Annotated Bibliography

Stanton, Tom. "VTOL Optimization Video Series." YouTube, uploaded by Tom Stanton, 8 Dec. 2022, <https://youtube.com/playlist?list=PLuBxOlXVJojYtc86kjsRkeqiIA8t7fuQ2>.

This YouTube playlist contains a series of videos created by Tom Stanton, an aerospace engineer, and YouTube content creator, in which he demonstrates how to optimize a vertical takeoff and landing (VTOL) aircraft. The playlist consists of 4 videos, each showing different aspects of his craft and how he improved upon the previous design. The video that inspired our project is “Optimizing a VTOL”, the moment Maxim showed me this video we both said let’s do that as our project that’s way more amazing than a quad-plane. This led to us looking into how he designed and manufactured each of his parts using CAD, CNC machines, and 3D printing. This aided us in our own designs of our tilt rotors, aerofoils, and chassis and this led us to the dRehmFlight resource.

Rehm, Nicholas. "dRehmFlight." GitHub, 2020, <https://github.com/nickrehm/dRehmFlight>, <https://youtube.com/playlist?list=PLTSCOv-lGtMax-oA4Pnq8OTxd4fTucrjQ>.

The dRehmFlight documentation is a guide created by Nicholas Rehm, a full-time aerospace engineer and drone enthusiast. dRehmFlight is a hardware & software configuration for a Teensy 4.0/4.1 as a flight controller using Arduino for the use of remote-controlled aircraft and drones. The guide provides detailed instructions on how to set up and program the Teensy Flight controller, including how to calibrate the sensors, configure the flight modes, and tune the PID controllers. Rehm also includes sample code and wiring diagrams to help users get started. We used his open-source resources in coding the Teensy to allow for the 2 different flight modes, hovering and forward flight.