

INDRA AND SYNAPTIC AVIATION ENHANCE EFFICIENCY WITH ARTIFICIAL INTELLIGENCE AT THE AIRPORTS IN BARCELONA, MADRID AND PALMA DE MALLORCA

- The innovative technology will help optimize ground operations such as passenger boarding and aircraft rotation, thus reinforcing the efficiency and sustainability of the three Spanish airports managed by Aena with the highest passenger flows
- The software will increase the predictability of turnaround times and data accuracy, and it will be securely deployed in compliance with the highest cybersecurity standards
- The advanced solution will improve the passenger experience through the real-time visibility of information and the precise coordination of all the activities at the major Spanish airports

Madrid, March 16, 2025. –Indra, in partnership with Synaptic Aviation Inc., is set to deploy an advanced digital system based on artificial intelligence to monitor the rotation of aircraft before they take off. The solution will come into operation at three of Spain’s busiest airports: Adolfo Suárez Madrid-Barajas, Josep Tarradellas Barcelona-El Prat and Palma de Mallorca, which, under Aena’s management, jointly transport over 150 million passengers each year and boast around 477 aircraft parking positions. The implementation of this integrated technology will constitute decisive progress in the large-scale modernization and digitalization of ground operations at these airports.

The solution analyzes the video streams captured by cameras installed in the vicinity of the parking positions and boarding bridges in real time, and automatically records the most significant events related to the location of the aircraft and the main activities on the apron, including the GPU connection, the placement of chocks, the refueling, and the provision of catering services.

The information generated by Synaptic Aviation’s software will facilitate the ongoing monitoring and optimization of the efficiency, safety, and sustainability of the operations. This Synaptic Aviation solution has already proven its ability to improve the predictability of turnaround times and data accuracy, and reduce the environmental impacts of the different airports and airlines around the world.

The implementation of the solution at the main Spanish airports reflects the growing demand for artificial intelligence-based technology to improve the efficiency of ground operations at these facilities, where precise synchronization, seamless coordination, and real-time visibility are key to efficiency, the environmental impact, and an improved passenger experience. The system can also maximize the capacity of the existing infrastructures and reduce turnaround times, leading to improved safety and the operational efficiency of all of the players involved in the apron control process.

“We’re committed to helping Aena remain at the forefront of airport innovation. The video analytics solution developed by Synaptic Aviation and deployed by Indra will provide Aena with a powerful and innovative tool, enabling it to revolutionize airport management and transform the future of air transport”, declared Lidia Muñoz Pérez, director of Ports and Airports at Indra.

Synaptic Aviation president Sal Salman highlighted that “we’ve demonstrated that Synaptic’s AI model delivers class-leading accuracy with low latency, resulting in improved punctuality, greater visibility, and a higher degree of apron safety for our customers. By combining the foregoing with Indra’s global reach in the aviation sector and integrating it into its robust resource management solutions, we can deliver high-impact results to airport customers such as Aena. We’re proud to be partnering Indra and Aena and bringing intelligent automation to the heart of airport operations in Spain”.

The integrated solution developed by Indra and Synaptic Aviation can be deployed securely, tailored to each customer’s cybersecurity policies and requirements, and deployed locally as a complete enterprise application. Without the need for major changes to the existing infrastructure, it brings immediate benefits in terms of the work flows and enables the airport teams to make faster decisions with reliable information, reducing delays, emissions, and costs. This implementation is fully aligned with Aena’s strategic priorities, in its undertaking to modernize airport systems and meet its environmental objectives through smarter data-driven technologies.

About Indra

Indra is a leading Spanish multinational and one of the foremost global defence, air traffic and space companies that, through technology, protects our current way of life and anticipates the needs of the future. Its committed team of experts, its in-depth knowledge of the business and the latest technologies, and its unique innovation and systems integration capabilities make it the trusted technology partner for key operations and digitalization for its customers around the world. Thanks to its leadership in major European programs and projects, as well as its spirit of collaboration and partnership strategy, it drives the industrial and innovative ecosystem in these sectors. The company is part of Indra Group, which posted revenues totaling €5.457 billion in the 2025 fiscal year, with a local presence in 46 countries and business operations in over 140 countries.

About Synaptic Aviation

With its headquarters in Miami, Synaptic Aviation (www.synapticaviation.com) is a leading artificial intelligence software company specializing in the transformation of operations on airport aprons and improving the safety, efficiency, and sustainability of aviation. Through advanced technology that optimizes ground assistance, punctuality, and operational decision-making, Synaptic Aviation helps airports and airlines around the world improve their performances and reduce costs. The company is committed to innovation in partnership with its customers, delivering smart solutions that support a safer, more connected, and sustainable aviation ecosystem.

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