



ENAIRE brings a new radar online in Taborno, Tenerife

- The next-gen radar will improve and enhance air traffic surveillance in the Canary Islands
- It serves ENAIRE's Air Traffic Control Centre in the Canary Islands, as well as the airports of Tenerife Norte-Ciudad de La Laguna, Tenerife Sur and La Palma
- It can provide coverage for aircraft departing from and landing at all the airports in the Canary Islands
- The turnkey installation of this new radar required an investment of around 2 million euros

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Yesterday, ENAIRE, Spain's air navigation service provider, placed into service a new cutting-edge radar in Taborno, Tenerife, situated in a prime location that provides coverage and surveillance for flights in both the Terminal Control Area and Control Zones in the Canary Islands Region.

Given its location, the new Mode S radar in Taborno is able to track the airspace over a radius of approximately 450 kilometres, and can also provide coverage to aircraft taking off from and landing at all Canary Islands airports.

Specifically, the turnkey contract to supply this new radar that provides service to ENAIRE's Air Traffic Control Centre in the Canary Islands, as well as the airports of Tenerife Norte-Ciudad de La Laguna, Tenerife Sur and La Palma, was worth 2,249,730 euros.

This radar replaces the previous civil radar, installed in 2005, which had reached the end of its useful life. The new radar is a leap forward in terms of the technology used, going from a secondary single-pulse radar to a secondary Mode S radar, which also incorporates an Automatic Dependent





Surveillance Station (ADS-B) on the same site, providing an additional layer of information to the Canary Islands airspace.

This new secondary radar is equipped with digital receivers and Mode S technology, which enable it to receive additional information from in-flight aircraft, thereby helping to optimise traffic management and increase safety.

This type of radar is used to monitor and control air traffic, as it provides information on the position of each aircraft, its identification and altitude, making it possible to locate and identify all the flights that are operating within its range.

In addition, this radar incorporates a redundant Automatic Dependent Surveillance-Broadcast (ADS-B) station, which allows the position of aircraft to be obtained based on the information they broadcast through their on-board sensors. This feature will ensure that surveillance information remains available in the future in the event of a mechanical failure of the radar station.

This radar joins the other twenty-four Mode S radars already installed in Spain.

This facility enhances ENAIRE's international standing as an air traffic manager in the field of surveillance, in line with European requirements to phase in new technologies that improve the management of air traffic 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, intended heading 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 (ADS-B) station can obtain data on aircraft positions via the information that they automatically transmit from their 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.

About ENAIRE

ENAIRE is the air navigation service provider in Spain.

As a company of the Ministry of Transport, Mobility and the Urban Agenda, it provides en route control services for all flights and overflights from five control centres in Madrid, Barcelona, Seville, Gran Canaria and Palma, as well as approach services to every airport in the country.

In addition, 46 airports receive ENAIRE's communication, navigation and surveillance services, and 21 airports, including the country's busiest, rely on its aerodrome control services.

ENAIRE is Europe's fourth largest air traffic manager and participates in the A6 Alliance, a coalition of air navigation providers responsible for over 80% of European air traffic, and which is seeking to modernise the air traffic management system. It is also a member of other international alliances promoting the Single European sky, such as SESAR Joint Undertaking, SESAR Deployment Manager, iTEC, CANSO and ICAO.

ENAIRE, as the agency appointed by the Ministry of Transport, Mobility and Urban Agenda to implement the U-space system in Spain, will be the provider of the Common Information Services (CIS), which are essential for





administering U-space services to drones and Urban Air Mobility, in interaction with local air traffic control services, so that all types of aircraft can fly safely in the same airspace.

ENAIRE has received the highest score in Europe on the aviation safety key performance indicator. It has also been awarded the EFQM 500 Seal for its safe, efficient, innovative and sustainable management of air navigation services.