

# In Vaisala

## Thirty years of Excellence in Humidity Measurement

Thirty years ago Vaisala presented a completely new way of measuring humidity. Vaisala HUMICAP<sup>®</sup>, Sensor, the world's first thin-film capacitive humidity sensor was brought on to the market. Three decades later Vaisala has become the world market leader in the measurement of relative humidity and kept its place as a pioneer in the development in state-of-the-art humidity instruments. More information can be found on [www.vaisala.com](http://www.vaisala.com)

## Annual Results for 2003 Released

Vaisala's net sales for 2003 totaled EUR 189.2 million and the operating profit of the Group was EUR 25.9 million. Growth in demand stopped in early 2002 and has been unstable across all business areas. Despite this situation the company's operating profit grew by 14.7% compared with 2002. The improved result, despite lower net sales, can be attributed to measures to improve profitability. These measures will have full effect in 2004. Vaisala is listed on the Helsinki Stock Exchange (HEX). For more information or to read the Annual Report for 2003 please visit [www.vaisala.com/annualreport](http://www.vaisala.com/annualreport)

## Vaisala to sponsor the 18<sup>th</sup> International Lightning Detection Conference

The International Lightning Detection conference will be held in Helsinki the 7th to the 9th of June 2004. The conference theme will be "New Understanding of the Relationships and Impacts of Lightning: Improving Real-world Applications with Advances in Detection Research and Data Integration."

The ILDC, a biannual conference, provides a unique and important forum for presentations and discussion related to education, research, and applications development in lightning detection technologies. ILDC presenters and attendees share a common passion for understanding lightning and how it affects the world we live in. Professionals in the fields of aerospace, atmospheric research, aviation, data center management, emergency response management, electrical engineering, electric power, explosive and ordnance management, forestry, golf and recreation, lightning research, meteorology, mining, telecommunications and weather media are invited.

## European Meteorological Annual Meeting

The 4th Annual Meeting of the European Meteorological Society (EMS) will be held

September 26-30th in Nice, France. Vaisala will participate in the meeting and will organize a customer workshop during the week to present Vaisala's new products such as the Thunderstorm Information System and the Vaisala Soundings division's equipment for upper air weather observations. Additional information about Vaisala's workshop can be found on [www.vaisala.com/News & Events](http://www.vaisala.com/News&Events) and more information on the EMS annual meeting can be found at <http://www.copernicus.org/ems/2004>

## Mesoscale workshop held in Boulder

Vaisala co-organized a workshop entitled Design and Development of Multi-functional Mesoscale Observing Networks in Support of Integrated Forecasting Systems in December. The goal of the workshop was to develop recommendations and identify areas for continued research and development of improved mesoscale observing systems. These developments will be based on the needs of users, modelers (including those engaged in data assimilation), and forecasters. The focus was placed on identifying the challenges, needs and opportunities involved in the development of improved, economically viable, integrated atmospheric mesoscale observing, modeling and information-delivery systems. The potential users of these systems include federal, state and local agencies in addition

to private weather information providers and end-user groups.

A consensus has emerged within the observational, modeling and forecasting communities that carefully designed, integrated mesoscale systems will improve short-term forecasts in the future. To realize the full benefits of enhanced forecast modeling there is a need to improve the high-resolution observations of all meteorological variables, in addition to improvements in data assimilation, model physics, parameterizations, and end-user-specific analyses and forecast products.

## Improved mesoscale systems yield improved short term forecasts

Improved mesoscale systems are able to deliver forecasts of the physical and chemical state of the atmosphere including precipitation, ground state and run-off. These systems provide accurate, timely and user-relevant forecasts useful for improved short-term forecasts of severe weather, flash flooding for the use of water management, energy production and management, agriculture, air quality, homeland security and public health to name a few.

## Next steps

The workshop was organized in joint cooperation between Vaisala, the University of Oklahoma and the NOAA Forecast Systems Laboratory. The formal report summarizing the findings and recommendations from the

workshop will be available at the end of April and will be reported in the next weather observation issue of Vaisala News. Additional information on the workshop can be found at [http://www.mmm.ucar.edu/uswrp/upcoming\\_meetings/announcement2.html](http://www.mmm.ucar.edu/uswrp/upcoming_meetings/announcement2.html)

## Vaisala Aviation Weather participates in ATC Maastricht 2004

Vaisala's Aviation Weather participated in ATC Maastricht February 10-12, 2004. Maastricht is the annual meeting place for the leading ATC (Air Traffic Control) and ATM (Air Traffic Management) industry global suppliers.

Vaisala Aviation Weather displayed solutions for aviation weather observations and introduced several new products including the new transmissometer for runway visual range assessment, the new ceilometer for cloud height measurements and vertical visibility measurements.

Vaisala arranged an Aviation Weather Seminar in conjunction with the exhibition. An overview of the present and future developments in the Vaisala Aviation Weather unit was presented and a group of experts discussed the latest products in the industry covering a wide array of items spanning from sensors to service contracts.

Mr. Pekka Utela from Vaisala presented a paper entitled



*Sales Managers Kim Kaijasilta and Ingo Schesonka present Vaisala Aviation Weather to customers at the Vaisala stand.*

"Specifying visibility and cloud instruments". The presentation covered current technologies for cloud and visibility measurement as well as international standards for measurement performance. Particular focus was placed on the key performance areas that are currently not adequately covered by common standards as well as suggestions for improving the methods of specifying cloud and visibility instruments were suggested.

The three day show attracted more than 2,800 visitors from approximately 80 countries. Most of the participants are from civil aviation authorities, governmental departments, air navigation providers, airports and airport authorities and it is a unique opportunity for the major supplier of air traffic control equipment, training and communications to meet their customers. ●

*Klaus Heyn of Vaisala presents the new Vaisala Transmissometer.*

