Project features two primary topics

Remote Sensing UAVs
- GeoSurv II large fixed wing UAV
- Gyroplane UAV
- Design, analysis and ground testing

High Performance Rotary Wing
- First Person View (FPV) racing quadcopter design and development
- Flight testing and performance improvements
Fixed Wing UAV Development

Air vehicle Design and Analysis

Manufacturing and Testing

Avionics design and development

Flight Testing
Quad Propeller CFD

Pressure distribution around propeller

Single propeller wake
Wind Tunnel Testing
FPV Racer Structural Analysis

Testing of new propellers.

SEM image of carbon fibre drone arm.
Plans for 2019

- Detailed design and construction of new Gyroplane UAV
- GeoSurv II ground and taxi testing
- Investigating autonomous flight of high performance rotary wing
  - Detailed design and flight testing
- Longer term
  - Scaling quadcopter technologies to full size personal aircraft