



ENAIRE puts the new 'Cancho Blanco' radar into service in the province of Cáceres

- The state-of-the-art radar will improve air traffic surveillance in the south-west of Spain as well as traffic coming from Portugal and from the Canary Islands
- The investment, which has exceeded 1.4 million euros, is in line with the efforts being made by ENAIRE towards innovation and technology modernisation

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ENAIRE, a company of the Fomento Group which manages air navigation in Spain, has put a new state-of-the-art radar into service in the province of Cáceres (Cancho Blanco), which covers and monitors flights in the south-west of Spain, as well as incoming traffic from Portugal and from the Canary Islands.

The new radar provides service to air control centres in Madrid and Seville. It also provides coverage to aircraft that take off and land at Badajoz and Salamanca air bases.

In total, it will control an airspace with a radius of 250 nautical miles (equivalent to an area of approximately 670,000 km²).

This secondary radar is equipped with digital receivers and Mode S technology, which allows for further information on aircraft that are flying, to manage traffic more easily and to increase security.

This type of radar is used to monitor and control traffic, as they provide information on the position of each aircraft, its identification and the altitude it is flying at, providing the location and identification of all the traffic that is operating within its range.

The radar also includes a redundant station of Automatic Dependent Surveillance - Broadcast (ADS-B), which can obtain the position of aircraft through the information the aircraft broadcast from their on-board sensors. This feature





guarantees to continue having surveillance information even if there are possible mechanical failures at the radar station.

The radar is linked to another eight Mode S radars already installed in Spain, completing coverage in the South.

The installation improves the international standing of ENAIRE as air navigational manager in the field of surveillance, in line with European requirements to gradually introduce new technologies that improve air traffic management in Europe.

Secondary Mode S radars and ADS-B stations

The secondary surveillance radar is a system that puts out an information request via a radio signal at a specific frequency received by the aircraft. To receive this signal, the plane responds via a transponder, which decodes the signal and sends the required information so that on the ground they can identify, in addition to its position, parameters such as the company it belongs to, the route it is taking or the height it is flying at.

The secondary Mode S surveillance radar is an improvement on the secondary monopulse radar, which was being used up until the development of Mode S technology. This radar uses the same frequencies but can carry out selective interrogations, which decreases radio electric pollution.

Another improvement that Mode S technology brings is an increased capacity to exchange information between the radar and the plane, which means that the aircraft can provide information on its flight plan, intention with respect to direction and altitude, and other parameters of the aircraft's flight management system.

Out of all the technology available for improving the provisions of the Spanish surveillance system, Mode S is the most mature and established, allowing for improved operations in various European countries.

The Automatic Dependent Surveillance – Broadcast (ADS-B) station can obtain data on the aircraft's position via the information that they automatically transmit from on-board sensors. It is a new technology that in the future is expected to complement the surveillance information of radars, being able to provide surveillance information with lower costs and less environmental impact.







New ENAIRE radar at Cancho Blanco (Cáceres)



Coverage of the Cancho Blanco radar on the level of Flight FL250





About ENAIRE

The public corporate entity ENAIRE is a company designated by the Ministry of Public Works to manage the fourth largest airspace in Europe in terms of traffic through 5 control centres, 21 control towers and a network of air traffic infrastructure and equipment. The air traffic managed by ENAIRE transports more than 250 million passengers on 2 million flights per year.