

There is another urge which often strikes packeteers. It is the BBS-urge. There are many parts of this issue which also involve node operation. If the BBS urge has hit you, please read Chapter 16, also. If this chapter looks like Chapter 16, it is because the questions are so similar.

17.A. DOES THE NETWORK NEED ANOTHER BBS?

There are many reasons why another BBS might be desirable and as many or more reasons why another BBS might be a bad idea. Here are some of the network-related issues.

17.A.1 Inadequate access: Perhaps a hilltop node has no BBS associated with it. The users of this node must then traverse the network to use another. Every message read must cross the network once for every reader. If there is a local BBS, the message travels across the network once, or perhaps twice (if the BBS forwards messages on somewhere else). If there are a sizable number of BBS users on a node, the network will actually be more lightly loaded through the addition of a BBS.

17.A.2 User access: In high population-density areas, user access to a BBS is as important as it is to a node. A BBS tends to slow significantly when there are more than 3 or 4 simultaneous users. The same arguments used in section 16.A.4 would then suggest perhaps a minimum of 4 bulletin boards per million population if 50% of the peak-time users try to access a BBS.

17.A.3 Improve forwarding redundancy: Forwarding redundancy? It is the same idea as network redundancy. If one BBS is heavily relied on to forward between two parts of the network and it fails (as it will, sooner or later), an alternate BBS can fill in. This is somewhat less important an issue, however, than the single-point-of-failure in a

network. In this case, the messages can still travel between bulletin boards, even though they are separated by more nodes than normal.

17.A.4 Can another BBS possibly hurt?: Yes! There are examples far and wide of a second BBS added to a hilltop node to relieve congestion. But when the node links to the BBSs on the same frequency as the one used by regular users, the problem is worse, not better.

17.B. WHAT'S THE DOWNSIDE?

Operating a BBS is much like operating a node. But there is more.

17.B.1 Cost: BBSs do not come cheap. If you were to go out and purchase everything needed, figure on the following for a single port BBS:

TNC	\$125
RADIO	\$450
ANTENNA	\$100
PWR SUPPLY	\$50
MISC	\$50
COMPUTER	\$800

TOTAL	\$1575

The estimated computer cost will probably purchase you a used monochrome machine with a small hard-drive. Do not plan on using your regular computer simultaneously as a BBS and for other home uses. It is more trouble than it is worth and mistakes while running other programs can be detrimental to BBS operation. Be also aware that almost all BBS programs are for DOS machines; there does not yet seem to be a real Macintosh or Amiga BBS program.

17.B.2 Pressure: If the BBS fails, you may experience a lot of pressure to get it operating again. This is especially true if there are many users or it is associated with emergency services operations. Failures will come. The computer seems to be the most failure-prone part and the hard-drive the most failure-prone part of the computer. Backup, backup, backup!

17.C. AND THE PAYOFF?

Of course, along with cost, we expect some sort of payoff for operating a BBS.

17.C.1 Regional cooperation: Operating a BBS means sharing forwarded messages with neighboring BBSs. This takes cooperation. It also means that you should become part of this cooperative process. Doing so means that you should be able to reach consensus with others and learn how to disagree without being disagreeable!

17.C.2 Public service: A BBS can be a very significant public service tool. In many areas, county emergency services organizations depend on packet radio for some of their communication. Handling NTS traffic is beneficial, also.

17.C.3 Technological growth: Operating a BBS is not simple. It requires learning a whole new set of skills. This learning can be a significant incentive for some.

17.C.4 Recognition: If your BBS provides a genuine service, your efforts will be recognized by users. You may never hear about it. But packeteers will recognize you as a supporter of packet radio who "puts money behind the words you speak".

If your BBS is more of a hindrance than a help, folks will recognize that also. It may take some time, but this too will be recognized.

17.D. A PLEA!

Before you go very far thinking about putting up a BBS, please talk to BBS operators in the area you are considering. Courtesy, at the very least, demands it. Ask them a some questions; your efforts will more likely to be well received and effective. Here are some of the things to ask:

17.D.1 Does the idea make sense?: Often, those BBS operators can tell you if your proposal makes network sense. They can often tell you about areas with difficult access since they have likely heard complaints.

17.D.2 What are the near-term network plans?: Packet networks are undergoing rapid change. BBS forwarding is greatly effected by the organization of the network on which it relies.

Perhaps the operator of local hilltop node would like hilltop-BBS linking on a separate frequency from users. This generally improves BBS (and node) operation substantially. When this change is made, forwarding in and out of the BBS are not seen as traffic by users. It may mean that a radio you had planned to use is no longer appropriate. Similarly, planned changes in radio baud rate can effect your modem needs.

17.D.3 What frequencies are available?: The question affects both user frequencies and linking frequencies. Some bulletin boards have more than one port. If there is going to be a separate user's frequency, what frequency should be used may be an issue.

If the BBS is going to link on a backbone frequency, which backbone is appropriate may also be an issue.

17.D.4 Is your proposal welcome?: In some areas of the U.S., there are BBS wars. Neighboring bulletin boards to not forward to each other. There are arguments about the types of messages to be forwarded (or more usually, not forwarded). There are complaints about how bad a BBS is for the network.

Some node owners do not welcome a BBS. Find out before you invest!