

LIDAR SMALL UNMANNED AERIAL SYSTEMS

Our lidar small unmanned aerial systems (sUAS) services are offered throughout the mid-Atlantic region with operations based in northern Virginia. Our Inspired Flight IF1200 sUAS is National Defense Authorization Act (NDAA) compliant and able to fly in highly secure areas or for organizations requiring NDAA compliance. Paired with the GeoCue TrueView 615 sensor, based on the Riegl miniVUX-2UAV scanner incorporating dual cameras providing aerial imagery and colorized point cloud data, we can take on projects across a wide variety of market segments. The TrueView sensor provides up to 200,000 measurements per second (200kHz) and is capable of generating the dense point cloud data needed for many specialty acquisition scenarios where a sUAS would be employed.



This colorized point cloud data of the historic mill site redevelopment was acquired using the TrueView615 sensor on the Inspired Flight IF1200 sUAS.

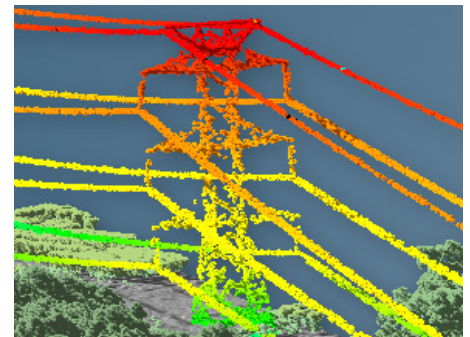
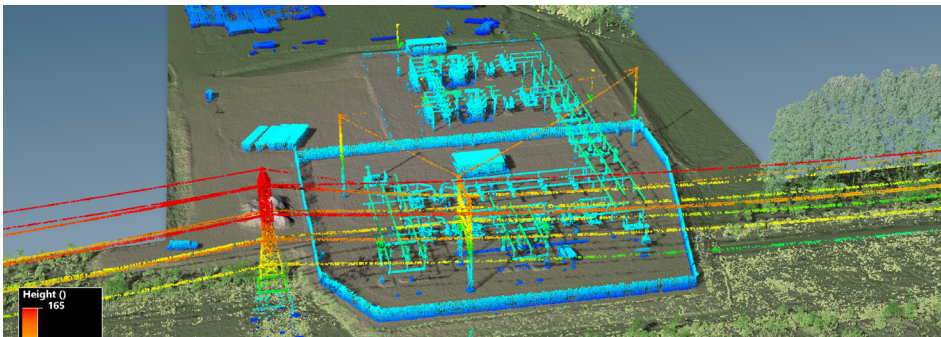
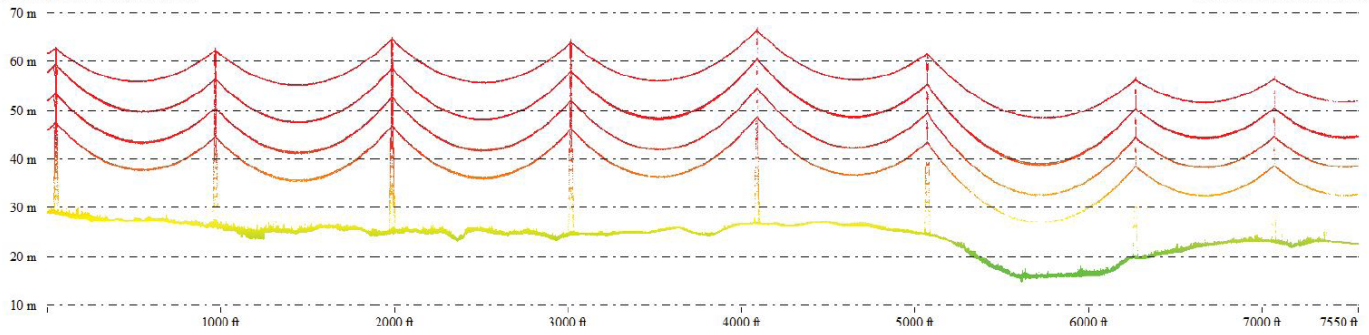
**American-made
Inspired sUAS
with Riegl
miniVUX sensor
serving a variety
of projects
and clients**

Drone Services

- Topographic mapping
- Utility corridor mapping
- As-built surveys
- Stock pile volume calculations
- Asset inventory monitoring
- Utility pole and structure inspections
- Bridge inspections
- Entitlement/property mapping

Formats Delivered

- Point cloud LAS or LAZ files
- Colorized point cloud from co-acquired imagery
- Digital elevation models (DEM)
- Digital terrain models (DTM)
- CAD deliverables – DWG, DXF, PLS-CADD, etc.
- Topographic map data – contours, Land XML, digital surface model (DSM), etc.
- Planimetric feature extraction
- Digital orthophotography



These colored point cloud and line profiles illustrate the mapping of a utility substation and transmission line for our energy clients in the mid-Atlantic region.



Centrally Located sUAS Acquisition Team

Based in Gainesville, Virginia, mobilization throughout the mid-Atlantic states is convenient and quick. Our flight team consists of Federal Aviation Administration (FAA) Part 107 certified pilots that have undergone training and conform with all FAA regulations and standards. In addition we have established rigorous internal standard operation and safety procedures. Our crew is also capable of completing all necessary ground survey in support of the lidar acquisition, removing the need to contract a separate survey company



Service Areas that Benefit from sUAS

- Land surveying
- Transportation
- Planning
- Architecture
- Inspections
- Telecommunications
- Site/civil
- Energy infrastructure



Benefits of Using sUAS

- Safe and faster data acquisition
- Quality and quantity of data capture
- Accuracy and precision of data capture
- Repeatability of missions
- Videography of current conditions
- Cost savings for the consumer
- Superior perspective compared to ground media
- Up-to-date photography compared to popular imaging sources



Eric Aufmuth, CST II
 eaufmuth@dewberry.com
 703.468.2247

in @ v
 www.dewberry.com

