Packet Radio Network (BBS)   vs
Automatic Packet Reporting System (APRS)
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Packet Radio Network is design with a center point of connection. When you connect to the Bulletin Board Systems (BBS) station that you plan on exchanging information with, the system portals have error check with controls to make sure the information is exchanged correctly. With this center connection point and with error control, you know your information is stored waiting for the intend recipient. When the recipient is ready to receive that information, they login to the BBS station and download all the data stored. It takes a long time, sometimes, to exchange traffic over the air with the size of the message and the overhead of controlling the packets.

One of the biggest differences on how Automatic Packet Reporting System (APRS) packets work is that it has no error checking and not knowing who got your message. APRS is a spray and pray way of transmitting packets and you have no idea if made it to your destination. It works very well at transmitting small bits of data fast. GPS beacons for positioning tracking is one of the biggest uses. There are also different forms of data that can be passed which include objects, bulletins and direct messaging capabilities. However, without a center point of storage like Packet Radio Network, if you intend recipient is offline or out of range of you and/or a digipeater in the area, they will not receive that message. Instead of storing the data in one spot, the packets are retransmitted in a timed interval depending on the sensitivity of the information being sent.

Both networks have their strengths and weaknesses, and both have their place in the air. Packet Radio Network is data pulled to a center point, and the information is in storage there. It reminds me of email service that we use now. Automatic Packet Reporting System is a data push out to the world, and the information is repeatedly blasted out in the air. APRS reminds me sort of like a text message, but not being stored on a cell tower. Both systems use a form of digipeating to extend the range of coverage area. However, they are not setup the same way and work totally different to accomplishing the same task of repeating packets.

It has confused me for some time the difference between the two network systems. When I would talk to anyone about packets, I always thought of APRS. Over the last few years I have been researching tracking high powered model rockets and an APRS tracking system is what I was learning about. It wasnøt till the last few months of learning about Radio Packet Network that I truly understand the difference between the two. I hope this article has helped you as well to understand some of the differences. If you have any questions just find me on the air or email me at n8rsh1 at yahoo dot com.

73 from N8RSH