VAISALA

Timeline:

The evolution of upper air measurement

More than 80 years ago, Professor Vilho Väisälä put the finishing touches on his first commercial radiosonde. Today, most atmospheric soundings around the world are performed with Vaisala sounding equipment.

Here is how our first groundbreaking technology has led to the organization we are today.

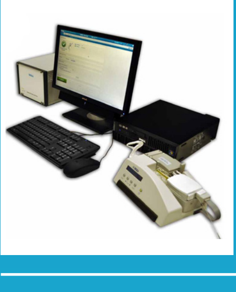
2018

Vaisala raises the bar for automatic soundings with the release of the Vaisala AUTOSONDE® AS41, a completely new upper-air observation system for synoptic and adaptive use.

Vaisala Dropsonde RD41 debuts as a meteorological measurement device that takes atmospheric profilings from aircraft flight level to surface.

2013

The Vaisala Radiosonde RS41 is released and combined with the Vaisala DigiCORA® Sounding System MW41. It introduces new standards in both technology and usability.



2012

Vaisala launches Vaisala DigiCORA® Sounding System MW41, the first part of the next-generation radiosonde system. MW41 takes the sounding operational experience to a new level.

2009

Vaisala introduces the second generation Vaisala MARWIN® Sounding System for demanding environmental conditions. It meets a number of focal MIL-STD and other applicable requirements including operating environment and electromagnetic compatibility.

2003

The Vaisala Radiosonde RS92 features new high-performing sensors designed for radiosonde use, featuring Vaisala's method of applying GPS to wind measurement. The next sounding system version, Vaisala DigiCORA® Sounding System MW31, gives meteorologists comfortable control over the sounding process by integrating sounding controls, archiving the sounding data, and meteorological messaging.

1999

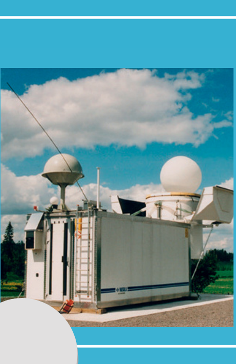
Vaisala DigiCORA® Sounding System MW21 is introduced. It features data and messages transmitted over the Internet, together with a user-friendly graphical interface. A BUFR message coding program is implemented in 2001.

1997

Vaisala delivers the first dropsondes. The National Center for Atmospheric Research (NCAR) and Vaisala enter into a licensing agreement on dropsonde design. NCAR designs the "GPS Dropwindsonde" using Vaisala core technology for pressure, temperature, humidity and wind finding. This dropsonde is renamed the Vaisala Dropsonde RD93.

1996

Vaisala introduces GPS for upper-air wind measurements. GPS technology offers substantially more detailed profiling of upper-air wind patterns.



1994

The first Vaisala Automatic Sounding Station AUTOSONDE® is delivered—a robot that prepares and releases a radiosonde without human intervention.

1987

Vaisala introduces the first version of the 1680 MHz radiotheodolite for defense applications.

1986

Vaisala introduces the compact ASAP Sounding Station, a semi-automatic upper-air observation station for use on board ships. ASAP receives the radiosonde signals and converts them into meteorological messages.

1985

The Vaisala DigiCORA® Sounding System MW11 is introduced. It features a self-guiding menu for operation through front panel keys, comprehensive self-testing, and built-in battery backup. An automatic telemetry system control is introduced. The next version—DigiCORA® Sounding System MW15 (pictured) —is compact and portable.

1981

The Vaisala Radiosonde RS80 sets a new standard in synoptic upper-air observation. New methods for measuring small capacitances and an electronic switch are patented worldwide. It becomes the WMO's "transfer standard" in radiosonde comparison tests.

1977

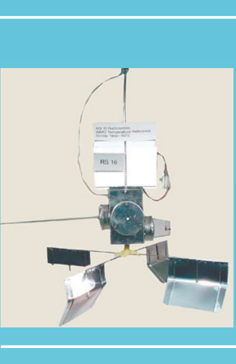
WMO chooses Vaisala Radiosonde RS21 as the radiosonde for the FGGE (First GARP Global Experiment). This was the beginning of the great success of Omega based wind finding. Picture shows RS21 launch on board of a research ship, late 1970s.

1975

Vaisala introduces the CORA® Automatic Sounding System. It features wind measurement based on the Omega NAVAID network, and automatic coding of TEMP messages. The world-famous MicroCORA (pictured) enters the market in 1981. It is in use until the termination of the Omega network in 1997.

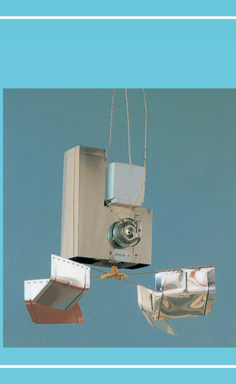
1973

The Vaisala Radiosonde RS21 offers an improved temperature sensor and a thin film, the HUMICAP® humidity sensor. 400 MHz telemetry opens the door to mobile radiosonde systems.



1969

The Vaisala Radiosonde RS16 is equipped with a thin wire thermometer. The WMO grants it temperature reference radiosonde status.



1965

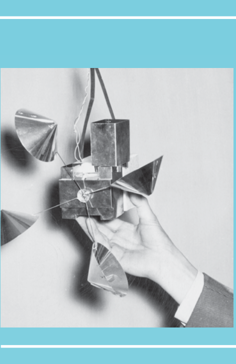
The Vaisala Radiosonde RS13 is the world's first fully transistorized radiosonde—much lighter than previous models, with better performance and new measuring elements.

1950

Väisälä Radiotheodolite for upper-air wind measurement is introduced in the early 1950s. It works in the 25 MHz frequency band.

1936

Prof Väisälä develops the Väisälä Aerogram, in use for 50 years. The Aerogram is a graphical aid to determine hydrostatic altitude for pressure levels.



1936

The Vaisala Radiosonde RS11 wins Gold Medal at the 1937 World Fair in Paris. This was Professor Vilho Väisälä's first commercial radiosonde, delivered to MIT, USA on July 30th, 1936.

Professor Väisälä, Ph.D. Mathematics, Prof. Meteorology, was a member of the WMO's Commissions for Aerology (CAe) and for Instruments and Methods of Observation (CIMO). He was founder and longtime Managing Director of Vaisala.

Through innovation, industry investment, and an innate curiosity, Vaisala strives to produce high-quality and dependable measuring solutions that provide observations for a better world.

Trusted weather observations for a sustainable future

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