

Teledyne FLIR Defense Demonstrates Groundbreaking UAV Vehicle Reconnaissance Technology at DSEI in London

Release from Teledyne FLIR

'Black Recon' tech concept will enable crews in fighting vehicles to autonomously launch and recover small drones for immediate, covert situational awareness without leaving the vehicle

LONDON, September 12, 2023 – Teledyne FLIR Defense, part of Teledyne Technologies Incorporated (NYSE:TDY), is showcasing a new technology concept at this week's DSEI conference in London that will allow crews to autonomously launch small drones operated from inside a military vehicle; perform reconnaissance, surveillance, and target acquisition (RSTA); and then recover the aircraft without ever having to leave the safety of the vehicle.

The Black Recon™ Vehicle Reconnaissance System (VRS) is a development program that features an entirely new micro-unmanned aerial vehicle (UAV) designed to withstand the rigors of traveling on infantry and other fighting vehicles. The system is built to provide continuous untethered reconnaissance at flight speeds that allow the UAV to work ahead of advancing vehicles, supplying valuable situational awareness even beyond line of sight.

Fitted inside a hardened launch box mounted to a vehicle, Black Recon's deployment system can launch up to three UAVs during a mission. When one returns, a unique cradle-arm autonomously recovers the drone using patented technology to

precisely track, capture, and dock the UAV – day or night, even in poor weather. Drones are then automatically recharged for the next mission

With its thermal and visual payload, Black Recon delivers live imagery and targeting information to vehicle crews. Operators can use the system for a wide range of missions, such as assessing if terrain is passable, sweeping for mines and improvised explosive devices, or performing close-up inspection under bridges using onboard illumination. The system provides high precision RSTA and can perform GPS-denied operations.

“Black Recon represents a groundbreaking new capability and a force multiplier for warfighters to take on near-peer adversaries,” said Dr. JihFen Lei, executive vice president and general manager of Teledyne FLIR Defense. “The ability to launch and recover UAVs in seconds from a vehicle, without exposing the crew, will enable fighting units to maintain operational tempo and leverage the system when it’s needed most – in dynamic, uncertain, and complex environments.

“We continue to refine Black Recon’s technology and are excited about future applications, not only for the military but also other areas like law enforcement, border security, and critical infrastructure protection. We look forward to sharing the concept with industry partners during DSEI,” Lei added.