Bolder Flight Systems, Inc. and Systems Technology, Inc. Partner to Develop Made-in-USA Autopilot Systems for UAS

HAWTHORNE, CA, UNITED STATES, January 28, 2026 /EINPresswire.com/ -- Bolder Flight Systems, Inc. (BFS) and Systems Technology, Inc. (STI) today announced a strategic partnership to co-develop advanced, fully U.S.-manufactured autopilot systems for unmanned aircraft systems (UAS). The collaboration combines BFS' high-performance flight control hardware and software with STI's aerospace guidance, navigation, and control (GNC) expertise to deliver secure, mission-ready autonomy solutions.

The jointly developed autopilot architecture is designed to support commercial, defense, and research UAS applications requiring high reliability, predictable real-time performance, and trusted domestic supply chains.

"By partnering with STI, we are bringing together two highly experienced engineering organizations to address the growing demand for U.S.-built autonomy," said Brian Taylor, CEO of Bolder Flight Systems. "This collaboration enables autopilot systems that meet stringent performance, safety, and sourcing requirements – manufactured entirely in the United States."

Addressing Limitations of Legacy Autopilot Platforms

Existing open-source autopilot and flight control ecosystems have played a significant role in expanding access to drone autonomy. However, these platforms are often constrained when applied to mission-critical, safety-sensitive, or regulated operations.

Common limitations include restricted computational capacity and reliability margins that limit advanced control, sensor fusion, and safety-critical processing; cybersecurity architectures and communication protocols not originally designed for hardened or certifiable environments; and

non-deterministic system behavior that can complicate validation, scalability, and predictable performance.

By contrast, the autopilot architecture developed by BFS and STI prioritizes real-time determinism, accurate state estimation, and robust flight control system design. This approach enables safer, more resilient UAS operations across fixed-wing, rotary-wing, and hybrid aircraft operating in complex or high-assurance environments.

Supporting U.S. Autonomy and Supply Chain Resilience

The need for a sovereign U.S. autopilot capability has become increasingly urgent. Recent federal policy developments, including interpretations of the FY2025 National Defense Authorization Act and related Federal Acquisition Regulation guidance, restrict the use of federal funds for UAS manufactured or assembled by certain foreign entities beginning in late 2025. These measures also emphasize the importance of resilient, domestic supply chains for unmanned systems and critical avionics.

This evolving regulatory landscape reflects a broader national effort to reduce reliance on foreign-made drones and components while strengthening the U.S. industrial base for autonomy and airspace sovereignty—supporting missions ranging from defense and homeland security to civilian infrastructure inspection and emergency response.

“This partnership strengthens the foundation for trusted, U.S.-built autonomy,” said Sanjeev Weerasuriya, President and CEO of Systems Technology, Inc. “By pairing rigorous guidance and control engineering with deterministic flight control platforms, we are delivering autopilot systems that meet both mission performance and national supply chain requirements.”

Focus Areas of the Collaboration

Initial development efforts will include:
* Integrated Autopilot Systems designed from the ground up for security, performance, and deterministic real-time operation
* Simulation-Driven Engineering leveraging advanced modeling and analysis to accelerate validation and flight testing
* Custom GNC Development tailored to next-generation UAS mission requirements

“STI’s long-standing experience in aerospace guidance and control design complements Bolder Flight Systems’ real-time flight control hardware platforms,” said Dr. Mike Jones, Director of Aerospace at STI. “Together, we are advancing how U.S.-based autopilot systems are designed, tested, and deployed.”

About STI
We empower people to safely operate complex systems. With nearly 70 years of expertise in

human-machine interaction, STI's research-backed solutions enhance assessment, training, and human performance across aerospace, defense, and clinical applications.

About Bolder Flight Systems
Bolder Flight Systems develops advanced flight control and data acquisition systems for unmanned aircraft and aeronautics research. Its products, including the FMU-R flight management unit, are designed for real-time determinism, reliability, and integration with industry-standard tools across commercial and government UAS programs.

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