

UNIVERSITY OF SOUTH FLORIDA DIGITAL DIRECT READOUT



7/07/2006

FABRICATE, INSTALL, & SET-UP A DIGITAL DIRECT READOUT GROUND STATION

Sutron was awarded a contract to fabricate, install, and set-up a Digital Direct Readout Ground Station at the University of South Florida located in St. Petersburg. This equipment is being used by the Department of Marine Science to receive data from a network of ocean buoys and shore stations. These stations collect meteorological data and transmit it using the GOES Data Collection System transponder.

This data is received by the DDRGS, processed, and stored using Sutron's PCBASE2 software package. The data collected is then forwarded to a network of high performance workstations where it is used to improve weather predictions for the Gulf of Mexico.

Sutron provided the receiving antenna (5-meter dish), DDRGS, and PCBASE2 software. The antenna was installed by a subcontractor at the University's St. Petersburg campus. Sutron's staff installed the feed assembly and down converter on the antenna, aligned the antenna, and installed the DDRGS and software. After verifying operation, Sutron's staff provided operation and maintenance training for the University's staff.

This project did encounter some difficulties in receiving all the buoy-based stations. Upon investigation, we determined that the placement of the transmitting antennas on the buoys resulted in excessive attenuation of the transmitted signal. By relocating these antennas, and fine-tuning the DDRGS, we were able to receive this data.



OWNER: University of South Florida, St. Petersburg, Florida

PROJECT: Digital Direct Readout Ground Station, Department of Marine Science

PURPOSE: Receive real-time data from a network of ocean buoys and shore stations, processed and transmitted to a network of high performance workstations for the purpose of weather predictions for the Gulf of Mexico

EQUIPMENT: Sutron's Digital Direct Readout Ground Station, PCBase2 Software, 5-Meter Radar Dish

COMPLETED: 1998

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