

Zenith Aerotech is a leading, U.S.-based manufacturer of, heavy-lift Tethered Aerial Systems (TAS) for defense, federal agency, first responder, and commercial applications.





# CUSTOM SOLUTIONS FOR CRITICAL APPLICATIONS

What makes Zenith Aerotech so special is our highly customized Approach to designing and delivering TAS solutions to operators-In stark contrast to the mass-produced, one-size-fits-all systems available from other aerospace companies.



Zenith Aerotech's solutions enable a strong multilayer approach to the detection and defeat of threats-layering sensors, geographic zones, ranges, and capabilities as needed.

our staff thrive on finding solutions to challenges. Our in-house areas of expertise include aerodynamics, vertical takeoff and landing (VTOL) systems, remote sensing, embedded systems, and software, sensor fusion and signal processing, automatic control algorithms and systems, 3D printing, and custom fabrication.

Zenith's TAS are always the right choice, be it mission-critical applications, like counter-UAS, force protection, facility overwatch, mobile ISR, and communications relay; non-emergency use cases, like event illumination, media operations, and aerial mapping; or simply any application that would benefit from an elevated platform.

Our TAVs allow users to rapidly respond to changing threats. Common payloads include and electro-optical/infrared camera, LIDAR, scanning radar, laser designator/pointer, networking radio, loudspeakers for audio announcements, and lights for overhead spot/wide-area illumination.

Zenith Aerotech's team works to stay ahead of new UAS threats via field upgrades and helping to avoid obsolete hardware. Areas of ongoing innovation include RF-based products built on software-defined radios (SDR) and RD Systems on a Chip (RFSOC)





We design, manufacture, and test all our products in the United States, in a secure facility situated on 10 rural acres in Afton, Virginia.

Our facility can accommodate multiple ongoing projects and supports compartmentalization to project sensitive and proprietary applications.



#### A capable industry partner

Our team of experienced engineers and managers boast a deep understanding of tethered flight vehicles, power electronics, embedded systems design, and various sensors. Zenith Aerotech also provides customized user interface design and integration of specialized payloads.

Zenith Aerotech goes above and beyond the typical supplier, offering an array of in-house services. These include but not limited to-mechanical engineering, power electronics design and manufacturing, software and user interface development, fabrication and assembly, prototyping and testing, customer requirements definition, and project management.



In June 2021, over the span of a week, Zenith Aerotech Quad 8 multi-rotor platform flew a total of 161 hours and 49 minutes—108 hours of which were continuous, uninterrupted flight to reach out video of the 108 hours continuous endurance test please use the QR code or visit our website.



## PREMIER PRODUCT PORTFOLIO

Zenith Aerotech`s product portfolio is built around the Tethered Aerial System (TAS). Each TAS incorporates a multi-rotor Tethered Aerial Vehicle (TAV) and a Ground Power Unit (GPU), which also serves as a tether management system. The GPU runs on 110/220 VAC input (depends on TAV), and its system control/data downlink is delivered via fiber optic cable.

We use only the highest quality components and design our TAS to deliver continuous, uninterrupted flight-not just for hours, but for days if necessary. All our subcomponents comply with the John S. McCain National Defense Authorization Act (NDAA), and we adhere to all U.S. Federal Aviation Administration (FAA) regulations and maintains FAA Part 107-accredited pilots on staff.

Our products are modular, facilitating expandable features/capabilities and future upgrades, and protecting a customer's initial investment in the platform.

Zenith Aerotech systems integrate seamlessly with complementary technologies, including base security systems, counter-UAS systems and sensors.

Company products supports bi-directional integration with existing government technologies (e.g., Cursor on Target, ATAK, QGroundControl and Mavlink compatible flight control software) and the rapid incorporation of ongoing innovations to maintain superiority over evolving UAS threats.

We deliver single-vendor simplicity, turnkey solutions, and products that are easy to use, providing a straightforward flight experience for operators.

Integrated, ready-to-deploy packages, such as counter-UAS systems, are available, incorporating sensors, countermeasures, and a command-and-control geospatial operator console.

Zenith Aerotech products carry a full one (1) year parts and labor warranty and unlimited technical support.

The system warranty package can be extended up to 4 additional years-provided to system's original configuration has not been modified by anyone other than Zenith Aerotech or individuals authorized in writing by the company to do so.

Zenith Aerotech provides pre and post sales consultation and design assistance as well as basic spare parts and services.

#### ZENITH AEROTECH PRODUCTS

Customers have a choice of two TAV base models that can accommodate different payload weights and ground power needs: Quad-L can carry up to 8 pounds of payload with a 1.8 kW ground power, Quad-8 can carry up to 20 pounds of payload with a 3.5 kW ground power









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