QUICK DEPLOYMENT METEOROLOGICAL STATION

The Quick Deployment Meteorological Station (QD Met Station) is designed for use with the National Oceanic and Atmospheric Administration's (NOAA) Computer Aided Management of Emergency Operations (*CAMEO*). *CAMEO* is a computer program and database written for the Apple Macintosh (TM) computer to assist personnel responding to a chemical accident.

Air temperature, wind speed and wind direction are measured at the Remote Station and the values transmitted via radio frequency (RF) or hardwire cable to the computer at the Base Station. The *CAMEO* Air Model uses these values to predict and provide a map display of the aerial extent of the chemical plume.

The QD Met Station can be deployed without tools in less than 3 minutes. Bulkhead connectors are provided for the sensors, antenna and hardwire cable. Toggle switches at the Remote and Base Stations are used to select either the RF or hardwire data transfer option. The Remote Station's functions are preprogrammed into the CR10 Measurement and Control Module for execution upon system power-up.

The entire QD Met Station is packaged as three pieces with the Remote and Base Station components shock-mounted in foam and housed in two separate fiberglass transit cases.

MODEL QDR10 REMOTE STATION

A portable weather station housed in a watertight fiberglass transit case containing:

- CR10 Measurement and Control Module
- HT90 Motorola Radio
- Crossarm with Compass, Level, Radiation Shield and Antenna
- Wind and Temperature Sensors
- 12VDC Rechargeable Battery
- SC32A RS232 Interface

MODEL QDR10-M TRIPOD

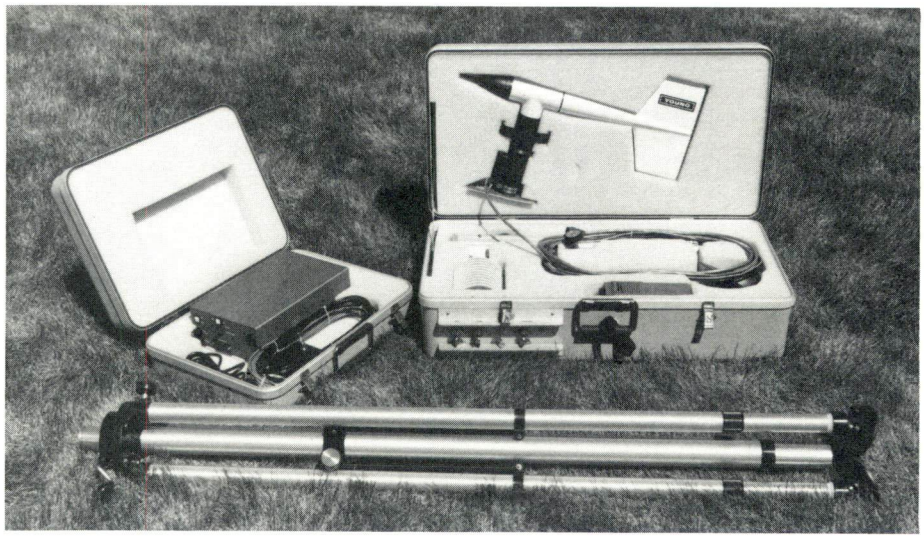
An 8 foot adjustable aluminum tripod for mounting the crossarm, sensors and antenna.

MODEL QDB32 BASE STATION

A portable AC powered interface for receiving data and transferring it to the computer. The fiberglass transit case contains:

- PS232-QD Base Station
- HT90 Motorola Radio
- Antenna with Magnetic Base
- 100 ft. Hardwire Cable
- 6 ft. Computer Interface Cable

Model QDR10 Remote Station and Tripod



QD Met Station Components and Packaging

COMPUTER REQUIREMENTS

Apple Macintosh (TM) II, Plus or SE Computer with Hard Disk. *CAMEO* Software available from: *CAMEO* Database Manager, NOAA/Hazardous Materials Response Branch, 7600 Sandpoint Way N.E., Seattle, WA 98115, telephone 206-526-6317.

QD MET STATION SPECIFICATIONS

Model QDR10-M Tripod

- Material: Aluminum
- Maximum Wind Sensor Height: 8 feet
- Stability: 65 mph without guys, using field case as ballast

Sensors

- Wind Speed: R.M. Young Wind Monitor
  Range: 0-100 mph
  Threshold: 1.3 mph
- Wind Direction: R.M. Young Wind Monitor
  Range: 0-355 degrees
  Threshold: 2 mph
- Temperature: thermistor
  Range: -35°C to +55°C
  Accuracy: ±0.4°C
  Shield: R.M. Young 11 plate

Radios

- Motorola HT90, 4W

Power Specifications

- Model QDR10 Remote Station
  Batteries: sealed lead acid, 5 Ahr per charge; 110 VAC charger provided
  Minimum Recharge Time: 6 hrs
  Operating Time Per Charge: 166 hrs RF; 350 hrs, hardwire
- Model QDB32 Base Station: 110 VAC @ 60 Hz

System Physical Specifications

- Model QDR10-M Tripod: 57" (collapsed); 15 lbs
- Model QDR10 Remote Station Case: 31" x 15.8" x 9.5"; 38 lbs
- Model QDB32 Base Station Case: 19.4" x 14.1" x 7.2"; 19 lbs

Operating Temperature Range

- Model QDR10 Remote Station: -25°C to +55°C

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