





FEAVY LET DRONE

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ADVANCED AUTOPILOT

> Autonomous flight utilizing PixHawk flight controller Automatic transition between vertical and horizontal

> Waypoint based GPS navigation > Optional controller for manual operation Based on Free Open-Source Software (FOSS)

AERODYNAMIC ANALYSIS

Aerodynamic Forces —Lift —Drag (kg) 300 **9** 200 **မှ** 100 108 126 Airspeed (km/h) Figure 5: Major Aerodynamic Forces



Figure 6: Airflow Analysis over the Drone's Body and Wings

WING STRESS ANALYSIS

> Forces and moment were applied along the quarter chord using the coefficients of the airfoil > The maximum deformation is 2.8 cm > The maximum stress is 57 MPa on the trailing spar



Figure 7: Wing Deformation