The Future of Amateur Digital Communications?

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What is high speed?

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1 [ ] 300bps?
1 [ ] 1200bps?
1 [ ] 9600bps?
1 [ ] 19.2Kbps?
1 [ ] 56Kbps?
1 [ ] 1Mbps?
1 [ ] Really Fast!
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Appropriate Speed for Application

- How do you determine how fast you really need to go?
 - The type of information being sent?
 - The number of users to be supported?
 - The time you want to wait to get the information?
 - Just a few others

A few Examples

Is 1200bps fast enough for ?
Is 9600bps fast enough for ?
Is 14.4Kbps fast enough for ?
Is 28.8Kbps fast enough for ?
Is 56Kbps fast enough for ?
Is 164Kbps fast enough for ?

How could this effect ...

- 1 ATV ?
- Data Networks?
- Public Service ?
- Voice Repeaters?

What would a new repeater look like?

- Can handle several separate voice conversations, bulletins, and data streams simultaneously?
- Supports duplex (just like a telephone) and conferencing (just like a teleconference)?
- Lets you know who else is monitoring and lets you contact them without interrupting anyone else?

What would a new repeater look like?

- Is resistant to deliberate interference, and allows the control operator to "lock out" stations that are not following the rules?
- Can share its operating frequencies with several similar repeaters nearby, with little degradation in the performance of any of them?
- Lets you use one radio to access all of these functions, and others such as PacketCluster and APRS, simultaneously?

Is this a pipe dream?

- Symbol Technologies
- New product called 'NetVision'
- 2.4 GHz spread spectrum transceiver
- H.323 stack, TCP/IP stack, compression and codecs
- All this in a cellular phone form factor and at consumer market pricing!!

Is this a pipe dream?

- Part 15 Data Communications
- TAPR 900Mhz FHSS Radio Project
- N6GN Projects and others

The keys to success

- Push the usage of advanced technology in amateur radio.
- Push for rules that favor change not status quo.
- Don't depend on the land mobile industry to take care of amateur radio as a hobby.
- Support groups providing leadership in change.
- Get involved!
- Start projects don't depend on others to deliver.