

Automation for modernization

The Italian Air Force Meteorological Service upgrades their nationwide weather network with automation, remote control and the highest standards



The Italian Air Force founded the country's Meteorological Service in 1925 and expanded to a national role in 1950 when Italy joined the World Meteorological Organization. Today, the Italian Air Force Meteorological Service acts as the national weather service.

The challenge: **Modernize the nationwide network**

The Italian Air Force Meteorological Service has built an extensive observation network covering the entire country. Upper air observations play a key role in providing accurate weather data across the network: The Meteorological Service carries out soundings for synoptic use twice per day in six regions across Italy. These soundings are essential for numerical weather prediction and meteorological diagnostics.

Although their sounding stations were established and functional, the Meteorological Service was manually conducting soundings. The organization sought to

modernize the weather network with an automated sounding solution that would optimize staff resources, freeing them to focus on other tasks. At the same time, the solution needed to be safe for operators.

The solution: **Automation plus remote operation**

Working with Eurelettronica ICAS, Vaisala's long existing representative and Certified Service Partner, Vaisala delivered six AUTOSONDE® MAS15 automatic sounding systems to TELEDIFE for the Italian Air Force Meteorological Service. The solution modernizes the country's upper air sounding system by fully automating the process of radiosonde preparation and balloon filling and release.

The client:

TELEDIFE for the Italian Air Force Meteorological Service

Vaisala provided:

6 AUTOSONDE® MAS15 automatic sounding systems

RS41 Radiosondes

DigiCORA Sounding System MW41

Observation Network Manager NM10

The Meteorological Service selected the AUTOSONDE system based on its reputation for exceptional accuracy and reliability in all weather conditions. The AUTOSONDE is also designed specifically for operator safety: Gas lines are never fed inside the container, ensuring that the operator does not come in contact with the gas.

The AUTOSONDE systems use world-class RS41 radiosondes to deliver accurate, high quality data, while the DigiCORA Sounding System MW41 processes, analyses, archives, and relays sounding data. The Meteorological Service uses Observation Network Manager NM10 to remotely monitor and

control the AUTOSONDE along with the sounding schedule, initiate on-demand sounding, and perform remote diagnostics.

The benefit: Efficiency with exceptional accuracy

With the AUTOSONDE system, RS41 radiosondes and NM10 software in place, the Italian Air Force Meteorological Service has a modern upper air sounding network that provides the most accurate, reliable and dependable weather data available with no downtime.

The staff take full advantage of the automation features of the AUTOSONDE and only need to reload the sounding station every two weeks — saving time and boosting efficiency.

Not only is the department able to focus on other critical activities, they have peace of mind knowing that AUTOSONDE operators are safe from any gas since they never come in contact with the substance. The Meteorological Service also enjoys the remote-control features which enable them to easily monitor and manage the solution.



Courtesy of TELEDIFE

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