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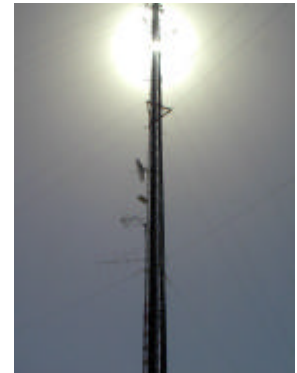
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## OUR ADELPHIA SITE K4PKT-8/9

Marvin Kaskawits KD2CK  
Howie Silver KB2BBG  
Bill Manley KB4XE

During July, a small contingent of members visited the Adelphia Cable Company tower site to view the K4PKT-8,9 installation. Along with our curiosity, we brought our digital cameras to satisfy our overlapping interests in the PBPG and photography as a hobby. With notes by Marvin, photography by Howie, and editing by Bill, we are sharing the tour with you.

Our antenna are at the 380, 340, and 200 foot locations on the Adelphia tower shown in silhouette with the hazy sun.



The K4PKT equipment is housed in racks within the building.

On the left, John Green is explaining the racks to Andy Czermann KF4ATC, John, Marvin Kaskawits KD4CK, Burck Gross KC4UEV and Mike Michaels K2GPI.

On the right is a wide-angle view of all the equipment in the rack. In the left side of the rack is located the FPAC PC and UPS (not shown in the picture, it is below the PC). The PC is a 486 that uses the DOS operating system and runs the FPAC



software that now runs the WPB packet switching system. In the right rack are the radios, TNCs, Power supply and AC distribution and Protection.

Starting at the bottom of the rack:

12VDC Power Supply – This is a HP 12 VDC, 50 amp power supply that powers the radios, TNCs, UPS and charges the batteries when needed.

AC distribution and Protection – 120 VAC is brought into this panel from the wall AC outlet. It goes through a hefty protection system comprised of several stages of protection and is then distributed to the HP power supply, UPS, and the PC monitor. The PC itself is plugged into the UPS thus allowing the complete switch to operate from the batteries.

Above the APRS radio are the control heads for the 561655 and APRS radios. The left one is for 561655 and the right one is for APRS.

Above this (not shown) is the 561655 radio and the 440/445 MHz duplexes. The 561655 radio works with the 561655 TNC listed above.



This view shows the right side of the rack clearer. Next up is the telephony channel bank frame with all but the fuse panel removed. It comprises of four shelves, actually five if you count the top where we have located two TNC's.

Continuing upward (shelf 4 (bottom) of the channel bank frame) we have the radio and TNC for the BBS port, 445Mhz, 9600b, 561113.

Above this (shelf 3) is radio and TNC for the Local LAN port, 145.630Mhz, 9600b, 561793.

Above this (shelf 2) is the radio and TNC for the alternate trunk to Boca, 223Mhz, 1200b, 561111 and the fuse panel which supplies 12vdc to all the TNC's.

Above this (shelf 1) is the local LAN TNC (left) 1200b, 145.030Mhz, 561655 and the APRS TNC (right), 1200b, 144.390Mhz. The A/B switch sitting on top of the 561655 TNC is used to switch the serial connection from the 561655 TNC to the APRS TNC to allow programming The APRS TNC when required.

Sitting on top of the channel bank shelf are the primary Boca trunk TNC (left), 445Mhz, 9600b, 561114 and the Stuart Trunk TNC (right), 440Mhz, 9600b, 561112.

Mounted directly above each TNC are the corresponding radios. They are mounted on the bottom of the APRS radio shelf. The APRS radio (top unit in P7130125) works with the APRS TNC listed above.

All the TNC's (except the APRS one operate in the KISS (checksum) mode and are connected to the PC on serial ports running at 19200 baud.

Finally the Backup Batteries provide out very professional backup system that our network can be proud of. These are Exide batteries, wet cells at 600 AH each. There are 6 cell in a string for 13 VDC, convenient since our radios and TNC's run at this voltage. There are two strings of batteries connected in parallel for a total of 1200 Amp Hour capacity. In our case standby time is measured in weeks not hours as is typically done. We have not tried to calculate the standby time – our load is intermittent and not that easy to calculate



## **Our Summer Doldrums**

Bill Manley KB4XE

Key members of the Palm Beach Packet Group are taking extensive vacations this summer. They are among the doers who make the *WHITE NOISE* possible on a monthly basis. With their absence, it just cannot be done.

Consequently our *WHITE NOISE* is also taking a vacation. This will be the last newsletter until we regroup in October or November.

Club meetings however will continue at 19:30 on the second Thursday monthly at the Piccadilly Cafeteria, corner of Summit and Military Trail in West Palm Beach, Florida. Vice-President Mike Michaels will orchestrate the occasions. Read this issue's minutes for Mike's planned agenda for the August meeting.

See you there and then.

## **PBPG MINUTES**

JULY 8, 1999

### **OPENING AND REPORTS**

Vice President Mike Michaels (K2GPI) brought the meeting to order at 19:30 hrs. All present introduced themselves, using their names and call signs.

### **TREASURER'S REPORT**

Marvin (KD2CK) reported that as of May 31, 1999, statements show savings account \$954.13, and checking account \$76.80. Deposits and credits totaled \$239.77, savings were at \$3,982.76 and the total assets were \$4,289.20. A complete report will be provided in the June "White Noise".

### **WEB PAGE REPORT**

Vice President Mike reported that the club does have an attractive, informative web page (<http://www.qsl.net/pbpg/index.html>). The web page will display the latest edition of "White Noise" and a library of past issues. Additional information such as a Network map so that you can see the route your packet signal might take when you connect. Further, the web site contains a listing of SWITCHES and NODES that used to be provided by paper listings. This change in operating mode saves money for the club (greatly reduced reproduction costs), but more importantly provides the latest data.

### **TECHNICAL COMMITTEE REPORT**

Director John Green (WB4MOZ) gave the technical report and indicated that the Palm Beach Switch had to be reset once during the month. This represents several months of no resets, reflecting an excellent record of durability.

### **OLD BUSINESS**

Vice President Mike reminded the group that we are still looking for suitable recipients of our donated computers. The approximate inventory is now 10 operational computers and monitors.

Vice President Mike also reminded the group that we do have a small lending library. Those who want to borrow a book should see Secretary Burck Grosse (KC4UEV).

### **NEW BUSINESS**

A new/old Bulletin Board System N4JOA has re-upped and is back in business.

Mike announced next meeting's program, featuring Pete McGovern (KE4PPI), who will present a program on PSK-31. Pete is from the Jupiter-Tequesta Repeater Group which successfully used PSK-31 digital QSO's during this year's Field Day. Pete really knows how to make things sound easy. I'm sure you will find this an interesting presentation.

Marvin reported on his very successful use of a magnetic sign on the rear of the family car. This sign informs following or overtaking vehicles the call signs of the two hams inside and their favorite calling frequency. Many miles have been dramatically shrunken by the ability to talk to other hams and get advice as needed for eating spots, motels, etc.

Marvin also talked about QSO's with Bob Pasquale (WD9AJM), a snowbird who summers in the vicinity of Chicago. Marv has found an excellent packet routing and is able to talk to Bob regularly.

Marv described his interesting and very useful installation of mapping equipment in his vehicle. He and Berniece (KD2CJ) find the system to be fascinating in helping pass the time on long trips, as well as in avoiding mistakes on the selection of routes.

### **ADJOURNMENT**

The meeting was concluded at 20:25.

## **Broward Amateur Radio Digital Society**

July 17, 1999

The June meeting brought out one of the founders of BARDS, Bill, KB4XE, and a new attendee, Don, AF4NR. The old "We are a society, not a club" introductory speech had just about been forgotten but we did manage to stumble through it.

The program was a briefing on the status of the Navy Postgraduate School's spread spectrum ham satellite, Pansat, PO-34. From there we have a detailed discussion of spread spectrum. PO-34 is direct sequence and the current TAPR 902-926 spread spectrum initiative is a frequency hopper. This, chip rate, convolution, taps, and the near-far problem were all discussed.

Then Bob, N4CU, gave a description of the latest FM satellite, Sunsat, SO-35. The satellite has been working in mode B starting in June. Mode B is 70 cM up and 2 M down. The power budget is 60 minutes of FM per week and the command station is setting 30 minutes of up time on the weekends for North America. Use the AMSAT website at [www.amsat.org](http://www.amsat.org) for additional information.

The August 20th program will be an introduction to Linux by Al, K4BVL

Bob, N4CU