

Automated Weather Configurations

The Bureau for the Complication of Simple Affairs has created six varieties of AWOS to confuse the public. They are:

AWOS I

This configuration measures: wind (speed, gust, direction and variable direction), temperature, dew point, altimeter setting and density altitude.

AWOS II

Added to the Mk. I standard are these observations: visibility, variable visibility, precipitation and day/night (for those not sure if the sun is above or below the horizon).

AWOS III

Building on the AWOS II, this variety further adds sky condition, cloud height and cloud type. Beyond this, the alphabet starts piling up.

AWOS III-P

This flavor adds to AWOS III present weather and precipitation discrimination (the many ways to get wet).

AWOS III-T

This configuration adds thunderstorm and lightning detection to the mix, but not the -P-configuration sensors.

AWOS III-P-T

Finally, in a fit of alphabetical excess, this device combines present weather and lightning detection, along with all of the other AWOS III functions.

Meanwhile, ASOS includes all the functions of an AWOS III, but in addition has sensors to measure type of precipitation,



Above, the ASOS at the Morehead City, N.C., National Weather Service Forecast Office. Although the acronyms differ, an ASOS is functionally equivalent to the latest-configuration AWOS III-P-T.

freezing rain and thunderstorms. In sum, ASOS is similar to the AWOS III-P-T standard but with freezing rain detection thrown in for good measure.

In addition to the various varieties of AWOS, we also have four different modes of operation. With Mode 1, the AWOS operates 24 hours per day with no manual input. Observations are updated every minute, with no weather observer input. Mode 2 adds the capability to append a manually recorded Notam to the automated voice reports while Mode 3 provides the capability for a weather observer to manually augment the automated observation by appending a weather entry to the observation. Finally, Mode 4, typically used as backup, permits a weather observer to enter a complete manual observation into the system.