

VERNON JOHNSON

DRONE PILOT

1. JCC Drone Pilot operates Autel Robotics Alpha. Drone scope of work includes Aerial Data Collection, Inspection and Documentation Services for Switchyard, Substation, and Transmission Line Construction Projects. Drone Operations enhances safety, accuracy and efficiency in Construction Monitoring and Documentation. This scope ensures accurate visual and infrared data capture to support construction progress tracking, quality assurance, safety, and as-built documentation. By providing real-time aerial intelligence, the Drone Pilot supports decision-making, reduces the need for manual inspections in hazardous areas, and ensures quality control throughout project execution. JCC Drone Pilot operates under Federal Aviation Administration (FAA) Part 107 Certification and in full compliance with all client, site, and utility safety requirements.
2. **Responsibilities and Tasks**
 - Pre-Flight Planning and Coordination
 - Review project drawings, maps, specifications to plan flight paths and coverage areas
 - Obtain flight authorizations, permits, and client approvals prior to operations.
 - Conduct site-specific safety briefings and hazard assessments.
 - Verify weather conditions, equipment readiness, battery status before missions.
3. **Aerial Data Collection**
 - Perform scheduled drone flights for construction progress monitoring, including aerial imagery and video capture of transmission lines, substations, and switchyards.
 - Conduct detailed inspections of towers, bus work, structures, and equipment to identify defects, alignment issues, or construction quality concerns.
 - Capture thermal (infrared) imaging to detect hot spots, electrical resistance issues, or improper grounding during energization and commissioning stages.
 - Collect high-resolution photos and videos for as-built and post-construction documentation.
4. **Data Processing and Reporting**
 - Process and organize all aerial data, including still images, videos, 3D mapping (photogrammetry), and thermal results.
 - Deliver detailed visual reports to the project team highlighting progress, deficiencies, and corrective action areas.
 - Label and store all collected data in accordance with the project's data management and security protocols.
5. **Compliance and Safety**
 - Maintain compliance with FAA Part 107, client-specific UAS policies, and all local aviation regulations.
 - Adhere strictly to project safety rules, maintaining situational awareness during flight operations near energized equipment and construction personnel.
 - Maintain updated pilot certifications, equipment maintenance records, flight logs.
6. **Deliverables**
 - Weekly and monthly aerial progress photo and video packages.
 - Infrared inspection reports identifying electrical and thermal anomalies.
 - 3D orthomosaic maps and aerial surveys of transmission corridors and substations.
 - As-built visual documentation and final turnover data set.
 - Flight logs and FAA compliance documentation.
7. **Schedule**

Drone operations shall be conducted in alignment with the project construction schedule. Flights will typically occur weekly or as requested by the Construction Manager, QAR, or Project Engineer to document key construction milestones or perform



JOHNSON CONSTRUCTION CONSULTING LLC
POWER PERFECTED



Vernon Johnson
Drone Pilot Operations
(FAA) AVIATION CERTIFICATION

Operates

Autel Robotics Alpha
In Full Compliance

- FAA Part 107
- Client-Specific UAS Policies
- Local Aviation Regulations
- Site Safety Requirements
- Utility Safety Requirements
- Equipment Requirements

AUTEL ROBOTICS ALPHA



Provides Real-Time Aerial Intelligence. Ensures accurate Visual and Infrared Data Capture to support construction progress tracking, quality assurance, safety, and as-built documentation.

FAA-registered UAV with 4K-capable camera and gimbal stabilization.

Thermal/infrared imaging capability for electrical inspections.

GPS-enabled flight control, waypoint programming for automated survey missions
Spare batteries, propellers, and data storage devices.