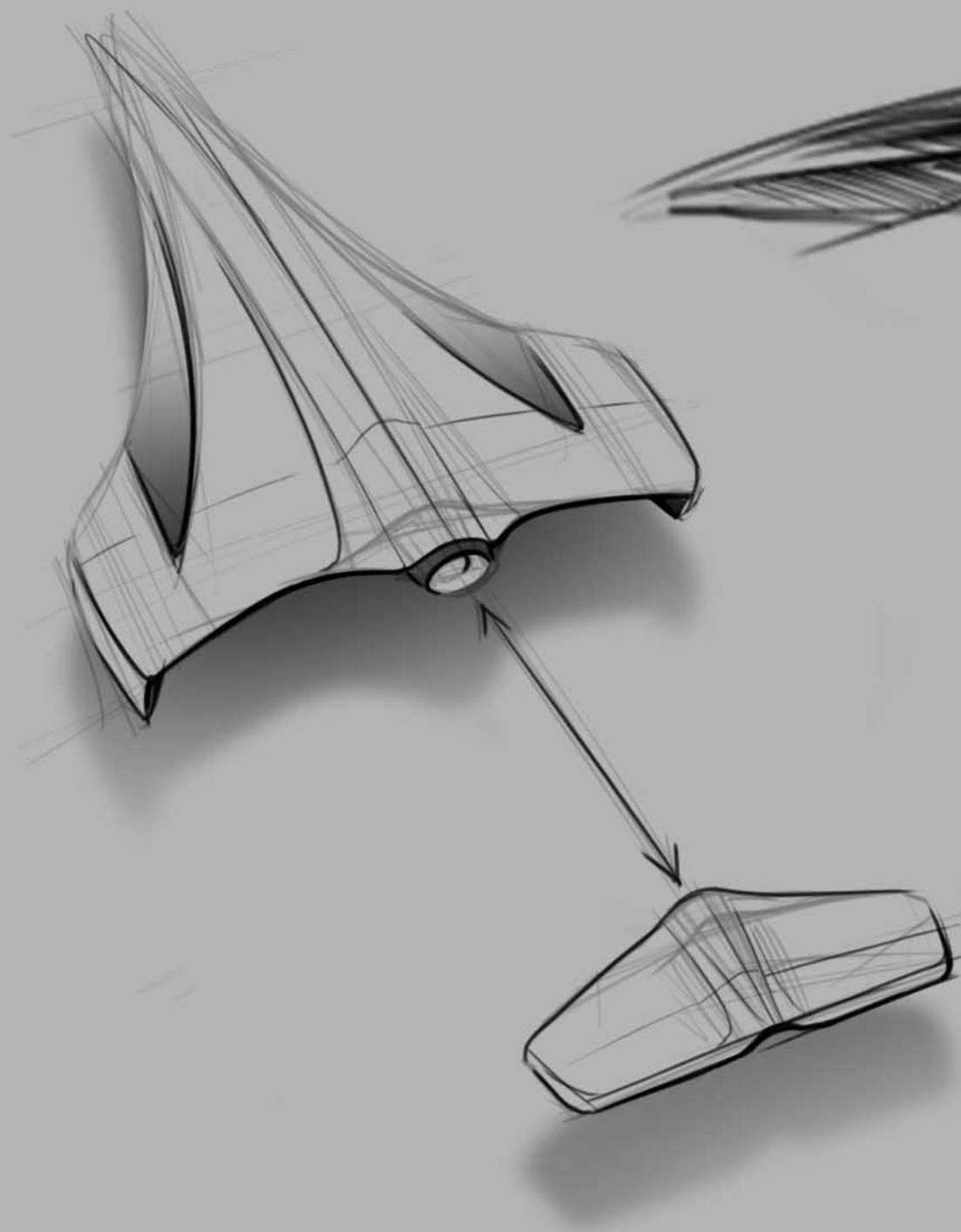
AERODYNAMIC AND SCULPTURAL

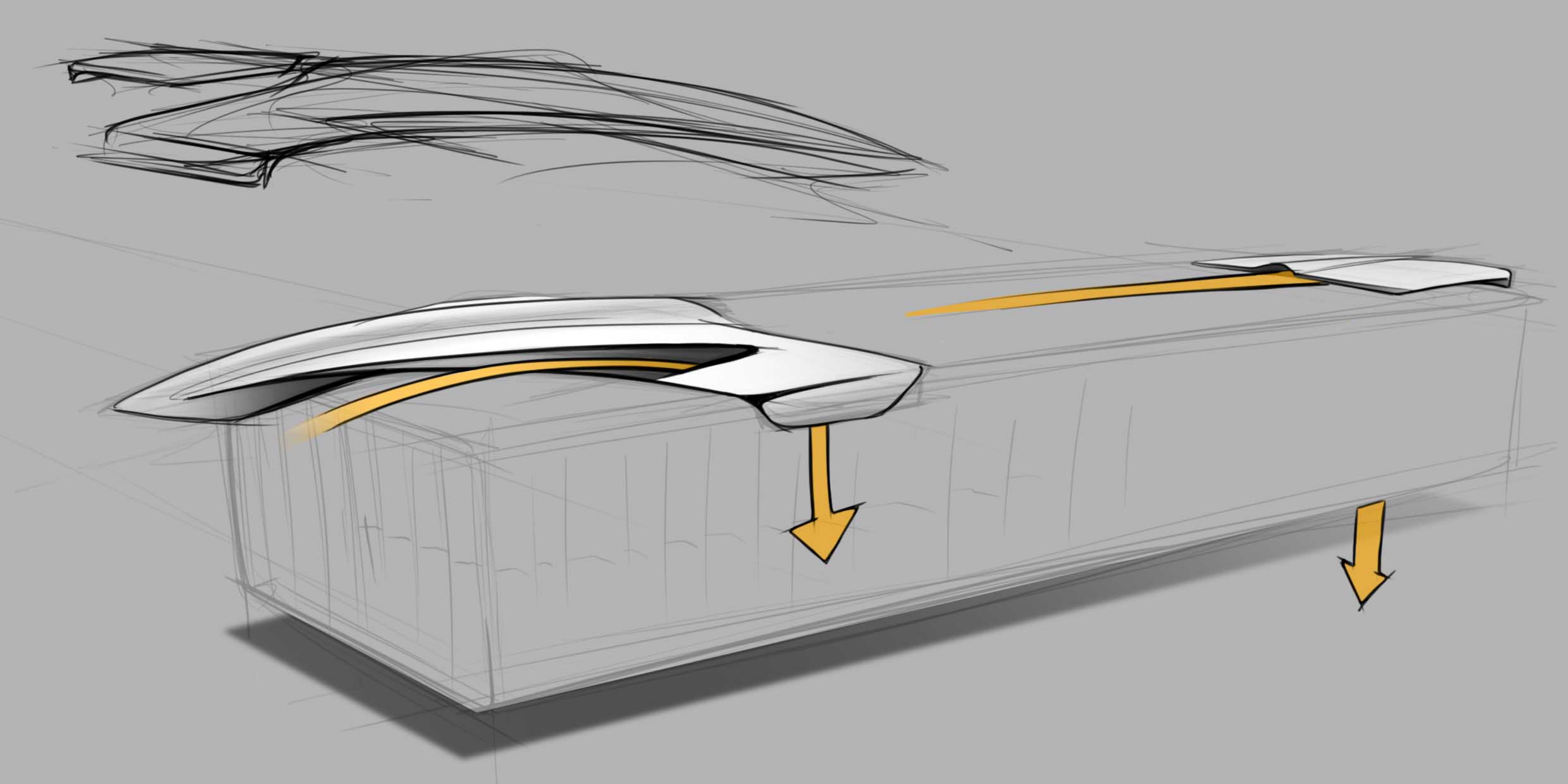


**WHEN STRETCHED, BOTH FRONT AND REAR COMPARTMENTS
CAN INDIVIDUALLY CONTROL THEMSELVES.**

CARGO AND PEOPLE

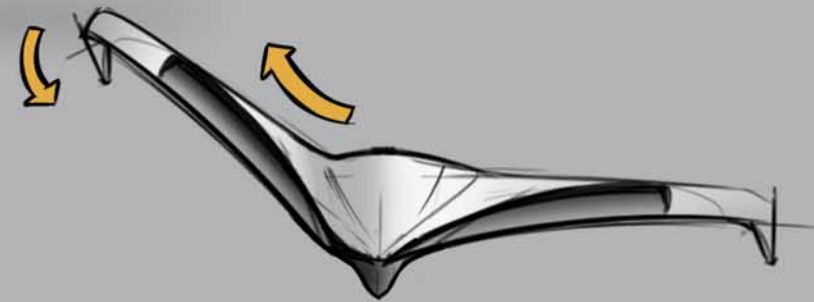
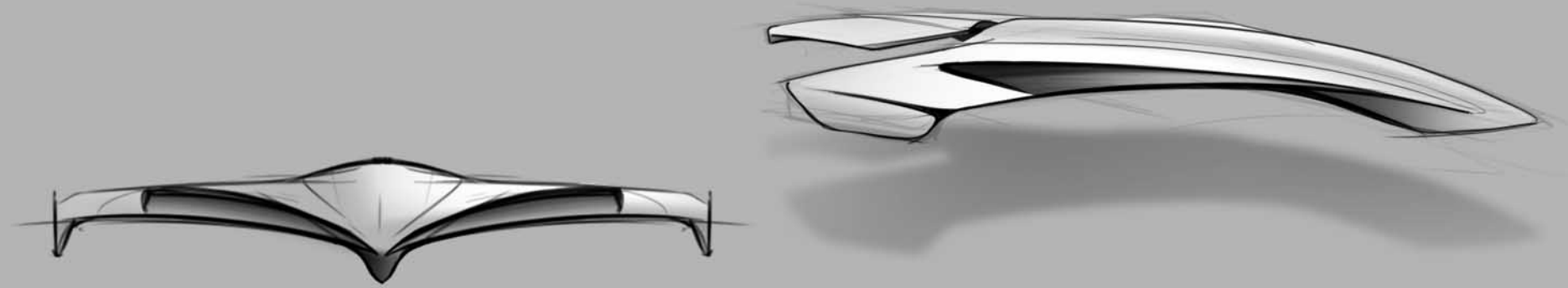




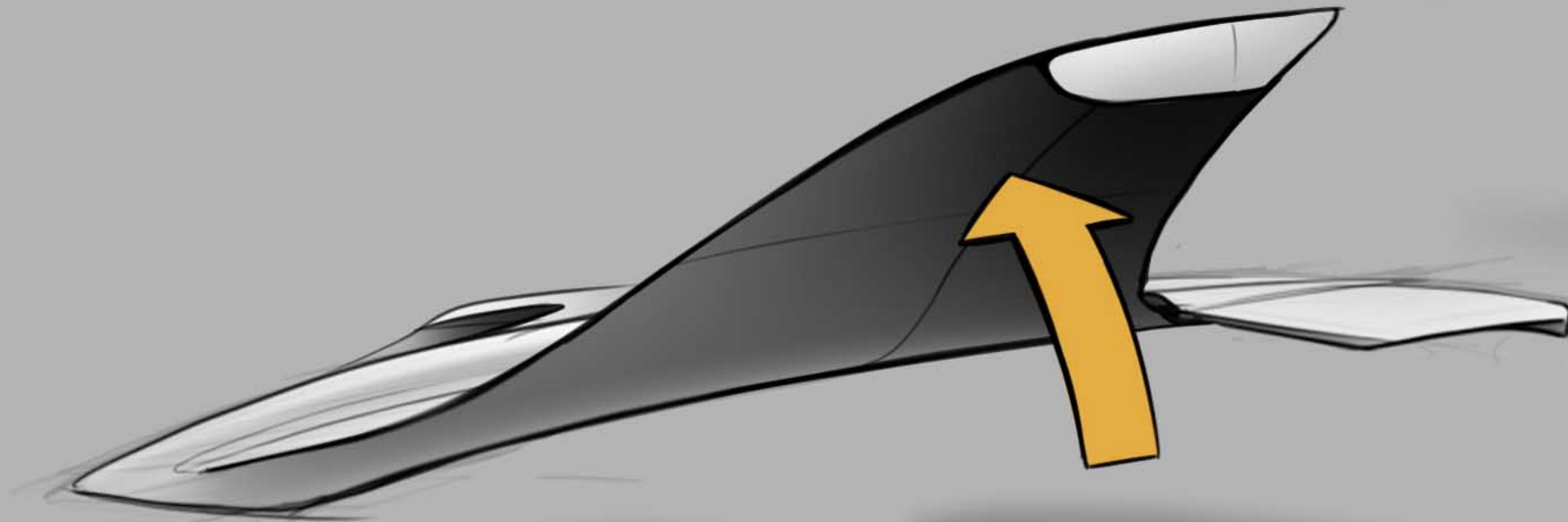


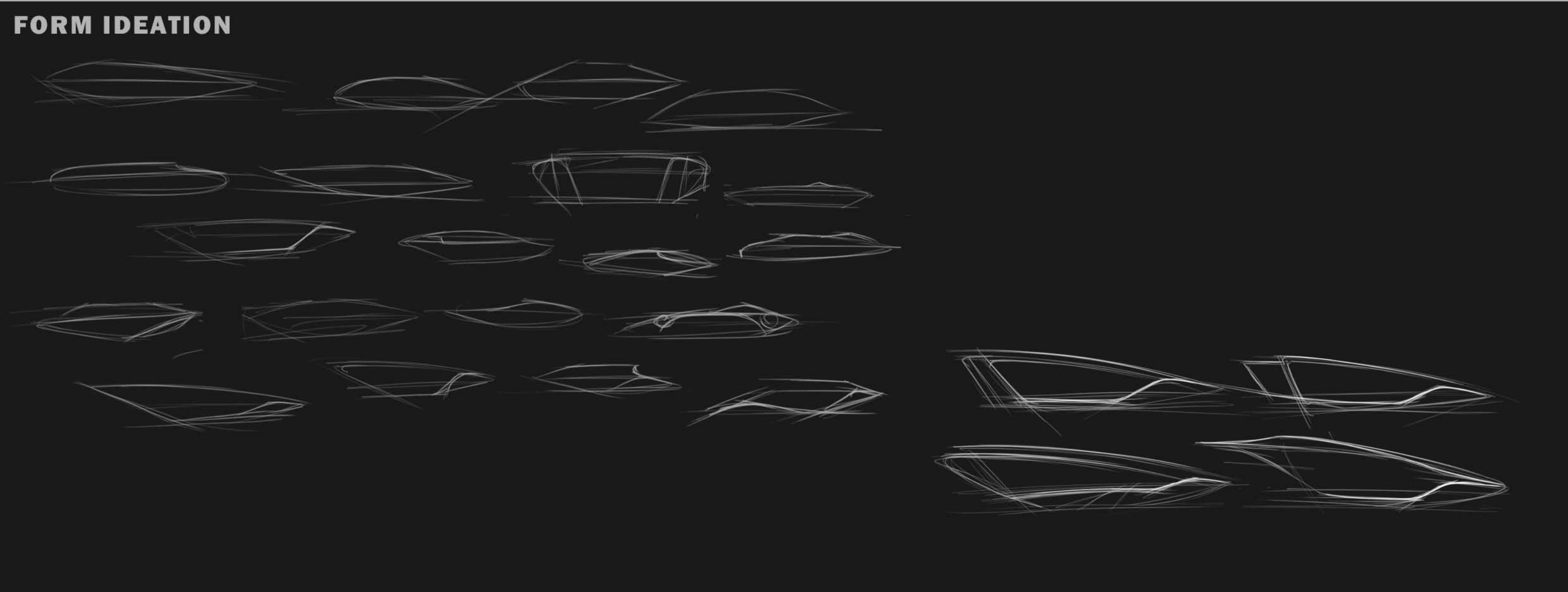
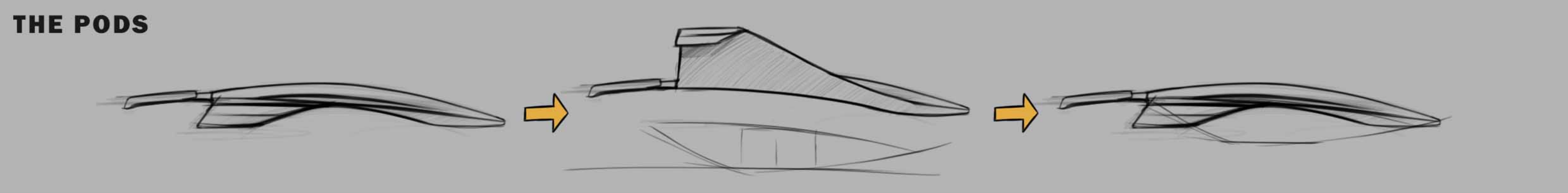
MANEUVERABILITY

FOR EASIER ACCESS AND BETTER MANEUVERABILITY,
THE WINGS AND TIPS ROTATE AGAINST EACH OTHER.
THIS ALLOWS FOR A SHORTER WINGSPAN AT LOWER SPEED



MORE HEADROOM FOR PEOPLE GETTING INTO THE VEHICLE









DIFFERENTIATIONS

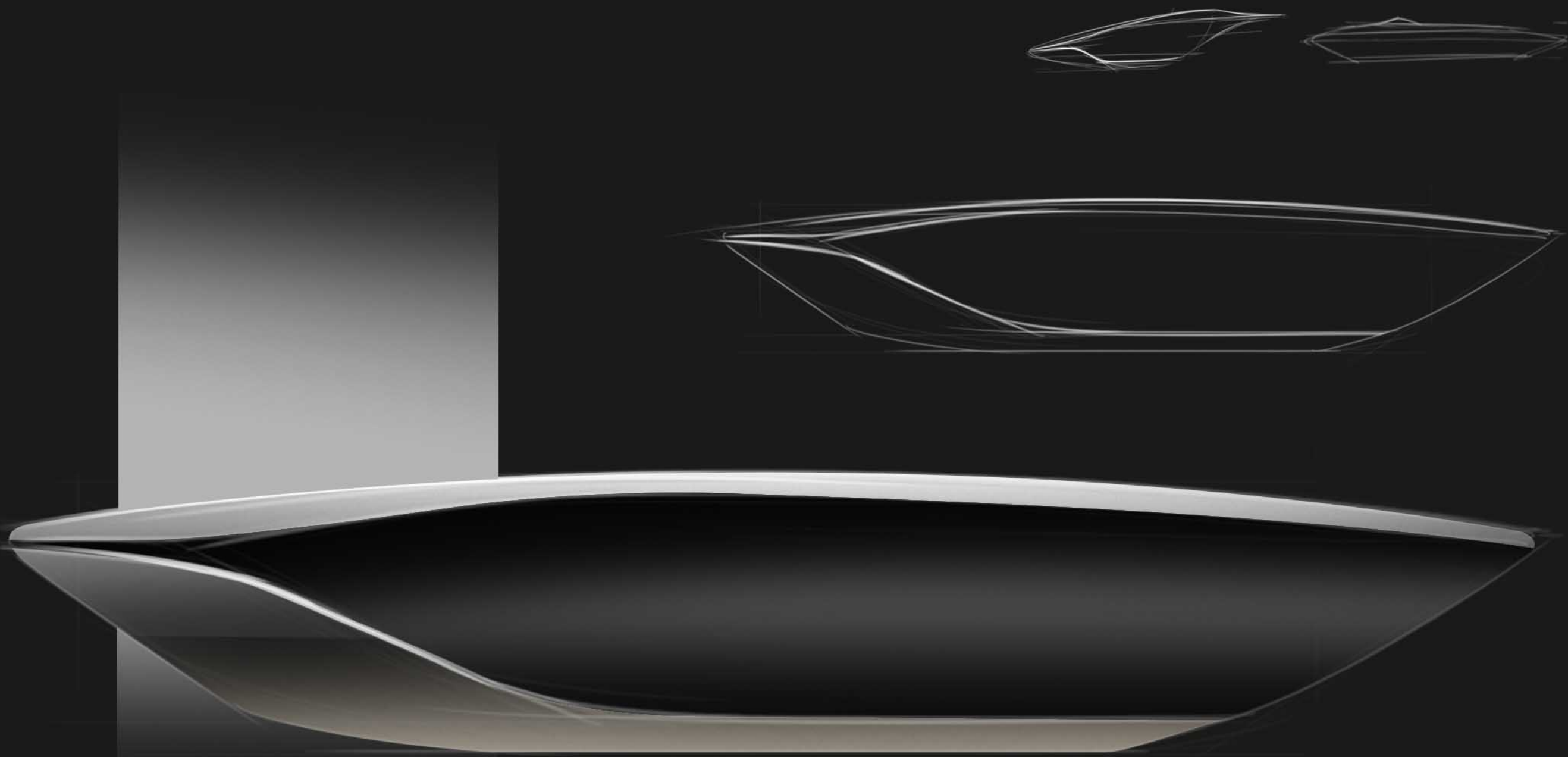


4 PERSON

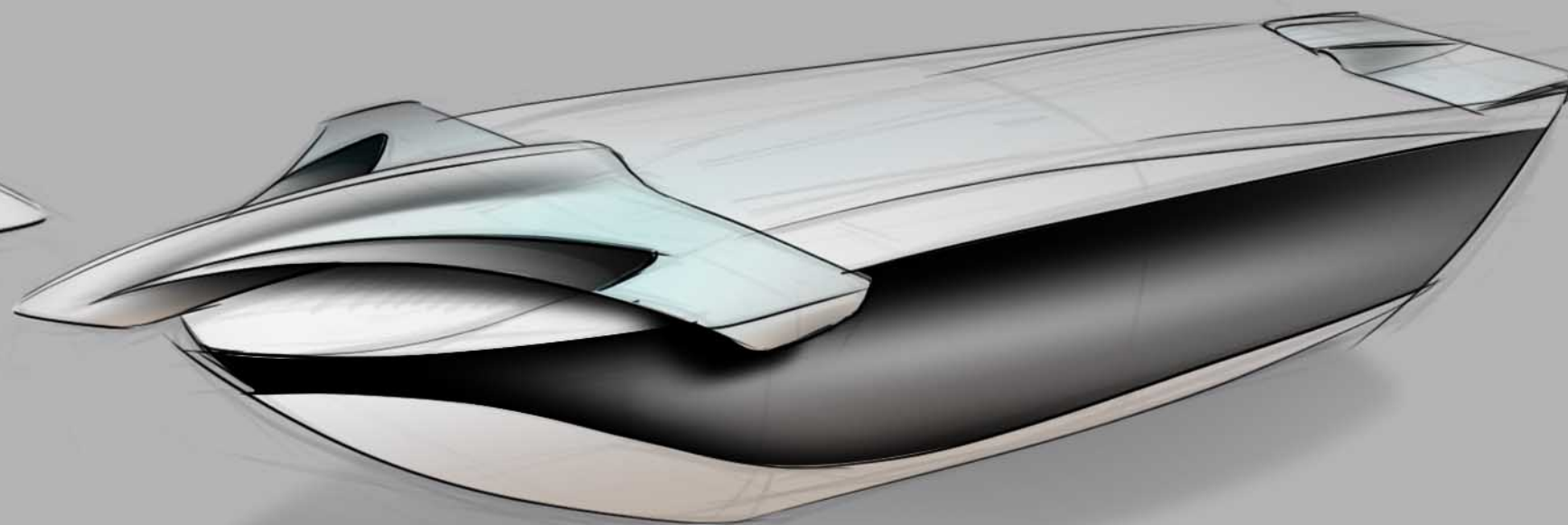
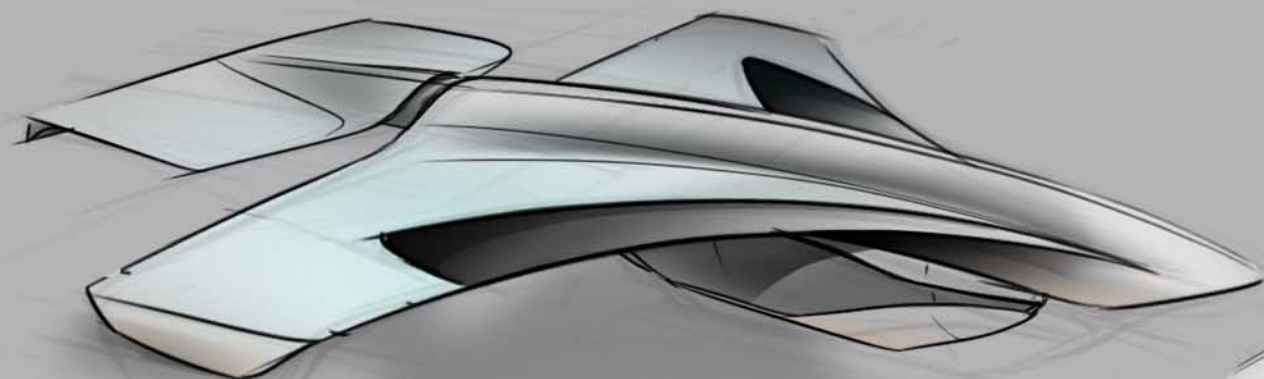
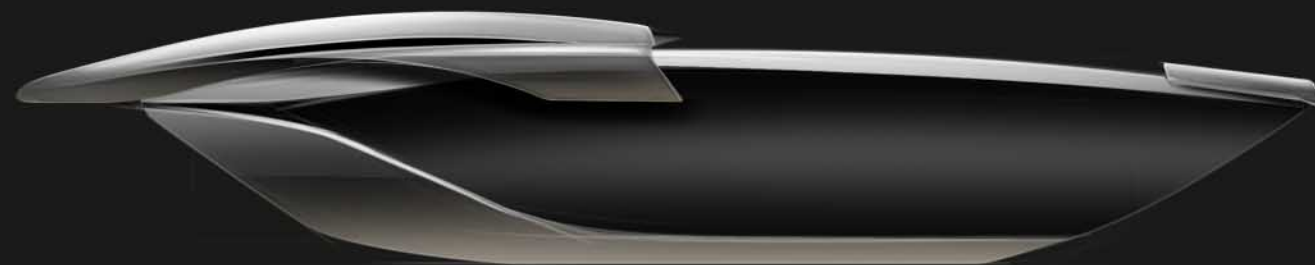


1 PERSON

FREIGHT TRANSPORTATION

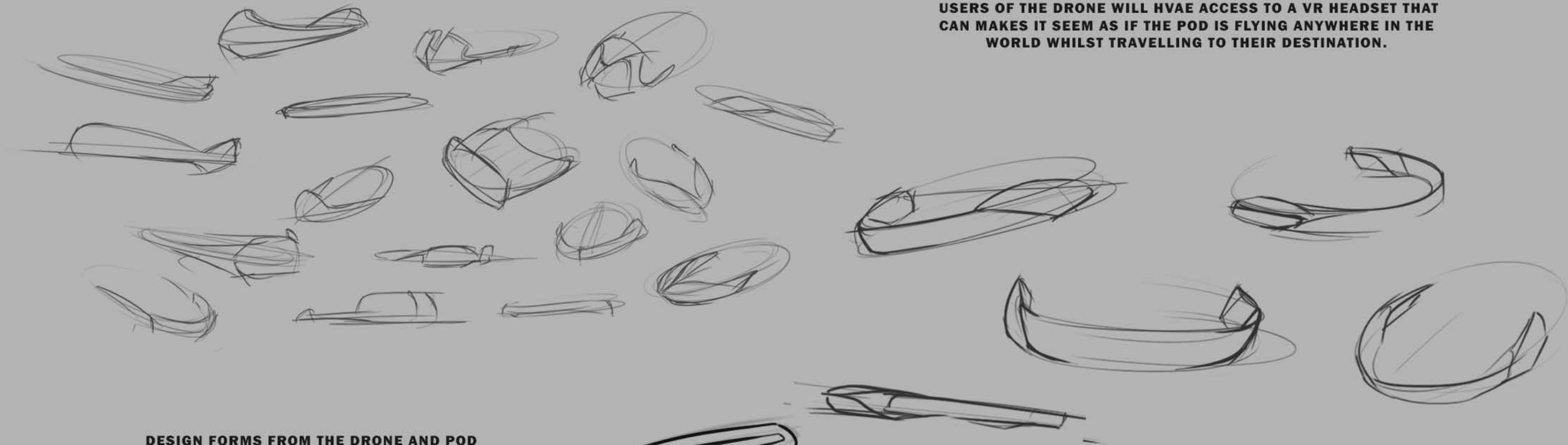


SIZE COMPARISON

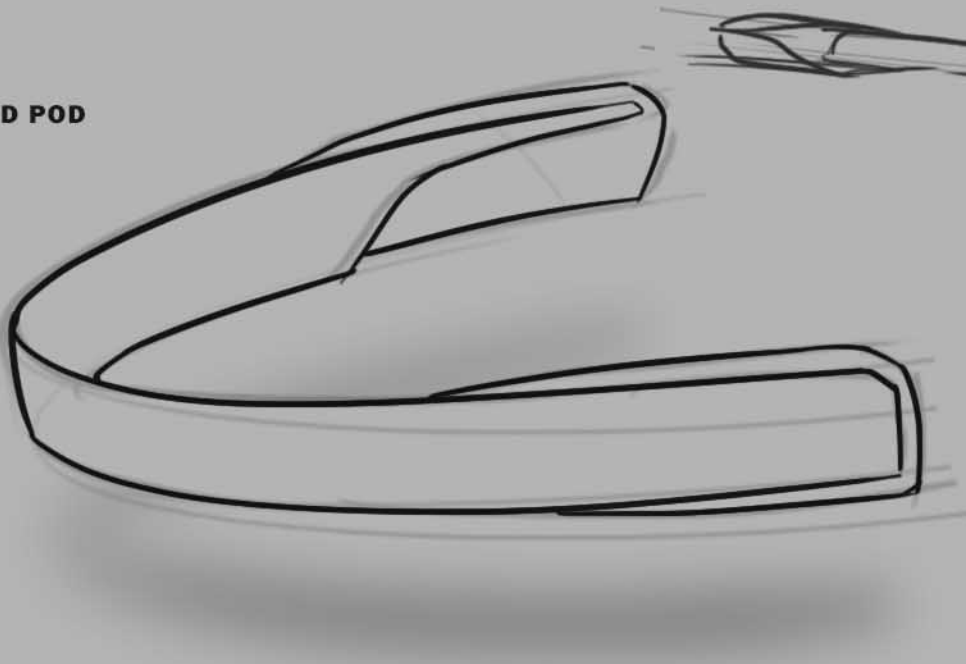


HEADSET

USERS OF THE DRONE WILL HAVE ACCESS TO A VR HEADSET THAT CAN MAKE IT SEEM AS IF THE POD IS FLYING ANYWHERE IN THE WORLD WHILE TRAVELLING TO THEIR DESTINATION.



DESIGN FORMS FROM THE DRONE AND POD

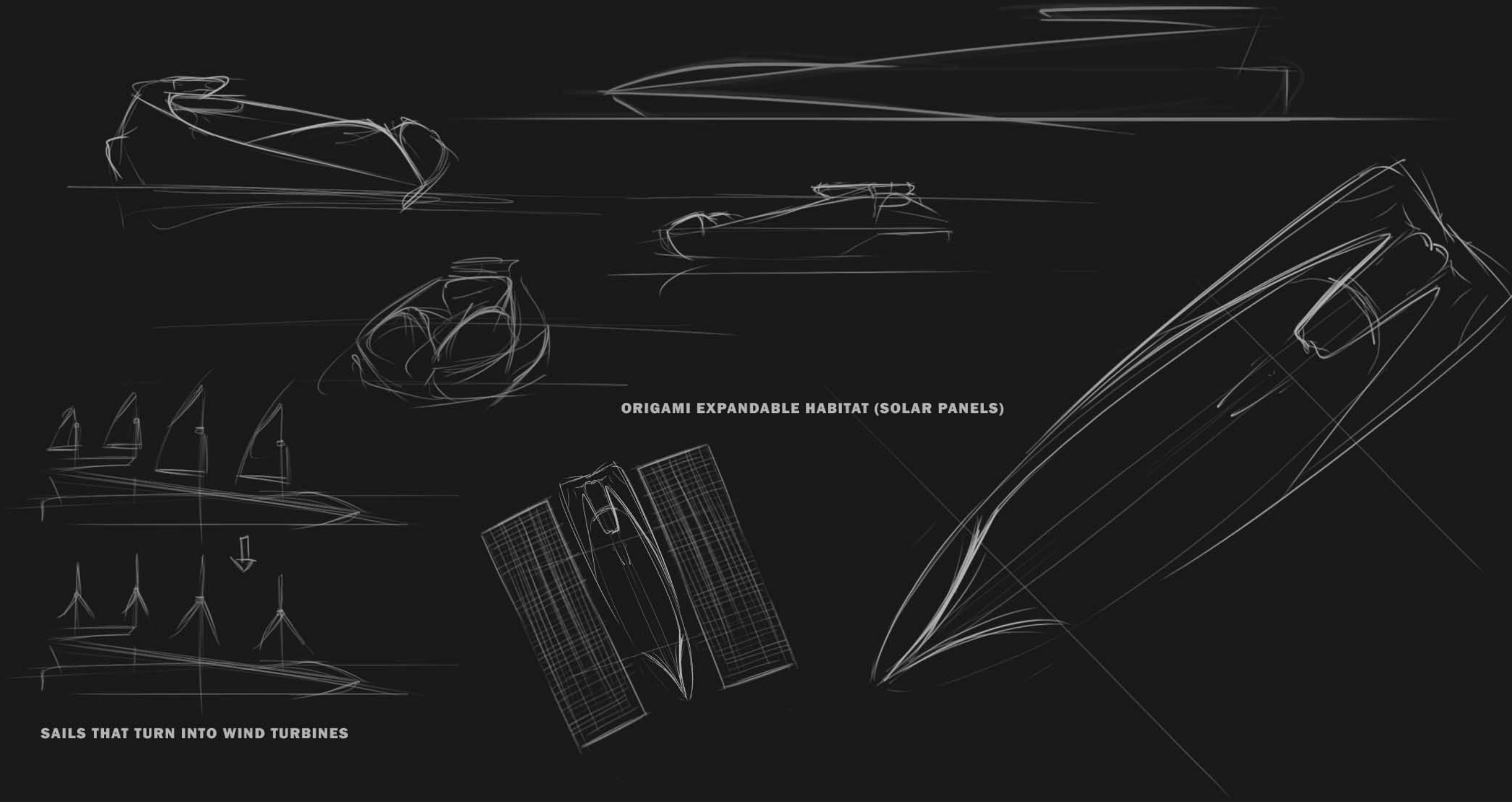




MOTHERSHIP

THE MOTHERSHIP WILL BE THE MAIN HOME FOR ALL OF THE DRONES IN THE LOCAL AREA.
BY USING WIND TURBINES, SOLAR PANELS AND WAVE POWER, IT WILL BE FULLY SELF-SUFFICIENT.
THE GENERATED ENERGY GOES INTO POWERING THE DRONES AND ROBOTS ONBOARD.
IF NEEDS BE, IT CAN MOVE TO A MORE EFFICIENT LOCATION.

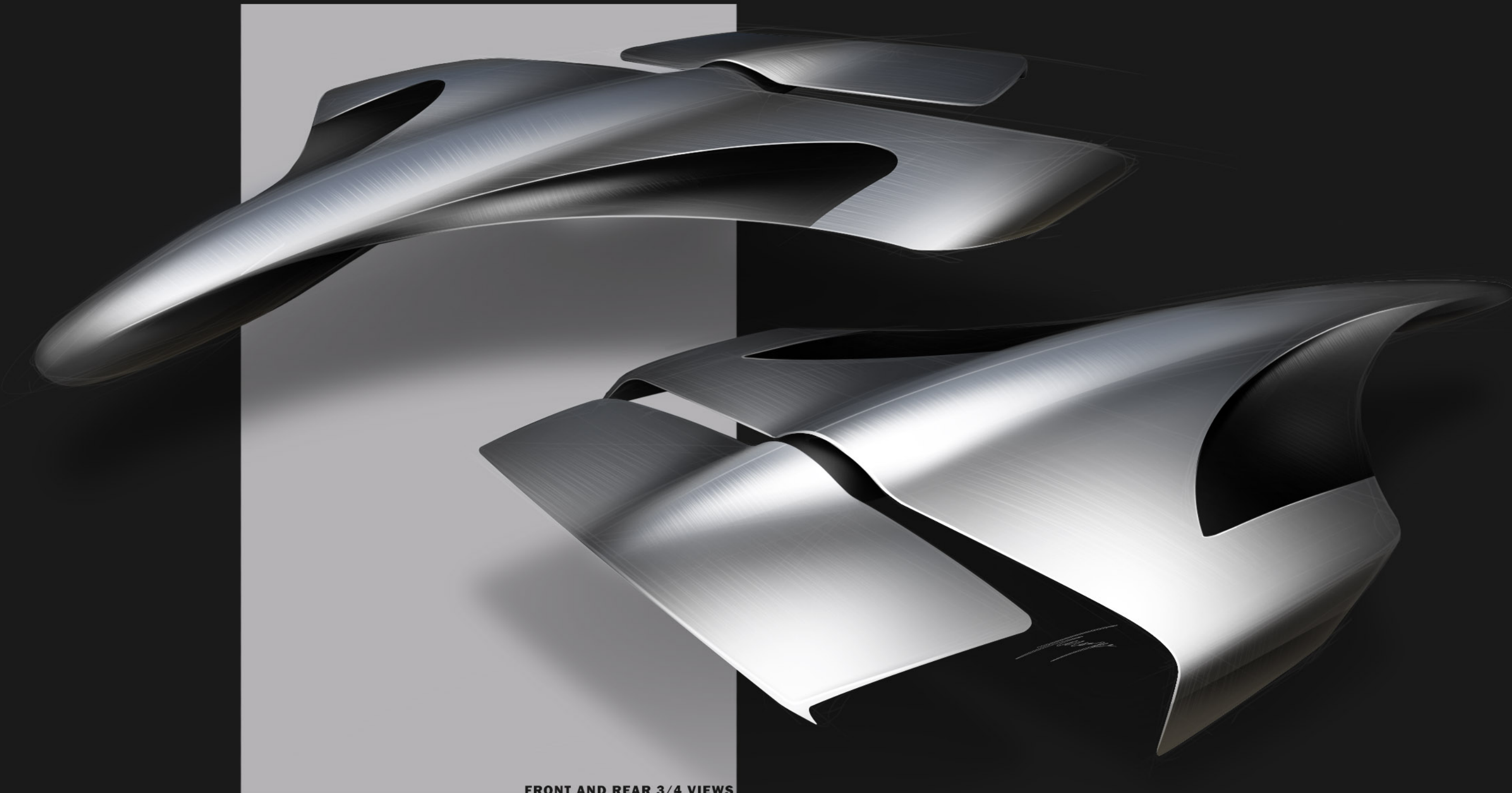




ORIGAMI EXPANDABLE HABITAT (SOLAR PANELS)

SAILS THAT TURN INTO WIND TURBINES

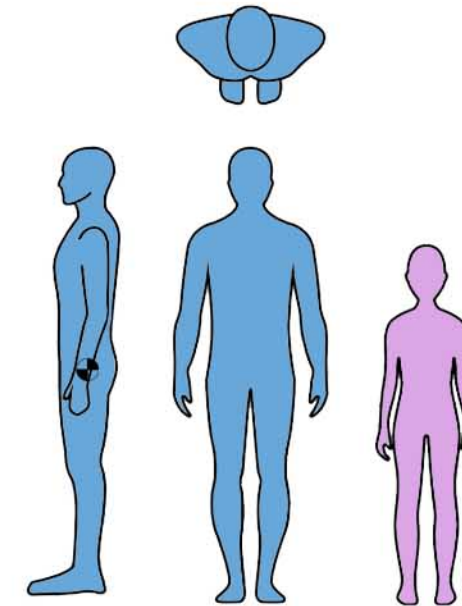
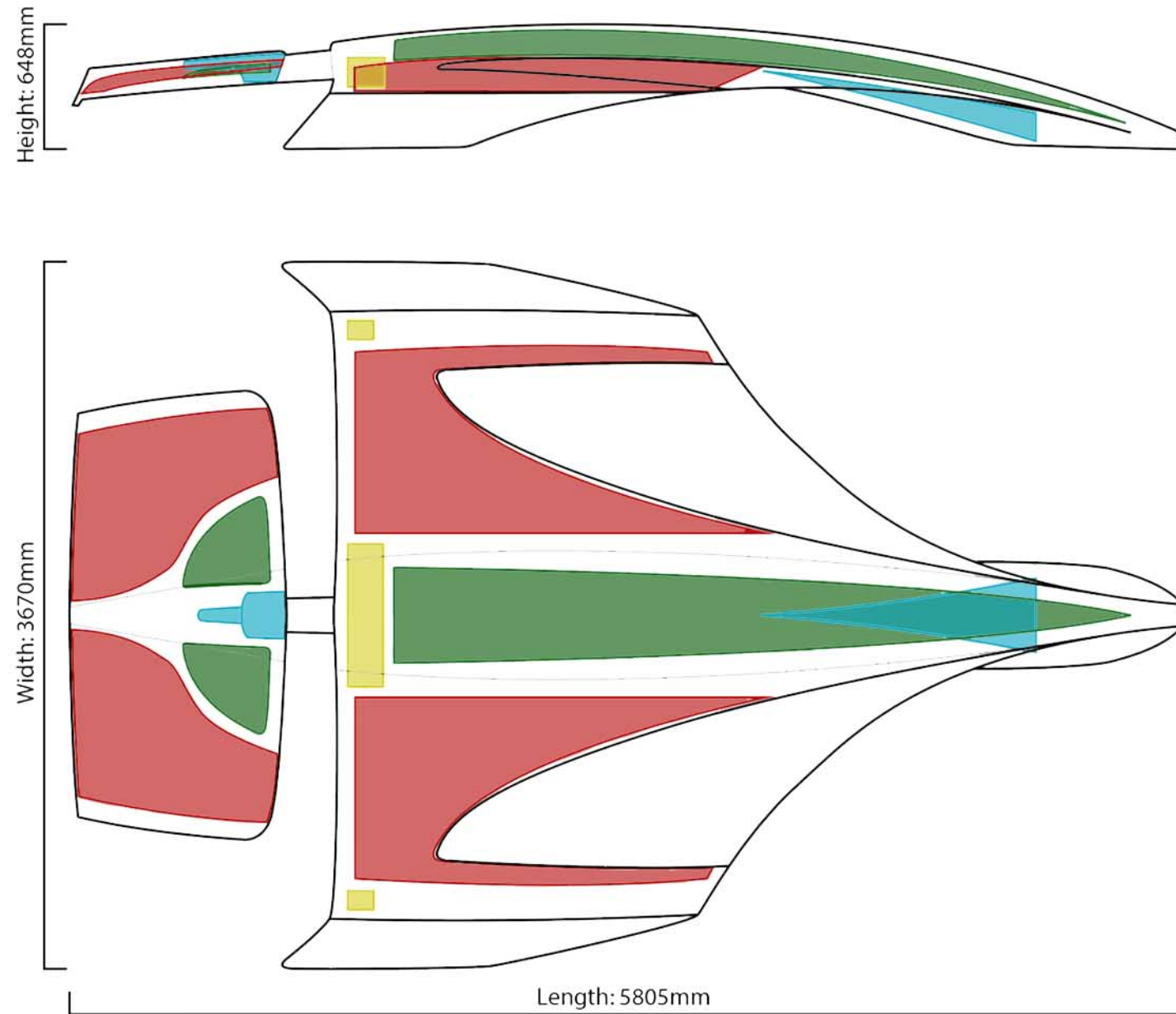




FRONT AND REAR 3/4 VIEWS

AIO

**Package Drawing
1:30 Scale**



-  **Male 95 Percentile**
-  **Female 95 Percentile**
-  **Thrusters**
-  **Connectors**
-  **Battery**
-  **Wing Motors**

A I R - I S - O P E N

B Y

L L O Y D M O R G A N