Manned drone

> ⚠️ Project under development.
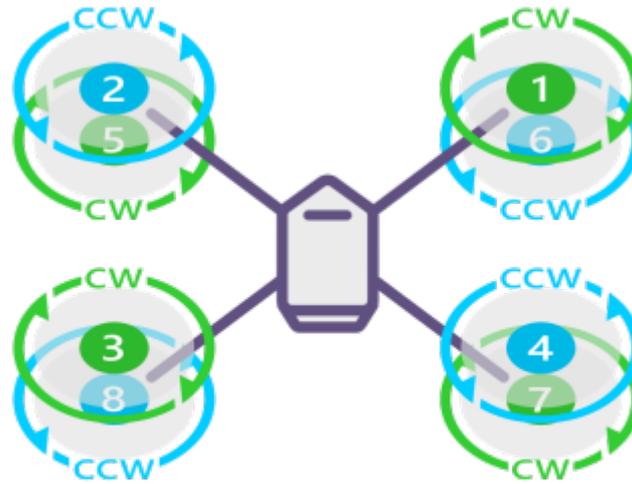
Project Description
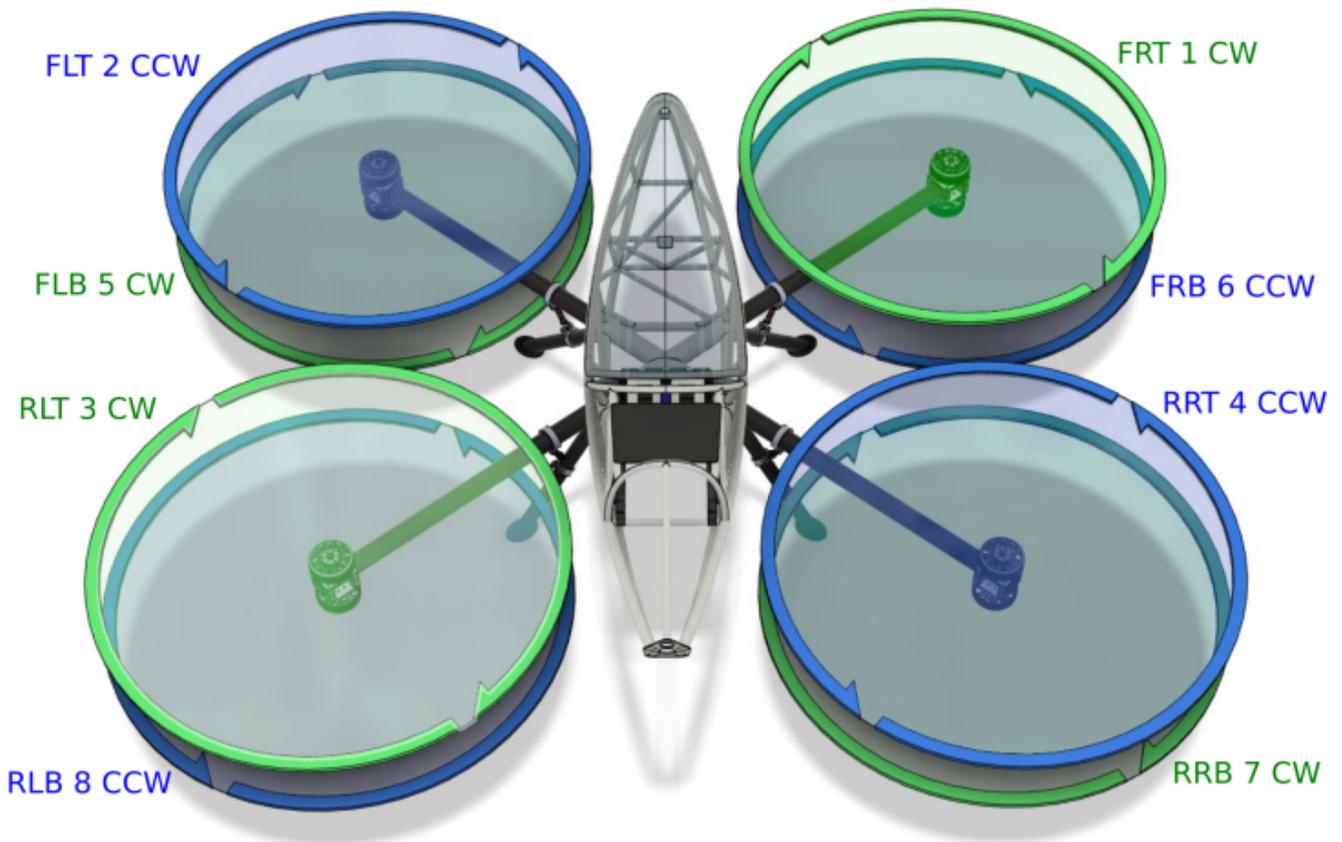
> ℹ️ To be added

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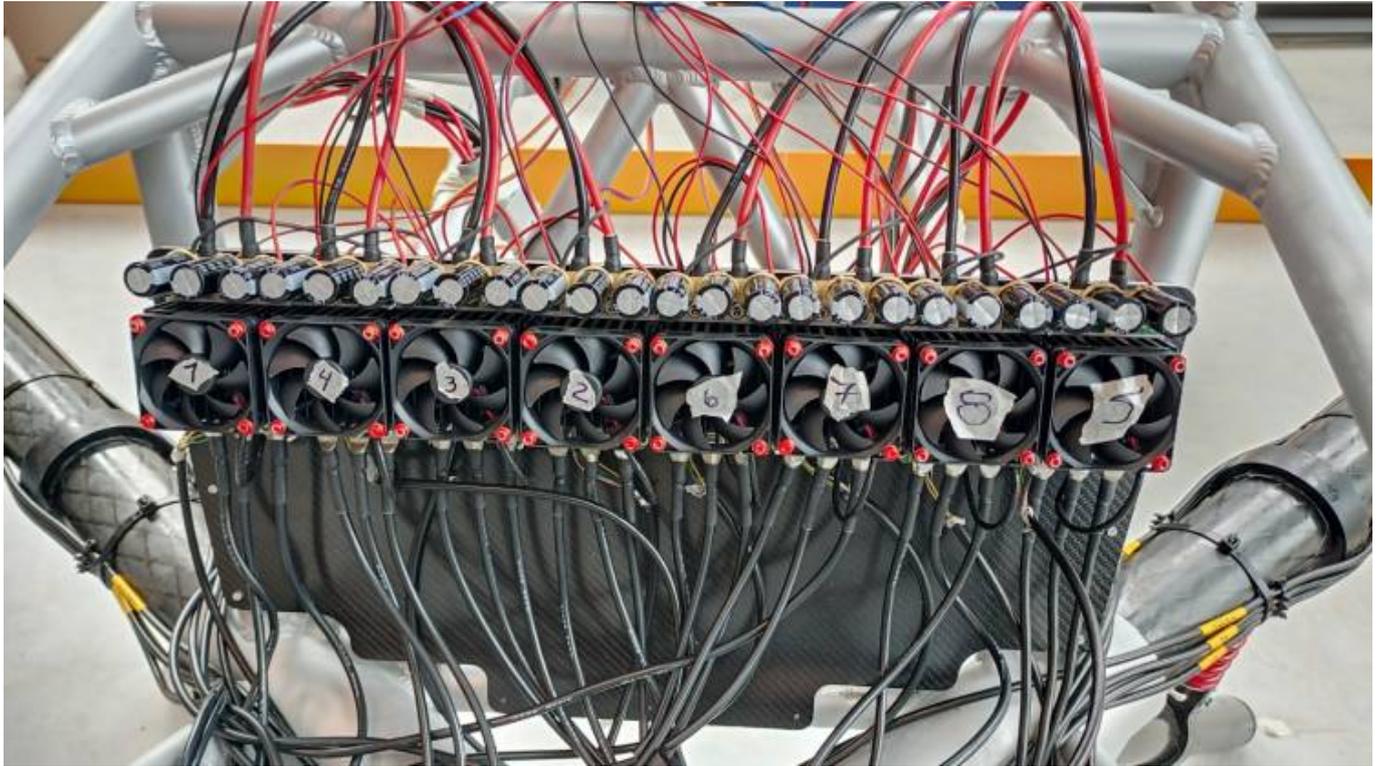H25F 1,80m L-LES-04-2

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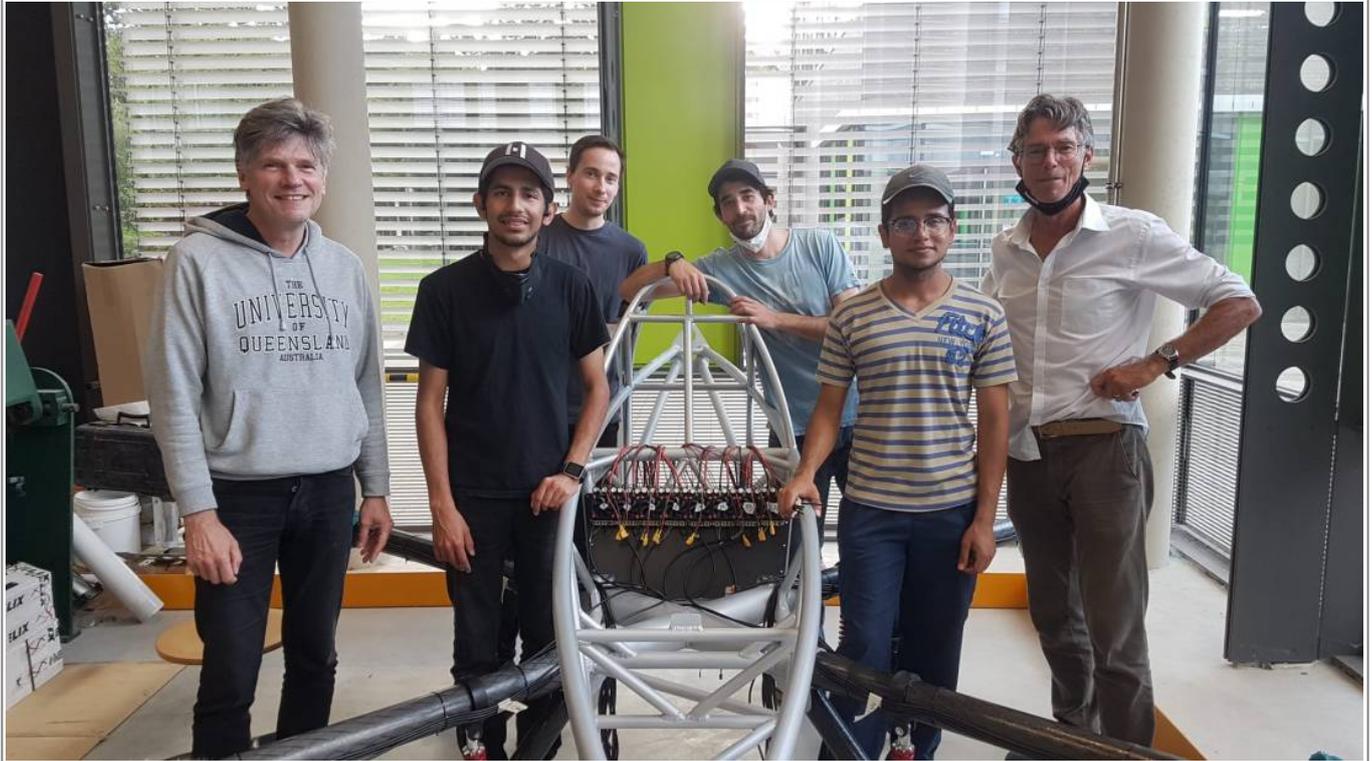
<u>Date</u>: 09.sept.2021
<u>Place</u>: FabLab HSRW Kamp-Lintfort, Germany
<u>Carried out by</u>: Jefferson Sandoval and Harley Lara

[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

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