

## NAV Portugal delivers new wind detection system to Madeira Airport

- With a range of more than 10 km, the system will collect meteorological data with high precision and in near real time, reinforcing operational safety
- MAD Winds now begins a 365-day pre-operation period, during which it will be continuously evaluated and subjected to adjustments in its configuration and parameterization to optimize its operation in relation to the characteristics of Madeira Airport

NAV Portugal handed over Madeira International Airport's new wind detection system this morning, a significant milestone for the safety and efficiency of airport operations in the region and one that reinforces NAV's commitment to modernizing air navigation infrastructures across the country.

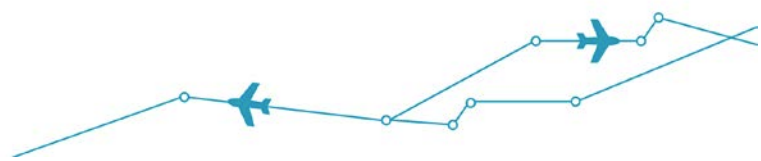
The "MADEIRA Winds" system (**MAD Winds**) delivered today consists of an X-Band Radar, a LIDAR system and a sophisticated processing system that analyzes meteorological data with high precision and in near real time, thus providing essential support for operational decisions and increasing the confidence of crews, who will be better informed about the weather conditions in the region.

"This investment reflects NAV Portugal's commitment to operational safety and the efficiency of air operations, in this case particularly with the Autonomous Region of Madeira, guaranteeing robust technical support for controllers, pilots and airport operators," said Pedro Ângelo, CEO of NAV Portugal.

The system delivered today to Madeira airport, the result of an investment of 3.5 million euros by NAV Portugal, has the main objective of improving the analysis and forecasting of critical meteorological phenomena, such as *windshear*, turbulence and microbursts, which affect airport operations. The system enables more effective knowledge of wind conditions in the very short term, particularly during the most critical phases of flight - approach, landing and take-off.

The alerts automatically generated by **MAD Winds** will be transmitted by air traffic control to aircraft, providing essential support for operational decisions and empowering crews to make decisions, as they will be better informed about the weather conditions they may face. In addition, the system will contribute to greater efficiency in air traffic management, airline operations and airport management. With a range of more than 10 km around the airport, the system will collect highly accurate weather data in near real time. This information will be analyzed by the competent authorities and could, in the future, support a possible revision of the wind limits in force. Currently, around 80% of wind-driven divergences are only up to 3 knots above the limits, making this system a crucial tool for a more accurate and potentially more favorable assessment of the operation.

The **MAD Winds** System is now starting a 365-day pre-operation period, during which it will be continuously evaluated and subjected to adjustments in its



configuration and parameterization in order to optimize its operation in relation to the physical and operational characteristics of Madeira Airport. This period will also allow for comprehensive analysis in different weather conditions, consolidating the data needed for even safer and more efficient operations.

Madeira Airport thus becomes one of the few airports in the world to benefit from this cutting-edge technology to mitigate adverse wind conditions. Inspired by similar infrastructures implemented at airports such as Hong Kong and Palermo, the **MAD Winds** System is positioned as a valuable tool for improving safety, predictability and confidence in operations, reaffirming NAV Portugal's commitment to innovation and operational excellence.

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**About NAV Portugal:**

*NAV Portugal is the air navigation services provider in the airspace under the responsibility of Portugal, which is divided into two regions: the Lisbon Flight Information Region (FIR), with 671,000 km<sup>2</sup>, covering mainland Portugal and the Madeira Archipelago; and the Santa Maria Flight Information Region, with 5.18 million km<sup>2</sup>, which includes a vast area of the North Atlantic Ocean and the Azores Archipelago.*

*NAV has a team of around 1,000 highly qualified technicians who ensure the safety of passengers and aircraft 24 hours a day, 365 days a year. In addition to the air traffic control centers in Lisbon and Santa Maria, NAV manages the control towers in Lisbon, Porto, Faro, Funchal, Porto Santo, Santa Maria, Ponta Delgada, Horta, Flores and Cascais.*

