



## ENAIRE brings a new radar into service on the island of Lanzarote

- The new radar has represented an investment of over 2.5 million euros
- The radar, which is based on cutting-edge technology, will improve air traffic surveillance in the northeastern region of the Canary Islands as well as between the islands and mainland Spain

## <u> 19 March 2019</u>

On 18 March, ENAIRE, Spain's air traffic controller, brought into service a new cutting-edge radar on the island of Lanzarote that provides coverage for flights in the northeastern region of the Canary Islands as well as between the islands and mainland Spain, allowing the company to provide air traffic surveillance services for these regions.

The new radar, which serves ENAIRE's Air Traffic Control Centre in the Canary Islands, has represented an investment of over 2.5 million euros. In addition, it provides coverage for aircraft taking off and landing at the airports of Lanzarote and Fuerteventura.

In total, it will control airspace with a radius of around 250 nautical miles (equivalent to an area of around 670,000  $\rm km^2$ ).

The radar in Lanzarote replaces the previous civil radar which was installed at the beginning of the year 2000, on the same plot of land located at the peak of Peñas del Chache, owned by the Ministry of Defence. This new radar is part of a sustainable construction site made of volcanic stone, and the radome's brown colour helps to reduce the facility's environmental impact.

The new radar serves as a secondary surveillance radar and is equipped with digital receivers and Mode S technology. This allows it to incorporate more information on the aircraft in the air at any given time, to manage air traffic more smoothly and to boost safety. Radars of this kind are used to monitor and control air traffic since they provide information relating to the position of each aircraft, their identification and the altitude they are flying at, thus making it easier to locate all the traffic operating in the area that it covers.

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The Mode S secondary surveillance radar represents an improvement over the monopulse secondary surveillance radar used up to now. This new radar uses the same frequencies but it has the capacity to make selective enquiries, thus reducing use of the radio waves.

This radar is the fifth Mode S radar to be installed in the Canary Islands (the other four are located on Gran Canaria, Fuerteventura, La Palma and in the south of Tenerife), thus completing the air traffic coverage in the archipelago.

Of the technologies available for improving the provisions of Spain's air traffic control system, Mode S is the most mature and widely implemented. This facility contributes to ENAIRE's international standing as an air traffic controller in the field of surveillance, in line with the European requirements to gradually introduce new technologies that improve the management of air traffic in Europe.

In addition, the radar at Peñas del Chache incorporates a redundant Automatic Dependent Surveillance-Broadcast (ADS-B) station, which allows the position of aircraft to be obtained using the information they transmit through their on-board sensors. This function ensures that surveillance information remains available even in the event of the radar station suffering mechanical failures.

This ADS-B station has been co-funded under the "Connect Europe" initiative of the European Union's INEA agency, as part of a project for the implementation of ADS-B surveillance presented by air traffic service providers from Spain (ENAIRE) and Portugal (NAV Portugal).

## About ENAIRE

ENAIRE is the company belonging to the Public Works Department that handles air navigation in Spain. It renders aerodrome control services at 21 airports, including the busiest in terms of air traffic, plus en-route and approach control, from five control centres: Barcelona, Madrid, Gran Canaria, Palma and Seville.

In 2018 ENAIRE operated 2.1 million flights to and from four continents (Europe, America, Asia and Africa), transporting 300 million passengers.

ENAIRE is the fourth most important European air traffic manager, and, in a clear commitment to the Single Sky initiative, belongs to international

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partnerships such as SESAR (Single European Sky ATM Research) Joint Undertaking, SESAR Deployment Manager, A6, iTEC, CANSO (Civil Air Navigation Services Organisation) and ICAO (International Civil Aviation Organisation).

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