Hensoldt to Supply CAIRAS Missile Warning System for CA-1 Europa

By Richard Scott

Helsing has become the launch customer for **Hensoldt**'s latest CAIRAS (Compact Infrared Reconnaissance and Alert System) passive infrared warning system.

The order – concluded under the umbrella of a strategic partnership signed by the two companies in February – will see CAIRAS equip Helsing's AI-powered CA-1 Europa autonomous combat aircraft. An initial three systems will be deployed on board the CA-1 Europa under the terms of the sale.

CAIRAS uses two-color infrared sensor technology to provide early detection and warning of approaching missile threats. It will also enhance the situational awareness of the CA-1 Europa by processing collected infrared imagery into a real-time panoramic view.

For the CA-1 Europa, CAIRAS will be embedded within the AMPS-MR (Airborne Missile Protection System) self-protection suite. This combines the CAIRAS missile warning system with the Kalætron radar warning system and also includes a chaff/flare dispenser system. This marks the first deployment of AMPS on an unmanned aerial vehicle.

The CA-1 Europa is an autonomous combat aircraft being developed by Helsing and its subsidiary Grob Aircraft. Combining the Centaur AI software and mission stack with Grob's proven capability in aircraft design and manufacturing, the CA-1 Europa is engineered for fully autonomous operations in contested and denied environments.

Alongside the baseline kinetic attack (CA-1KA) variant, Helsing is also developing an electronic attack (CA-1EA) version as a stand-in jammer to support suppression of enemy air defenses. Aside from the payload, the two variants share a common airframe, propulsion system, autonomy software suite and ground control infrastructure.

The CA-1KA is planned to start flight testing in early 2027. Initial Operating Capability (IOC) is scheduled for 2029 for the CA-1KA and 2031 for the CA-1EA.