Raytheon Technologies unveils next-generation electro-optical intelligent-sensing capability

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RAIVEN reduces pilot workload while accelerating engagement decisions much faster than adversaries

ARLINGTON, Va., April 24, 2023 /PRNewswire/ — Raytheon Technologies (NYSE: RTX) today announced the launch of RAIVEN, a revolutionary electro-optical intelligent-sensing capability, which will enable pilots to have faster and more precise threat identification.

RAIVEN can identify objects optically and spectrally simultaneously in real-time — a single electro-optical/infrared, or EO/IR, system has never been able to do this before.

RAIVEN's 'intelligent-sensing' capability uses artificial intelligence, hyperspectral imaging, and light detection and ranging, or LiDAR, to enable operators to see up to five times farther and clearer than traditional optical imaging. This helps increase platform survivability and gives the warfighter decision advantage over peer threats.

"The future battlespace will consist of a myriad of threats from all directions evolving at an unprecedented pace," said Torrey Cady, vice president of Surveillance and Targeting Systems at Raytheon Intelligence & Space. "RAIVEN improves

platform survivability and keeps the warfighter safe by providing accurate, persistent target observation coupled with accelerated information sharing. This combination enables a decision-making process that simultaneously reduces pilot workload while accelerating engagement decisions to prosecute targets much faster than adversaries.”

Paired with AI, RAIVEN synthesizes reams of data into a detailed picture of the battlespace and the threats within it. The AI automatically detects and identifies threats, delivering a level of automation for the operator to choose what decisions need to be made – providing a critical capability while drastically reducing operator workload.

RAIVEN is a modular, open system that builds upon the successes of Raytheon Technologies’ combat-proven Multi-Spectral Targeting System family of sensors. RAIVEN provides more mission versatility and capability than ever before – all within the same size, weight and power specifications.

The first version of RAIVEN, RT-1000, can support a wide array of missions, including the U.S. Army’s Future Vertical Lift modernization effort, with the first flight test being conducted in 2024.

Work for this program is being done in McKinney, Texas.