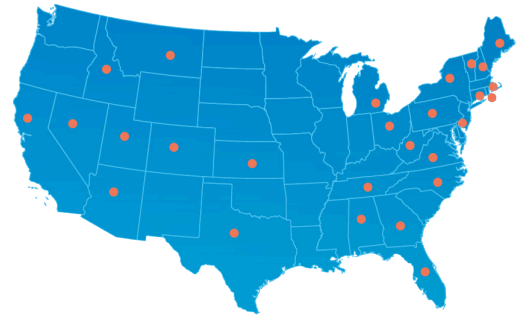




ARE Corporation's UAS Services division (dba AirShark) operates nationwide, providing an end-to-end solution for clients interested in leveraging drone technology across their operations. Our team of FAA Part 107 UAS Pilots are experienced with operating in high-risk environments near high-value assets. With an array of UAS platforms and specialized sensors, as well as the expertise to process data in-house, ARE provides a full-stack solution that enables safer, cost-effective, high-quality data collection and delivery on-demand.



**ENERGY** | Utility, Oil & Gas, Renewables  
Transmission & Distribution Asset modeling, ROW & Vegetation Management, Structure Inspections, Hydro, Wind & Solar Inspections

**CIVIL** | Engineering, Construction, Institutions  
Digital Surface/Elevation/Terrain models, 2D and 3D Mapping & Modeling, Progress Monitoring, BIM/VDC, Volumetrics (Cut and Fill), Building Envelope Inspections

**TRANSPORTATION** | Rail, Highways, Marine/Ports, Aviation  
Progress Monitoring and Project Documentation, Critical Infrastructure Inspections, Volumetrics (Cut & Fill), As-built's and Existing Conditions

**ENVIRONMENTAL** | Coastal Wetlands, Mining, Geology  
Supporting Phase 1 Assessments, Coastal Erosion, Wetland Monitoring, Stormwater Monitoring, Rock Face Analysis, Mine Reclamation & Aggregate Inventories

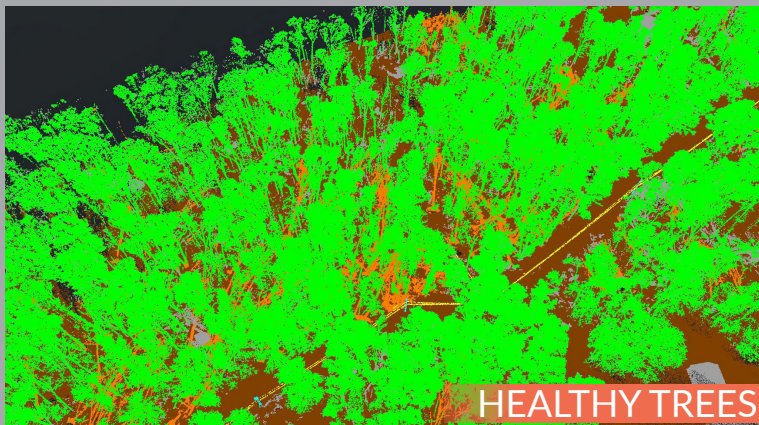
## DIFFERENTIATORS

- Operations Over People (FAA Approved)
- Nighttime Operations Approved
- Rapid Response Capabilities
- Level 1 Certified Thermographers

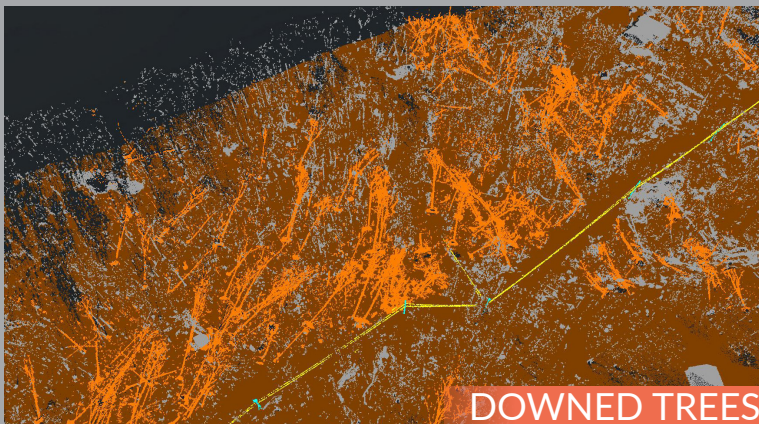
## UTILITY PROJECTS

## AIRSHARK

AN ARE BRAND



HEALTHY TREES



DOWNED TREES

### ELECTRIC DISTRIBUTION STORM DAMAGE ASSESSMENT

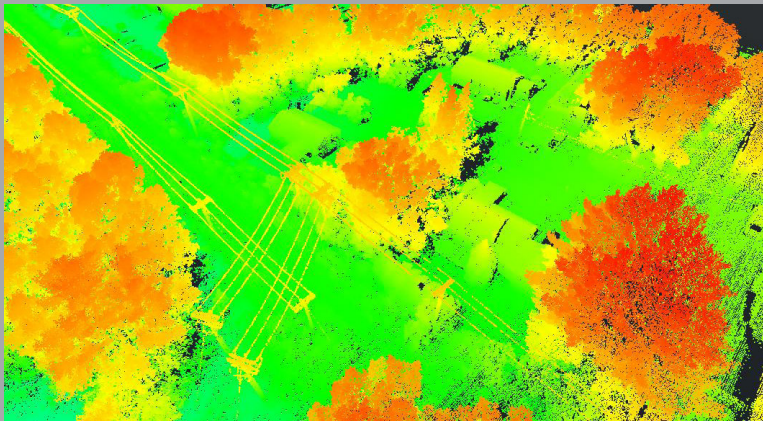
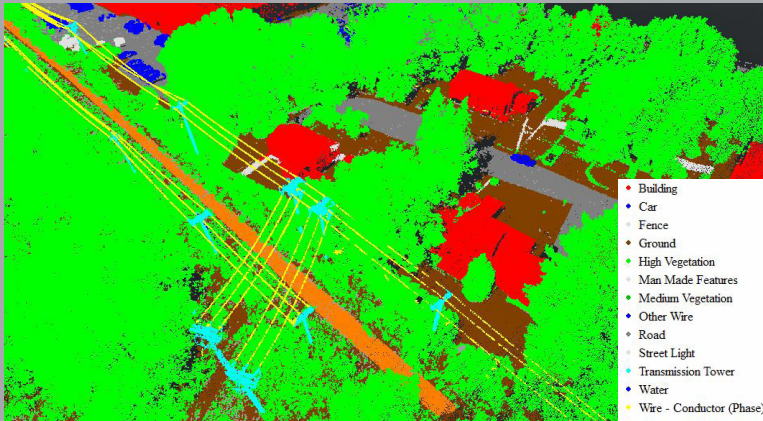
Eversource Energy  
NEW FAIRFIELD, CONNECTICUT

ARE led a pilot project to demonstrate how various UAS could be used in routine and emergency response efforts. Roughly 10 miles of distribution lines were inspected with RGB and thermal imagery, and mapped with LiDAR. The results of the project were used to develop a strategic plan to implement a distribution system UAS program.

#### DELIVERABLES

- Oblique Images & Video
- RGB & Thermal Inspection Images
- Live Video for Remote Assessment
- Classified LiDAR Point Cloud
- Digital Elevation Model
- Orthomosaic

UAS DATA COLLECTION &  
PROCESSING



## UTILITY RIGHT OF WAY LIDAR MAPPING

TRC Companies

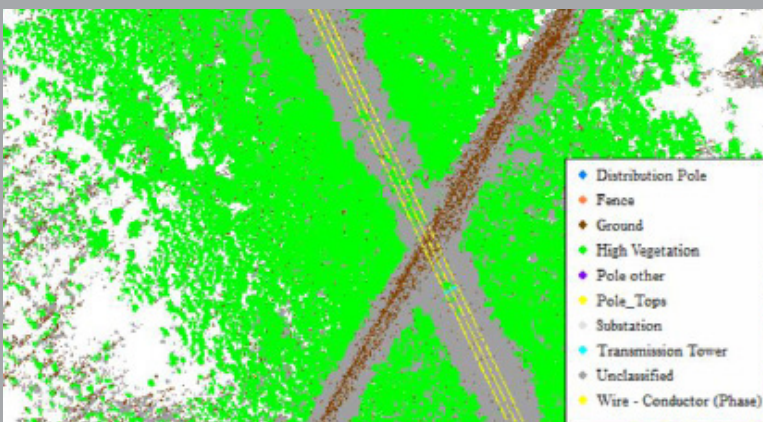
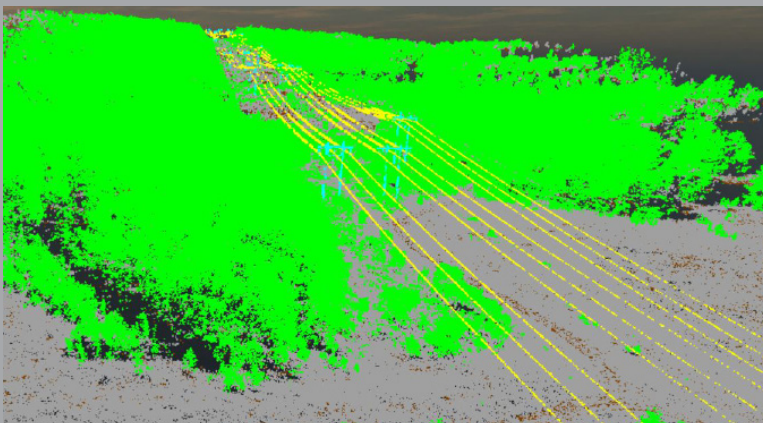
SALEM, NEW HAMPSHIRE

ARE's UAS team mapped three miles of utility Right-of-Way in Salem, NH with LiDAR. ARE provided a classified point cloud including ground, vegetation, phase conductors, transmission towers, road surface, and buildings, which could be filtered out and hidden as needed. Data files were imported into PLS-CADD to seamlessly fit TRC's workflow to provide existing condition information. This improved the design process of the transmission system upgrade.

### DELIVERABLES

- Classified LiDAR Point Cloud
- Orthomosaic
- 4K Marketing Video and Images

UAS DATA COLLECTION & PROCESSING



## 12-MILE TRANSMISSION LINE LIDAR MAPPING

Emera Maine

PRESQUE ISLE, MAINE

ARE planned, mobilized, collected and delivered classified UAS LiDAR data for approximately 12 miles of transmission line Right-of-Way in Presque Isle, Maine. The area of interest was covered with heavy vegetation, making UAS LiDAR ideal for capturing the data. The high density LiDAR scan provided nearly 100 points per square meter throughout the 12 miles. This classified data set was used to assist in pre-construction survey.

### DELIVERABLES

- Classified Point Cloud (Classified ground, vegetation, power line, substation, etc.)

LIDAR MAPPING & PROCESSING