The Modem Dictionary v2.00

COLLABORATORS

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Contents

Chapter 1

The Modem Dictionary v2.00

1.1   The Modem Dictionary v2.00

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              The Modem Dictionary
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                  Version 2.00
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          "What is this, why, and who is this guy?"

     I feel that this dictionary fills a major void. In my years
of using BBS's, I have never seen such a dictionary. The closest
thing I've seen was a text file that had about 40 words listed.
These words included "RAM" "ROM" "Microcomputer" "Telex" and a
bunch of other words that aren't really that important to under-
stand computer telecommunications. I've seen some books about
"modeming" in bookstores, but they tend to be expensive ($15-
$49), and I don't recall seeing any dictionaries of terms relat-
ing to modems. Also, many terms are easy to confuse and it can
be very difficult to find definitions for these terms. I have
seen terms used incorrectly in advertisements by modem manufac-
turers and in many, many magazine articles. I hope that this
dictionary can be used as a good source of reference for confus-
ing terms.

     Why do I feel qualified to write a dictionary such as this?
I bought my first modem more than seven years ago and have been
using computers for twice as long. Not only have I used many
different computers and modems, I have seen the days where
1200bps BBS's were rare because most people had 300bps modems.
For about a year I ran my own BBS, which was quite successful at
the time. While I only had about 150K of storage for messages
and files, I was able to get over 500 users in that year. I have
also gathered, read, and searched through hundreds of text files,
magazines, and program documentation, just to help define words
and find new words for this dictionary. I have also spoken to
representatives of major companies to help find out the truth
behind the more confusing terms.

LEGAL STUFF

     This dictionary is provided with no warranty of any kind.
The author and/or distributor will not be liable for any conse-
quences resulting from the use of this information. This is a
field where misconceptions abound. Although to the best of my
knowledge all information is accurate, I can not guarantee its
accuracy.

NOTES

Note 1: It was difficult to decide what words to include and
what words not to include. I tried to include every term relat-
ing to computer telecommunications that the average user needs to
know, or might come across and be curious about. Some words
(such as PSK) are easily found in manuals for modems, but are
hard to find definitions for. I tried to include as many of
these as possible.

Note 2: Since there are so many words defined here, and many of
them are complex and easily misunderstood, I wouldn't be sur-
prised if there are a couple errors of some sort. I tried to be
as careful as I could, but it is possible that there may be some
mistakes. If you notice any mistakes, or have suggestions of
words to add (or take out), please let me know. I correct all
known mistakes in future version.

Note 3: Check out the appendixes at the end of the file! They
contain a list of Emoticons :) and another list containing abbre-
viations (such as BTW and CUL8R).

MAKING COPIES OF THIS DICTIONARY

     This dictionary is being marketing as freeware. It is copy-
righted, and you may not make any changes to it without my per-
mission.

O You may give copies to anyone you know, provided you do not
charge for the copies.

O Any BBS may have this dictionary available for downloading.

O Any shareware distributors (including CD-ROM developers) may
distribute this. I'd really appreciate a note saying that you
are doing so.

O If you SELL any communications products, and wish to distribute
this dictionary with your product(s), you MUST get my permission

first (if you do not, it is considered copyright infringement).
Send requests to the address listed below.

O If you wish to QUOTE this dictionary in any media, such as in
an article for a computer magazine, you must give me credit.
Also, you must let me know that you have quoted the dictionary.
Just send a note to the address below.

                          PAYMENT? NO!

     I've obviously put in countless hours over the past 6 years
creating this dictionary. Just searching through new articles
and information to find new words takes hours.

     As mentioned above, this dictionary is being marketed as
freeware. Feel free to use it as much as you want. However, if
you find that you are benefiting from it, I'd appreciate a quick
note or postcard saying so.

     I'd also love to hear how you are using this dictionary.
Since its first public release in 1989, the dictionary has been
used: in training courses run by modem manufacturers; as a
reference for term papers for school; as a reference for an
article and a speech for Bar Associations; by SysOps for new user
messages; and more. It has also been praised by Uncle Hanks
Shareware Review Newsletter (May '93).

                  "How do I reach the author?"

     I'm always looking to improve the dictionary. Send any
comments/suggestions/notices/praise/complaints/etc. to:

R. Scott Perry
178 Morton Street
Newton Centre, MA 02159

Hopefully, at some point there will be a BBS to call to get the
latest version of the Telecommunications Dictionary, as well as
to use as an easy way to contact me.

I hope you enjoy this dictionary!

                  Notes about the entries
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* [Also called <entry>] and [Same as <entry>] mean that there are

more than one word for a certain concept. Do not bother looking
at <entry>, it will just refer you back to the original entry.

* [See also <entry>] at the end of a definition refers you to
more information or an entry that may help you understand the
original entry better. Also, a word and it's opposite will often
refer to each another.

* [See <entry>] appearing directly after the term indicates that
the definition is the same as <entry>, and you should look there.

* BBS is used here generically to denote any service that you can
call up with your computer, whether it is a bulletin board, a pay
service, or even a mainframe.

* Some entries refer to computers in general, but an understand-
ing of them is sometimes needed to understand other entries.

                        The Dictionary
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---Numbers---

8N1 - The most common modem format. [See also format].

42A Block - This is a box about two inches square, with a modular
jack, that separates the wires coming from the phone company.
You can plug a phone or modem into this jacking, using a modular
cord. [See also modular cord, modular jack, modular plug].

103 - Officially, 'Bell 103' which is the standard controlling
transmission at 300 bps in the United States. It was created by
AT&T. [See also 212A, V.21].

212A - Officially, 'Bell 212A' which is the standard controlling
transmission at 1200 bps in the United States. It was created by
AT&T. [See also 103, V.22].

300 bps (baud) - A transmission speed that is now almost never
used, although most modems will allow communication at the speed
(since it was common in the early 1980's). It is roughly equal
to 30 characters per second.

1200 bps (baud) - In the mid 1980s this was the most common
transmission speed, until 2400 bps became popular/cheaper. It is
roughly equal to 120 characters per second.

2400 bps (baud) - A fairly high-speed transmission speed that

towards the end of the 1980s gained popularity. It is roughly
equal to 240 characters per second.

3400 hertz – The highest pitch that a telephone line will trans-
mit. This cutoff limits the ways in which computers can communi-
cate over telephone lines.

8250 UART – The UART used for the communications ports on most
older computers. [See also UART].

9600 bps (baud) – This, along with 14,400 bps are the 2 standard
speeds for high-speed modems. It can transmit and receive ap-
proximately 960 characters per second (without compression).

14400 bps – Currently, the fastest standard speed for high-speed
modems.

28800 bps – The highest speed obtainable using the proposed
V.fast standard.

16450 UART – The UART used with some 286 computers. [See also
UART].

16550 UART – This is the UART used with most newer computers and
high speed modems. There are several variations, but they all
include one main feature: they include buffering, so that if data
comes in or is sent faster than the computer/modem can accept it,
the UART will hold the data (up to 16 bytes) until the
computer/modem is ready for it. [See also UART].

16550A UART – See 16550 UART.

16550AF UART – See 16550 UART.

16550AFN UART – See 16550 UART.

---A---

abort – [1] The command word used with editors that allows you to
exit, destroying your message. [2] The character used to stop
characters from a block of text appearing on your screen. Usual-
ly the spacebar or CTRL-X are used to abort a message.

access – Refers to an intangible amount (usually represented by a
security level or flags) that indicate to what extent you are
allowed to use a BBS. When used in a term such as 'you will be
granted access', it means the amount of access that new users
will generally receive.

account – A term that refers to information that a BBS has about
you. It is usually referred to by an ID number or your name.
The information it contains can include any information that you
have at some point given the BBS, usually including your name,

phone number, and security level. [See also user number].

account number - See user number.

Acculink - A packet switched network that is used to save money
on long-distance telecommunications.

ACK - A character (CTRL-F) that ACKnowledges something, usually
that a certain amount of data has been received correctly. [See
also NAK].

acoustic coupler - This was common many years ago, but rare now.
It is a cradle in which you would place the handset of a phone.
This would be connected to a modem, and the modem would access
the phone line through this coupler. Modern modems connect
directly to the phone line. [See also acoustic modem].

acoustic modem - A modem that uses an acoustic coupler. [See
also acoustic coupler].

adaptive data compression - See ADC.

adaptive dialing - When a modem can determine whether to dial
pulse or tone. It will try dialing with tones first. If that
doesn't work, it will dial pulse.

adaptive equalization - Modems that have this feature "listen" to
the phone line to find the bandwidth with the least noise, and
use that part of the band for transmission. This allows for less
interference from noise.

ADC - Adaptive Data Compression. A method of data compression
developed by Hayes, with a possible compression ratio of 2:1.

address - Similar to a physical mailing address, an address lets
people know how you can be reached on a network. It may consist
of numbers or words, for example, 1:212/113 or joe@usc.edu. [See
also matrix address, network address].

alias - A name that users can use on a bulletin board that is not
their own. Aliases are usually used by young BBS users and those
who pirate software or do other illegal activities. Some exam-
ples of aliases are 'Cracker Kid', 'Starbuck', and 'Midnight
Killer'. [Also called handle]. [See also user name].

America On-line - A commercial on-line service.

ampersand - A character (&) that usually means 'and'.

analog - As far as electronic signals are concerned, analog
refers to signals that can represent an infinite range of num-
bers, as opposed to digital which can only be distinct whole
numbers. Analog data often comes from measurements. The sound a
modem makes over the phone is analog since it can be any of a
number of different frequencies. [See also digital].

anonymous - Refers to a message, where the author was able to

leave out his name. On some BBS's you are allowed to post anony-
mous messages so that others won't know who you are. The SysOp
usually can find out who the author is, however.

ANSI - ANSI is an organization that sets standards. ANSI graph-
ics, however, is a set of cursor control codes which originated
on the VT100 smart terminal. Many BBS's use these codes to help
improve the sending of characters to communications programs. It
uses the escape character, followed by other characters, which
allows movement of the cursor on the screen, a change of color,
and more.

answering computer - This is the computer that is being called.
Therefore, it is usually the BBS or mainframe. [See also origi-
nating computer].

answering machine - See voice mail.

answer frequency - The frequency of the carrier that a modem uses
when it has been called by another computer. [See also originate
frequency].

answer mode - When a modem is ready to pick up the phone when it
rings. After picking up the phone, the modem will attempt to
make a connection with another modem. All BBS's are in answer
mode. [See also originate mode].

apostrophe - The character '. It is usually used in contractions
of words, such as "don't".

ARC - When a filename has the extension ARC, it means that it is
an archive that has been compressed with the program PKARC. To
get the files out of the archive, you need to use the program
PKXARC. You should be able to find this program on many BBS's.
[See also archive, unarchive].

archive - [noun] A group of programs that are together, usually
compressed, in one file. [verb] the process of combining those
files. There are a number of software packages which will com-
press files into an archive, and most programs on BBS's have been
archived with one of these software packages. [See also unar-
chive, compress, ZIP, ARJ, ARC, PAK, LZH].

area code - The 3-digit number used by the telephone company to
designate a geographic area. Each state in the United States has
1 or more area codes. If you call a phone number in a different
area code, you must dial "1" and then the area code before the
phone number. If you call a number within your area code, you
just dial the phone number (if it is long distance within your
area code, you must dial "1" and then the number).

ARJ - [1] A file extension that indicates that the file was com-
pressed with the program ARJ. [2] The program ARJ, used to
archive and un-archive files with the ARJ extension. [See also
archive, unarchive].

ARPA-NET - The network from which Internet was formed.

ASCII – An acronym for American Standard Code of Information
Interchange. It uses 7 bits to represent all uppercase and
lowercase characters, as well as numbers, punctuation marks, and
other characters. ASCII often uses 8 bits in the form of bytes
and ignores the first bit. [See also EBCDIC].

ASCII transfer – When a text file is sent directly as it is,
without any special codes.

asterisk – The character *.

asynchronous communication – This is when the beginning and end
of each byte that is sent over the phone lines is marked somehow.
This way, if there is line noise, the modem can find out right
away where the next byte should start. [See also synchronous
communication].

AT command – Any instructions sent to a modem that begin with
"AT". See also Hayes AT command set.

AT command set – See Hayes AT command set.

at sign – The character @. Often read as 'at'.

AT&T – American Telephone and Telegraph, the inventors of the
first modem.

attended mode – This is the mode that a communications program is
in while you are operating it. [See also unattended mode].

attention characters – The letters "AT", which get the modem's
attention that you are about to send it a command. [See also
Hayes AT command set].

audio monitor – A speaker that is included as part of a modem.
It allows you to listen to whatever sound is on the phone line.
This is often used to let you hear busy signals or make sure that
the other modem picks up the carrier.

auto-answer – When a modem has the ability to automatically pick
up the phone when the phone rings and then attempt to connect
with another computer.

auto-answer LED – When this LED (found on some external modems)
lights up, it means that the modem is ready to answer the phone
when the phone rings (it will then try to connect to another
modem). If it is not lit, the modem will not answer the phone.
[See also LED indicators].

auto-baud detect – The ability of a modem to change to a lower
bps rate if the computer it is calling is unable to communicate
at the requested speed.

auto-dial – When a modem is capable of dialing a phone number, so
that you don't have to dial manually. Almost all modems have
this ability.

auto-download – The feature of some file transfer protocols
whereby a BBS can automatically make your communications program
start a download or upload (if your communications program has
this capability too). This saves some time for the user, who
would otherwise have to set up his program to upload or download.

auto fall-back – See fall-back.

auto-kill – A feature on some BBS's that will delete a message on
a board if a certain threshold limit is reached. For example, a
BBS might delete the second message on a board if there are
already 100 messages and someone posts another message. This
would limit the board to 100 messages, but still keep the first
message (which is usually left by the SysOp).

auto-redial – A feature that allows a modem or a communications
program to dial a number again after it finds out that the number
is busy. This is very handy when trying to get through to popu-
lar bulletin boards that are often busy.

auto-reliable – The ability of a modem to be able to communicate
both with modems that do have error-control and/or data compres-
sion, and those that do not.

auto-reply – To send a message (either public or private) immedi-
ately after reading a message on a BBS. Usually, this is used to
respond to the author of the original message.

auto-syncing driver – This is the part of a BBS program that
automatically determines the bps rate of a caller. [See also
manual-syncing driver].

auto-typing – This is when a communications program can upload
information to a BBS as if the user were typing in the informa-
tion. For example, the user might type a message into a file,
and then the communications program can send it to a BBS (which
assumes the user is actually typing the message) to post as a
message.

---B---

backdoor – A way of getting into certain BBS's and getting full
access, without using a regular account. Usually the author of
the BBS program built the backdoor into the program so that he
could get access to any BBS running his software. Backdoors are
less common today than they used to be.

background send/receive – The ability of a fax/modem to send or
receive faxes while the computer is being used for other pur-
poses.

backslash – The character \.

backspace - The character (CTRL-H) that causes the cursor on your
screen to move back one space. [See also destructive backspace,
non-destructive backspace].

bandwidth - A range of radio, audio, or other frequencies.
Telephone lines have a bandwidth from 300 hertz to 3400 hertz.
Since it is so limited, a modem must carefully change data into
sounds that "fit" within this range. Similar to frequency spec-
trum.

bannerware - A software program that is free to use and copy, but
advertises another program or product. [See also public domain].

batch file transfer - This is when more than one file is sent at
a time by a file transfer protocol. The user will tell the BBS
what files he wants, and then the BBS will send all the files
before the user needs to do anything else.

baud - A term referring to the speed at which modems communicate.
Technically, it is the number of changes in an electronic signal
per second. Since the number of changes used to be the same as
the number of bits sent or received per second, bps and baud are
often used interchangeably. However, there is a difference,
which is very often confused. For example, many 1200bps modems
were advertised as 1200 baud, even though they operate at 600
baud. They send out 2 bits 600 times a second, which means that
it is 600 baud. However, since it is so often misunderstood, you
can assume that when you see "baud" it means bits per second,
unless it is stated otherwise. The term comes from the scientist
J. M. E. Baudot. [See also bps, dibit].

BBS - An acronym for Bulletin Board System. Usually it is a home
computer that has a modem attached and is waiting for calls from
other computers. It can, however, also refer to commercial serv-
ices (such as CompuServe and Prodigy) and any other computers
that you can call via telephone lines. BBS's almost always allow
you to leave messages for other users. Most BBS's have programs
that you can download and use on your computer. BBS can also be
expanded more simply to 'bulletin board'.

BCC - Block Check Character. This is used to help make sure that
a group of data has not been accidentally altered.

Bell 103 - See 103.

Bell 212A - See 212A.

bisync - Refers to a modem that synchronizes with an electronic
signal over the telephone lines that marks the beginning of
blocks of data. It is one of a number of synchronous protocols.

bit - A Binary digIT. It is a number in base 2 (binary), which
means that it can only be a 0 or a 1. It is used in the expres-
sion 'bits per second'. [See also byte].

bitstream - BBS's and related activities. For example, you could

say that a lot of public domain programs can be found in the
bitstream.

blind dial - This is when a modem will dial a number without
waiting for a dial tone. Some long-distance telephone services
require a number to be dialed, even though there is no dial tone.
In this case, your modem should be set to blind dial.

block - A group of data bytes. For example, when downloading a
program, blocks of 128 or 1024 characters are often sent.

block check character - See BCC.

block size - This term, when used with either error control or
data compression protocols, refers to the number of characters to
be sent at one time. If error control is used, the codes are
sent immediately following this block. Typical block sizes are
64, 128, 192, or 256 characters. Small block sizes are better
when the line quality is bad (such as for long distance calls),
while large block sizes are better during good connections (such
as for local calls).

board - [1] See BBS. [2] See message base.

bps - Bits Per Second. The transmission speed of most modems is
measured in baud or bps. Bps is literally the number of bits
sent by the modem every second. [See also baud].

braces - The characters { and }. [See also left brace, right
brace].

brackets - The characters [and]. [See also left bracket, right
bracket].

break signal - This is a signal sent from one modem to another
that lasts for about a second. It is sometimes used to try to
clear up synchronization problems. On CCITT V.42 modems, there
are more specialized procedures involved with the break signal,
such as regarding the timing. In V.42 there are three kinds of
break signals. [See also expedited signaling, destructive sig-
naling, in sequence signaling].

browse - To go through the list of titles of messages or files on
a BBS and note which ones you want to read. On some BBS's, you
can search through the messages and look for specific words.
This can be handy if there are lots of messages, and you do not
want to go through them all.

buffer - [1] (verb) To save all incoming data in memory. [2]
(verb) to temporarily save incoming data until the computer has a
chance to process it. [3] (noun) The place in memory where the
saved information is stored, as in "I have a 32K buffer."

bulk mailing - Used on a BBS when you send the same message to
more than one person. This saves you from having to rewrite the
message. [See also E-mail].

bulletin – A special message posted on a BBS, usually written by
the SysOp. In most cases all users are expected to read any new
bulletins that may have been posted since their last call.

bulletin board – [1] See BBS. [2] Sometimes same as message base.

bulletin board system – See BBS.

busy – When a bulletin board is being used by as many users as it
can handle, which is when all the telephone lines are being used.

busy signal – The sound that you hear on a phone when the phone
number you are trying to reach is in use (busy). It usually
consists of 60 cycles per minute. [See also audio monitor].

byte – A group of 8 bits. It usually represents one character.
[See also ASCII].

---C---

call back unit – A device that can be attached to the phone line
of a BBS to make it more secure. After you connect with the BBS
and tell it who you are, the device will then call your phone
number. This is used to make a very secure system to help pre-
vent hackers from invading a system. It then becomes very diffi-
cult, if not impossible, for a hacker to get into the computer
system.

caller – Anyone who connects with a BBS. It is usually used in a
phrase such as "You are caller #4328."

caller I.D. – A code that is sent over the phone lines in some
areas when a person makes a phone call. This code includes the
phone number of the person making the call. Some modems are able
to understand this signal, and let you know who is calling you
before you answer the phone.

caller log – A list of callers who have called a BBS within a
given time period. The list may also keep information such as
the bps rate of the caller. This is used so that the SysOp can
keep track of users, as well as any hackers, if they call the
BBS.

call progress monitoring – This is when your modem tells you what
is happening when you dial another computer. It will tell you
that it has dialed the number, if the number is busy, if you
connect, etc.

call waiting – A service that the phone company offers that
allows the customer to hear a special sound on the phone if there
is an incoming call while the customer is talking on the phone.
The customer can then talk with either caller. This is a nice
service unless you have a modem and call BBS's. If you are

connected with a BBS and someone else calls you, you will be
disconnected. In most areas there is a special 2 or 3 digit
number that you can dial before a phone call that will disconnect
call waiting for that call. If you have call waiting, check your
phonebook or call the phone company to find out how to disconnect
call waiting.

capital letters - See uppercase.

capture - To 'catch' text that is being sent to your computer
from a BBS and put it in a buffer or a file.

capture buffer - The area in a computer's memory where a communi-
cations program stores incoming data that is to be saved. [Also
called capture memory]. [See also buffer].

capture memory - See capture buffer.

card (peripheral) - Any computer peripheral that can be connected
directly, inside a computer. Internal modems are usually periph-
eral cards.

caret - The character ^.

carriage return - See return.

carrier - The tone that the modem sends over the phone lines
before any data is sent on it. It has a fixed frequency and a
fixed amplitude. It is then modified to indicate data.

carrier detect - The wire in an RS-232C cable that holds the
information as to whether or not the modem senses a carrier (and
therefore is connected to another computer). [Also called CD].

carrier detect threshold - A way of measuring how well a modem
can detect valid data over noisy phone lines. It is measured in
negative dBm's (decibel-milliwatts). The bigger the number (the
more negative) the better. For example, -45 dBm is better than
-40 dBm. [Same as receive sensitivity].

carrier detect LED - This LED will light up on an external modem
when it senses a carrier on the phone line. This indicates that
the modem is connected to another modem. [See also LED indica-
tors].

carrier frequency - This is the frequency which a modem uses to
transmit or receive data.

carrier loss time - The amount of time your modem will remain on
the line when the carrier is lost. It will stay on the line for
this amount of time, to see if the carrier comes back. If the
carrier does not come back, the modem will hang up the phone
line.

CAS - Communications Applications Specification. This is a
standard for fax communications. The other fax standards are
class 1, class 2, and class 3. [See also class 1, 2, 3].

CB simulator - A computer service where there are multiple phone
lines (usually at least 5). The CB simulator allows all the
users to send messages to one another while they are on-line. It
usually allows you to send both public messages that everyone who
is on-line can see and private messages that only one specific
user can see.

CCITT - International Telegraph and Telephone Consultative Com-
mittee. This group, created by the United Nations, establishes
certain standards for data transmission. Their transmission,
data compression, and error control standards all begin with V,
for example V.22. To find the standards in this dictionary, look
up the standard name, i.e. V.42. Note that this organization is
now referred to as ITU-TSS. [See also ITU-TSS].

CD - See carrier detect.

character - Any letter, numeral or symbol. [See also ASCII].

character format - See format.

characters per second - The number of bytes or characters that
can be sent over the phone lines in 1 second. This is determined
by dividing the bps rate by the number of bits it takes to send
one byte (usually 10--the start bit, 8 bits of data, and the stop
bit). So, a 2400bps modem can send 240 characters per second
(2400/10). [Same as CPS].

chat - A mode that allows two or more people (almost always a
SysOp and a user on a BBS) to communicate directly with each
other using the modem. Usually, each person can see what the
other is typing at all times and can interrupt them (a beeping
sound with a CTRL-G is useful to interrupt with). [See also page
(verb)].

chat mode - This is when a communications program is set up so
that the user can "chat" with someone on the other end of the
line. One way this can work is that anything that is typed by
the other person is printed on the top half of the screen, but
anything you type would appear on the bottom half of the screen.
[See also chat].

checksum - A number that represents a larger group of numbers in
order to check for errors in data transmission. It is commonly
used when downloading a program, as well as in error control
protocols. The checksum is the result of a mathematical equa-
tion, such as adding all the numbers in a block together (al-
though it is usually more complex than that).

chip set - A group of important IC chips on a modem (or other
computer peripheral) that are all made by the same manufacturer.
While there are many companies that make modems, there are only a
few that make the chips for them. Because the chip manufacturer
is making the chips for many companies, they produce more chips,
and the price of the chips is lower than if each company produced
their own. This decreases the price of the modems on the market.

Christensen protocol - See Xmodem.

CIM - CompuServe Information Manager. This is a program created
by CompuServe which is supposed to make it easier to use Compu-
Serve.

circular dialing queue - This is used in some communications
programs to allow you to enter a list of phone numbers to call,
and it will keep going through the list and dialing numbers until
it reaches one of them. This is useful if you are trying to
reach BBS's that are often busy.

CIS - Compuserve Information Service. See CompuServe.

city code - With many foreign countries, you need to dial a city
code before the phone number you are trying to reach. You must
dial the country code before the city code. The city code will
be from 1 to 5 digits. [See also country code].

class 1, 2, 3 - Fax standards. [See also CAS].

clear to send - See CTS.

columns - A measurement of the width of your screen as measured
by the number of characters your screen can fit across it. BBS's
often ask for your screen width. Most computers have a screen
width of 80 columns.

COM port - IBM and compatible computers have the ability to hook
up devices (such as modems and mice) to the computer, through
ports. These ports are called COM ports, and are numbered 1-8.
While all 8 could be used, usually only #1 and #2 are used, while
#3 and #4 are used occasionally. [See also selectable COM port].

comm program - See communications program.

command buffer - The place in your modem's memory where it stores
the commands that you give it. [See also buffer].

command echo - When this is on, any AT command sent to the modem
will then be sent back from the modem to the computer. For
example, if you were to type "ATS11=40," the modem would act on
the command, and then send "ATS11=40" back to the computer.

command mode - This is when your modem interprets what you type
as commands, rather than just sending the data over the phone
line. [See also data mode, terminal mode, voice mode].

command set - A list of all the possible commands that you can
give something, such as a modem, a BASIC program, or a BBS. [See
also Hayes AT command set].

commands - Instructions that you can give to a modem, a BBS, or
another similar device.

commercial host system - An on-line system that you can call up,

that is operated by a company that charges you to use it.

commercial software - Software that is copyrighted and may not
legally be distributed by BBS's or copied and given to other
users. [See also public domain, copyright].

communication - The idea of transferring one's thoughts or ideas
to another person. This can be through speaking, radio, T.V.,
telephones, mail, etc.

Communications Applications Specification - See CAS.

communications program - A program that controls a modem, and has
features that allow the user to do such things as upload, down-
load, etc. It is similar to a terminal program but more sophis-
ticated. It used to be used interchangeably with terminal pro-
gram. [Same as comm program].

compatible - When one object can work just like another. Al-
though the term is usually used with computers, it is often used
with modems. Many modems are compatible with other popular
modems. [See also V.42 compatible].

compliant - See V.42 compliant.

compress - To make data take up less space. Archiving programs
do this, which means that files will take less time to transfer
with modems. Many modems now have the ability to automatically
compress the information they send and receive. [See also ar-
chive, data compression].

compression ratio - The ratio of the original size of data that
is sent to the compressed size. For example, a 3:1 compression
ratio means that the original data takes up 3 times the amount of
space as the compressed data, and a modem would transfer the data
3 times more quickly than if it was not compressed.

CompuServe - The first major commercial on-line service.

CompuServe Information Service (CIS) - See CompuServe.

computer network - See LAN.

conference - A group of related messages on a BBS. Often, many
BBS's are linked together for a conference (so that all users on
all the BBS's see the messages and can reply to them). For
example, there may be a conference just on Windows. [Same as
forum].

configure - To set something to your liking. To configure a BBS,
you may have to tell it your screen width, whether you need line
feeds and other such information.

configuration - Configuration is the information describing what
your computer's hardware and software is like, so that a BBS can
send information properly. For example, you need to tell a BBS
how wide your screen is.

connect – [1] To get to a point where you can start communicating
with a BBS, as in "I have connected with the BBS." [2] Any point
after you have established contact with a BBS, as in "I am still
connected with the BBS" or "I have been connected with the bulle-
tin board for just over an hour."

connect speed – The speed, in bps, which your modem uses when it
connects with a BBS. This speed will depend on the speed of your
modem, and the BBS's modem. It will be no higher than the lower
of the two speeds. If you have a 2400bps modem, and call a
1200bps BBS, your connect speed should be 1200bps.

connection – The actual contact with a BBS. It is used most
often in expressions such as "I have a bad connection," meaning
that there is line noise.

control character – Any of the 32 ASCII characters that do not
print on your screen or printer. These characters are usually
used to control your computer. [See also CTRL].

copyright – A term meaning that a program or text file is pro-
tected by the government so that it may not legally be copied,
except to make backup copies, or as specified by the author of
the program. You should not upload a copyrighted program to a
BBS, unless it is shareware or freeware. [See shareware, free-
ware].

Co-SysOp – A term similar to a vice president. The Co-SysOp of a
BBS has more access to the BBS than any other user except the
SysOp. The Co-SysOp might check messages to make sure that they
are suitable for the BBS (not containing illegal messages), and
he may be able to validate users. Sometimes a Co-SysOp is just a
title given to someone who helped the BBS a lot by doing things
such as posting messages and uploading. Also, many times there
is more than one Co-SysOp. [See also SysOp].

country code – The code that the telephone company uses to desig-
nate a certain country. If you need to call a BBS (or a person)
in a foreign country, you need to dial the country code, then
usually the city code, and then the local phone number. The
country code will be 2 to 3 digits. [See also city code].

CPS – See characters per second.

<CR> – Carriage Return. See return.

CRC – Stands for Cyclic Redundancy Check. CRC is a system to
make sure that a block of data (usually from a downloaded pro-
gram) is as free from error as possible. It is usually 16 or 32
bits long (CRC-16 and CRC-32 respectively).

crash – When a BBS is harmed in such a way that it is temporarily
inoperable. The usual cause is that some files are destroyed,
either by accident or by a hacker. Some people try to crash
BBS's, a fact that most users (and especially SysOps) think is
sad.

crash recovery - This feature of some file transfer protocols
allows a user to continue a download or upload that had been
interrupted. With this system, a user will not have to receive
the data that had already been sent before the disconnection,
which will save time.

crippleware - This is software, usually distributed as shareware,
but it is not the complete program. If it is a game, it might
only let you play the first level. If it is a database program,
it might only let you have 50 entries (whereas the real version
would have more). Some SysOps refuse to have programs on their
system that are crippled.

cross-link - This occurs when 2 or more echos are joined togeth-
er, either accidently or purposely. If this happens, the joined
echos then contain the same messages.

CRT - Cathode Ray Tube. This is another name for a computer
monitor.

CTRL - The abbreviation for ConTRoL. This abbreviation is fol-
lowed by a dash and then a character, such as CTRL-C, meaning the
control character C. [See also control character].

CTRL-G - The control character G, which usually causes the com-
puter to produce a beeping sound.

CTS - Clear To Send. This is when the modem lets the other
computer know that it can send information to the other computer.
[See also flow control, RTS].

CTS/RTS - The method of flow control that uses the CTS and RTS
signals. It is built into the hardware, not software. [See also
CTS, RTS, flow control].

cursor - The marker that points out where text will next appear
on your screen. It can be one of many things, usually a plain
white or flashing square, or an underline character.

cyclic redundancy check - See CRC.

cycling - When a light (such as the RD light) on an external
modem continuously turns on and off.

---D---

DARPA - The United States Defense Advanced Research Projects
Agency.

dash - The character -.

data - A group of characters that represents meaningful informa-

tion. This information can be anything, ranging from bank ac-
count numbers to computer programs. [See also information].

database - [1] A program that keeps track of data, such as the
information contained on mailing labels, or the price of stocks.
[2] A large group of data. The sum of the information that you
can receive on extensive pay services such as CompuServe can be
considered a database.

database hack - A way that hackers attempt to gain access to
someone's account on a BBS. They create a list of common pass-
words (such as SECRET and MINE) and try every one on an account
to see if it is the right password. Because of this, an intelli-
gent BBS user will not use easy-to-guess passwords.

data bits - [1] The number of bits that the modem uses to repre-
sent one byte. This is usually 8, though it can be 7 since ASCII
needs only 7 of the 8 bits. [See also format]. [2] the actual
bits within a byte being sent through the phone lines.

data byte - A byte of information that is being sent over the
phone lines.

data carrier detect - See DCD.

data communications equipment - See DCE.

data compression - Some modems have the capability to 'squash'
data so that it takes up less space. When another modem (that
also has this capability) receives the data, it 'unsquashes' the
data to its original form. By using data compression, a modem
can send information faster. It's a lot like shorthand--all the
information is still there, but it takes less space and is quick-
er. [See also MNP-5, V.42bis].

data grade - A phone line that is set up by the phone company to
be more convenient for data communications. It should have
better electronic characteristics than a regular phone line.
[See also voice grade].

data mode - The mode that a modem is in where all information
typed on the computer will be sent through the modem, and all
information received by the modem will be placed on the screen.
[See also command mode, terminal mode, voice mode]. [Same as
on-line mode].

data modem - A modem that does not have the ability to send or
receive fax transmissions.

data rate - See data transmission rate.

data set ready - See DSR.

data terminal equipment - See DTE.

data terminal ready - See DTR.

data throughput - See effective transfer rate.

data transmission rate - The speed at which data travels. For
example, data may be sent at 115,200bps. [Same as transmission
rate, transmission speed, data rate]. [See also bps].

dB - See decibel.

dBm - Decibel referred to one milliwatt. This is used to measure
certain levels, such as transmit level. [See also transmit
level, receive level, carrier detect threshold].

DB-25 - The 25 pin plug that connects an RS-232C cable to the
RS-232 port.

DCD - Data Carrier Detect. This tells the computer whether or
not the modem is connected to another modem.

DCE - Data Communications Equipment. These are computer periph-
erals that communicate. A modem is a DCE. [See also DTE].

decibel - A unit describing how loud one sound is compared to
another. [Same as dB].

decompress - The process of converting compressed data back to
its original form. [See also archive].

decoy program - A program or text sent on mainframes and multi-
line BBS's that simulates the log-on procedure. The unsuspecting
user will see this and enter his password, and the person who
made the decoy program will get the password and can use the
account.

default - A setting or an answer to a question that is automati-
cally assumed. If 80 columns is a default, then you only have to
change it if you want something other than 80 columns.

delay time - The time it takes between sending data on a computer
and receiving a response from the remote computer. If the delay
is long, most file transfer protocols will slow down. [See also
protocol].

Delphi - One of the major on-line services. As of this writing,
it does not support high speed modems.

demodulate - To convert the tones that a modem sends over the
phone lines back into data. [See also modulate].

department name - This is the last piece of information needed
for an internet address. [See also internet address].

destructive backspace - A term that indicates that your communi-
cations program deletes the character the cursor is on when it
receives the backspace character. [See also non-destructive
backspace].

destructive signaling - This is a type of break signal that

causes all data to be destroyed while the break signal is being
sent. [See also break signal].

dial - To send out either the tones or pulses that the phone
company needs to understand what number you are calling. Most
modems will dial automatically (auto-dial).

dialing speed - See touchtone dialing speed.

dialout facility - A service where you call a computer, and from
that computer you can call other computers. It is usually used
with packet switching networks, which saves you money on long
distance calls.

dialup line - A telephone line connected to the telephone compa-
ny. This is a regular phone line. [Compare to leased line].

dialup modem - A modem that is used over normal (dialup) tele-
phone lines.

dial modifiers - Any commands that are sent to a modem which
change the way a phone number is dialed. For example: tone,
pulse, and pause.

dial tone - The sound that you hear when you pick up the phone if
it is ready to have an outgoing call made. Your modem, if it can
dial, should understand this tone.

dibit - Two bits sent simultaneously by a modem. For example, a
modem can operate at 1200bps and 600 baud. What happens in this
case is that 600 times a second, the modem sends out a dibit (two
bits). Therefore, it is sending 1200 (600 times 2) bits per
second. [See also bps, baud].

dictionary - The V.42bis data compression protocol stores certain
data that is being sent/received in a "dictionary," which it
refers to when compressing/decompressing data. [See also
V.42bis, dictionary size]. [Same as encoder dictionary].

dictionary size - This is the number of characters in the dic-
tionary used for the V.42bis data compression protocol. It is
usually 2048, but can also be 1024, 512, or 4096. [See also
dictionary, V.42bis].

digital - A system using discrete numbers to represent data. In
computer systems, these are the numbers 0 and 1 (for binary).
[See also analog].

digital signal processing - This is what is used to perform echo
cancellation on a CCITT V.32/V.42 modem. [Same as DSP]. [See
also echo cancellation].

DIP switch - DIP stands for Dual In-line Package. DIP switches
are a group of small switches placed together on electronic
equipment. Many modems have these. The switches can be changed
to alter various settings. For example, one DIP switch on a
modem may change the status of the DTR.

direct mode - See MNP direct mode.

disconnect - To hang up the phone and cause the connection be-
tween your modem and another computer to be stopped. Most BBS
programs have a way of disconnecting a user who has called the
bulletin board, if it is needed.

disk capture - This is when a communications program will save
incoming information to the disk. This is useful if you are
receiving a text file that you want to read later.

dither tone - See echo suppressor defeat tone.

domain - The domain is the main category for an internet address.
[See also domain name].

domain name - This is the name for an internet domain. The most
common domains are COM (commercial), EDU (educational), and GOV
(government).

door - A gateway that will allow a bulletin board to run a pro-
gram while a user is on the BBS. Games are popular doors on
BBS's, although doors can be used for serious purposes, too.

down - A word meaning that a bulletin board is not working, so
that you can not connect with it. This can mean that there was a
crash, or it could simply mean that the SysOp is playing a game
on his computer. Often a SysOp will leave a phone connected to
his BBS line off the hook when he is using the computer so that
you will get a busy signal. [See also running].

download - To receive a computer file from a bulletin board. It
is usually a computer program, but can also be a text file. [See
also upload, protocol].

DSP - See Digital Signal Processing.

DSR - Data Set Ready. This indicates that the modem is on, and
ready to accept input from the computer (either commands or data
to be sent over the phone line). [Same as modem ready].

DTE - Data Terminal Equipment. This is computer equipment which
is not directly responsible for communicating, for example, the
computer itself and printers. [See also DCE].

DTMF - Dual Tone Multi-Frequency. This is used in tone dialing.
It is a method where 2 distinct tones are sent for each digit
dialed.

DTR - Stands for Data Terminal Ready. The DTR signal is sent
from the computer to the modem, to let the modem know that the
computer is ready to communicate.

dumb modem - A modem that only sends and receives characters to
or from the phone line. [See also smart modem].

dumb terminal – A keyboard and monitor that receive and send
information either to or from another computer or a phone line.
It is up to the other computer to do anything else, such as word
wrap. [See also terminal, smart terminal].

duplex – The capability of both sides of a connection to send
information at the same time. Full duplex is the same as duplex.
When you are talking on the telephone to someone you are using
duplex (you can both talk at the same time if you want to). [See
also half duplex].

---E---

EBCDIC – Stands for Extended Binary-Coded Decimal Interchange
Code. It is a way of coding characters. It is similar to ASCII,
but it uses 8 bits instead of 7. [See also ASCII].

EBBS – Electronic Bulletin Board System. See BBS.

echo – [1] A reference to an echomail conference. For example,
"This echo has too many messages." [2] A character that is sent
back from a BBS instead of the character that was sent to the
BBS. For example, if you enter your password on a BBS it will
often say 'dots will echo', meaning that it will send a period
for every character in your password (it is a safety feature).
[3] When a bulletin board or your terminal program sends back the
characters that you type. If the bulletin board does not send
back the characters, your terminal program should print them to
your screen as you type them. [4] Echo on the phone lines is
when you hear an echo on a long distance call. This can inter-
fere with modem transmissions. [See also local echo, echo sup-
pression].

echomail – Many BBS's have message bases that are shared with
other BBS's. Usually late at night the BBS's will exchange any
new messages. This way a user on one BBS can interact with users
on other BBS's. Sometimes echomail can extend across the world.

echo canceling – This is included in the CCITT V.32 standard. It
attempts to cancel echoing on long distance calls, which other-
wise would interfere with the transmission. It sends the exact
opposite of the sound it receives, which cancels the echo. [See
also echo suppression, digital signal processing].

echo suppression – Echo suppression is a technique that the phone
company uses in an attempt to make long distance voice calls
sound better, by minimizing echo. However, this can cause the
carrier of a modem to be lost (or at least garbled, causing a
loss of data). In order to prevent this problem, a modem needs
to send a certain tone over the phone line at all times. [See
also echo suppression defeat tone].

echo suppression defeat tone – This is a signal sent over the

phone lines by some modems in an attempt to cancel out the nega-
tive effects of echo suppression. In the Bell standard, it is
2225Hz +/- 10Hz, in CCITT standards it is 2100Hz +/- 15Hz. [Same
as dither tone]. [See also echo suppression].

editor - The part of the BBS that allows you to enter a message
and edit it.

effective throughput rate - See effective transfer rate.

effective transfer rate - This is the rate at which data can be
sent after data compression has been accounted for. For example,
a modem may be rated at 9600bps. If it uses data compression
with a ratio that averages 2:1, it has an effective transfer rate
of 19,200bps. While only 9600 bits are sent over the phone line,
they represent 19,200 bits of real information after they are
decoded. [Same as throughput, data throughput, effective
throughput rate]. [See also raw speed, data compression].

EIA - Electronics Industry Association. They developed the RS-
232C standard. [See also RS-232C].

electronic mail - See E-mail.

E-mail - Electronic mail. Messages that are sent to individual
people. You choose who to send the message to and (usually) only
that person receives the message. (Some BBS programs allow you
to send bulk E-mail, which goes to more than one person, but the
concept is still the same.) Originally, you could only send mail
to people on the same BBS. Now, through networks, it is possible
to send mail to anyone on any BBS in the network.

emoticons - See emotion icons.

emotion icons - These are groups of several characters that are
used to express emotion over the phone line. For example, :) is
a happy face (when you look at it from the side). Similarly, :(
is a sad face. [Same as emoticons]. [See Appendix B].

emulate - When a communications program imitates a certain brand
of terminal.

encoder dictionary - See dictionary.

encryption - Coding data so that people who are not supposed to
see the data will not be able to understand it.

ENQ character - This is the same as Control-E, ASCII value 5. It
stands for Enquiry.

EOF - Stands for End Of File. It is the character CTRL-Z, which
can mark the end of a text file.

equalization - When a modem adjusts its transmit level for dif-
ferent frequencies, to account for the greater loss at certain
frequencies over the phone line. [See also transmit level,
receive level].

error - When there is line noise and one or more characters are changed. This is especially noticeable when downloading or uploading a program. In this case the error must be detected, and the data must be re-sent (or else the file will be destroyed). [See also line noise].

error control - The ability of a modem to notice errors in trans- mission, and have any incorrect data re-sent. [See also MNP 1-4, LAPM, V.42].

error correction - See error control. (Error control is a more correct term, since the modem does not correct incorrect data, it just has it sent again).

error free - When referring to data transmission, error free refers to communications equipment in which data is transmitted perfectly. This is actually an impossible situation, but it is possible to have data that is very, very close to error-free.

ESC - See escape key.

escape character - ASCII character 27. [See also escape key, ASCII].

escape character guard time - See guard time.

escape code - See escape sequence.

escape key - The key marked ESC on a computer keyboard. It is often used to 'escape' out of a program or procedure in a pro- gram. Also, the ASCII character (ASCII 27) is used by ANSI to produce limited graphics. [Same as ESC]. [See also ANSI].

escape sequence - A sequence of characters (usually +++) that instruct a modem to change from data mode to command mode, if they are typed with a certain delay before and after they are typed. [See also data mode, command mode, guard time].

even parity - This indicates that the parity bit is always set such that the sum of the "1" bits in each byte that is sent, plus the parity bit, is an even number. [See also parity bit, format].

executive mode - When a user is connected to a bulletin board, but the SysOp is controlling the bulletin board. The most common use of an executive mode is when the SysOp validates users with- out the user having to hang up.

exit - See logoff.

expedited signaling - Break signals that are sent before any other data. All data will remain intact. [See also break sig- nal].

expert mode - Many BBS's have this feature, which allows a user who feels that he knows the system well to save time by not

having menus sent to his system. If he forgets some commands
that are available, he can have the menu appear. Otherwise, the
menus will not appear. This is especially helpful at slow
speeds.

extension - The extension of a filename on an MS-DOS system is
the last three characters, which are separated from the rest of
the filename by a period. For example, the filename SPREDSHT.WKS
has the extension "WKS". [See also archive].

external modem - A modem that is located outside of the computer.
It is hooked up to the computer with a cable, most commonly an
RS-232C cable. [Same as stand-alone modem]. [See also internal
modem].

external program - A computer program that is separate from
another program. When BBS software runs a program that is sepa-
rate from it, it is called an external program. [See also door].

external protocol - This is a file transfer program that is not
built into your comm program, but the comm program is able to run
it anyway (as an external program). [See also internal proto-
col].

extract - To take out files from an archive. [See also archive,
unarchive].

---F---

factory configuration - The way that your modem was set up when
it left the factory. Typing ATZ normally returns your modem to
the factory configuration.

fall-back - The ability of a modem to change to a lower speed
when there is a problem communicating at the higher speed (usual-
ly caused by line noise). [Same as auto fall-back].

fall-forward - This is when a modem will change to a faster speed
if line conditions improve after a fall-back occurs.

fax - Short for facsimile. It is a copy of a piece of paper that
is sent over the phone lines by a fax machine. Some modems also
have fax machines built in them, so that they can send and/or
receive faxes. [See also faxmodem].

faxmodem - A modem that also has the capability of sending and
receiving faxes. [See also fax].

FCC - Federal Communications Commission. This is the government
agency that is responsible for making sure that phone lines are
being used correctly and that radio interference is at acceptable
levels.

FDM - Frequency Division Multiplexing. A way that some modems
transmit full duplex information, by splitting the telephone
bandwidth into two sections. One is used to receive data, the
other is used to send data. This method can be used at speeds of
up to 2400bps. [See also modulate].

feature negotiation - This is when a modem can determine the best
protocol to use when connecting to another modem. This includes
the fastest speed, error control, and data compression. It is
part of hand-shaking. [Same as negotiation scheme].

feed - The connection between a BBS and a message network. When
a BBS "loses its feed," that means that it is no longer receiving
messages from the network, and can not send to the network.

feedback - A message that is sent by a user to the SysOp of a
bulletin board. While it is meant to be a way for the user to
let the SysOp know of any complaints or compliments they may
have, it is more often a convenient way of sending E-mail to the
SysOp.

fidonet - A public network connecting thousands of BBS's around
the world.

filter - When a communications program or a BBS program takes out
certain characters or words and doesn't accept them. For exam-
ple, a bulletin board program may filter out CTRL-G's so that the
SysOp does not hear the beeping. Also, some BBS programs have
the ability to take out obscene words from messages. [See also
profanity filter].

filter device - A piece of hardware which goes between the modem
and the phone line of a BBS. When a user calls up, they will
either have a voice or computer connection that asks them for a
special password before they can gain access to the main computer
system. This makes it more difficult for hackers to get into the
system, but is also more of a burden for the legitimate users.

FINGER - On internet, a function that allows you to determine if
a user is connected to the network.

flash - On a normal telephone, this is when you quickly push down
and release the off-hook button. It is often used for call
waiting. Many modems have a command that will simulate this
action.

flag - A piece of information that is either TRUE or FALSE. It
is used in some bulletin board security systems to indicate
whether the user has access to certain parts of the bulletin
board. It is also used by modems for certain indicators such as
DTR.

flow control - A method of controlling when information is sent.
One method is Xon/Xoff, where a BBS will send information until
your computer sends an Xoff (CTRL-S). It will resume sending
information when you send an Xon (CTRL-Q). [See also Xon/Xoff,
CTS/RTS].

format - Information such as "8N1" that describes the way that
your computer and a bulletin board should be connected. The
first digit is normally 7 or 8, the number of data bits. The
second character is a letter describing the parity (N for None, M
for Mark, S for Space, O for Odd, and E for Even). The last
number is the number of stop bits. 8N1 is the most common for-
mat. Data is sent as follows: Start bit (0) - 7 or 8 bits of
data - (parity bit, if used) - stop bit (1) - (gap bits, if used)
[Same as settings].

forum - See conference.

forward - To send E-mail that you received to someone else.

FOSSIL driver - Fido-Opus-SEAdog Standard Interface Layer. This
is a program that allows BBS and related programs to communicate
with different types of modems, keyboard, and monitors.

framing bits - Bits that are used to separate characters. The
bits themselves are not used as information. [See also stop
bits, start bits].

framing error - This occurs when the UART in a modem does not
detect a stop bit. The modems are probably out of sync with each
other.

freeware - Computer programs that are copyrighted, but they may
be legally copied if there is no payment involved. They are
almost the same as public domain programs, except that public
domain programs are not copyrighted and may be sold for payment.
Freeware programs often can not be changed when they are distrib-
uted. [See also public domain].

freq - Short for "File REQuest." It is used to get program(s)
from a BBS, without logging on. In order to do this, you need to
be part of a network that that the BBS is also part of.

frequency division multiplexing - See FDM

frequency shift keying - See FSK.

frequency spectrum - A range of frequencies having similar char-
acteristics. All sounds we hear are grouped as the audio fre-
quency spectrum. Similar to bandwidth.

FSK - Frequency Shift Keying. This method that low-speed modems
use to transmit information over phone lines uses 4 frequencies,
which are used to represent 0's and 1's for both sending and
receiving. These modems can only operate up to a speed of 600bps
at full duplex (or 1200bps at half duplex). [See also modula-
tion].

FTP - File Transfer Protocol. This is the method of transfering
files on internet.

full duplex - See duplex.

full flow - See streaming.

---G---

gap - See gap bits.

gap bits - A series of 0's that are sometimes sent between data
bytes over the phone lines.

garbage - Unwanted characters that appear because of either line
noise or incorrect settings. [See also line noise, format].

gateway - A connection between one network and another. For
example, on some commercial on-line services, you can reserve
airplane tickets. This usually involves the on-line service you
called connecting to the airline's computer.

general file - Any kind of text on a bulletin board that is not
specifically E-mail, a bulletin of any sort, or a message.
Usually they are long files for the user's information. Some
examples of general files are: a file containing more information
on the bulletin board program, a newspaper article about a con-
troversial issue, and an article that explains how to make your
own disk drive.

GENIE - One of the major on-line services.

global scan - When a bulletin board goes through all the messages
on all boards to check for new messages that the user has not yet
read. This is very useful as it prevents the user from having to
go through each board to check for new messages. [See also
quickscan].

goodbye - See logoff.

group III FAX - The standard controlling fax communication.

guard time - When the escape sequence is sent to your modem, the
guard time is the amount of time that must occur between charac-
ters of the escape code, for it to be considered the escape code.
Otherwise, it will assume you are entering data that is meant to
be sent to the other modem. [See also escape code, data mode,
command mode].

guard tone - A tone that is sometimes sent over the phone line
for echo suppression. 1800 hertz and 550 hertz are sometimes
used.

guest - When a user is just looking at a bulletin board and does
not want to receive an account there. The user usually has the
same privileges as a new user who has not yet been validated.
Many bulletin board programs allow guests. This is a good fea-

ture, since the SysOp does not have to validate users who will
not be calling the board more than once or twice.

---H---

hacker - [1] A programmer who likes to experiment with computers
(this is the type of person who often will not read the documen-
tation to software before using it, so he can figure out how to
use it by himself). [2] A person who attempts to abuse the
privileges of computer BBS's and other services. His activities
may range from getting and exploring an account he is not sup-
posed to have on a mainframe computer to attempting to crash a
bulletin board. These people are unwanted by most BBS's. They
are often not malicious. The media sometimes confuses them with
phreakers. [See also phreaker].

half card - For IBM compatible computers, this is a card that is
smaller than normal (about half the size). It does not affect
the operation of the modem.

half duplex - This is a mode which allows only one modem at a
time to transmit information. When one modem is finished, the
other can then start to transmit. [Same as simplex]. [See also
duplex].

hand-shaking - The process of establishing an electronic link
between two modems. Handshaking lets both modems know informa-
tion such as the speed they will be using, and whether or not the
modems have the same type of error correction capability. [See
also feature negotiation].

handle - See alias.

hang - When a bulletin board all of a sudden starts to do noth-
ing. That is, it will not accept calls or even let the SysOp
type anything until the computer is reset. This can be caused by
a problem with the BBS software, or the computer itself.

hang up - When someone closes a switch which stops a telephone
connection. This either happens when someone puts a telephone
receiver into its cradle or when the person instructs the modem
to hang up.

hardware error control - This is when error control is performed
by the modem, not the communications program. [See also error
control].

Hayes compatible - Any modem which operates in the same way as
the modems developed by Hayes. Most modems up to 2400bps are
Hayes compatible.

Hayes AT command set - This is the set of commands used to oper-
ate Hayes modems and Hayes compatible modems. Almost all of the

commands start with AT.

help file – Many BBS systems will include information on how to
run the system in case you are having troubles. Often just
pressing "H" or a question mark at the main menu will show you
the information, but with some systems you have to find the help
file somewhere, occasionally amidst the files to be downloaded.

hertz – A unit of frequency, which equals cycles per second.

high speed – A modem that operates at a high speed. In most
cases it is assumed to be at least 9600bps.

host – The computer that is being used to store information from
other computers. Every BBS is a host, and so are pay services.
On a network, hosts are all the computers that are connected to
the network.

host program – A computer program that allows your computer to
accept incoming calls, and let the callers upload or download
files. It is limited compared to a BBS. If you want to do any-
thing more, such as record information or print it out, you
usually have to do the programming yourself. [Similar to unat-
tended mode].

hot-keys – A term which means that you only have to press one key
at a menu, rather than several. You don't have to hit the return
key. Usually you can do this while a menu is being sent to your
computer (so you don't have to wait for the whole menu to be
sent).

HS/LINK – A file transfer protocol that allows you to upload and
download at the same time, which can theoretically double your
transferring time.

HST – High Speed Technology. A high speed protocol developed by
US Robotics. It allows for 14400bps one way, and 450bps the
other way. The two computers can switch when one has more infor-
mation to send than the other. It is not compatible with the
CCITT protocol.

hyphen – The character –.

Hz. – See hertz.

---I---

IBM graphics – On IBM computers, there is a group of "graphic"
characters (such as lines, used to make boxes) that can be shown
on the screen. Some BBS's will send these graphic characters if
requested. Most non-IBM computers will not recognize these
characters. These characters' bytes have their 8th bit set to 1.

ID number – See user number.

idle time – When a computer is not being used. This refers to
either a computer running a BBS that is not busy, or a caller
that is not sending anything or receiving anything. Some BBS's
will hang up a user if there is a certain amount of idle time
(such as a minute).

inactivity timer – When this is on, a modem will automatically
disconnect from a remote computer after a given amount of time
passes without any information sent or received.

incoming – Information that is being sent to your computer.

information – Any data that is sent between computers. Data
usually refers to numbers and small pieces of information.
Information is usually used for larger things, such as text
files. [See also data].

initialize – To set up either hardware or software to work cor-
rectly with your system. Many modems have to be initialized each
time they are used so they 'know' how to act with the communica-
tions program. When your software initializes your modem, it may
tell the modem to expect 2400 baud and no parity, as well as the
fact that you do not want any information to echo on your screen.
[See also initialization string].

initialization string – This is the command that your communica-
tions program sends to the modem when the program is started. In
most cases, it is an AT command just like you would type in.
[See also initialization].

interdigit interval – When pulse dialing is used, you need a
certain amount of time free of "clicks" so that the phone company
knows when each digit is finished. When you are dialing on a
rotary phone, you don't need to worry about this because the time
it takes to turn the dial is sufficient. A modem that sends
pulse codes must wait a specified amount of time before going
from one digit to the next in a phone number. A value between
1/2 second a 1 second is usually used.

internal modem – A modem that is 'hidden' inside your computer.
Outside of your computer you will only see the phone cord. An
internal modem can either be on a peripheral card that is placed
inside your computer, or it can be built into your computer.
[See also external modem].

internal protocol – A file transfer protocol that comes as part
of a comm program, and is not separate from it. [See also exter-
nal protocol].

International Telephone Union – See ITU.

internet – This is the largest network of BBS's. It was origi-
nally started by the U.S. Government. It connects hundreds of
thousands of host computers.

internet address - This is an address used to reach someone on
the internet. It is actually a 32-bit number assigned by the
U.S. Government agency DDN Network Information Center. It is
broken down into 4 parts, the domain, the organization, the
system, and the department. [Same as IP address].

internet format - An address on internet. For example,
Joe_User@place.loc.edu.

internet relay chat - On the internet, it is possible for 2 or
more users to talk to each other in "semi-real time", meaning
that their messages may take a while to reach each other, but
quick enough that they can wait for replys and "chat."

interrupt - An interrupt, as far as modems and computers are
concerned, is an electronic signal that tells the computer that
something important is happening. Most modems can be set up by
software to send an interrupt every time a character is received
by the modem. When operating at fast speeds, this makes sure
that the computer doesn't miss characters as it is printing them
on the screen or saving them to a disk.

in sequence signaling - Break signals that are sent in the proper
order among data, as opposed to expedited signaling (which will
send the signal before other data). No data is harmed, it all
remains intact. [See also break signal].

IP - Internet Protocol. See internet address.

IP address - Internet Protocol address. See internet address.

IRC - See Internet Relay Chat.

ITU - International Telephone Union, a part of the United Nations
involving telephone systems. Its divisions are responsible for
creating standards, and helping underdeveloped countries with
their phone systems. [See also ITU-TSS].

ITU-TSS - Telecommunications Standards Sector of the Internation-
al Telephone Union. ITU-TSS can be considered the new name of
the CCITT. It is responsible for creating standards relating to
computer telecommunications, namely the V. series of standards.
It is expected to be able to bring standards to the industry
faster than the CCITT was able to. [See also ITU, CCITT].

---J---

jack - The small plastic box that your phone cord connects to on
your wall.

jump - A command used on some BBS's to go from one board or
section on a BBS to another.

jumper - This is a piece of plastic and metal that can be moved
on an internal modem to change a setting, such as the COM port to
be used. [See also selectable COM port].

---K---

K - When K is placed after a number, it means 1024 times that
number. If you computer has 640K that means that it has a little
more than 640,000 bytes of memory. Often communications software
will tell you that you have a certain amount of free memory to
use as a buffer.

Kermit protocol - An almost error-free file transfer protocol
usually used for text transfers. It was developed at Columbia
University. [See also protocol].

keyboard macro - A macro that will allow you to hit one or sever-
al keys and have the program act as though you had typed a lot
directly from the keyboard. [See also macro].

kill - When referring to a message on a bulletin board, it means
deleting that message from the board. Usually you can only
delete the messages that you write (unless you are a SysOp).

---L---

LAN - Local Area Network. This is a group of computers that are
all connected. Usually, there is one computer that controls all
peripherals (such as printers and a hard disk drive). The other
computers are linked to the controlling computer, which lets the
other computers take turns using the peripherals. [Same as
computer network].

LAPB - Link Access Procedure Balanced. This is a form of error
control found in X.32 packet switched networks.

LAPM - Link Access Procedure for Modems. A type of error control
used by some modems. It is included in the V.42 protocol
(V.42bis also includes it, since V.42bis includes all V.42 error
control methods). It is NOT a compression method, even though
some modem manufacturers have incorrectly advertised it as such.
[See also V.42, error control].

leased line - A telephone line that directly connects two comput-
ers. It is usually rented from the telephone company. A leased
line doesn't have many of the electronic restrictions that a
dialup line has, so data can be sent faster. However, data
therefore can only be sent between those two computers. [Compare
to dialup line]. [Same as private line].

LED indicators - The lights on external modems that indicate
conditions such as speed, RD, DCD, etc.

leech - A person who downloads a lot from a BBS, and does not
contribute much to the BBS by uploading programs or using the
message bases.

left-brace - The character {. It's not used often.

left-bracket - The character [.

letter - [1] The characters A-Z (uppercase or lowercase) [2]
Another term for a message posted on a BBS.

LF - Line Feed. This is a control character (ASCII 10) that is
used on some computers and printers to move down one line (on the
screen or paper). It is usually used right after a carriage
return. [See also return].

LHARC - A program that will extract archives with the extension
"LZH". [See also archive, LZH].

line - [1] A row of characters on your screen, for example, many
computers have screens with 25 lines. [See also columns]. [2]
The connection between your computer and a BBS. Most commonly
used in the term "line noise." [3] A phone line connected to a
BBS. For example, a BBS might advertise that it has "4 lines,"
meaning that 4 people can call the BBS and use it at the same
time. [Same as node].

line delay - See delay time.

linefeed - See LF.

line noise - This is interference on the telephone lines. It
will cause a character or many characters of garbage to appear on
your screen. In general, the higher the bps rate of your modem,
the more line noise will appear. However, error control proto-
cols strive to eliminate line noise (and get rid of most of it).
[See also error control].

link access procedure - See LAPM, LAPB.

local - On a computer that is running a BBS, there are 1 or more
phone lines connected to it. However, the SysOp can usually use
the BBS, too, from the keyboard. This is considered a local
connection.

local analog loopback - Tests the connection between a modem and
the computer. [See also local digital loopback].

local area network - See LAN.

local call - A phone call to a phone number in your local area,
which will not incur long distance charges. [See also long
distance call].

local digital loopback - Tests the connections between a comput-
er, the modem, the phone line, and the remote computer. [See
also local analog loopback].

local echo - This is when a communications program will send
information (either that you type or from a file) to your screen,
as well as to the other modem. Usually local echo is not used,
and the BBS you are connected to will send the information back
to you, and only then will the communications program print what
you typed on your screen.

local number - The phone number used after a country code, area
code and/or a city code. In the United States, it is 7 digits
long.

log - A log is a file that keeps track of some kind of use. In a
communications program, it might keep track of what BBS's you
call. A BBS can keep a user log, which is a file that indicates
which users called up and when. [See also user log].

logic bomb - This is part of a software program that will do
something malicious. For example, the author of a BBS program
might have the program set up so that if he enters his initials
in a certain point while the program is running, it will destroy
all of the files on the BBS. These are no longer as common as
they used to be.

logoff - To leave a BBS. When you choose to logoff, the BBS will
usually ask if that's what you really want to do, then it will
hangup. It may also ask if you want to leave a note to the
SysOp. [Same as exit, quit, goodbye].

logon - The process of connecting to a BBS. The is what occurs
after you have called the computer and the phone starts to ring,
but before you actually start using the BBS. "Logon" can also
include the process of entering your name and password (which is
also called sign-on). [See also signon].

long distance call - A telephone call that is outside your local
calling area, and that you must pay for. [See also local call].

lowercase - The letters that are normally used, such as in this
sentence. The other kind of letters are UPPERCASE. [See also
uppercase].

lurk - This is a term used on some CB simulators, which means
that the person is leaving his computer for a while (and there-
fore will not be able to respond to messages).

LZH - This file extension refers to an archive that was com-
pressed with the program LHARC. You need to get the program
LHARC from a BBS before you can un-archive the file. [See also
archive, unarchive, LHARC].

---M---

macro - A series of instructions or text that can be entered by
hitting a couple of keys. For example, a communication program
might let you enter your user name and password just by hitting
CTRL-N. [See also trigger character].

mailer - A program used by BBS's that allows for other BBS's to
call, so that mail and/or files can be transfered automatically
between the two.

mainframe - A large computer that many people can use at the same
time. Usually, a mainframe computer is owned by a large company,
and it has a lot of memory and storage for its users. Some
mainframes have phone lines connected to them so that employees
(or other authorized people) can use the mainframe from home.

make/break pulse ratio - During pulse dialing, the make/break
pulse ratio is the ratio of the time that the phone is off the
hook to the time the phone is on the hook. In America and Cana-
da, it should be 39/61.

manual-syncing driver - This is what a BBS uses if the BBS pro-
gram can not determine directly what the user's bps rate is, and
the user must hit the return key several times before the BBS can
figure out the user's speed.

mark - When you are looking at the titles of messages to read,
some BBS programs will allow you to choose certain ones you want
to read. This is called marking.

mark bit - A bit that is set to 1. [See also space bit].

mark parity - This is when the parity bit is always set to a
binary 1. [See also parity bit, format].

matrix - See topology.

matrix address - The address of a node on a network. [See also
address].

maximum string length - In V.42bis data compression, this refers
to the maximum length of data (in characters) represented by one
word. It can range from 6 to 250 characters, although it is
usually 32.

menu - A list of options that you can choose from. A BBS might
have a menu that lets you choose from reading messages, download-
ing, or logging off. In reality, there would be many more op-
tions.

message - Any text that is left in a message base on a BBS.
These can range from questions for other users to answer, to
information on new computer programs, to just about any topic you
could imagine. [See also message base].

message base - A group of messages on a BBS pertaining to a
certain topic. For example, a BBS might have message bases for
general messages, computer-related messages, and social informa-
tion. Some BBS's have dozens or even hundreds of message bases.
[Same as subboard, board].

message network - A network of BBS's that transfer messages
between each other. [See also network].

minicomputer - A scaled-down version of a mainframe. A minicom-
puter usually has many terminals connected to it, and can run
many programs at the same time. It is more powerful than a
microcomputer.

MNP - Microcom Networking Protocol. A type of error control and
data compression, created by Microcom, that many newer modems
use. It is built into the modem, unlike software error correc-
tion in file transfer protocols. There are different MNP levels.
Levels 1-4 are error control protocols, and level 5 is a data
compression protocol that can compress data to about 50% of its
original size. A modem with MNP-5 also has MNP-4. MNP 1-4 is
also included in the CCITT V.42 error correction system.

MNP direct mode - This is a mode used on modems with the MNP
protocols, where the speeds from the modem to the remote modem
and to the computer are the same. Also, there is no buffering,
and no flow control. [Same as direct mode]. [See also MNP
normal mode].

MNP normal mode - This is the more common mode used with modems
that have MNP capability, where the speed from the computer to
the modem can be higher than the connection between the modem and
the remote modem. This mode uses buffering to prevent lost data.
[Same as normal mode]. [See also MNP direct mode].

mode - The state that a computer or a program is in. For exam-
ple, a computer can be in a text mode, and a communications
program can be in a chat mode (which operates differently than
the normal mode).

modem - MODulator/DEModulator. This is a computer peripheral
which allows a computer to communicate over telephone lines.
This is the heart of computer telecommunications. The main
factor that differentiates modems is their speed, measured in
bps.

modem ready - See DSR.

moderator - The person who is in charge of a conference. This
person usually checks to make sure that all rules are followed
(for example, that people do not swear).

modify - See edit.

modular cord - A standard telephone cord, with a modular plug at
either end. [Same as modular line. [See also modular jack,

modular plug].

modular jack - The square hole in which you put telephone cord
(that has a modular plug). [See also modular cord, modular plug,
42A block].

modular line - See modular cord.

modular plug - The square piece of plastic at the end of a tele-
phone cord. It plugs into a modular jack. [See also modular
cord, modular jack].

modulate - When a modem changes information from computer bits
into tones that can be transmitted over the phone lines. Differ-
ent methods of modulation are PSK, FSK, and FDM. [See also
demodulate, PSK, FSK, FDM].

modulation scheme - The method that a modem uses to modulate
data. [See also PSK, FSK, FDM].

MTA - Message Transfer Agent. This is what moves data across a
network under the X.400 electronic mail system. [See also
X.400].

multiple-speed - This refers to a modem that can operate at
several speeds. Most modems are capable of doing this. While a
modem may be listed as having a speed of 2400bps, it most likely
also can operate at 1200bps and 300bps.

multiple-state modulation - A modulation scheme that sends more
than one bit per baud.

multi-line BBS - A BBS that has more than one line or node. [See
also line].

---N---

NAK - This control character (CTRL-U) is sometimes used by commu-
nications or BBS programs (usually in file transfers) to indicate
that the information it received was bad. NAK stands for Nega-
tive AcKnowledgement. [See also ACK].

navigator - A program that makes it easier to access the various
functions of an on-line service.

negotiation scheme - See feature negotiation.

netmail - Messages that are sent over networks of BBS's to spe-
cific people. It is the same as E-mail, except that E-mail goes
to a user on the same BBS that you are calling. Netmail goes to
a user connected to a BBS that is on a network of BBS's that is
hooked up to the BBS you call. [See also E-mail].

network – A group of BBS's that are "linked" together. This
means that the BBS's share messages and sometimes files. Usually
the BBS's will call each other late at night to get the messages
and files. [See also echomail].

network address – In order for a message to find its way to the
correct BBS in a network, it must include an address. Every node
in a network should have its own address. [See also address].

new user – When you use a BBS, usually you will have the status
of new user for the first few calls, until the SysOp verifies
your account (at which time you will normally be considered a
registered user). A new user usually has less privileges, such
as not being able to download programs.

news – Some BBS programs will have announcements that are shown
when you log on to the BBS. These are often referred to as news,
since they often inform you of changes to the BBS. [Same as
system news]. [See also sign-on message].

next – A command in BBS programs that will let you view the next
message in the message base.

node – [1] See line. [2] A BBS that is connected to a network.
It has an address that lets everyone know how to reach it from
the network. [See also address].

nodelist – A list of all the nodes on a network, along with their
addresses. This is used by some mailers to find out how to send
out messages. [See also node].

noise – See line noise.

noise level – See noise power.

noise power – The "loudness" or strength of noise on a phone
line. It is measured in –dBm's. [See also signal power].

non–destructive backspace – This is when a communications program
will not delete any characters on the screen when the backspace
key is pressed. [See also destructive backspace].

non–volatile memory – This is memory that many modems have which
is not destroyed when the power is turned off. Using this memo-
ry, you can store a certain configuration in the memory, and have
the modem automatically use the configuration when you turn it
on.

normal mode – See MNP normal mode.

NSF – National Science Foundation. See NSFNET.

NSFNET – The National Science Foundation network. The NSF is a
government agency. This network was the basis for the internet.

null character – The ASCII character 0, or CTRL–@. This charac-
ter usually will not be printed on the screen. It was originally

used when communications programs were slower and could not
receive information as fast as it was sent, so BBS programs would
send these characters after every line to slow down the speed at
which information had to be received.

null modem - A special connection between two computers that will
make the computers think that they are hooked up to a modem, so
that the two computers can communicate with each other.

numeric result codes - These are result codes that are printed as
numbers, rather than words. [See also result codes, verbal
result codes].

---O---

odd parity - This indicates that the parity bit is always set so
that the sum of the bits set to 1 in a byte, plus the parity bit,
is an odd number. [See also parity, format].

off hook - The state that your telephone is in when you pick it
up. In non-computer life, it usually means when the telephone
connection is accidentally disconnected, such as "Someone must
have left the phone off the hook." A modem that takes the phone
"off hook" is taking control of the phone line, and it will
usually then dial a phone number for you. When a telephone line
is "off hook," you are not able to receive calls from other
people, unless you have call waiting. [See also on hook].

off hook button - This is the button on a real telephone that is
depressed when you put down the receiver. It signals the phone
company when your phone is off hook, and ready to place calls.

off-line - When your computer is not connected to another BBS.
[See also on line].

offline mail reader - A program that allows you to read messages
and reply to them after you call a BBS. This can save you money
if you call BBS's long distance (because you do not spend the
time reading messages while online with the BBS). Also, it makes
it easier for other callers to reach the BBS, since you spend
less time on line.

on hook - When your telephone is not being used, and it is ready
to ring if someone calls. [See also off hook].

on-line - When your computer is connected to a BBS. For example,
some communications programs will keep track of how long you have
been on line. This lets you know how long you have been connect-
ed to the BBS.

on-line conference - This is when a group of people "get togeth-
er" and have a conference using their computers. Some of the
major on-line services do this. [Same as real-time conference].

on-line games – Any game that is played on a BBS. Sometimes they
are played in real time against other players who are using the
BBS at the same time, and sometimes they are played by making a
move and waiting for their opponent(s) to make their move when
they next call. [See also Role Playing Game].

on-line information service – Any on-line service that provides
information. Most commercial systems fall into this category.
[See also on-line service].

on-line mode – See data mode.

on-line navigator – See navigator.

on-line service – While this can refer to any computer that is
hooked up to the phone line, it usually means a pay service such
as Compuserve or GEnie. [Same as on-line system]. [See also
on-line information service].

on-line system – See on-line service.

organization name – This is part of an internet address. It is
usually an abbreviation of the name of the company or organiza-
tion that controls the computers at that point in the network.
[See also internet address].

originate – To call another computer and connect to it. The
originating computer is the one that placed the telephone call
(as opposed to the BBS, which is the answering computer).

originate-only modems – Some older modems only operate using an
originate frequency, which means that if you try calling one, you
must change your modem to send an answer tone. This can be done
on many modems by typing ATDT, the phone number you want to call,
and then the letter R (before hitting return).

originating computer – The computer which dials another computer.
This is most likely referring to your computer (unless you have a
BBS, or other people are calling your phone number, and you have
your computer's modem answer the phone). [See also answering
computer].

originate frequency – This is the frequency of the carrier that
is used by the modem that places a call to another modem. [See
also answer frequency].

originate mode – This is when a modem is ready to place a call,
rather than accept an incoming call. [See also answer mode].

---P---

packer – A program that some BBS's have which takes new messages,

and packs them together to be sent out by a mailer. [See also
mailer].

packet - [1] A group of bits sent by a modem that comprise a byte
of information. [2] A group of bytes sent by a file transfer
protocol.

packet radio - The equivalent of a BBS, but with with radio
connections instead of telephone connections. It requires an
amateur (ham) radio setup, instead of a modem. With the right
setup, you can read/send messages and even files, using radio
waves.

packet switching network - A telecommunications service that
transmits data from one computer to another using packets of
data. They usually have telephone numbers in most areas of the
country so that users can connect to on-line services without
toll charges.

pad - This happens when a file that is being transferred ends in
the middle of a block of data. The communications program must
add blank data to fill up the block. This is called padding.
[See also protocol].

PAD - Packet Assembler/Disassembler. This is a device that
disassembles incoming packets, and assembles outgoing packets.

page - [1] (noun) A page is one screen's worth of information.
Many BBS's will automatically wait for you to press a key after
it has sent you a page of information. [2] (verb) to alert the
SysOp that you would like to speak with him. Many BBS's will
allow you to do this, and it will make beeping sounds so that the
SysOp will know you want to talk to him. [Same as yell]. [See
also chat].

PAK - [1] The extension for files archived with the program of
the same name. You need the program PAK to un-arc an archive
with this extension. [2] The program itself. [See also archive,
unarchive].

parallel - This is when a computer sends data one byte (or any
number of bits other than one) at a time. This is faster than
the alternative, serial. [See also serial].

parallel interface - Any interface that transmits or receives
more than one bit at a time. In most cases, 8 bits are trans-
ferred at a time. The RS-232C standard involves a parallel
interface. [See also serial interface].

parity bit - Most modems have the capability to send an extra bit
for every byte sent, which is used to help sense errors. This is
called the parity bit. It can be set to no parity, mark parity,
space parity, odd parity or even parity. Most BBS's do not use a
parity bit. [See also format, mark, space, odd, even].

password - A special code that only you should know. This code
will allow you to gain access to your account on a computer.

Different BBS's have different rules as to how long your password
can be and what characters can be used. You should not use a
password that is easy to guess (such as your name, or
"password"), because a hacker might try to gain access to your
account by guessing your password.

pause - On most modems, you can send the modem a command that
will pause at some point while dialing a number. This can be
useful on PBX systems, if you have to wait for a dial tone.

PBX - Private Branch Exchange. This is the telephone system that
many offices have, allowing extensions for each telephone, and a
connection to the main telephone system.

PC-Pursuit - A packet switching network that allows people to
save money on long distance calling, if they use modems.

phase shift keying - See PSK.

phone number - A number identifying a specific phone line. In
the United States, a phone number consists of a 3 digit area code
and a 7 digit number. If you call BBS's in other countries,
there may be a specific country code and city code that is part
of the phone number. You can find many of these codes in a phone
book. A BBS will usually ask you to tell it your phone number
before you can be a registered user.

phreaker - A person who spends a lot of time trying to find out
as much as possible about the telephone company, and how it
works. They often try to find out ways to make long distance
calls for free. Some steal calls from telephone credit card
users, some steal calls from the phone company directly, and
others don't make "free" long distance calls. They are sometimes
confused with hackers. [See also hacker].

pick up - To pick up a carrier is when the 2 modems recognize
each other's signals over a phone line. After this point the two
computers can communicate.

ping-pong - A 9600bps and 4800bps protocol developed by Hayes.
It features fast turnaround.

pins - The ports on the back of your computer and an external
modem will have pins. Each pin has a certain function, such as
letting the computer know that the modem is online. The pins
from a computer's port and the modem are connected by a cable.

PKARC - The program which will make an archive with the extension
"ARC". [See also archive, unarchive, ARC].

PKUNZIP - The program which will un-arc a file that has the
extension ZIP. [See also unarchive, archive, ZIP].

PKXARC - The program which will un-arc an archive created with
PKARC. [See also unarchive, archive, ARC].

PKZIP - The program which will create an archive with the exten-

sion "ZIP". It is one of the most popular archive programs.
[See also archive, unarchive, ZIP].

pocket modem – An external modem that is small enough to be
easily portable. It usually either uses a battery for power, or
it can get its power from the phone line.

point – A person who has his computer connected to a node on a
network. This person has a special address for his computer. A
person who has a point is considered part of the network. If you
just call a BBS, you are not considered part of the network.
[See also node].

poll – [verb] The process when a computer checks to see whether a
peripheral or another computer has data to send. [noun] See
vote.

post – To save a message that you have written on a BBS so that
other people can see it. [Same as leave message].

private – When referring to a message, it means that only a
specific person or several people that you specify can view the
message. [See also public].

private branch exchange – See PBX.

private line – See leased line.

privileged – Some BBS's have a privileged user level, where the
user can do more than a regular user. For example, they may be
able to download more programs than regular users. [See also
user level].

profanity filter – Some BBS's have a special function that will
take out specified words (usually swears) from messages that
people leave. That way, the BBS will automatically keep itself
"clean," even if users try to leave swears in their messages.

prompt – A character or group of characters that are meant to
remind the user of a BBS that he needs to enter some information.
It might say "What now?" or it might list the name of the message
base the user is currently in, or a list of possible commands.

protocol – [1] When referring to file transfers, a protocol is a
method of sending and receiving a program. There are many meth-
ods available, each with different advantages and disadvantages.
[See also upload, download, Xmodem, Ymodem, Zmodem, Kermit]. [2]
Protocol is also used to describe the way that hardware error
control is managed. [See also error control].

PSK – Phase Shift Keying. In this method of modulation/demodula-
tion, there are two frequencies used (usually 1200 hertz and 2400
hertz). There are 4 different phase angles (0, 90, 180, and 270
degrees), representing dibits 00, 01, 10, and 11. This is usual-
ly used for 1200bps transmission. Note that the baud rate using
PSK is really 1/2 of the bps rate, since 2 bits are sent at a
time instead of one. [See also modulation].

PSTN - Public Switched Telephone Network. This is the regular
phone lines that just about everybody uses.

public - When referring to a message, it means that the message
is available for everyone to see. [See also private].

public domain - A program that is in the public domain usually
has no copyright, and can be copied legally by anybody. BBS's
often have public domain software available for people to down-
load. [See also shareware, freeware, commercial software, ban-
nerware].

public messaging - A fancy term that means to read and/or leave
messages in a message base.

public switched telephone network - See PSTN.

pulse dialing - A method that some phones use to dial numbers.
It involves a series of "clicks." Most modems support this type
of dialing, which is the only type available in some remote
areas. The other method of dialing is tone dialing. [See also
tone dialing].

---Q---

quickscan - An option used by some bulletin board programs which
will let you check several message bases to see if there are any
new messages. [See also global scan].

quit - See logoff.

---R---

rack mounted modems - Some multi-line BBS's use rack mounted
modems, so that the modems can be easily and safely stored.

raw speed - The speed at which a modem can actually transmit
data, before compression or other factors. [See also effective
transfer rate].

RD - Receive Data. This is the wire in an RS-232C cable that
receives data.

real-time conference - See on-line conference.

receive - To transfer information from another computer to your
computer. To receive a file is the same as downloading the file.
[See also send].

receive data LED – On external modems, this LED will light up
when the modem is receiving data. [See also LED indicators].

receive level – The "loudness" of the sound that is received by a
modem. It is measured in -dBm's. A modem will have a certain
range which it can understand, for example, -33dBm to -9dBm.
[See also equalization].

receive sensitivity – See carrier detect threshold.

register – A location in memory that stores a value which refers
to something specific. This value can be changed. For example,
most modems have a register that holds a number which tells the
modem how many rings it should wait for before picking up the
phone.

registered user – This is the most common user level on most
BBS's. It usually allows reasonable usage of the BBS (perhaps it
will give you a time limit of 45 minutes per day, and let you
download up to 200K of programs per day). [Same as regular
user]. [See also user level].

regular user – See registered user.

reliable link – A connection that is "error-free," meaning that
an error control protocol is being used. [See also auto-reliable
link].

remote – A computer in a different location. For a BBS, the user
is at a remote location (since they are connected by the phone
line, and not right there). For a user, the BBS is at a remote
location.

request to send – See RTS.

reread – After a message is sent to your computer from a BBS, the
reread command will send the message again. This can be useful
if the message is long, and you miss part of it.

reset – A modem can be reset. This will change any options (such
as parity and speed) to the values that they have when the modem
is first used. This can be useful if you change some values for
the modem and aren't sure what they do, and then you find that
the modem won't work. Resetting the modem will fix everything
for you.

response format – The way that a modem sends certain information
to the computer. It can either be verbal (such as "BUSY" or "NO
CARRIER"), or it can be numeric ("7" or "3").

response time – How long it takes for the computer or modem to
respond to a certain condition. For example, a carrier detect
response time of 10ms means that it takes the modem 10 millisec-
onds to figure out that there is a carrier.

result codes – These are either numbers or words that the modem

sends to the communications program (which will usually print
them on the screen for you to see) that indicate how the modem
responded to an action you requested. For example, if you tell
the modem to dial a number, it may respond with "CONNECT 1200",
which is a result code that means that the computer dialed the
number and connected to a computer on the other end. [See also
numeric result codes, verbal result codes].

retrain - Some modems have the capability of monitoring the phone
line to "see" how good the connection is. If the line quality is
poor, these modems can "retrain"--they change their equalization
so as to better accommodate the lines. [See also equalization].

retransmit - To transmit information that was previously sent.
Whenever an error is encountered, retransmitting the data will
fix the problem.

return - ASCII character 13. This is the key marked "RETURN" or
"ENTER". It will advance the cursor to the next line. On some
printers, it will just move the print head to the left hand side,
and the printer then needs a linefeed to move to the next line.
[Same as carriage return, <CR>].

reverse - When you are in a message base, you may find this
command which will allow you to read messages is backwards order
(from newest to oldest messages).

reverse mode - When a modem switches the signals it should send.
For example, in reverse mode, a modem that dials another computer
will act as though it just received the call. Some modems only
let you dial out (they do not accept calls). In order to call
one of these modems, you would have to set your modem to reverse
mode, and then call the computer.

RI signal - See ring indicator signal.

right brace - The character }.

right bracket - The character].

ring - When someone calls you on the telephone, the sound that
your phone makes is called a "ring." Also, when you call someone
(or a computer), it will ring before they pick it up. This
indicates that the number is not busy, but nobody has picked up
the phone yet.

ringback - The sound that you hear over the phone that indicates
that the phone is ringing on the other end, and not busy. It
sounds a lot like a phone actually ringing.

ringing indicator LED - This is an LED on some external modems
that lights up when the phone is ringing. [See also LED indica-
tors].

ring indicator signal - This is the line on an RS-232C cable that
indicates that the phone is ringing.

RJ-11 - This is a normal phone jack. Modems usually have 2 jacks
like this, one to connect to the phone line, and the other to
connect to a telephone (that you can use when the modem isn't
being used).

RPG - See Role Playing Game

Role Playing Game - Some computers don't act as places to leave
messages or programs, but instead let you play a game. On these
computers, you have a character and call up the computer to move
around in a world with other characters (other people who call
up), and you interact with them (for example, you may try to kill
the character). [Same as RPG]. [See also on-line games].

rotary - A phone that dials with the pulse method. [See also
pulse dialing, tone dialing].

RS-232 - The name of a specific type of port on the back of some
computers, or peripherals such as modems. It has 9 or 25 pins.
[See also RS-232C].

RS-232C - The name of a standard (created by the Electronics
Industry Association) for communication between a computer and a
serial device. The interface consists of 25 wires, although a
variation contains 9 wires. Computers and peripherals which both
have an RS-232 port can be connected easily with an RS-232C
cable.

running - Working. If a BBS is running, then it is working
correctly and people can call it. [See also down].

RTS - Request To Send. This is when the computer tells the modem
that it wants to send information to the other computer. It is
only used in half duplex mode. [See also flow control, CTS].

---S---

S register - A type of register that modems use. [See also
register].

scan - To look through messages or file descriptions to either
find new messages or files or look for certain key words within
the messages or descriptions.

screen width - The number of characters that a computer can
display on one line. On most modern computers, it is 80 columns.
[Same as video width]. [See also columns].

script language - Many communications programs allow the user to
write a program, or script, which allows them to use the communi-
cations program without actually typing anything. It is often
used to call BBS's late at night to download programs or look for
new messages. This way, the user does not have to be there when

the communications takes place.

scripting language - See script language.

sector - A unit to measure storage space. It usually refers to
256 bytes. It is rarely used any more.

security level - Some BBS programs have different user levels,
usually numbered, which allow different levels of access. For
example, 0 might refer to an unregistered user, 10 a registered
user, and 99 for the SysOp. Each has different levels of access
on the BBS. [Similar to user level].

selectable COM ports - On internal modems for IBM compatible
computers, this allows you to change something on the modem
(usually a jumper or DIP switch) to allow you to change which COM
port the modem will be connected to. [See also COM port, jumper,
DIP switch].

selftest - The ability of a modem to test itself to make sure it
is functioning properly.

send - To transfer information from one computer to another. To
send a file is called uploading the file. [See also receive].

SendFax(TM) - A modem that can send faxes, but not receive them.

serial - The method used when a computer sends and receives data
one bit at a time. Contrast this to parallel. [See also paral-
lel].

serial interface - An interface that transmits only 1 bit at a
time. [See also parallel interface].

serial port - A port on a computer that is used to transmit and
receive data in a serial fashion (one bit at a time). [See also
RS-232C].

service class - The level of MNP protocol that is being used,
such as MNP Class 4 or MNP Class 5. [See also MNP].

settings - See format.

set-up - (noun) - Information that a BBS has about your computer.
(verb) - To give the information about your computer to a BBS.
This information usually includes screen width, whether or not
you want hot-keys, and other miscellaneous information.

shareware - Programs that can be distributed freely, but you must
pay for these programs if you use them. They usually allow you
to try them for a specified period of time and then you must
either pay for the program or get rid of it. Many BBS's have
shareware programs that you can download without paying the BBS,
but you must remember that if you use a shareware program you are
supposed to pay for it. [See also public domain].

shell virus - A virus which places itself either before or after

a program on a disk or in memory. It can be easy to detect such
a virus, since the length of the program will be longer after the
virus hits than it was before. [See also virus].

SIG - Special Interest Group. This is similar to a message base,
but it may also contain files. It is generally used on large
services, such as CompuServe. [See also SIGop].

SIGop - SIG OPerator. The coordinator of a SIG. This person is
responsible for checking messages to make sure that they pertain
to the topic of the SIG. [See also SIG].

signal power - The loudness or strength of what a modem sends
over the phone line. It is measured in -dBm's. [See also noise
power].

sign-off message - A message that is displayed when you log off a
BBS. Often the message will include the numbers of other BBS's,
and in some cases the BBS will allow you to leave a message for
the next user to call the BBS.

sign-on - The procedure of letting a BBS know who you are. This
involves giving the computer information such as you user number,
name, password, and sometimes even phone number. [See also
logon].

sign-on message - A message that is displayed by a BBS after you
sign on. Often news about the BBS will go here. On some BBS's
you can leave a sign-on message for the next caller. [See also
news].

simplex - See half duplex.

smart modem - Originally the brand name of a modem, it refers to
a modem which has capabilities which make it 'smart'. Most
modems now sold are considered smart. Basically, it means that
the modem has many features. [See also dumb modem].

smart terminal - A terminal that is capable of certain editing
features. [See also terminal, dumb terminal, terminal
emulation].

space bit - A bit set to zero.

space parity - This is when the parity bit is always set as a
binary 0. [See also parity bit, format].

special interest group - See SIG.

speed - This refers to the bps rate of a modem. The most common
modem speeds are 300bps, 1200bps, 2400bps, and 9600bps. [See
also effective transfer rate].

stand-alone modem - See external modem.

stand-alone program - A program, usually that allows you to do
file transfers, that is separate from your comm program, but can

be called by it.

start bit - This framing bit indicates that the data byte will be
following. It is always a binary 0. [See also format, framing
bits].

statistics - Any information that a BBS keeps on its users. Some
BBS's keep track of how many messages a user posts, how many
programs the user uploads or downloads, and even how many times
the user calls.

stats - See statistics.

status line - In communications programs, sometimes the bottom
line of the screen will contain a status line, which has informa-
tion such as the speed of the modem, the parity, how long you
have been connected to a BBS and other such information.

status lights - See LED indicators.

stop bit - When a modem sends a byte of data, it usually sends
one or two framing bits after the data byte, before the next byte
is sent. These bit(s) are called stop bits. They are always a
binary 1. [See also format, framing bits].

streaming - When a file transfer protocol sends data continuous-
ly, without waiting to make sure there are no errors. A stream-
ing protocol should check for errors, but if an error occurs the
file transfer should be stopped. A streaming protocol should
only be used with modems that have hardware error control. [See
also Ymodem-g, protocol]. [Same as full flow].

streaming Ymodem - See Ymodem-g.

STU-III - Secure Telephone Unit, generation III. This is a
system used by the government that makes voice and data calls
much more secure.

subboard - See message base.

subject - Most BBS's require that you leave a short description
about any messages that you post on the BBS. This description is
referred to as the subject of the message. [Same as title].

subop - A term used for the operator of a subboard. Some BBS's
allow a person besides the SysOp to control a specific message
base. This person would be able to kill any messages that he/she
felt were inappropriate.

synchronous communication - With synchronous communication, data
bytes are not marked with a beginning and end, but instead are
sent at a specific interval. When computers send data to modems,
it is synchronous communication. When modems send the informa-
tion they get from the computer, the modem usually will add start
and stop bits to identify the bytes. That is asynchronous commu-
nication. [See also asynchronous communication].

SysOp - Short for SYStems OPerator. This is the person who is in
charge of a BBS. He has the power to change anyone's user level,
delete users, delete or edit messages. Usually this is the same
person who paid for the BBS equipment and pays for the phone
line. [See also Co-SysOp].

SysOp window - Some BBS programs have an area of the computer
screen (on the computer that the BBS runs on, not the user's
screen) that gives information about the user who is on-line,
such as his password, where he is from and his phone number.
This is called the SysOp window, and is for the convenience of
the SysOp. [Similar to top of screen display].

system - [1] Your computer. When a BBS asks for your system
configuration, it is referring to information about your comput-
er, such as screen width. [2] A BBS.

system files - Any computer files that are used by an operating
system, or in the case of BBS's, files that are used by the BBS
program that do not get changed.

system name - Part of an internet address. [See also internet
address].

system news - See news.

---T---

tab - The key on your keyboard that will move the cursor forward
about 5 spaces. It is not an ASCII character (it is similar to a
function key, since it does not output a single character).

tag - To choose what you want from a list. A BBS might let you
tag certain files to download all at once. Also, you can tag
certain message areas. This way, the BBS will assume those are
the only message areas you are interested in, and it will not
send you messages from other areas.

tagline - When using an offline mail reader, you often have the
option of including a "tagline" at the end of your messages.
This is often a funny saying or a quote, and usually takes up
just 1 line.

talk mode - See voice mode.

TCM - Trellis Coded Modulation. This is a form of error control
used on some modems.

TCP - Transmission Control Protocol. This is used to control the
flow of data on the internet.

TCP/IP - Transmission Control Protocol and Internet Protocol
combined.

TD - Transmit Data. This is the wire in an RS-232C cable that is
used to transmit information.

Telco - Abbreviation for Telephone Company.

telecomm - Short for telecommunications. See telecommunications.

telecommunication(s) - This word has no precise definition, but
is frequently used. Its definition ranges from "any form of
communication over a distance" to "any communication by electric
means" to "two computers 'talking' to each other via modems."
Methods of communications that probably are considered telecommu-
nications: BBS's, telephones, TV's and fax machines. The word is
used both in singular and plural.

telecommuting - The idea of company employees working from home,
rather than their office. At home, they can communicate with the
office (and other entities) by modem or voice calls.

telecomputing - Using computers to communicate. This usually
involves using modems to communicate over the phone lines, but
can also involve other media such as the air waves.

Telenet - The packet-switched network that is used for PC-Pur-
suit, which is operated by U.S. Sprint.

term program - See terminal program.

terminal - A CRT and keyboard that are connected to either a
computer or a modem. [See also smart terminal, dumb terminal].

terminal emulation - When a communications program can simulate
the operations of a smart terminal.

terminal mode - Some modems have a built in terminal program. On
these modems, if that program is running, the modem is said to be
in its terminal mode. It also refers to the state where a modem
is ready to accept commands, although command mode is the pre-
ferred term.

terminal program - A program that allows a person to use a modem.
It is generally very limited. A communications program is a more
advanced version of a terminal program. Usually a terminal
program will simulate a specific brand of terminal. It generally
does not support file transfers. [Also called term program].

terminate - To disconnect with another computer. This is some-
times listed as a command in menus on BBS's.

text file - Any information that can be read, and is stored in a
computer file. A text file can be any kind of information, such
as a description of a computer program.

thread - A group of related messages on a BBS, within the same
message base. If a user posts a reply to a message, some BBS's
will start a thread. If a message is part of a thread, the BBS

will have a command so that you can see the original message,
which started the thread.

throughput - See effective transfer rate.

tilde - The character ~.

time limit - Most BBS's have a time limit, where you can only be
on the BBS for a certain amount of time. On some BBS's you can
only be on for a certain amount of time each time you call, on
others there is a limit of time that you can be on the BBS per
day.

time out - BBS programs often will disconnect a user if he
doesn't type anything for a certain amount of time. Time out
occurs when the time limit is reached and the BBS program hangs
up on the user. This is done so that users do not tie up the
BBS. If a user is connected to the BBS but is not using it,
other callers might not be able to use the BBS.

timing signal - A signal sometimes sent by modems over the phone
line that lets the receiving modem know when a byte of informa-
tion starts. It is required in synchronous communication.

title - See subject.

tone dialing - This is a method that a phone or modem can use to
dial a phone number. It uses one audible tone per digit to be
dialed. [See also pulse dialing].

top of screen display - Some BBS's have this display on the top
of the screen of the computer running the BBS. This will show
the SysOp certain information about the user who is on-line, such
as his phone number, how many programs he has downloaded, etc.
[Similar to SysOp window].

topology - How a network is organized. In other words, which
computers (or BBS's) are connected to each other.

touchtone dialing speed - The length of time that your modem
sends each touchtone digit over the phone lines. It is the
equivalent to the length of time that you hold down the buttons
on a phone when you make a call.

training sequence - A way of detecting the quality of the phone
lines. Two compatible modems can do this by sending out the
"training sequence," which tests the phone line at various fre-
quencies. When one of the modems receives this information, it
compares it to what it should be (if the phone lines were per-
fect). The modem then can adjust various frequencies (using
equalization) to accomodate the problems in the phone line.

transfer - To send a computer program from one computer to anoth-
er. [See also download, upload, protocol].

transfer protocol - See protocol.

transmission control protocol - See TCP.

transmission rate - See data transmission rate.

transmission speed - See data transmission rate.

transmit data LED - This is an LED on an external modem that will
light when the modem is transmitting data over the phone line.
[See also LED indicators].

transmit level - The "loudness" level of the sound leaving a
modem to go over the phone lines. It is measured in -dBm's. It
should be different at different frequencies, since certain
frequencies have more loss over the phone line than others. [See
also equalization].

trapdoor - This usually refers to a BBS program (or a mainframe
that you call up) that has a special code that can be entered to
give you high access. Usually, it is entered as a user name and
password when logging on. These are undocumented by the program,
and usually were created by the programmers so that they could
gain access to any computer running their BBS program. Hackers
try to find trapdoors, but they are usually not created by hack-
ers. (Some other kinds of software have trapdoors, such as video
games, which might have trapdoors to give you extra lives).

Trellis-coded modulation - See TCM.

trigger character - This is a character that, when pressed,
starts a macro. [See also macro].

trojan horse - A trojan horse is a program within another pro-
gram, usually on a mainframe or a computer running a BBS. The
original program looks innocent, but when run it will trigger the
trojan horse, which will usually try to gain access to the main-
frame computer system or BBS.

TTY - A TeleTYpe machine. It is a keyboard and a printer com-
bined in one unit. It is hooked up to another computer.

TTY mode - This is when a communications program emulates a TTY
machine, which only involves printing characters and recognizing
the linefeed, carriage return and backspace characters. [See
also TTY].

two-wire leased line - See leased line.

Tymnet - A packet-switched network.

type-ahead buffer - Some BBS programs let you type characters to
the BBS, even while it is sending information to you. When it is
finished sending the information to you, it will then act on the
information you sent. The type-ahead buffer refers to the proc-
ess, and the space in the BBS computer's memory where the charac-
ters are held.

---U---

UA - User Agent. It is the program that people use to create and
read messages under the X.400 system. [See also X.400].

UART - Universal Asynchronous Receiver/Transmitter. This is a
device in a computer or modem that will change serial data (the
way data comes in over the phone line) to parallel, and vice
versa. [See also serial, parallel, 16550 UART, 8250 UART, 16450
UART].

un-arc - See unarchive.

unarchive - To take out the files from an archive. [Same as
unarc]. [See also archive, extract, ARJ, ZIP, ARC, PAK, LZH].

unattended mode - This mode is available on some communications
programs.   It will let your computer wait for a telephone call
from another computer, and will let the person using that comput-
er access your computer (usually to download or upload programs).
It is called unattended because you don't have to wait for the
person to call, the program will automatically answer when some-
one calls. [See also attended mode]. [Similar to host program].

underline character - The character _.

underscore character - Any character (although almost always the
underline character) that is used for underlining. When this
method is used, the text to be underlined will be sent (usually
to a printer), and then backspaces will be sent, and then the
underscore character will be printed over the text, so it looks
like it is underlined.

upload - To send a program from your computer to a BBS. [See
also download, protocol].

uppercase - Letters that are used for emphasis, as opposed to
regular lowercase letters. CAPITAL letters are the same as
uppercase letters. The first word in a sentence is in uppercase.
Some older computers were only capable of displaying uppercase
characters.

user - A person who uses a BBS. For example, a BBS might claim
that it has 500 users, which means that there are 500 different
people who have called the BBS.

user level - The level of security which a user has. This usual-
ly is in the form of word(s), usually progressing from: New User,
Registered User, Privileged User, SysOp Level. [See also securi-
ty level].

user list - Most BBS programs will allow you to see a list of all
its users. It will show the user's name, and often city and
state. This is called the user list. Rarely will it show any

phone numbers or more detailed information.

user log - A file on a computer running a BBS that lists which
users called, what time they called, and sometimes information as
to what they did while they were on the BBS.

user name - This is the name that a person uses on a computer
system. Sometimes an alias is used, but it is more often the
user's real name or a variation of it. [See also alias].

user number - A number that is used by some older BBS programs to
keep track of users. On these BBS's, a user would have to remem-
ber a specific number as well as his password. Most BBS's now
just use the person's user name instead, which is much easier for
a user to remember. [Same as account number, ID number].

userfile - A file that a BBS program has that keeps track of all
users of the BBS and their statistics.

---V---

V.17 - The CCITT standard for fax transmission at 14,400bps.

V.21 - The international standard, created by CCITT, that con-
trols transmission at 300bps. [See also 103].

V.22 - The international standard for transmission at 1200bps,
created by CCITT. [See also 212A].

V.22bis - The international standard, created by CCITT, that
controls data transmission at 2400bps.

V.23 - The CCITT protocol for transmission of 1200bps one way,
75bps the other way.

V.24 - This, combined with V.28 is the CCITT standard equivalent
to EIA's RS-232C standard. V.24/V.28 has 25 pins, just like the
original RS-232C standard. [See also RS-232C].

V.28 - Part of V.24. [See also V.24].

V.29 - The CCITT standard for 9600bps half-duplex communications.

V.32 - The international standard controlling transmission at
9600bps. It was created by CCITT. It has provisions for fall-
back, if the line is too noisy.

V.32bis - The international standard for 14,400 bps modems,
created by CCITT.

V.42 - A standard error control system created by CCITT that is
in use on many 9600bps modems and some 2400bps modems. It in-
cludes LAPM, as well as MNP 2-4. [See also error control, V.42

compatible, V.42 compliant].

V.42 compatible – This is a modem that follows all the V.42
specifications, except for LAPM error control (instead it uses
MNP). [See also V.42].

V.42 compliant – This is a modem which follows all the V.42
specifications, and uses LAPM error control if possible. Other-
wise, it will go to MNP error control. [See also V.42].

V.42bis – A CCITT standard for data compression. It can compress
data with about a 3:1 compression ratio, although it can compress
up to 4:1 given the right conditions. Any modem with V.42bis
also has V.42 error control. [See also data compression].

V.Fast – At this time, the proposed CCITT standard for communica-
tions at up to 28,800bps. It will most likely be the new stand-
ard for high-speed data communications. It probably will use
adaptive line probing and symbol rates to determine the fastest
acceptable speed, given the condition of the phone line. Most
people will not be able to achieve 28.8Kbps rates originally,
until phone line conditions improve.

verbal result codes – These are result codes which are printed as
words, rather than numbers. [See also result codes, numeric
result codes].

verify – This is when a SysOp makes sure that a new user is who
he or she claims to be. The normal procedure is for the SysOp to
call up a new user, just to make sure that the phone number he
listed is real. This is a way to make sure that the users are
less likely to abuse the system. However, most SysOps do not
call new users, since it is time consuming. Some SysOps will
look at the information the new user left just to make sure it
"looks" right (if the new user says his phone number is 555-1212,
the SysOp knows it is not real). After verifying the user, the
SysOp will usually raise the user's user level.

verified user – Any user who has been verified by the SysOp. It
is also used to refer to users who have access better than that
of new users.

video width – See screen width.

videotex – The idea of getting information by computer, over the
phone lines, and paying for it. It is the computer version of
audiotex (900 numbers, voice mail, having computers call you).

virus – Any program which spreads itself secretly. It reproduces
within a computer, and also will go to other computers if possi-
ble (through file transfers). At a certain point in time, the
virus will do something (anything from saying "Boo" to something
destructive, such as erasing all files on a hard disk drive).
They are often hidden inside legitimate programs that seem to run
normally, but contain the virus. It will usually spread to every
program you run. Viruses became widespread because BBS's can
inadvertently spread virus all across the country. Whenever you

download a program, it might have a virus in it. However, there
are several programs available which find many viruses and can
destroy them.

voice detection - The ability of a modem to detect whether a
computer answers the phone, or whether it is a human voice.

voice grade - A telephone line that is designed to transfer human
voice. This is the way most phone lines are set up. However,
the phone company also has data grade lines, which are supposed
to make data communications better. [See also data grade].

voice mail - An addition to some modems. This allows the modem
to also answer incoming voice calls, send recorded (voice) mes-
sages to the caller, and let them leave a message. [Same as
answering machine].

voice mode - Some older modems require the user to manually dial
phone numbers through a telephone. When this is done, the modem
is in voice mode. When the remote computer picks up the phone,
the user must switch his modem from voice mode to data mode.
[Same as talk mode]. [See also data mode].

vote - Some BBS's have this feature, which allows the SysOp to
find out user's preferences about things ranging from operation
of the BBS to political positions. It is similar to a survey in
the non-computer world. [Same as poll].

VT100 - A smart terminal, which is emulated by many communica-
tions programs. It uses ANSI codes. [See also ANSI].

VT52 - Another smart terminal, which is emulated by some communi-
cations programs.

---W---

WHOIS - A way of finding out biographical information about a
user on internet, if the user has provided such information.

window - A distinct area of a computer screen that contains
information different than the rest of the screen. Sometimes it
covers other information 'underneath' the window (in which case
it is temporary), or it is permanent and does not contain other
information. [See also SysOp window].

word wrap - A function of editors on BBS's (just like that found
in most word processors) which will move a word that won't fit at
the very right hand of the screen down to the next line.

worm - A program which embeds itself within another program.
Either it tries to find a space in which it won't be noticed, or
it will just stick itself anywhere within the main program (which
will ruin that program). A worm is almost always destructive.

[See also virus].

---X---

X.25 - This is a packet-switching protocol developed by CCITT.
It is used to carry large amounts of data at fast speeds over
leased phone lines. [See also X.32].

X.25 dialup - See X.32.

X.32 - This is CCITT's 1984 update of X.25, also known as X.25
dialup. [See also X.25].

X.400 - This is the CCITT standard protocol for a global system
for the exchange of electronic mail.

X.500 - The CCITT standard for a directory of the users of the
X.400 system. [See also X.400].

xfer - Short for transfer. It usually refers to file transfers.
[See also upload, download].

Xmodem - A file transfer protocol developed by Ward Christensen
around 1977. It is fairly slow by today's standards, but was the
first widespread file transfer protocol. It uses blocks of 128
bytes, and after each block is sent, it sends a 1 byte checksum
to check for errors. If an error is encountered, the block will
be re-sent. Almost every communications program offers this
protocol. [Same as Christensen protocol]. [See also protocol].

Xmodem/CRC - The same as Xmodem, but it has a 16-bit CRC instead
of the checksum, which makes it more reliable (it catches more
errors). [See also protocol].

Xmodem-1K - This is similar to Xmodem/CRC, except it uses blocks
of 1024 bytes, rather than 128. It is faster than Xmodem, since
it needs to stop less often to check for errors. This is some-
times incorrectly called Ymodem. [See also protocol, Xmodem,
Ymodem].

Xoff - The CTRL-S character. This is often used to pause infor-
mation that is being sent. The information will be continued
when an CTRL-Q is received. [See also flow control, Xon].

Xon - The CTRL-Q character. This will sometimes continue paused
information. [See also flow control, Xoff].

Xon/Xoff - The flow control method using the Xon and Xoff charac-
ters. It is built into the software, not the hardware. [See
also Xon, Xoff, flow control].

---Y---

yell - See page (verb).

Ymodem - A file transfer protocol which can transfer more than
one file at a time. It transfers both a file and some informa-
tion about the file (including its length, and the name of the
file). It is similar to Xmodem/CRC, except that Ymodem can
transfer more than one file at a time. It will use CRC-16 if
possible, or else it will use a 1 byte checksum. It will use
both 1024 byte blocks and 128 byte blocks. [See also protocol].

Ymodem-g - This is Ymodem changed to provide best results with
error-correcting modems. Errors can be discovered by the proto-
col, since Ymodem-g uses CRC, but if there are any errors in the
transmission, the transmission will be aborted. [See also Ymo-
dem, protocol, streaming]. [Same as streaming Ymodem].

---Z---

ZIP - The file extension which refers to archives that were
created by the program PKZIP. You need the program PKUNZIP to
get the files out of the archive. [See also archive, unarchive,
PKZIP, PKUNZIP].

Zmodem - A file transfer protocol which is known for its speed,
as well as the ability to transfer information about the files
which it sends. It has crash recovery and auto-download fea-
tures, and can use a 32 bit CRC, which makes it almost error-
free. [See also protocol].

*** APPENDIX A ***

A List of Acronyms used in Telecommunications
(Words in [brackets] are to be exchanged with other words)

AAMOF   As A Matter Of Fact
ADN   Any Day Now
AFAIK   As Far As I Know
AMF   Goodbye! (Adios [My Friend])
AS   (On) Another Subject
ATSL   Along The Same Line

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AWGTHTGTTA?    Are We Going To Have To Go Through This Again?


B4N            Bye For Now
BAD            Broken As Designed
BAMF           Bad [A] [My Friend]
BBR            Burnt Beyond Recognition
BBS            Bulletin Board System
BCNU           Be seeing you
BNF            Big Name Fan
BRB            (I'll) Be Right Back
BRS            Big Red Switch
BTA            But Then Again
BTW            By The Way
BWQ            BuzzWord Quotient


CU             See You
CUL            See You Later
CUL8R          See You Later
CYA            Cover Your [A]


DIIK           Damned If I know
DTRT           Do The Right Thing
DWIMC          Do What I Mean Correctly


ESAD           Eat [Sugar] And Die
ETLA           Extended Three Letter Acronym


FAQ            Frequently Asked Questions
FISH           First In, Still Here
FITB           Fill In The Blank
FOAF           Friend Of A Friend
FRED           [Frigging] Ridiculous Electronic Device
FUBAR          [Fouled] Up Beyond All Recognition (or repair)
FURTB          Full Up Ready To Burst (regarding a hard drive)
FWIW           For What It's Worth
FYBITS         [Fool] You, Buddy, I'm The Sysop.
FYI            For Your Information


<G>            Grin
GA             Go Ahead (or, 'I'm done, it's your turn to talk')
<GD&R>         Grinning, Ducking & Running (placed at the end
               of a nasty message)
GDW            Grin, Duck, and Weave
GFR            Grim File Reaper
GIGO           Garbage In, Garbage Out
GIGO           Garbage In, Gospel Out (believing everything from computers)
GIWIST         Gee I Wish I'd Said That
GLAGH          Good Luck And Good Hunting
GMTA           Great Minds Think Alike (when two people say the
               same thing at the same time)


HHTYAY         Happy Holidays to You and Yours


IAE            In Any Event
IANAL          I Am Not A Lawyer
IC             I See
IITYWISWYBMAD  If I Tell You What It Says, Will You Buy Me A
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```
                drink
IMAO            In My Arrogant Opinion
IMCO            In My Considered Opinion
IMHO            In My Humble (or Honest) Opinion
IMNSHO          In My Not So Humble Opinion
IMO             In My Opinion
IOW             In Other Words
ISBAB           I Should've Bought A Book
ITSFWI          If The Shoe Fits, Wear It
IWBNI           It Would Be Nice If


JIC             Just In Case
JITNOT          Just In The Nick Of Time


KHYF            (I) Know How You Feel


L8R             Later...
LAB&TYD         Life's A Bitch & Then You Die
LTNT            Long Time, No Type


MLA             Multi Letter Acronym
MOTAS           Member Of The Appropriate Sex
MOTOS           Member Of The Opposite Sex
MOTSS           Member Of The Same Sex


NBFD            No Big [Frigging] Deal
NFW             No [FrigginG] Way
NTYMI           Now that you mention it


OFTPATHIRIO     Oh [Fool] This Place And The Horse It Rode In On
OIC             Oh, I See
OTOH            On The Other Hand


PFM             Pure [Frigging] Magic
PITA            Pain In The [A]
PLOKTA          Press Lots Of Keys To Abort
PMFBI           Pardon Me For Butting In
POSSLQ          Person of Opposite Sex Sharing Living Quarters
POV             Point Of View
PPTSPAHS        Please Pass The Salt, Pepper And Hot Sauce


<ROTF>          Rolling On The Floor
<ROTFL>         Rolling On The Floor Laughing
<ROTFLMAO>      Rolling On The Floor Laughing My [A] Off
RPG             Role Playing Game
RSN             Real Soon Now
RTFM            Read The [Fine] Manual (or message)


<SG>            Sheepish Grin
SFLA            Stupid Four Letter Acronym
SMOP            Small Matter Of Programming
SNAFU           Situation Normal, All Fouled Up
SO              Significant Other
SOW             Speaking Of Which
SWMBO           She Who Must Be Obeyed
SYSOP           System Operator
```

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TAFN            That's All For Now
TANJ            There Ain't No Justice
TANSTAAFL       There Ain't No Such Thing As A Free Lunch
TDM             Too Damn Many
TFTHAOT         Thanx For The Help Ahead Of Time
TGIF            Thank God It's Friday
TIA             Thanks In Advance
TLA             Three Letter Acronym
TOBAL           There Oughta Be A Law
TOBG            This Oughta Be Good
TPTB            The Powers That Be
TTBOMK          To The Best Of My Knowledge
TTFN            Ta Ta For Now
TTL4N           That's The Lot For Now
TTUL            Talk To You Later
TTYL            Talk To You Later

WIMP            Windows, Icons, Mice, and Pointing
WOFTAM          Waste Of [Frigging] Time And Money
WTF             What The [F]
WYGIWYPF        What You Get Is What You Pay For
WYSBYGI         What You See Before You Get It
WYSIWYG         What You See Is What You Get

YABA            Yet Another Bloody Acronym
YGLT            You're Gonna Love This
```

*** APPENDIX B ***

A List of many Emoticons
(note that any of these can be interpreted in several ways)

```
:)      The original smiley face, "I'm Happy".
:(      The original frown
:-)     Smiling, happy face; don't take me too seriously
B-)     Above, but poster wears glasses or sunglasses
8-)     Same as previous; also used to denote wide-eyed look
#:-)    :-) done by someone with sort of matted hair
:-(     Sad or angry face
>:-(    Even angrier face
;-)     Winking happy face (something said tongue-in-cheek)
:-P     Tongue stuck out
:-b     Same as previous
:-B     Buck-toothed smile
:-D     Wider happy face (or mouth open too much)
:-o     "Oh, nooooooo!" (a la Mr. Bill)
#:-o    Same as previous
:-)##   Person with a beard
(:-)    Messages dealing with bicycle helmets
<:-)    Dumb questions
oo      "Somebody's head-lights are on" messages
O>-<|=  Messages of interest to women
```

```
;-)      Wink ( take this message with a grain of salt)
|-(      Late night messages
:^)      Messages teasing people about their noses
:-{#}    Messages teasing people about their braces
(:-#     Message concerning something that shouldn't have been said
(:-$     Message indicating person is ill
(:-&     Message indicating person is angry
(:-*     Kiss
(:-(     Message indicating person is VERY sad
(:^(     Message concerning people with broken noses
(:<)     Message concerning blabber mouths
:-(=)    Message about people with big teeth.
&:-)     Message from a person with curly hair
?-(      Message about people with a black eye
b-)      Message about a pirate
*:*      Message about fuzzy things
*:**     Message about fuzzy people with a fuzzy mustache
%-)      Message about people with broken glasses
+<:-|    Message from a monk/nun
{0-)     Message from cyclops
(:-D     Message concerning another blabber mouth
(:-|K-   Formal message
B-)      Message from Batman
||*(     Handshake offered
||*)     Handshake accepted
>< ><    Message about/to someone wearing argyle socks
:-)<></////> Message about someone wearing a striped tie
2B|^2B   Message about Shakespeare
=|:-)##  Message about Uncle Sam
>:-{     Message about Dracula
\:-)     Message about Gumby
(-_-)    Secret smile
<{:-)}   Message in a bottle
<:-)<<|  Message from a space rocket
(:-...   Heart-breaking message
<<<(:-)  Message from a hat sales-man
(O--<    A fishy message
(8-)     Message from a four-eye
(:>-<    Message from a thief: hands up!
<I==I)   A message on four wheels
:^{      User wears a mustache
:*)      Another person wearing a mustache
{        User is Alfred Hitchcock
*** STUFF TO END THE FILE WITH ***
```

HISTORY

Telecommunications Dictionary version 0.99:

    This was the first version available. It was incomplete,
with about 150 words, only covering A-K. But it was nice for
people not to have to wait another year to see part of it. It
was released in 1989. It was usually in a file called
"MODEMDIC".

Telecommunications Dictionary version 1.00:

    This was the first real version. It had somewhere around
430 words defined in it. It was released on August 15, 1991. It
was sent out originally as "TDIC100" in a ZIP compressed format.

Telecommunications Dictionary version 1.10:

    This version had more than 530 words listed. Many words were
added, some extra information was added to some old words, and
several minor errors were corrected. It was released on August
22, 1991 (I was very busy that week!). It should be called
TDIC110.TXT, or if archived, TDIC110.ZIP (or whatever extension).

Telecommunications Dictionary version 1.20:

    This version was not officially released. It was an interim
version. It updated about half the definitions existing in
version 1.10, and minor inconsistencies were fixed. Also, a few
words were added.

Telecommunications Dictionary version 1.21:

    Another interim version, not officially released. Last
modification in August, 1992.

The Modem Dictionary version 1.25:

    An interim version, just before 1.30. The name was changed,
since the dictionary is specific to modems, just a small portion
of telecommunications.

The Modem Dictionary, version 1.30:

    This version was widely distributed, and contains all of the
improvements found in the previous, unreleased versions. It was
marketed as shareware on a trial basis. This version is on file
at the United States Copyright Office, in Washington. Released
in November 1992.

The Modem Dictionary, version 1.50:

       The current version. The main change is that is was changed
back to freeware. It will remain that way. Released 1/93.

The Modem Dictionary, version 2.00:

       This version. It has been improved quite a bit, mostly due
to the appendixes and the new definitions relating to the Inter-
net and offline readers. Released 9/93.

*** END ***