Spectrum Bulk Service

Currently, **79** out of **82** units, including the clubhouse, have fully operational Spectrum bulk service. **3** units do not have Spectrum bulk service installed yet:

Lot 23: The owner does not require internet access.
Lot 30: The owner is mostly absent and hasn't installed service yet.
Lot 39: The owner has been absent for several years, and the unit is presently used for RV storage.

40 units had privately owned M5 STAs for internet service. Of these, **32** owners have kindly donated their M5 STAs to the park to serve as spare and replacement equipment for our network infrastructure. **6** more M5 STAs that were used for PTP (point-to-point) backbone links have also been recovered (so **4** M5s are still active in PTP backbone link service).

2 recovered M5 STAs were immediately used to replace intermittently failing point-to-point backbone M5s in the park's PTP backbone network.
6 recovered M5 STAs were found to have broken parts and were discarded.
30 recovered M5 STAs have been reset to factory parameters and are stored in the clubhouse internet room, ready for use when needed. Any one of them can be reprogrammed to replace a faulty or broken park-owned M5 AP or STA in PTP backbone service at any time.

Privately Owned M5 STAs

While all privately owned M5 STAs are retired and powered off, **8** units have not yet removed them due to various reasons. We are hoping to collect M5 STAs from **4** of these units, but coordinating with these owners has been challenging:

Lot 22 and Lot 32: These units have tall ground-mounted pole M5 STAs.
Lot 40 and Lot 66: These units have RV-mounted M5 STAs.

Additionally, **4** units have expressed their intention to retain their privately owned M5 STAs for various purposes:

Lot 25 and Lot 48: These units plan to use them as APs or STAs in new residences outside the park.
Lot 37 and Lot 54: These units plan to use them as "backup" STAs in the park's network.

There are three (3) important points of information I would like to share with anyone in the community who thinks that their privately owned M5 STAs still have great value to them:

1. These M5 STAs are not completely compatible with the advanced WiFi 6 technology available through Spectrum's new routers, and they have limited wired bandwidth (maximum 100 Mbps). They may also not serve as efficient general-purpose APs due to their directional nature (ask me how I know this).

2. Most of the network infrastructure that supported these M5 STAs has now been removed from service, so the above **4** units no longer have anywhere to connect and this means that having an old privately owned M5 STA at your unit generally won't restore any service. But these M5 STAs <u>do</u> belong to their owners and they can use them as APs or STAs in other locations and networks as long as they understand how to program them. I have offered to teach this programming to every owner who wishes to retain their M5 STA, but I have not yet had any takers. A PC with a web browser, an ethernet interface and 2 short ethernet cables are required to program an M5 as an AP or a STA and I <u>must</u> provide some first time instruction because the procedure is NOT inherently intuitive.

3. A few years ago, I software-disabled the factory reset button functions on all of the park- and privately-owned M5s because this helped to protect us against spontaneous resets that were caused by lightning or very intense static discharges which at one time were occurring at an alarming rate. Therefore, the only possible way to ever log into any programmed M5 in this park is to know what its current IP address and login credentials are.

I therefore informed every private M5 STA owner what the IP addresses and login credentials to their M5 STAs are, but I have since realized that most of our residents did not keep a record of this information. Therefore, the configuration files in my possession and engineering spreadsheet for the park's network are the only records of this information in existence. If you do not know the IP address of your M5 STA, then you will never be able to configure them for whatever purpose you think they can serve.

So every privately owned M5 STA that is still out there, even if it is powered off, represents a configuration "set" that I cannot possibly retire simply because its owner may want to log into it again someday to factory reset and/or reprogram it for another purpose or network.

Park WiFi Service Changes

Last season, **seven (7)** 2.4 GHz. park-provided M2 APs were decommissioned and are no longer available to residents: PPRVP 2 and PPRVP 3 (Lot 76), PPRVP 4 A (Lot 36), PPRVP 5, PPRVP 6 and PPRVP 7 (Lot 61) and PPRVP 8 (after power was unexpectedly cut to Lot 30). This decision was made to reduce RF noise and interference from older park WiFi 5 equipment to the newer and superior 2.4 GHz. WiFi 6 service that is provided by Spectrum routers at our individual residential units.

Lastly, **3** out of the **4** remaining 5 GHz. user APs in the park have been retired or relocated (PPRVP 11 is still located on Lot 36):

PPRVP 10 (formerly on Lot 42) has been permanently retired. This 5 GHz. AP started operating intermittently over the summer and it was the lot owner's decision to retire his lot as a club house network point of presence.

PPRVP 12 (formerly on Lot 76) has been permanently moved to the clubhouse roof. The estate owner of this lot cut power to the lot without any advance word.

PPRVP 13 (formerly on Lot 61) has been moved to the swimming pool pole. The M5 which brought club house service to this lot lost its mounting in the spring, filled with water and stopped operating entirely over the summer, and it was the owner's decision to retire his lot as a club house network point of presence.

The placement of 5 GHz. user APs at the clubhouse (PPRVP 12) and swimming pool (PPRVP 13) areas will enhance park-provided WiFi coverage for residents gathering in these locations, as well as at the pavilion.

We appreciate your cooperation and support as we work to improve our networking and WiFi services for the PPRVP community.

If you have questions or need assistance, please feel free to come and see me, or contact me via text or email.

Respectfully submitted,

Barry Siegfried
Volunteer Networking and WiFi Manager

PPRVP Lot 36
973-558-0099
k2mf.bgs@gmail.com

LEONARD ROAD

PROPERTY OWNED BY OTHERS

PROPERTY OWNED BY OTHERS

TRACT "A"

PPRVP 11 L36

PPRVP 1 PPRVP 12 CH

"OFFICE TRACT"

TRACT "A"

TRACT "A"

TRACT "A"

TRACT "D"

PPRVP 13 SP

TRACT "E"

TRACT "A"

5 GHZ SERVICE PPRVP 11 L36 - 12 CH - 13 SP

LOT SETBACK LINE (TYP.)

TRACT "B" DETENTION POND

2.4 GHZ SERVICE PPRVP 1 CH

WETLAND SETBACK LINE

TRACT "A"

TRACT "A"

POND

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81