

INDRA TESTS AN ADVANCED ANTI-COLLISION SYSTEM FOR DRONES DEVELOPED AT THE GALICIAN AEROSPACE HUB, KEY FOR COMPLEX SWARM OPERATIONS

- The system detects aircraft over one kilometer away to avoid other UAVs with great anticipation and precision, enhancing safety
- It is one of the most advanced systems of its kind: it combines multiple optical sensors with a precision radar and algorithms that optimize decision-making
- Its development has taken place within the Galician Aerospace Hub, where Indra and Tecnabit-Grupo Oesía collaborate on solutions for rescue operations, detection of maritime spills, and forest fire extinguishing

Madrid, January 9, 2026 – Indra has demonstrated the effectiveness of its new collision detection and avoidance system for unmanned aircraft, developed under the strategic program of the Galician Aerospace Hub, in which it works in a joint venture with Tecnabit-Grupo Oesía.

The company has completed a series of test flights with a multirotor UAV equipped with cameras and radar, which detected an Indra TARSIS-family UAV at distances of up to one kilometer, executing avoidance maneuvers optimally.

During the exercises, typical flight profiles were recreated, and approaches were made with different trajectories, altitudes, and speeds. This verified the system's performance in scenarios typical of a UTM (Unmanned Traffic Management) environment, from low-altitude flights up to 2,000 meters.

This detection and avoidance capability is especially relevant for complex operations, such as those involving drone swarms, and for the safe integration of UAVs into airspaces shared with manned or unmanned aircraft.

Indra's system stands out for its ability to fuse information from multiple onboard cameras, covering 360 degrees and allowing discrimination of small or distant targets.

These data are complemented by those from the electronically steered radar, essential in low-visibility conditions. In addition, the system has high onboard processing capacity, enabling advanced algorithms that optimize decision-making.

After successfully completing tests at the Aerohíspalis airfield (Seville), the project developed by Indra together with Tecnabit-Grupo Oesía takes a decisive step forward. Both companies are working within it on drone-based systems for rescue operations, detection of marine spills, and forest fire extinguishing.

To this end, they are developing VTOL-type UAS platforms, offering great operational flexibility and equipped with hybrid propulsion (electric and combustion) to achieve extended autonomy. These drones will be able to carry payloads of up to 20 kilograms, thus meeting the growing demand for medium-sized UAVs in the market.

About Indra

Indra (www.indracompany.com) is one of the leading global technology and consulting companies, world leader in engineering technology for aerospace, defense and mobility business, and that heads digital transformation consultancy and information technologies in Spain and Latin America through its affiliate Minsait. It is the technology partner for digitalization and core business operations of its customers worldwide thanks to its business model, based on a comprehensive range of proprietary products, with a high-value end-to-end focus and a high degree of innovation. Sustainability is part of its strategy and culture, to face present and future social and environmental challenges. In the 2024 financial year, Indra Group posted revenues totaling €4,843 billion, with a local presence in 49 countries and business operations in over 140 countries.

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