AEC SOLUTIONS

Juniper Unmanned’s Architecture, Engineering, and Construction (AEC) Solutions can save you time and money. Contact Juniper today to discover how we can support your projects, efficiently and cost effectively.

ARE YOU:

• Struggling with escalating surveying and mapping costs?
• Experiencing delays due to inadequate justification for change orders?
• Having trouble receiving your final payment on a project?
• Unsure of jobsite material quantities?
• Required to submit frequent construction progress updates?

• 3D terrain models
• Machine control digital surface models (DSM)
• ALTA, Topographic, and Planimetric surveys
• Hydrologic surveys
• Thermographic and Magnetic surveys
• Slope stability surveys

Juniper Unmanned, Inc., provides premier unmanned system-based information solutions for commercial, federal, state, and military organizations. The company integrates best-in-class aircraft with the most advanced sensors. High-quality data is combined with Juniper’s engineered processes, advanced software, and analytics to deliver actionable intelligence to our clients. Juniper’s team of professionals has extensive experience in remote sensing, engineering, safety and compliance, data processing and analysis, and surveying and mapping. We start each project by listening to our clients’ needs, then identifying the most appropriate sensors and equipment to meet their requirements.
WHAT MAKES JUNIPER UNMANNED UNIQUE?

- Top-rated and continuously trained FAA Part 107 certified pilots
- Safety and compliance experts
- Remote sensing specialists
- In-house data processing and analysis
- Large selection of advanced sensors
- Extensive data acquisition experience in extreme operational environments
- AI-enabled products and services
- Expert mission management
- Projects completed on six continents
- Selected as a “2018 Colorado Company to Watch”

BENEFITS OF UAS FOR AEC

- Rapid and as-needed deployment
- High-resolution 3D models
- Valuable pre-construction data
- Jobsite productivity optimized
- Worksite safety improved
- Data acquisition in less time
- Workflows streamlined
- Frequent status updates and quality control
- Operate above hazardous ground conditions
- Wide range of sensors to support various applications

PLATFORMS/EQUIPMENT

- Many platforms available: fixed-wing, multi-rotor, and single-rotor UAV from trusted manufacturers
- Onboard GNSS/IMU
- Survey-grade terrestrial GPS/GNSS base
- Agile flight planning for extreme terrain

SENSORS

- Multispectral, RGB, NIR
- LiDAR
- HD Video
- Thermal
- Magnetometer
- Bathymetric LiDAR

DATA PROCESSING/PRODUCT DEVELOPMENT CAPABILITIES

- Preliminary design surveys, planimetric maps, contour maps, calibrated point clouds, orthomosaics, bulk-material quantities and project takeoffs
- Files compatible with all major machine control manufacturers: Topcon, Trimble, Leica, others
- Solutions include XML, DTM, TIN data, cross sections, point files, contours
- Data products delivered in most CAD/GIS formats: AutoCAD, Civil 3D, MicroStation, GEOPAK, others