

PRESS RELEASE
For Immediate Release

DiSTI's GL Studio SC Powers New Guardian UAV Ground Control System

The Orlando-based company's Safety-Critical HMI Software Development Tool helps Naval Air Warfare Center Aircraft Division develop Ground Control Systems

Orlando, FL (October 8, 2024) – The DiSTI Corporation, pioneers in advanced human-machine interface (HMI) software solutions, announces that its innovative GL Studio SC (Safety Critical) software development tool is integral to the new Guardian UAV Ground Control System (GCS), now running in the MQ-9 Ground Control System. Naval Air Warfare Center Aircraft Division (NAWCAD) engineers leveraged GL Studio SC's capabilities in designing the Guardian system to meet the Federal Aviation Administration's (FAA) stringent safety requirements for unmanned systems to operate safely in shared airspaces alongside manned aircraft.

Unmanned Aerial Vehicles (UAVs) represent the future of military operations, offering the U.S. military greater operational flexibility, enhanced situational awareness, and reduced risk to personnel. UAVs are essential in modern defense for a wide range of missions, from surveillance and reconnaissance to strike operations and disaster relief. As UAVs continue to take on more critical roles in military strategies, software like GL Studio SC becomes crucial in ensuring these unmanned systems' safe and efficient control.



“The ability of GL Studio SC to meet the rigorous safety and performance demands of military-grade systems makes it an ideal tool for programs such as this, where precision and reliability are paramount.,” stated Christopher Giordano, VP of UI/UX Technology at DiSTI. “As unmanned aerial vehicles' use continues to expand within the U.S. military, we are proud to contribute software solutions that ensure these systems can operate safely and effectively in complex, real-world environments.”

The Guardian system, a groundbreaking innovation operational as of August 2024 at the Marine Unmanned Aerial Vehicle Training Squadron (VMUT) 2, Marine Corps Air Station Cherry Point in North Carolina, is the Navy's first detect-and-avoidance system designed to safeguard UAV

operations. It enhances UAV safety by tracking manned and unmanned aircraft over a 200-nautical-mile radius and providing real-time visual cues for collision avoidance.

GL Studio SC's pivotal role in the Guardian project is a testament to The DiSTI Corporation's 30-year legacy of delivering advanced software solutions for mission-critical systems. As UAVs are poised to play an increasingly dominant role in U.S. military operations, GL Studio SC's ability to develop safety-critical HMIs with precision, reliability, and speed makes it the ideal tool for such programs. Its real-time performance and rapid prototyping capabilities empower engineers to create complex, safety-critical interfaces like Guardian, which enables UAV operators to have the same level of situational awareness as pilots in manned aircraft.

As these systems become increasingly autonomous and complex, robust safety-critical software ensures they operate effectively within tightly regulated airspace environments. Guardian represents a significant leap forward in making unmanned operations safer, more efficient, and more versatile. The system's success underscores the importance of integrating advanced software tools, like GL Studio SC, in defense systems to meet the unique challenges posed by UAV technology.

The Guardian system is under consideration for deployment in other operational squadrons, including at Edwards Air Force Base and the Naval Air Warfare Center Weapons Division. This potential expansion underscores the system's adaptability and role in enhancing manned/unmanned teaming in future operational environments.

For over three decades, The DiSTI Corporation has been at the forefront of developing graphical user interfaces for critical defense and aerospace applications. Its flagship product, GL Studio SC, ensures safety, reliability, and performance, making it the software of choice for developing HMIs in the defense industry.

For individuals seeking to learn more about GL Studio and the HMI software development solutions provided by DiSTI, please reach out to sales@disti.com

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About DiSTI Corporation

The DiSTI Corporation is the world's leading provider of graphical user interface software and virtual training solutions. Our flagship product, GL Studio, delivers advanced high-performance 3D user interfaces to the aerospace and automotive industries. Leading global manufacturers and defense organizations like the U.S. Air Force, U.S. Navy, Boeing, NASA, and Lockheed Martin choose GL Studio for its performance, fidelity, interface development, and deployment reliability. GL Studio exceeds the developer's workflow and runtime performance demands for avionics, instrument clusters, infotainment systems, or flight simulators.

Visit <https://disti.com> to learn more.

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