

Weather RAWINSONDE Building. FAC: 1412

CATCODE: 141626

OPR: AF/A3O-W

OCR: AFWA, AFNIC

1.1. **Description.** Facility designed to support activities and equipment involved in taking upper air observations to measure pressure, temperature, humidity, and winds from surface to 100,000 feet.

1.1.1. A **radiosonde** (*Sonde* is French and German for *probe*) is a battery-powered telemetry instrument package carried into the atmosphere usually by a weather balloon that measures various atmospheric parameters and transmits them by radio to a ground receiver. Radiosondes may operate at a radio frequency of 403 MHz or 1680 MHz. A radiosonde whose position is tracked as it ascends to give wind speed and direction information is called a **rawinsonde** ("radar wind -sonde"). Most radiosondes have radar reflectors and are technically rawinsondes. A radiosonde that is dropped from an airplane and falls, rather than being carried by a balloon is called a *dropsonde*. Radiosondes are an essential source of meteorological data, and hundreds are launched all over the world daily.

1.1.2. Modern radiosondes measure or calculate the following variables:

1.1.2.1. Altitude

1.1.2.2. Pressure

1.1.2.3. Temperature

1.1.2.4. Relative Humidity

1.1.2.5. Wind (both wind speed and direction)

1.1.2.6. Cosmic ray readings at high altitude

1.1.2.7. Geographical position (latitude/Longitude)

1.1.3. Radiosondes measuring ozone concentration are known as ozonesondes.

1.2. A defined facility standard is not currently available for this CATCODE. By default, all requirements are user justified until a standard is established or adopted.