eVTOL Control

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17/02/2021
eVTOL Layouts
Mission Optimization

MULTIROTOR

HELICOPTER / AUTOGYRO

VTOL FIXED WING

TILT
Mission Optimization

eVTOL Applications

- Aero-taxi
- Urban Air Mobility
- Leisure - Experience
- Medical
- Cargo delivery
System Architecture
Control Components
Flight Modes
Auto & Manual Control

- **AUTOMATIC**
  - BASED ON GNSS
  - SKYWAYS

- **FLY-BY-WIRE**
  - MANUAL CONTROL
  - CUSTOM PILOT EXPERIENCE
Autopilot Functions
Veronte Autopilot

GNC

GUIDANCE - NAVIGATION - CONTROL

- Any vehicle
- Adaptive control
- Smoothness
- Automatic routines
ESC for eVTOL
Reliability & Performance

- Motor speed control
- Feedback & health status
- High voltage
- Hardware & software reliability
Certification

Robustness evidences

- System certification
- Redundancy management
- No TSO for eVTOL Autopilot
- DO254 - Hardware
- DO178C - Software
- DO160 - Environmental
Obstacle Avoidance
Detect & Avoid

- **COLLABORATIVE**
  - ADS-B
- **NON-COLLABORATIVE**
  - RADAR - LIDAR
  - VISION AI

DETECT & SUGGEST
Communications
Flexible Architecture

- 4G/5G Network
- Jamming
- Encryption
- Redundancy
UTM / ATC integration

Cloud Technology

VERONTE CLOUD

Weather Data Services

UTM Data Services

UTM/ATC

Ground Control Center PIPE
“ENABLING DRONES TO POPULATE OUR SKIES”

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