## WIFI status, enable internal antenna at base

The WIFI has been working very well, with dependable connections between our data systems. The **check\_ap24.sh** script on flux reports the following today, Oct 2 around 14:40:

```
check_ap24.sh
local remote
                (
                          mac-addr)
                                      uptime ccg txrate rxrate rxsig snr #txpkts #rxpkts txretry
rxretry txB/sec rxB/sec
ap24 ap24-3@near (00:15:6D:20:01:90) 50:30:07 100% 54.0Mbs 54.0Mbs -63dBm 40dB 2337026 2169508
           829 12328
0%
      0%
ap24
     ap24-2@rim (00:15:6D:10:1C:0D) 22:45:04 64% 18.0Mbs 18.0Mbs -87dBm 16dB 1459062 1446472
3%
      0% 2107 14582
ap24 eanth@sodar (00:20:F6:05:24:85) 0:47:21 100% 11.0Mbs 5.5Mbs -57dBm 46dB
                                                                              4124
                                                                                     4333
             887
                    1031
ap24
     eanti@far (00:20:F6:05:24:56) 0:00:47 100% 11.0Mbs 2.0Mbs -66dBm 37dB
                                                                               170
                                                                                      170
       0%
           217
0%
                   1186
ap24-2 ap24@base (00:15:6D:10:3C:BC) 22:45:05 47% 18.0Mbs 36.0Mbs -79dBm 19dB 1465417 1440073
       0% 14582
                   2107
ap24-2 eantf@flr (00:20:F6:05:24:5A)
                                     0:14:40 94% 11.0Mbs 5.5Mbs -46dBm 54dB
0 %
       0%
           222 1493
ap24-3 ap24@base (00:15:6D:10:3C:BC) 50:30:09 97% 54.0Mbs 54.0Mbs -63dBm 36dB 2205848 2300696
0%
        0% 12328
```

ap24 is as the base trailer. ap24-2 is at rim, ap24-3 is at near.

The connection between base (ap24) and near (ap24-3) looks very good, up 50 hours, with 40 and 36 dB SNR.

The connection between far (eanti) and base has also been solid, but the above shows only 47 seconds since the last association. Etherants seem to drop and re-associate fairly frequently.

eanth@sodar has been a bit problematic, requiring power-cycling of the etherant from time to time. Gary re-oriented it yesterday, and I think it has been more solid since then. The SNR looks good.

The connection between rim (ap24-2) and base has a low SNR of 16/19 dB, but has been up for 22 hours, at a lower tx/rxrate than the connection from near to base. This is probably low because the yagi on the rim tower is connecting to the back of the 180 deg yagi at the base trailer. To see if it improves things I just enabled the internal patch antenna on the ap24, which is pointing at the rim tower. I'll wait until the radios re-associate and see what the signal levels are. Both the internal patch and the eternal 180 degree yagi are access points for the SSID of ISFSext. I am also curious to see if that works.