Sanborn UAS
Unmanned Aerial Systems for Mapping Applications

Sanborn is pioneering the development of new mapping products and services for the breaking UAS marketplace. An unmanned aircraft system (UAS), is an aircraft without a human pilot aboard. The UAS’ flight and flight plan are determined either autonomously by onboard CPUs or via remote control by a ground-based pilot.

**UAS Benefits**
Unmanned Aircraft Systems are poised to increase efficiency and bring new processes to bear in high-accuracy / small area applications for customers such as:

- Utilities Infrastructure and Facilities Management
- Agriculture and Livestock
- First Responders and Emergency Management
- Energy Exploration, Resource Development, Infrastructure and Logistics
- Departments of Transportation

**UAS Features**
Sanborn is currently selling and providing imagery processing services for two unmanned aircraft systems for mapping: The Lepton RDASS4 and the Lepton Avenger E / G Model. Each UAS is constructed from state-of-the-art composite materials for efficiency and strength, and engineered with the latest software, hardware, and aviation technology. In addition, each UAS system features:

- Live Downlink Capability
- iOS Integration
- GPS Enabled
- Stable Flight Platform
- Gyro-Stabilized Sensor Mounts
- Multi-Sensor Capable Platform:
  - RGB
  - Hyperspectral
  - Video
  - FLIR
  - LiDAR

Above: Lepton Avenger E UAS
Below: Lepton RDASS4 Quadcopter UAS
Avenger UAS

Specifications
- Operational Altitude: 5,000 - 12,000ft WGS, no lift loss (FAA limited at this time)
- Sensor agnostic system
- Full autonomous flying, terrain following, target tracking, real time GPS waypoints
- Dual Mode - Wireless and Laptop
- Automated return home
- Max / min altitude setting
- Payload up to 15lbs
- Can fly in 30mph crosswinds
- Take off and land in small areas

Flight Management Integration
- Auto Takeoff, flight, and Landing
- Waypoints - 10cm accuracy terrain following
- Remote camera settings
- GPS integration
- Real time downlink data

Flight Time
- Gas Powered:
  - 60 - 90 minutes w/ 10 - 15lb payload
- Electric Powered:
  - 25 - 45 minutes w/ 10 - 15lb payload

RDASS Quadcopter UAS

Specifications
- Sensor agnostic system
- Full autonomous flying, target tracking, real time GPS waypoints
- Dual Mode - Wireless and Laptop
- Automated return home
- Max / min altitude setting
- Payload up to 1lb
- Take off and land in small areas

Flight Management Integration
- Auto Takeoff, flight, and Landing
- Waypoints - 5m accuracy
- Remote camera settings
- GPS integration
- Real time downlink data

Flight Time
- Electric Powered:
  - 20 minutes w/ 1lb payload

Above: With UAS, elevation accuracies of up to 1cm - 2cm are possible. The above image shows 3.5cm resolution at Nichols Reservoir, Colorado.

Above: Sample Thermal image. UAS platforms are sensor agnostic and compatible with a variety of sensor types.

Above: Sample powerline inspection video imagery. Sanborn UAS platforms feature live video downlink capability.

About Sanborn
Sanborn is a 21st century industry leader in geospatial solutions and technology, offering superior services, program management, and customer support.

For our clients we provide a national presence, extensive resources, quick responses, and exceptional value. For over a century, we have been a leader in the rapidly growing geospatial industry, with successful projects delivered worldwide.

For more information, visit us online at www.sanborn.com, or email information@sanborn.com to contact a representative.