

Rawinsonde

A radiosonde is a balloon-borne, battery-powered instrument used to simultaneously measure and transmit meteorological data while ascending through the atmosphere. The instrument consists of sensors for the measurement of pressure, temperature and relative humidity. The sensors' information is transmitted in a pre-determined sequence to the ground receiving station where that information is processed at some fixed time interval. When wind information is processed by tracking the balloon's movement electronically, the instrument package is termed a rawinsonde. The rawinsonde system consists of a balloon-borne radiosonde, receiving and tracking equipment and computer systems for data processing.



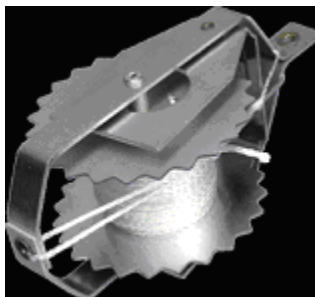
Pre-flight Preparations

Before any flights or launches there are a few things that need to be done. A weather balloon is filled with hydrogen.

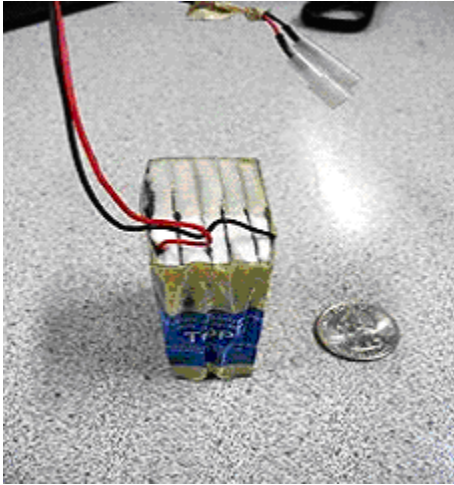
After the balloon is filled and tied with cord, a parachute is attached no more than 6 feet underneath the balloon.



A dereeler or cord is attached to the based of the parachute, where the rawinsonde would be attached later on.



Twenty minutes before the schedule flight, the water-activated battery is soaked in water for at least 2-5 minutes.



After the rawinsonde is calibrated with the surface pressure and temperatures, it is then attached to the dereeler or cord which is between 85 to 120 feet long. Below, the rawinsonde is released into the wind

