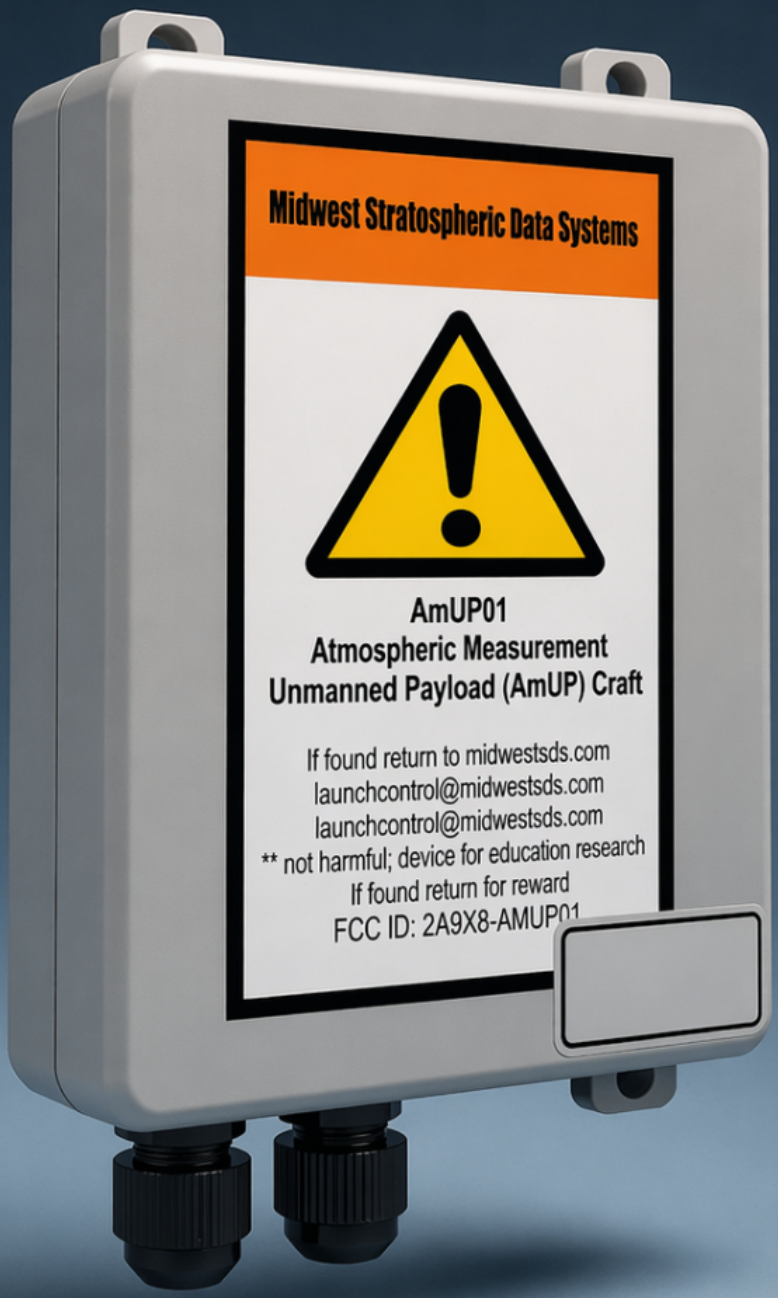
Former Tech CEO Jeremy Higgs Spearheads Midwest Stratospheric Data Systems

Bringing Decades of Award-Winning Data Expertise to the Edge of Space with AmUP Craft High-Altitude Payloads

Atmospheric Measurement Unmanned Payload (AmUP) Craft

by Midwest Stratospheric Data Systems



Effingham, Illinois Apr 16, 2026 (Issuewire.com) - Midwest Stratospheric Data Systems, a federally registered company, today announced the ongoing development and future 2026 launches of its AmUP Craft (Atmospheric Measurement Unmanned Payload Craft) — the company's main platform — under the leadership of Jeremy Higgs, former CEO of Net Diatom.

The project began about a year ago when Jeremy first started studying for and earned his amateur radio license from the FCC. That license, KE9CFY, is now central to the AmUP Craft, enabling real-time APRS (Automatic Packet Reporting System) tracking alongside WSPR telemetry for reliable, long-range data transmission from near-space altitudes.

Higgs built Net Diatom into a recognized technology startup specializing in software platforms and electronics. His DevPost portfolio showcases a range of web-based software projects, with a focus on HTML5, PHP, SQL, and full-stack development. He has participated in multiple hackathons, including the Pandemic Response Hackathon and COVID-related challenges, where he developed practical tools for real-world problems.

During the COVID-19 pandemic, he created a groundbreaking Tableau-based visualization website that integrated live data from the World Health Organization, Johns Hopkins, and NextStrain. The platform was named a Global Web Award winner for its response to the pandemic and was widely praised as the most comprehensive and visually advanced representation of global COVID-19 data available online at the time.

Higgs and his team from Net Diatom also competed in the Build the World with Dolby.io Hackathon, where they developed innovative hybrid audio and video communication experiences. Their project leveraged Dolby.io's spatial audio APIs to create immersive 3D sound environments, contributing to the hackathon's focus on memorable real-time audio-video applications.

In 2021, Higgs and Net Diatom filed suit against Facebook (now Meta), alleging deliberate blocking of their domain and social-media presence. After a two-year legal battle, Net Diatom prevailed in court on April 15, 2022. The court ordered Facebook to unblock access to Net Diatom's online properties and pay court fees, rebranding costs, and related domain restrictions. (See: "Tech Lawsuit: Net Diatom Vs Facebook," OpenPR, February 4, 2022; and "Net Diatom wins in court after 2 years; Facebook to pay court fees," OpenPR, April 19, 2022.)

One media outlet even compared Higgs to the "Elon Musk of Illinois" for his ambitious vision and hands-on approach to technology and data innovation.

Higgs has also been actively involved in spatial audio projects, exploring 3D sound design and binaural techniques to create immersive, multisensory user experiences. This work in advanced audio interfaces complements his expertise in real-time data systems and reflects his long-standing interest in pushing the boundaries of how humans interact with complex information.

Higgs is also an independent author. His most recent book, Between Code and Cosmos, explores the intersection of technology, consciousness, culture, and belief systems — themes that directly inform his current work in aerospace and real-time data collection from the edge of space. (Official Website)

"Data has always been my language," said Higgs. "If I could redo school, I would have studied jet propulsion instead of information systems. This project lets me finally combine both worlds — using cutting-edge technology and real-time data to push the boundaries of Earth toward the brink of space."

The AmUP Craft is a custom, hand-built unmanned high-altitude platform weighing under 4 lbs and capable of reaching 115,000 feet (115k ft). Each craft consists of a helium chamber, high-strength tether, parachute, Payload Containment Unit (PCU) — a rugged 5.9 × 3.9 × 2.8 inch ABS plastic waterproof enclosure — and an integrated Recovery GPS Unit. Powered by the ultra-lightweight QRP Labs U4B pico tracker under ham radio license KE9CFY, the system transmits live WSPR telemetry and GPS data, creating a pure, public-facing stream of atmospheric measurements with no external manipulation.

Data is obtained through fixed onboard sensors (including high-performance GPS and temperature sensors) that continuously monitor the atmosphere during ascent, at peak altitude, and during parachute descent after balloon burst. Telemetry is sent in real time via low-power WSPR packets and APRS, with additional hybrid Bluetooth proximity tracking and crowd-sourced GPS network support for reliable location updates. All raw measurements are collected directly from the payload and released publicly without alteration, ensuring maximum transparency.

This data will enable valuable contributions, including improved weather forecasting models, better understanding of atmospheric stability and wind shear events that affect severe weather in the Midwest, vertical thermodynamic profiles for winter storm and precipitation studies, urban climate impact analysis, and long-term tracking of stratospheric trends. By making high-altitude observations openly available, the project supports scientific research, education, and citizen science while advancing open atmospheric data collection.

Midwest Stratospheric Data Systems also plans to install a fixed weather station on the ground in the center of Clark County, Illinois, within 2026, providing high-quality local surface data to complement the high-altitude measurements from the AmUP Craft and deliver the nearest, most relevant data to the community.

Key data collected includes wind profiles and shear, atmospheric stability layers, vertical temperature and moisture profiles, and urban climate impacts. All flights are conducted from the Midwest, and the AmUP Craft has been assigned an FAA number. The company is currently building the first AmUP01 units and actively coordinating with local airports to establish a safe launch schedule for 2026.

“Jeremy’s background in advanced data visualization, real-time systems, immersive spatial audio, and philosophical inquiry makes him the perfect person to lead this effort,” said a company spokesperson. “His experience turning complex datasets into clear, actionable insights is now being applied directly to raw measurements from the edge of space — delivering transparent, publicly available atmospheric data that benefits researchers, educators, meteorologists, and citizen scientists alike.”

Midwest Stratospheric Data Systems invites collaboration from organizations interested in flying lightweight experiments (< 1 lb) in the PCU and is actively recruiting volunteers for its Flight Control Payload Team and Midwest Payload Ground Recovery Team (MPGR).

About Midwest Stratospheric Data Systems

Midwest Stratospheric Data Systems is a federally registered company led by former tech CEO and independent author Jeremy Higgs. The company designs, builds, and operates custom high-altitude unmanned payload craft to collect and publicly release atmospheric data with full transparency. All launches emphasize safety, open science, and responsible coordination with aviation authorities.

Media Contact:

launchcontrol@midwestsds.com

Media Contact

Midwest Stratospheric Data Systems

*********@midwestsds.com

http://midwestsds.com

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