# Manned drone

Project under development.

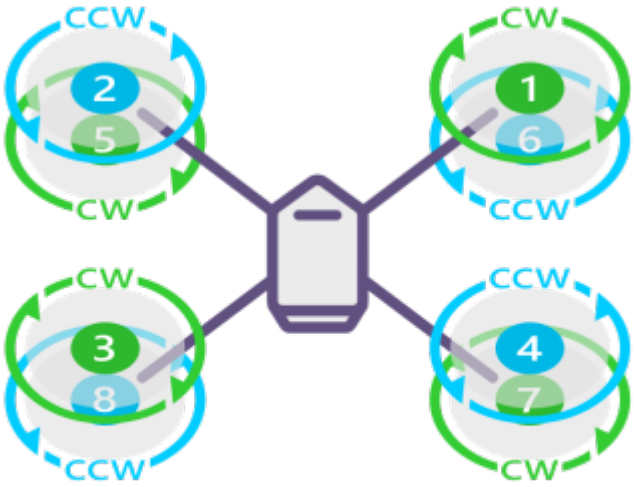
## Project Description

To be added

## Frame

### Design

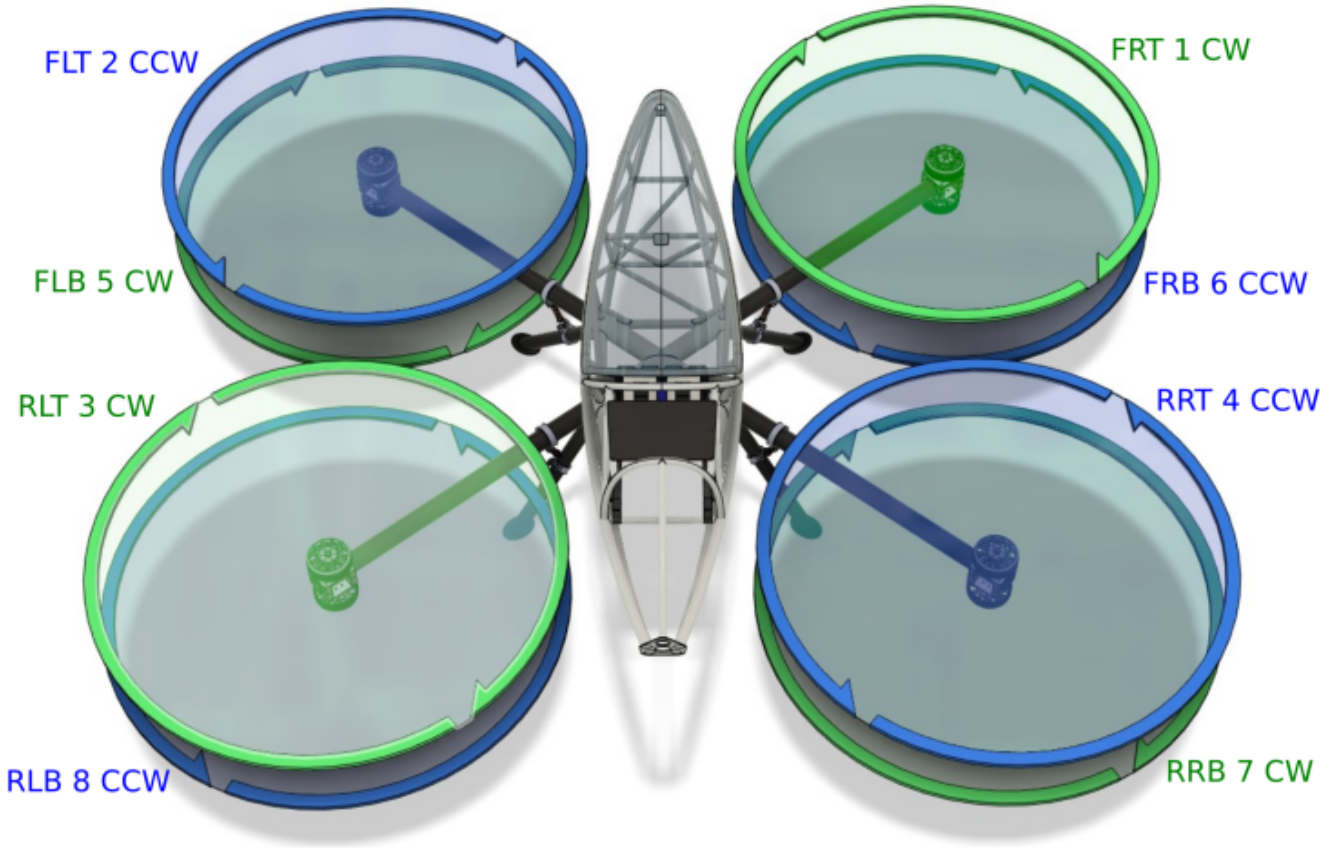
The diagram below shows the motor order for a frame type Octo Quad H:




***OCTO QUAD H***

*Source: https://ardupilot.org/copter/docs/connect-escs-and-motors.html#motor-order-diagrams*

The image below shows the Cargo drone model with the motor order and labels:




The first three digits in the lables indicate the position of the motors:
F / R - Front / Rear
R / L - Right / Left
T / B - Top / Bottom

The number indicates which output pin from the flight controller should be connected to each motor.


*Image: Pixhawk output pins. Source: https://ardupilot.org/copter/docs/connect-escs-and-motors.html#*

The last digits indicate the direction of rotation of the motors:
CW - ClockWise
CCW - CounterClockWise

### Propellers

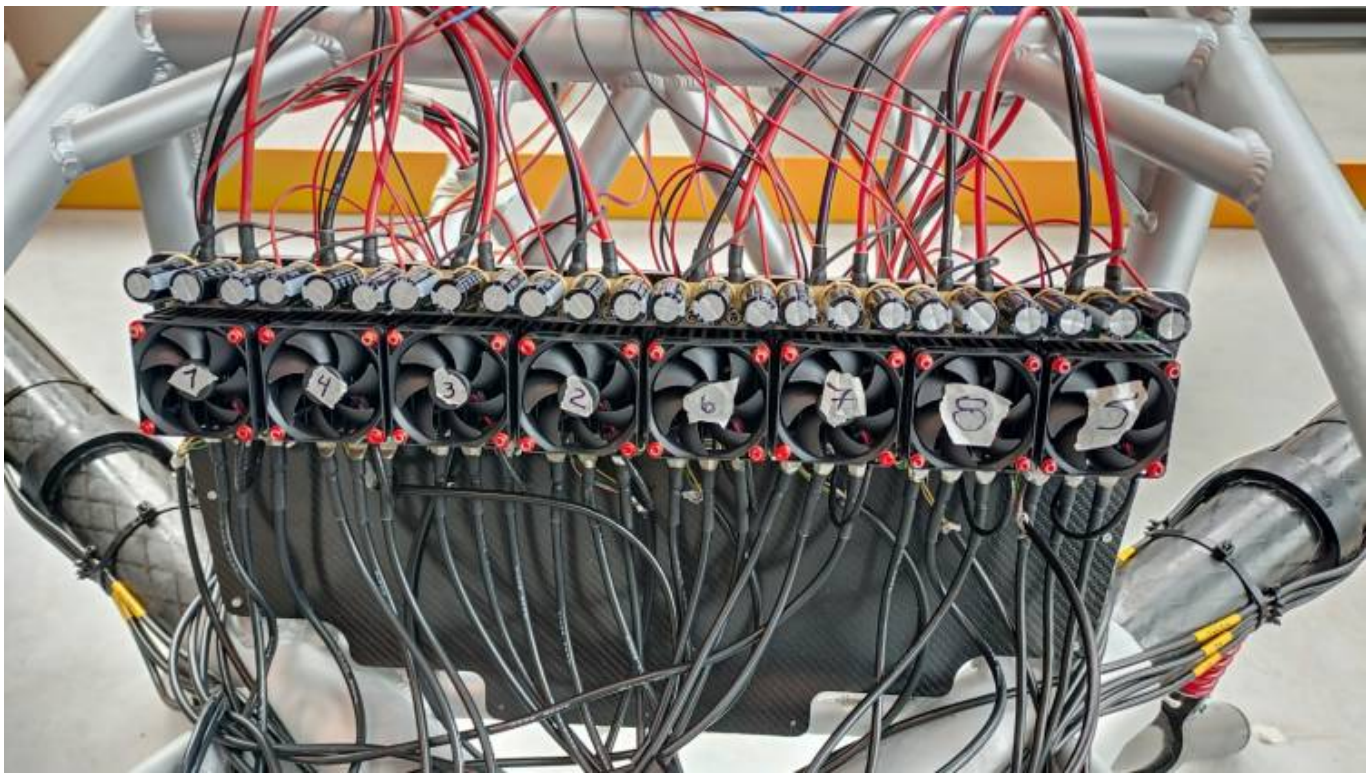
Helix H25F 1.80m

H25F 1.80m R-LES-04-2
H25F 1,80m L-LES-04-2

## Motors

RET 30 The motors were properly labeled.

# Electronic Speed Controller (ESC)




# Flight controller

Hex Cube Black Flight Controller

# Battery, Electronics, and Power Distribution Cables

# Tests

## Test 1

Date: 09.sept.2021
Place: FabLab HSRW Kamp-Lintfort, Germany
Carried out by: Jefferson Sandoval and Harley Lara

CargoDrone-Test1
*Video: Testing ESC + motors reaction and direction of rotation*

# The Team


From left to right: Rolf Becker, Harley Lara, Henrik Schoofs, Stefan Schmitz, Jefferson Sandoval, Winfried Rijssenbeek