

1. Introduction
 - a. Possible Configurations
 - i. Conventional Helicopter
 - ii. Tilt rotor
 - iii. Jet packs
 - iv. MultiCopter
 - v. Compound helicopter
2. Mission Requirements
 - a. Summary of mission
3. Weight Estimation (Using Design Code)
 - a. Wing Weight
 - b. Fuselage Weight
 - c. Battery Weight
 - d. Landing Gear Weight
 - e. Summary
4. Powerplant Design or Selection
 - a. Design Constraints
 - b. Tradeoff Studies
 - c. Power Requirements
5. Wing Design
 - a. Geometric Parameters
 - b. XFLR5 Studies
 - c. Airfoil Selection
 - d. Box Wing Design
 - e. CFD Studies
6. Rotor Design
 - a. Aerodynamic design
 - b. Hub Design
 - c. Performance Calculation (Using BET / BEMT)
 - d. Transmission design (?)
7. Transition and Control Systems
 - a. Methodology
 - b. Hover to Forward flight transition
8. Performance
 - a. Flight Speed
 - b. Noise
 - c. Stability and Control
9. Drawing (Detailed CAD representation)