Geotech History

- Formed in 1956, Geotech transitioned from a specialty machine shop to an environmental equipment manufacturer in 1978 when invited by the United States Geological Survey (USGS) to partner with them in developing products and technologies for the emerging U.S. Trace Metals Analysis Program.

- Geotech rounded out already-extensive product lines by acquiring three outstanding companies: Oil Recovery Systems (ORS) in 1997; Keck Instruments, Inc. in 1999, and the Marschalk Corporation in 2005. Coupled with ongoing product research and development, Geotech today offers the most extensive line of equipment in the environmental field.

- In addition to its 120,000 square foot Denver-based manufacturing plant and corporate headquarters, Geotech now operates service centers in six other states, plus a European Sales Center in Barcelona, Spain and a representative office in Beijing, China. Geotech equipment meets environmental challenges on every continent.

Lepton History

- Founded by John Oakley
- 26+ years of aerospace engineering experience
- Acquired in May 2015 by Geotech Environmental Equipment
- Currently manufacturing multiple UAV platforms
- Industry expert UAV flight training courses that complies with FAA rules and regulations.
Competitive Landscape

• Toy Companies: 95% of revenue from Toys ‘like’ UAV’s
• Small Operations: Single units
• Military Contractors: Large and expensive
• Delivery

Light Commercial/Industrial
• No major player
• Majority of market share not captured by one brand or type of UAS
• Growth will occur around applications
• Highest growth available in commercial/civilian verticals
• UAV manufacturers emerging outside US

Technology

• Fully featured autopilot
• Ground station
  – Real-time images transmitted from UAS
  – Fly with user controls
  – Map NY area and patterns on tablet
• GPS Waypoints
• Operations
  – Auto take-off and landing
  – Returns home before battery depletes
  – Stability up winds up to 35 MPH
  – Stabilized gimbal
• Safety protections
  – Returns home when signal is lost
• Camera configurations
  – HD Video
  – Ladar
  – Multi-Spectral
  – Hyper Spectral
• Sensors
  – Air quality
  – Soil quality

Airworthiness

Airworthy Releases:
January 26th, 2015 – RDASS UAS
August 15th, 2015 – Avenger UAS

“This memorandum constitutes an Airworthiness Release Qualification Level 3 authorizing operation of the Avenger Unmanned Aircraft System (UAS) for operations in Active Restricted Airspace.”
– Department of the Army, Jeffrey Langhout
**Industries Served**

- Environmental
  - Solid Waste
  - Mining
  - Agriculture
  - Consultants
  - Energy Sector
  - Universities
  - Nonprofit
  - Drillers

- Commercial
  - Construction
  - Real Estate
  - Railroad
  - Archeology and Geology
  - New Media

- Government
  - USGS
  - Fire and Rescue
  - EPA
  - Police and SWAT
  - Emergency Response
  - Homeland Security
  - Prisons
  - National Parks
  - Facility Protection and Inspection
  - Municipal/Public Works

- Military
  - Surveillance
  - Battlefield
  - Hazardous Materials and Sensing Operations
  - Training
  - Inspections

- Environmental
  - Solid Waste
  - Mining
  - Agriculture
  - Consultants
  - Energy Sector
  - Universities
  - Nonprofit
  - Drillers

**Lepton Video & Mapping**

- Live video stream to ground station controls enables inspections to be performed without physical presence.
- Drag and drop waypoints for autopilot flight paths to record high resolution video for orthophoto-mosaic mapping.

**Solid Waste Applications**

- Surveying and GIS
  - Track volume changes over time
  - Inspecting soil excavation areas
  - Comparing changes in erosion patterns
  - Monitoring vegetation restoration

- High Resolution Images
  - Inspecting soil excavation areas

- Infrared Camera for searching subsurface hot spots

- Inspections
  - Access remote areas of the site
  - Safely inspect dangerous terrain
  - Inspect dikes and outfalls
  - Control Litter

**Lepton Summary**

Manufactures multiple UAV platforms that are designed to safely carry video, imaging, and sensor equipment.

UAS flight training course that covers navigation, maintenance, risk assessment, aerodynamics, mission planning, weather, risk assessment, image controls, and logging flight time while piloting our professional RDASS unmanned aircraft system.

Experienced aviation pilots who provide aerial photography, video, imaging, and sensing services and processing catered to your industry.

Program management system that can help your business navigate through the complex and time-consuming processes of filing a 333 Exemption, Registering Aircrafts, and Applying for a COA.

UAV Repair and Scheduled Maintenance Center