

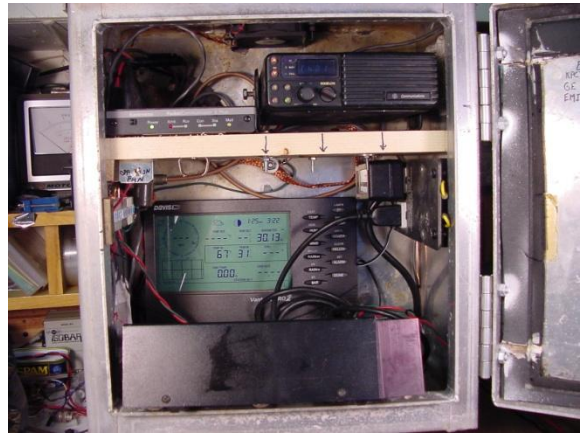
Weather-Digi Station Gallery

In this area we show snapshots of each of the weather-digipeaters described in the main text. Captions should be clear, but we welcome viewer questions.

Davis Vantage Pro™ + Kantronics KPC-3™ + GE Monogram™ Transceiver



Davis Sensor Package Installation



Davis Console; KPC-3 and GE Transvcr above



Wx Digi in a Locked Box



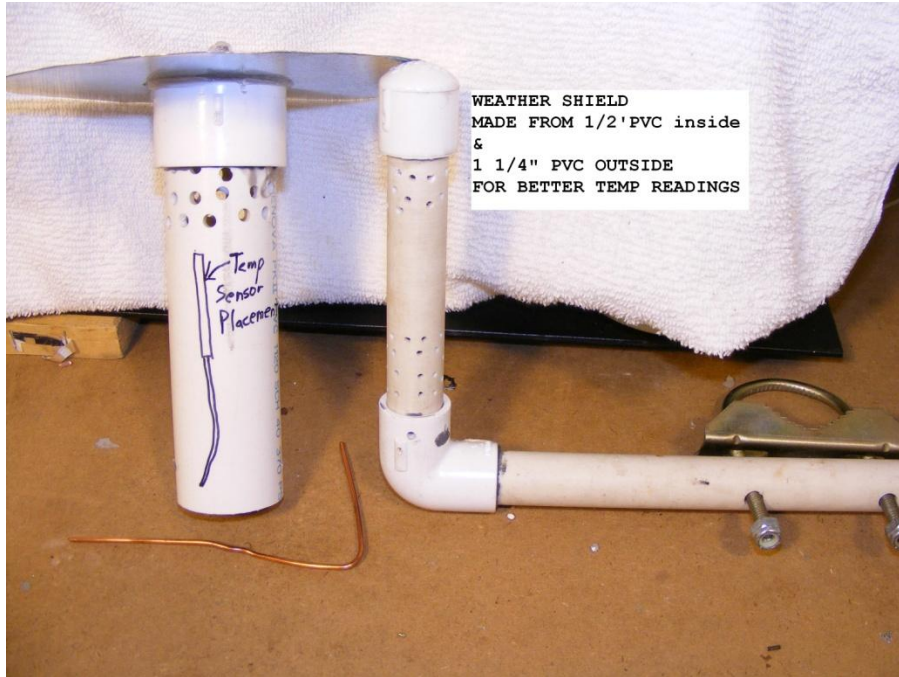
Davis Sensor Package with New Anemometer

In 2011 Our Davis system survived a ten-foot fall after the wooden support pole burned down. The anemometer seized: autopsy much later revealed red fire retardant. Once cleaned off, sensor revived. Station licensed as N5SOR-2.

We have not shown the special dongle required to make the Davis talk to the Kantronics TNC. This item requires special handling. See text.

Peet Ultimeter 2000™

In order to make the Peet sensor package field-tough, we fabricated some plastic shields from scrap PVC and sheet metal. The photos illustrate this activity, entirely WA5LNL's work. Station is licensed as K5DRT-1.



These are 2 home-made sun-shields for the temperature transducer



We must mount Anemometer and weather vane on plastic pipe, because of the magnetic switches inside. Rain

collector mounts on scrap aluminum with U-bolt to attach gauge to a vertical pipe. All that wire must be run through flex conduit, in order prevent rat bites.



KPC-3 on Top of GE Radio; Peet Ultimeter



We True Up the Peet Sensor Package

Not shown is a small UPS with a large battery, required to manage long power outages at this wilderness site. We charge the battery with a wall wart. The small UPS supports the weather station..



Station nested in Motorola "J" cabinet. The Unit on the right is a previous APRS station.

The fans were required for the GE MASTR-II™. This is also an excellent choice for APRS.

Radio Shack WX-200

We have 3 of these stations in service as WX5II-1,(Blanco) WX5II-2 (Uvalde) and WX5II-12 (Corpus Christi). Here are some shots: The two below are at Corpus.



Roof-Mounted Sensors



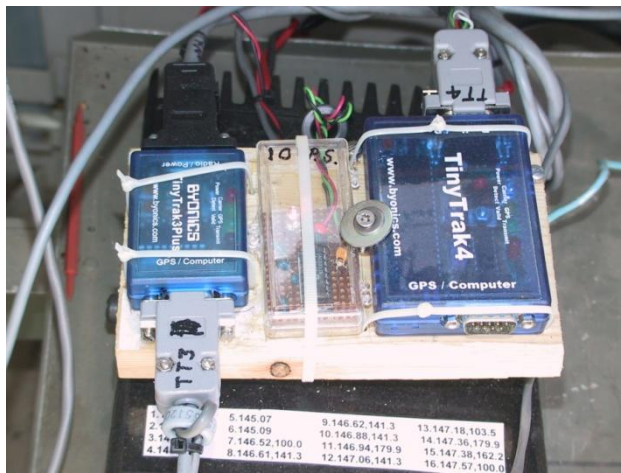
WX-200 Console Inside a Locked Radio Cabinet

Available transducer cable and physical height of the pent house ceiling constrained our choices for mounting the transducers. The pipe mast is 10 feet tall. The white object is PVC pipe, multi-perforated for air flow. It houses the temperature transducer. The rain gauge sits on a scrap metal platform below the anemometer and weather vane. All cables are run in flexible weatherproof conduit, which penetrates the brick wall about 22 ft. above the roof below the pent house. The system is located a few hundred yards from the Gulf of Mexico.

Here are snapshots of 2 other WX-200 stations: The first is located about 90 miles west of San Antonio and is licensed WX5II-2. The second is sited in the Texas Hill Country about 50 miles north of San Antonio and is licensed WX5II-1.

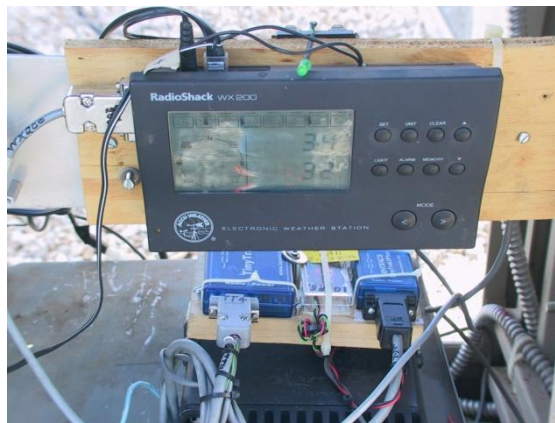


Anemometer is Offset to Clear Pole; Rain Gauge Wrapped in Foil Perched on Cabinet



Byonics Weather-Trak Accompanied by Tiny-Trak-4 and -9-v Bias Supply

A manufacturing quirk will block serial data flow from the Radio Shack unit, unless a minus-9 volt source is present. GE Monogram. The circuitry occupies the plastic box between the 2 units: A Weather-Trak for the WX-200 and a Tiny Trak-4 for digipeating.



ARGENT ADS WS-1™

After 9 months of home testing, our Argent unit moved to its permanent home at Longfellow Mountain near Marathon, TX. Here are some views, particularly of the CPU/thermometer/barometer unit, to show our best shot at weather-proofing. The box, Liquidtite™ and weatherproof fittings are available at Lowes™, etc. There is no control console. See text.



On the bottom left, note the PVC vent pipe extending from the top of the weatherproof box; a nipple at the bottom affords air ingress. Both orifices are screened to keep critters out. On the right, note the 3.6 v lithium keep-alive battery for the CPU and sensors above. Bottom 2 shots taken at the temporary test location in San Antonio. Station is licensed as WX5II-13.

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