

Have You Found a Vaisala RD93 Dropsonde?

What is a Vaisala RD93 dropsonde?

The Vaisala RD93 dropsonde that you found was initially ejected from a research aircraft flying at an altitude of several thousand meters. While descending with a parachute for 8-15 minutes, the dropsonde transmitted data of weather conditions back to the aircraft. In the aircraft, the receiving system stored the data on a computer. Some aircraft operators transmit the data via a satellite communication system further to national weather agencies to be used for weather forecast calculations.

Dropsondes are used operationally for example for hurricane measurements and other scientific programs studying the atmosphere. With onboard sensors the dropsonde measures atmospheric pressure, air temperature, relative humidity and wind two times each second. The atmospheric wind is calculated with the help of the onboard GPS receiver from the displacement caused by the wind.

Dropsondes are used for civilian weather measurements; they are not used for military operations.

Value

The used dropsonde has no commercial or reuse value. The components in the dropsonde are specially designed for weather measurements and can not be used for other purposes. By the time you found the dropsonde, the onboard lithium batteries have exhausted and cannot be recharged. Do not try to disassemble, crush, recharge or burn the batteries as they may cause leaking, heating and possibly explosion of the batteries.

In case you need more information about Vaisala dropsondes or the dropsonde you found in specific, please contact helpdesk@vaisala.com or visit the company Web site <http://www.vaisala.com> for further information.

Disposal

A Vaisala RD93 Dropsonde does not contain environmentally hazardous materials that would require special treatment. The dropsonde outer tube, plastic bulkheads, parachute and parachute cord can be disposed of like any household waste. The electronics inside the tube and the lithium battery pack (covered with white plastic film) can be disposed of in a similar way you are requested to dispose of any other electronic devices or used batteries.

European Waste Management Directory classifies printed circuit boards as class 16 02 14 and used batteries as class 16 06 05 waste; contact your local waste management authorities for correct disposal or recycling practices in your area for these materials.

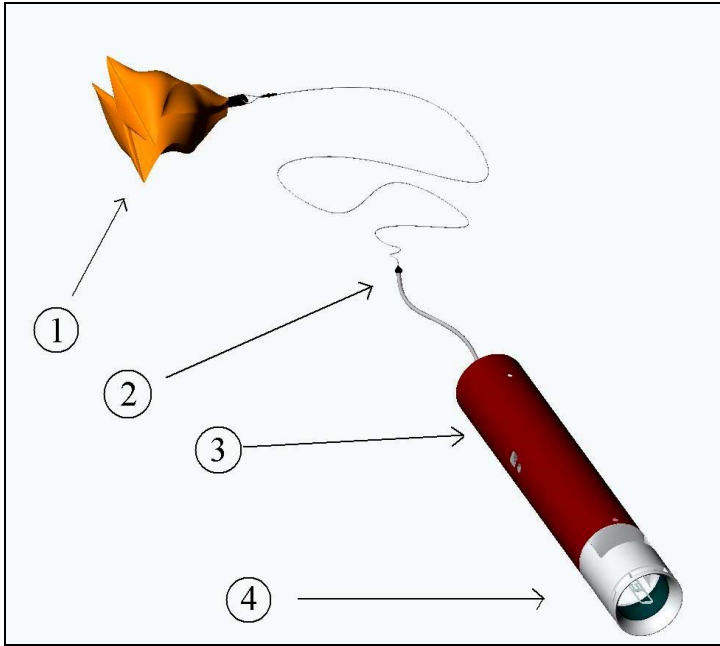


Figure 1: Vaisala RD93 Dropsonde

The following numbers refer to Figure 1 above:

- 1 = Parachute
- 2 = Parachute cord
- 3 = Outer tube
- 4 = Lower plastic bulkhead

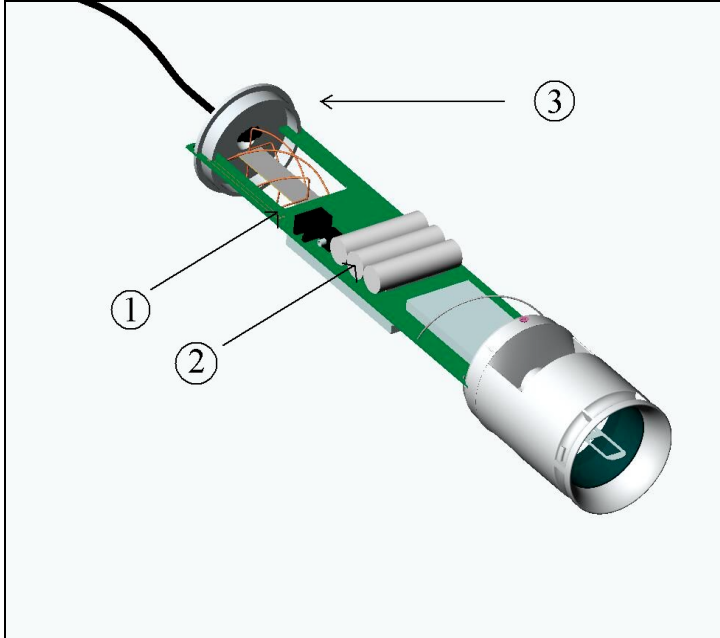


Figure 2: Vaisala RD93 Dropsonde components

The following numbers refer to Figure 2 above:

- 1 = Electronics board
- 2 = Lithium battery pack
- 3 = Upper plastic bulkhead