The Binkley Outbound and Nodelist Keeper Version 1.17 \*\* September 25, 1990 Copyright (C) 1986-1990 by Tom Kashuba

This documentation is a stripped down and reformatted subset of the documenation for Oman, the parent program of which Bonk is a subset. As such, there may be an odd error or two in syntax, meaning, or option descriptions that slipped through the proof reading. So, keep a few grains of salt handy. Thanks. -Kash.

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# Introduction

Bonk stands for the <B>inkley <O>utbound and <N>odelist <K>eeper and is an independent maintenance utility intended to be used by BinkleyTerm operators to inspect and/or maintain the outbound mail holding area, nodelist, and BinkleyTerm log file.

Bonk is actually a compiled subset of OMAN (The Opus System Manager) for Opus 1.10+ and contains just those functions that deal with the outbound mail area, nodelist, and log file.

To operate, Bonk needs to know several things about your BinkleyTerm and computer configuration. As such, it takes its operational information from a combination of its own optional configuration file (eg, Bonk.Cfg), command line switches, and/or the DOS environment variable, "BONK=".

For compatibility across a wide range of platforms, Bonk has several video output modes available such as via DOS, FOSSIL, BIOS, or direct video buffer manipulation (RAM). In addition, Oman can also be run remotely via FOSSIL controlled modem access. When operated remotely, it can be optionally set to request a password for added security and has carrier detect logic that will immediately terminate the program when the carrier is lost.

# Packing List

The official Bonk utility consists of the following files. Any further distribution of this kit must include all of these files, as is, without modifications of any kind.

- README.1ST Brief unpacking instructions.
- BONK.PRN Documentation (Printer format w/form feeds)
- SAMPLE.CFG Sample configuration file.
- BONK.EXE Main program

# Requirements

MEMORY

A minimum of about 250k, depending on the functions used.

#### DISK SPACE

Less than 350k is required. No other major operational requirements. Just enough to hold the component files of this package with a little safety margin.

#### OPERATING SYSTEM

Although this product makes use of the extended path specifications that were first supported by MSDOS 2.0, the supporting libraries used to create it assume MSDOS 3.0 or higher. MSDOS 3.0 or higher is recommended.

#### KEYBOARD

Local mode:

When running in local (non-remote) mode, the program accepts standard ASCII, WordStar Ctrl-Codes, or IBM PC key codes.

Remote mode:

When running in remote mode (via modem), the program accepts ASCII or IBM PC key codes (if they can be sent). A limited translation of ANSI or VT-100 cursor keys is employed at the menu prompts for HOME, END, LEFT, and RIGHT keys for moving through records.

### FOSSIL INTERFACE PROGRAMS

For remote operation or when using consoles that are not fully compatible with the IBM PC, a "FOSSIL" interface is required (Version 5 or greater) to make use of the "FOSSIL" or remote options. X00 by Ray Gwinn and OpusComm by Bob Hartman are examples of compatible FOSSIL interfaces. Please note that the Bonk option of "Video: FOSSIL" does \*not\* refer to the recently introduced VIDEO FOSSIL interface but only to the use of a regular FOSSIL for output.

# CARE and FEEDING

Bonk has no special nutritional requirements but likes to be operated in airy, indirectly lit, open areas with the New Age album of your choice playing in the background.

FILE FORMATS

Bonk only works with outbound area, nodelist, and log files that are compatible with the BinkleyTerm and Opus environments.

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#### REMOTE MODE

When running in remote mode (via modem), the program requires a FOSSIL interface, Version 5 or greater.

#### VIDEO SYSTEM

Character Set

The program primarily uses the IBM Extended ASCII character set as implemented on the IBM PC but makes minimal use of its text graphics codes (128-255).

For those systems that have trouble displaying IBM text graphics, you can optionally request that all IBM Extended Graphics be translated into their nearest ASCII equivalents. See the section on the configuration file for details.

#### Video Monitor

The screen presentations in both local and remote modes utilizes 24 lines of 80 columns each and can be presented in either monochrome or color.

#### Video Interface - Hardware

Any controller that is compatible with the text modes of the IBM MDA or IBM CGA video controllers or any later models that are downward compatible such as the EGA and VGA. controllers. Since bit mapped graphics are not used, graphic modes are not an issue.

# Video Interface - Software

The program has different software support requirements based upon its selected video mode. It defaults to using very standard DOS supervisor calls (slowest but safest) but can be set to use IBM-BIOS (faster), FOSSIL (most generic), or Direct Ram Write (very fastest) video routines. The following table lists the requirements for each mode.

Video Mode Requirements	Video	Mode	Requirements
-------------------------	-------	------	--------------

- IBM IBM PC/XT/AT compatible BIOS
- DOS MSDOS 2.1 or higher with ANSI.SYS
- FOSSIL FOSSIL driver (Version 5 or superset)
- RAM IBM CGA or MDA video buffercompatibility

Configuration ......

Bonk's operational parameters are taken from up to three different sources which can all work together in an increasing order of precedence (as listed below):

o Bonk configuration file (eg, Bonk.Cfg)

You can use an optional Bonk configuration file, "Bonk.Cfg", to conveniently set its initial defaults.

o Bonk Environment Variable "BONK="

You can set a DOS environment variable, "BONK=", which can specify the same values as those that can be entered on the command line (see command line, next).

o DOS command line

You usually run Bonk by just entering "BONK" on the DOS command line which would run it using the defaults set in BONK.CFG. Or you might add some command line switches to temporarily override the defaults.

Actually, the scanning order is a little more complex to allow for a wide range of control variations. The exact order in which these configuration sources are scanned is as follows:

- 1. Environment string "OMAN=" only for -C or -N parameters.
- 2. DOS Command line only for any -C parameter.
- 3. Default Configuration File (or as given by -Cpath).
  4. Environment string "OMAN=" (all settings EXCEPT -C, -N)
- 5. DOS Command line (all settings EXCEPT -C or -N)

As these sources are scanned in the above order, an option set in one overrides any like option set at a previous level.

Please note that, although the -N switch looks like a command line switch, it is only meant to be used in the environment string and turns off command line scanning. This is the primary reason for environment string being scanned before the command line. That is, by setting the -N switch in the environment string, the command line will not be scanned. This feature is needed in some cases where a host program might unconditionally pass some command line parameters which are not compatible with Bonk.

# Configuration File

The configuration file, "BONK.CFG", is optional and, if used, must be placed in the same directory in which Bonk is located unless its path is explicitly defined on the command line or in the BONK environment

variable. See the Appendices for a complete description of the configuration file, its syntax, and the acceptable commands.

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# Configuration (cont)

Here are some sample configuration files:

The following configuration is for 100% compatible IBM PC or compatible and enables direct video RAM screen write for maximum video response. It also disables the use of color. Although the program automatically matches the color mode indicated by the BIOS flags they do not always reflect the desired mode. With this setup, the program can be run without any arguments.

; ; Standard local PC configuration ; COLOR Off ; Forces monochrome VIDEO Ibm ; Video uses IBM BIOS ;

The following configuration autostarts the Outbound Manager whenever it runs and is for a machine whose BIOS does not match IBM's so the FOSSIL interface is requested for video operation. With this setup, the program can be run without any arguments.

; Autorun Outbound, Use FOSSIL video ; EXEC Outbound ; Run OutBound Manager VIDEO Fossil ; Video uses FOSSIL calls ;

# Configuration (cont)

The following configuration sets up a forced remote operation at 2400 baud using the COM1: port and enables password control for the password "ABC".

The "CMD off" is used here to suppress the scanning of the command line in case the program is called from another that passes command line switches that are incompatible.

Please note: the manual setting of the baud rate and communications port is not normally necessary when running Bonk as a child of Opus because Opus will add the necessary command line switches. Instead, this example might be used in special cases where Bonk needs to be run remotely outside of an Opus scenario.

Also note: the "VIDEO Fossil" command is actually redundant since the "Port" command will force the use of the FOSSIL interface.

; Example BONK configuration file (remote)
;
EXEC Outbound ; Jump to NED
VIDEO fossil ; Use FOSSIL
PORT 1 ; Use COM1:
SPEED 2400 ; Run at 2400 baud
REMPWD ABC ; Ask/Verify password "ABC"
;

Other, Opus or BinkleyTerm related environments?

It is quite possible that BONK can be used for other environments closely related to BinkleyTerm such as SeaDog and Dutchie with judicious use of the configuration parameters.

If running Bonk as a child from a BBS, host, or a netmail program that stuffs the command line with arguments different than those of Opus, you will need to use the "CMDLINE OFF" configuration command to suppress BONK' processing of the command line. Likewise, you probably should NOT have an "BONK=" environment string set as that is simply an alternative to command-line style processing.

In such non-standard environments, please keep in mind that the data files you would be accessing must be compatible with BinkleyTerm versions 2.xx.

Configuration (cont)

DOS Environment

You can alter Bonk's basic configuration using the DOS environment variable called "BONK=" using exactly the same format and command set as for the command line. See the section on "Command Line Switches", for details on the available options.

For example, to run with an alternate configuration file "C:\BONK2.CFG", with color forced OFF, and autostarting the Outbound Manager, you could place the following command in your AUTOEXEC.BAT file or execute it directly from DOS at some time prior to running the program:

SET BONK= -CC:\BONK2.CFG -L0 -X0

Then you need only run the DOS command "BONK" to have all those options in effect. Note, however, that anything you might then enter on the command line will override the above settings.

Command Line Switches

The option switches found on the command line (or as stored in the environment string "BONK=") are scanned and processed after the configuration file has been processed, thus acting as overrides to any settings made in it. For a complete listing of all command lines switches, please refer to Appendix I.

Example command switch usage:

Bonk ..... Take all settings from Bonk.Cfg BONK -10 ..... and Force video to Black and White BONK -vr ..... and Use Video RAM (fast write) mode. BONK -11 -vr .... and Video RAM and force Color BONK -11 -vr -yb1 .... and Color, RAM, Watch for Ring on COM1:

# Operation ......

Starting the Program

The program is started by running it as a DOS command with any desired option switches following on the command line. However, to make use of faster video, to force the use of color or monochrome modes, or to set other features, you'll most likely want to setup the configuration file, BONK.CFG. You can use command line switches for many of those things but a configuration file is more complete and saves keystrokes.

Additional startup automation is provided by use of the BONK= environment variable which be set in your AUTOEXEC.BAT and can contain any command switches you might otherwise enter on the command line. In most cases, though, you'll be better off setting up all major things in the configuration file and use option switches on the command line for temporary overrides.

After the program analyses and sets up its configuration, it clears the screen and presents you with its "parameter screen" which displays all major paths, settings, and options for you review or just skip by pressing <ENTER>. If you started the program using the autostart option to jump directly into a particular function, the parameter screen is bypassed, bringing you straight to the main menu.

When executed in remote mode, it automatically enables carrier detect sensing and will instantly terminate upon loss of carrier to return to the parent program. Remote mode is typically only used when it is spawned as a 'child' of Opus or some other telecomm program.

If modem ring monitoring is enabled with the RingMode BEEP option, the speaker will beep when an incoming call is detected to alert you of that fact. See the Appendix on Ring Watch for more information.

If you start up in macro playback mode "-[m", then BONK will immediately begin taking key-strokes from that given macro file as if you had entered them manually until there are no more; at which point, manual keyboard entry resumes. See the appendix on MACROS for more information on macros.

### Main Menu

When the program is run without any autostart option, it displays a status screen with its operating parameters. Pressing {Enter} will bring you to the main menu which has the following options:

- P) arameters Screen Return to opening parameter screen
- O)utbound Manager Manages the outbound mail area
- N)odelist Manager Nodelist Display and Editor
- L) og Surveyor Pre-scans, displays, searches log file
- Q) uit Return to DOS (or parent program).

From this menu, you request the other program functions and return to it when you exit from them.

The Quit option exits the program and will return to DOS if the program was from the DOS command line or the host program if it was run as a "child" from it.

Text field editing

The program has a fairly complete input text field editor. Whenever you enter or edit a text field, this editor takes over. Much like the DOS-EDIT or other command line editors, it gives you the following line editing controls:

Action	Ctl-Keys	Keypad
Move left 1 char pos	^S	[Left]
Move right 1 char pos	^D	[Right]
Move to field start	^X	[Home]
Move to field end	^E	[End]
Move left 1 word	^A	^[Left]
Move right 1 word	^F	^[Right]
Delete curr char	^G	[Del]
Delete left char	^H	[BS]
Delete to end	^Y	^[Home]
Delete to home	^U	^[End]
End input/edit	^M	[Return]
Cancel Input (Clear field	^[	[Escape]

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Major Functions

This section contains brief notes on each of the major functions within Bonk. Since most functions are screen oriented and relatively easy to use, detailled operational explanations have been left out of this section. You should use Bonk's built-in On-line Help System which is available on nearly all function menus via the help command (?). It offers specific, context sensitive help on each function.

Outbound Manager

#### SUMMARY:

This function starts up by scanning the outbound mail area, storing in memory information about the items found, sorts them into address order, and displays them in a visually coordinated fashion similar to a spread-sheet program.

#### FEATURES:

- Supports OMMM and Binkley style zoned directories
- Lists outbound area in Lotus-like format
- Lists the files within Attached file lists (FLO's).
- Lists empty, zero-length ARCmail entries.
- Lists incomplete Zmodem transfer file markers.
- Lists From/To/Subj of messages in unarced packets.
- Readdresses pending outbound mail objects
- Changes bundle priority (Hold, Direct, Normal, Crash)
- Deletes bundles, file lists, ArcMail, and others.
- Creates POLLs using Null FidoNet Packets ("Bundles")
- Creates File Requests (with matching POLL object)
- Creates File Attaches (directly creates .?LO file)Built-in DOS directory command
- Merges bundles when needed due to address changes.
- Merges file lists when needed due to address changes.
- Deletes null archives, "no call" and Zmodem markers.
- Runs DOS command from outbound menu.
- Full Screen File Request and Send editor.

The tabular display shows several selectable levels of detail:

- Mail bundles, archives, file lists and bad call markers.
- Archived mail bundles and file attach list contents.
- Spent mail archives of zero length

All objects are sequentially numbered for the ease of subsequent activities which one might group as:

- Readdressing
- Priority changing
- House keeping

- Inspection File Request and File Sends

# Major Functions (cont)

#### NOTES:

The Outbound Manager's options are fairly self-explanatory and a help key is available that invokes the Bonk On-line Help system. Please use it for more details on specific functions and fields.

In addition to modifying the characteristics of existing objects, you can create proper, zero-length, POLL packets, WaZoo (.REQ) File Requests, or File Send lists (.FLO).

You can change the mail priority or routing of objects with the commands of Norm, Crash, Hold, Direct, and Leave commands. For example, if your bundler program is set to HOLD all mail to a particular address but you wish to allow one particular message bundle to go out right away, you could set that one bundle to NORMAL or CRASH so it can go out right away.

Including 'Other' Files in the Display

The outbound manager can optionally display a number of 'other' file types that are not strictly mailable objects. There are several of these 'other' types that can be included. When you first enter the outbound manager, some of them are already set to be shown and are listed in the "Misc(F)iles:" area on the top line of the menu area. You can change these defaults by using the "OHMfmt" configuration file statement or, while in the outbound manager, you can toggle them on and off using the "F" command.

### Zoned Operation

When multiple, zone-specific outbound directories are used as with zoned operation of the BinkleyTerm and Ommm mail packing programs, then the directory for the default zone is the one that is first scanned and displayed. After that, the Z)one command can be used to switch between zones.

Any changes to the zone segment of an object's address will "toss" the object into zone-specific directory for that zone. If the no directory has been created for the object, then a rename error will be reported and the address change will fail, safely.

# Domains

This version of Bonk does not yet support Domains.

Entering Addresses

When readdressing a mail object, you can enter any or all of a netmail address' components. Only those that are given will be changed while those that are not will default to corresponding part of the original address. For example:

- 3: Change zone to 3 (tosses object)
- /111 Change node to 111
- 123/ Change district to 123
- 2:/12 Change zone to 2, node to 12 (tosses object)

Nodelist Editor

#### SUMMARY:

The Nodelist Editor, allows the Sysop to directly edit the actual Nodelist Data and Index files. It displays one record (Node) per screen. You can edit, search, jump to, insert, or delete nodes in the current, compiled nodelist data.

### FEATURES:

The EDIT function changes the current record's:

- o System Name
- o System Password
  - ssword o
- o Miscellaneous Info o Telephone number
- o User & Call cost o Hub node
- o All user bit flags
  - o Modem type & speed
- The INSERT and DELETE functions are handy for those times in between official nodelist updates when you wish to add a new node or remove

official nodelist updates when you wish to add a new node or remove one that has left the net. Note, this does not change the original nodelist.### file but DOES directly modify the working files.

The LIST mode, lists for each node, one per line, ...

Nodel:	ist posi	tion		0	Misc	cellaneo	us In	fo
o Network address				0	Tele	Telephone number		
Syster	n Name			0	Cont	tinuous	mail	flag.
Zone,	Region,	Host,	Hub	nodes	are	high-li	ghted	l
	Netwo: Syster	Network addres System Name	Network address System Name	System Name	Network address o System Name o	Network address o Tele System Name o Cont	Network addresso Telephone nSystem Nameo Continuous	Network address o Telephone number

#### NOTES:

It is important to note that all work is done on the compiled nodelist file and its index. Should anything go wrong or you find yourself edited into a corner, you can simply recompile your original, distribution nodelist.

Please remember that the prime use of Nodelist Editor is to make TEMPORARY updates to your nodelist while waiting for subsequent updates of the distributed nodelist. More elaborate updating is not recommended since the next nodelist compilation will erase what you've done.

Due to the size of the current nodelist, the nodelist data file is now in excess of 800k. For this reason, as well as for speed, all INSERTS and DELETES of nodes are done IN PLACE in the live nodelist without virtue of a back up.

When INSERTING a new node, all records above the insert point are shifted up by one, the new one is added where it belongs and the index is rewritten. When DELETING a node, all records are shifted down to the deletion point, the be deleted is overwritten by the shift, DOS is asked to resize the file, and the updated index is rewritten to disk.

Sysop Name Search

The Sysop Name search is invoked by the F)ind O)perator command and will search the sysop index for a sysop's name and display the corresponding node and then ask whether you want to seek out any next or previous name that also matches the given text.

Normally, the text you enter is taken to be (at least) the beginning portion of the sysop's LAST name. If you enter two words without a comma, then the program assumes you have entered a FULL name and reverse the words, adding a comma, to create a phone book style format. Because of this, you should only enter two words when it is a full name. Eg, a partial, two word name, like "Tom K", would end up as "K, Tom". If you were looking for me, you might enter "Tom Kashuba", "Kashuba", or, maybe, "Kash".

When entering names in the above manner, a binary search is performed on the sysop index. It is very fast but relies on your input being LAST NAME FIRST. If you are not sure of the name and only recollect a text fragment of it, you can request a linear search that will search each and every record for any name that contains the given text. To request this kind of search, you prefix your text with a question mark (?). Eg, "?TOM".

When requesting a linear search (?text), you should only enter a single, small piece of text without spaces. Spaces trigger an attempt to reverse the text into the reverse name order that the sysop index is stored in and would probably result in a search text that is not what you intended.

# Major Functions (cont)

Regardless of which method you request, whenever a match is found, you are asked whether you want to find the next or previous match. This allows you to choose among several nodes whose sysop names match the search text.

When a binary search is requested (without a '?' prefix) but no match is found, you are asked if you want to try again using the linear (ie, "Wild") search. If you request it, then the same text you entered for the binary search is used, again, for a linear search. This is adequate if you entered a short, single piece of text but will probably do no better if you entered what you thought was a full, correct name.

When unsure of a sysop's name, use the linear search with just a short name fragment that you are sure exists within the desired name. Eg, if you know he or she was Irish and had "Mc" in their name, you would enter "?mc". Likewise, if the sysop's first name was John, then use "?John". If, eg, you entered inadvertently "John", then only those whose LAST name starts with "John" would be found such as "Johns", "Johnston", and so on.

Changing Special Addresses

In order to preserve the complex nature of the nodelist index, you are prevented from changing addresses of Region or District administration nodes. These must be maintained, as is, because they are stored in the nodelist index in a unique manner that can only be properly handled by a complete nodelist compilation. If you really need to change a Region or District admin node, then use your nodelist compiler to do it properly.

#### Log Surveyor

#### SUMMARY:

The Log Surveyor prescans the BinkleyTerm log and displays it in a tabular, compressed, and highlighted manner that makes it easy to review all logged activity. For very large logs, it asks you choose what 1/10 of the log you want to review.

### NOTES:

When requesting this function, Bonk prescans the log then jumps to the last page of log entries. From then on, you can jump, by page, forward or backward in the log file. Each log session has the first applicable entry for that session highlighted so that sessions are clearly delineated.

Log session are broken into the three classes of Opus, User, and NetMail, each being displayed with different screen attributes. The Opus setting includes any Opus user calls that might be present in your log file as can happen if you use Opus and BinkleyTerm, together, and have them both use the same log file.

# Quick Start

If you are masochistic and have found your way to this section without reading the rest of the notes, then here's how to get the program up and running, quickly (at your own risk).

- If you haven't done it already, unpack and place the Bonk files in the directory where you put your commonly used Opus utilities or any previous version of BONK that you might have. The BinkleyTerm home directory is most often used. There is a sample configuration file included in this kit but since it is called SAMPLE.CFG, it will not overlay or destroy any previous BONK configuration file that you might already have.
- 2) If desired, create a configuration file using one of the simple examples in the configuration section of this document. You usually won't need to do this if you are willing to put up with the absolute slowest video display method that it defaults to.
- 3) Run the program.

If you have a 100% CGA or MDA compatible video adaptor, then you can use Bonk's fastest video mode (RAM) by adding the command line switch "-vr" as in "BONK -VR".

The program will start up and display the parameters screen. Any key will then bring you to the main menu. As stated elsewhere, however, there are several run-time options to better customize it to your individual needs but to properly use them, you'll just have to read the documentation.

4) Once you are up and running, you should set up a Bonk configuration file in which you can permanently set your video mode, and several other things. Review the SAMPLE.CFG file and use it as a starting point for setting up your own particular version of BONK.CFG.

# Licensing Agreement

This product is an external utility that is not part of the officially distributed BinkleyTerm package and is copyrighted by Tom Kashuba.

There is no charge for it use and it may distributed, copied, or used by any person or group as long as all of the terms and conditions associated with both it and the BinkleyTerm package are adhered to.

Those wishing to show their appreciation and who would like to contribute to this product's support and longevity, are invited (but not required) to contribute at least \$15 to:

Tom Kashuba 1411 Fort St, Suite #2001, Montreal, Quebec H3H-2N7 Canada FidoNet: 1:167/99

This product may only be distributed in its full, unadulterated form with all the files listed under "Packing List".

Due to inevitable time and money constraints, I can only respond to direct netmail queries from those who have contributed. Contributors who send me direct netmail queries must mention their contribution so I can verify it. All others should forward their queries to their nearest BinkleyTerm support system or the BinkleyTerm EchoMail conference. I may, on rare occasion, answer EchoMail queries if I accidentally come upon them and I have the time.

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# Revision History

This is a brief summary of the changes and new features in v1.17 that were added since the previous public version of Bonk, v1.16.

### General

- o Fixed a mite in the path checking function that overzealously disallowed some forms of otherwise legal paths whose last directory level name had an extension. The unavoidable downside of this fix is that path checking is less stringent than before.
- o Changed control file "Port" verb to accept ports from 1 to 16 just as the -p command line switch already allowed.
- o Session macros for emulating DOS redirection. See Appendix on MACROS for more details.
- o The text field edit logic has been changed so that any of the special exit keys which might be active for a given edit field, such as ESC, UP, DOWN, et al, no longer erase the field upon exit. Instead, the field contents are left as they were up to the point of the special exit.
- o Fixed mite which sometimes ignored the presence of the environment string BONK=. However, some other mites reported in this area were actually due to the capitalization of the environment variable which must be in UPPER CASE. That is, "bonk=", "Bonk=", "bonk=", or "bONK=" will not work.
- o Added LOG as an EXEC option in the CFG file. Previously, it had been left out. For example, "EXEC LOG" will now auto boot into the Log Viewer.
- o Fixed a long-standing and long-overlooked mite which was setting the port specified by the -p command line parameter to one higher than the given value. Eg, -p1 was taken as COM2:.
- o Fixed another mite related the "PORT" CFG command which may have caused intermittent problems in the setup of some remote cases.
- o Modem Ring Watcher

A new optional "RingMode Beep" feature can be set to monitor the modem on COM1 or COM2 for a RING signal and BEEP the speaker each time an incoming RING signal is detected. See Appendix section on Ring Mode for more information.

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#### Outbound Manager

- By popular request, I have reluctantly removed all limitations on the E)rase command. It will now allow you to erase virtually any item - including a 5 megabyte ArcMail file. Please BE CAREFUL!
- o Changed the way to select the 'miscellaneous' file types that will be included in the outbound display. Before, the "F"iles command first toggled the overall inclusion of miscellaneous files types that weren't mailing files. Once toggled on, you then had to set the types to show. That two step process has been eliminated.

You now directly set the file types to include directly from the "F" command's menu. That menu now also includes options for "O)ther" types, "ALL" types, and "NONE" (no types). The "O)ther" option is a catch-all that includes all files that do not fit into any other known category. Try the "F" command. It's easier to use and see than to explain.

- o Changed the way the lines are numbered in the outbound area. The numbering should now appear more consistent with line numbers for lines greater than the total number of objects being blanked out.
- Changed coloring of ARC and FiReq objects. ARC's now show as Low B/W like other raw files and FiReq's as Bright for better clarity.
- o The display of Bad Call marker files (xxxxyyyy.\$\*) now includes the number of tries as trailing text "(# Tries)" after the file name display. This feature is geared toward Binkley style marker files that are at least 2 bytes in length and have the count stored as an Intel (lo/hi) 2-byte integer in those first 2 bytes.
- o Added =) Macro command to Outbound menu for limited use of macros
  from that menu.
- Fixed a memory size calculation error in the outbound mail object loading routine that allowed more objects to be loaded than could fit in memory due to a math overflow of the computed memory size. The routine now checks for the total number of objects, as well as their total size and should now stop before the maximum is hit, issuing an error message saying it cannot load any more.
- o As part of the above fixes, the maximum number of outbound mail items that can be loaded and viewed has been increased from 630 to about 840. This was accomplished by reducing each mail item's file path field length from 64 to 40. This is the field that displays either a simple packet's actual file name or, in the case of file requests and attaches, the path to the files in the list. This shouldn't cause any problems unless you have extremely long paths. Even then, it shouldn't be fatal; they probably just won't display properly or be accessible for maintenance.

### Revision History (cont)

- o Fixed mite in the X)pand H)eaders code that caused all the headers in those packets that had more than one to quickly overprint so you only say the last one.
- o Added allowance of an outbound mail holding directory with the form "d:\". Previous versions were already fudged to accept the simple root form of "\". This version adds the "d:\" form, also.
- o Added new quick exit to DOS via the backslash command (\).
- o In the S)endFile function, added D)irect to the list of
  P)riorities that a file attach can be assigned.
- o Added the configuration file statement "FiAttPrio {priority}" which sets the default file attach priority used in the S)endFile function. Eg, "FiAttPrio Direct" will set the default to DIRECT. If not used, the internal default of NORMAL is used.

NodeList Editor

- o Added =) Macro command to NodeList menu for limited use of macros
  from that menu.
- o Fixed a well-camouflaged mite in the Node Editor that had the nasty habit of trashing the nodelist index when inserting a new node or editing an existing node's address <head hung in shame>.
- Added prevention of address edit on those nodes which are stored in the index as special marker nodes. These include Zone Hosts, Region Hosts, and dummy comment nodes. Previously, editing the address of such nodes would have messed up the index, a little because their internal values are different than what is displayed and changing their address would trash their internal marker values.
- o Added prevention of setting the Bits that denote Zone and Region hosts for the same reasons as in the above item.
- Changed the Message CallCost and Message UserFee field display and edit formats to decimal dollars; not cents. A number entered without a decimal is assumed to be in cents. Eg, entering "1.30" or "1.3" is taken to mean \$1.30 whereas entering "13" is taken to mean \$0.13. That should make cost entry easier for most Sysops.

Also increased the maximum allowed value to the internal maximum of 65535 cents, ie, \$655.35. That should handle even Steve Antonoff's local Bell rates :-)

 Changed the edit logic for all text fields in the Node List Editor so they are trimmed of all leading and trailing blanks before and after editing them. Previously, they were not trimmed before editing which prevented any inserts until manually trimmed.

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### Revision History (cont)

- o Fixed problem that required you leave at least one blank in an otherwise empty text field to clear it. Clearing it completely had simply aborted the edit, leaving the original contents. You can now clear any text field by simply clearing it completely as you would expect.
- o Added new quick exit to DOS via the backslash command (\).
- Fixed a long standing and overlooked mite that caused all variations of the Node L)ist function to list all nodes, regardless of the search criteria entered. The L)ist S)ystem, L)ist L)ocation and L)ist B)aud show now work as expected.

### Log Viewer

Added new quick exit to DOS via the backslash command  $(\backslash)$ .

### Help System

Fixed a few mites in the Help text which should make paging through some of the help sub-menus more fluid. Previously, the PgUp and PgDn keys didn't work properly when you were on some of the sub-menus within the help system.

# Credits

The credits for those who have contributed to existence of Bonk and Opus could fill volumes. As with all things in the PC BBS world as we now know it, there are many pioneers and contributors without whose help we would not have what we have now. Here's a partial list of those who have most affected my work in one way or another:

... Ward Christensen ...

Ward has to get top billing for creating and donating X-Modem, the first reliable and well documented method of exchanging binary files using those new fangled things called modems. To this day, despite its age and due to its simplicity, it is the most commonly found file exchange protocol in the world.

... Tom Jennings ...

It goes without much saying that the Opus project, and the world of FidoNet electronic mail, is based exclusively on the original On-line PC communications system model created by Tom Jennings, as first manifested in his Fido Bulletin Board Software.

... Wynn Wagner III ...

Wynn's Opus CBCS model advanced the Fido model, further still, with more advanced and efficient telecommunications methods, the inclusion of Z-Modem file exchanges, the WaZoo netmail protocol, and a host of other innovations. It is Wynn who created the Opus world that this product was borne out of lives and the Opus team that I am part of.

... Vince Perriello and Bob Hartman ...

Vince and Bob, contributed, enormously, to the advancement of the overall netmail and Opus environments. The ConfMail, Ommm, and Renum programs created by Bob, the BinkleyTerm electronic mail program by both of them, and Vince's Opus telecommunications contributions share very prominent roles on the Opus stage.

George Stanislav	For Opus, Avatar and OEC advancements.
Doug Boone	For keeping the ball rolling.
Bob "Scribe" Davis	For his tremendous support and cool head.
Mike Elkins	For introducing me to the Opus gang.
Chuck Forsberg	For creating Z-Modem.
Rick Huebner	For fitting Z-Modem into Opus.
	For giving Z-Modem to the callers.
The Opus Test Crew	For shaking down this, and previous versions.
Cheryl and Suki	For finding problems I never dreamed of.
My Lovers & Partners	For putting up with me through it all.

# Appendix I - Command Line Switches

This section lists the option switches that can be specified in the environment string "BONK=", on the DOS command line, or both.

Not that the [] enclose optional items and the {} enclose mandatory ones. A vertical bar separates multiple choices. Eg, "{A|B}" means that you must enter "A" or "B" whereas "[A|B]" means that you may optionally enter a value but, only if you do, then it has to be "A" or "B". In all cases, the brackets and vertical bars are not meant to entered and are only for descriptive clarity.

General command line format (in the case of the environment then there would be an equal sign after the BONK as in "BONK= "):

BONK [-opt1] [-opt2] ... [-optn]

Command switch descriptions:

-N	Don't use command line (environment only)
-Ccfgpath	Alternate configuration file path.
-L{0 1}	Force color OFF (-L0) or ON (-L1)
-V{I D F R}	Video mode: I)BM D)OS F)OSSIL R)AM
-X{O N L}	Run OUTBOUND, NODELIST, or LOG functions.
-A{helppath}	Alternate help file path
-O{path}	Outbound mail path
-S	Naked (starkers) Requests, ie, w/o POLL
-O{path}	Outbound mail path override
-Н	List these command line options to screen
-W{pass}	Remote password 'pass'
– Z	Leave FOSSIL active on exit
-YB{1-2}	Set RingMode BEEP on port {1-2}. Eg, -YB1 will set RingMode BEEP on port 1. Used to monitor incoming rings while you're off-line and working merrily away in Bonk.

Appendix I - Command Line Switches (cont)

- -]{m} Macro Record Mode: Records all key-strokes in the file "MACRO.{m}". Eg, "-]T" would record keystrokes in the file "MACRO.T" for editing or playback by the "-[T" switch or "=" command. See Appendix on "MACROS".
- -[{m} Macro Playback Mode: Plays back the key-strokes
  stored in the macro file, "MACRO.{m}". Eg,
  "-[X" would take key-strokes from the file,
  MACRO.X. See Appendix on "MACROS".

These command switches are sent by Opus when it shells to an external program, such as Bonk, but can also be entered, manually:

-P{1-16}	Remote COMM port 'n' (1-16)
-B{baud}	Remote baud rate of 'n' (1200,2400,etc)
-K	Local mode (from Sysop keyboard)
-Fn	Opus Caller's current file area 'n'
-Mn	Opus Caller's current message area 'n'
-Rn	Opus Caller's remaining minutes 'n'
-Tn	Opus Caller's current Opus task no 'n'

# Appendix II - Configuration File Commands

The configuration is a plain ASCII text file that contains configuration commands, one per line. Each command starts with a verb and is followed by a number of option settings as required for the particular verb.

Blank lines and any portion of a line following a semi-colon are skipped completely. Therefor, prefix all comments with a ';'.

Currently supported configuration commands:

Command Syntax	Description
CMDline {ON off}	Scan command line options (or not)
COLOR {ON off}	Force use of color (or not)
HELP {path}	Alternate path to the BONK.HLP file
SYMBOLS {IBM   ASCII}	Allow IBM graphics or convert them to their nearest ASCII equivalent.
NETMSG {path}	Netmail directory (future use)
INFILE {path}	Inbound files path (future use)
EXEC {OUTBOUND   NODELIST   LOGVIEW}	
	Start up with given function
NETID {net addr}	Prime address Zone:District/Node
NETINFO {path}	Nodelist directory path
OUTbound {path}	Outbound mail (Hold) path
SYSOP "{name}"	Sysop's Name (use quotes)
SYSTEM "{title}"	System Name (use quotes)
SYSOPIDX {path\file}	Sysop Index a la FIDOUSER.LST
VIDEO {IBM DOS FOSSIL RAM [Vi	deoSegment]}
	Video Method. If RAM, an optional

Video Method. If RAM, an optional second argument (4 hex digits) can be given to set the video buffer's segment address, eg, A000.

LOGfile {path\file} Opus log file path\file

Appendix II - Configuration File (cont)

FOSSIL {Active}	Leave FOSSIL active on exit
PORT {1-16}	Remote operation via comm ports 1-16.
SPEED {baud rate}	Remote baud rate, eg, 2400
REMPWD {password}	Remote password
NAKEDREQ	Don't make POLL with File Requests
RINGMODE BEEP {port}	Sense incoming ring on port {port} and beep the speaker each time.
CSDelay {locsecs} {remsecs}	Specify the Caller Info screen's refresh time (in seconds) when operating locally {locsecs} and remotely {remsecs}.
XLTOUT {path\file.ext}[DUMP]	A 256 byte Output translate file with 1 byte per code. If a byte is a binary zero, the original character is used, as is, otherwise, the byte's value is sent, instead. If the DUMP keyword is present, the default internal translate table is dumped to the given file name so only use it once to generate a starting translate file that you can then binary edit to create a custom translate table.

OHMFMT {FILES ZMODS ZARCS NOCALL OTHER ALL NONE}

Sets the types of miscellaneous files that will be displayed in addition to standard mail type files.

FILES = FiReq/FiSend Listed Files ZMODS = Partial Zmodem file transfers ZARCS = Zero byte (empty) archives NOCALL= Incomplete dial markers OTHER = Virtually all other files ALL = All of the above NONE = None of the above

Appendix III - Macros

NOTE | Advanced Feature. Use with caution!

Due to a DOS problem that makes it difficult (if not impossible) to receive redirected keyboard presses without them being screened for ^S and other special keyboard sequences, the keyboard I/O routines directly access the BIOS when the video mode is set to IBM or RAM. Unfortunately, this prevents redirection of input (in those fast I/O modes) which some Sysops had been using to create a session level macro that would run some key stroke sequences prestored in a redirected input file.

To better accommodate such scenarios while retaining the direct BIOS keyboard interface required for proper keyboard handling, the command parameters of "-[a" and "-]a" were added which playback or record an external macro file. This not only provides a good substitute of DOS redirection of input, but also allows for easier manipulation of the commands because each keystroke is stored in a symbolic fashion. Eg, ENTER and ESC are stored during recording (or interpreted on playback) as {Cr} and {Esc}.

... Recording a Macro ...

You can create a macro file directly with any text editor or you can use the new "-]a" command switch (like DOS's ">" command) to create one for you by recording all the keystrokes that you enter during the entire execution of the program. It instructs the program to RECORD all keystrokes entered during a run session in the file "MACRO.a" where 'a' is the single, alphanumeric character (0-9,A-Z) specified in the command.

... Playing Back a Macro ...

You can start the playback of macro as soon as the program starts with the "-[m" command line switch, from most of the main function menus with the "=" command, or both.

The new "-[a" command switch (like DOS's "<" command) instructs the program to take its keyboard input for that session from the file "MACRO.a" where 'a' means the same as described, above. For example, the command switch of "-[G" would play back the commands stored in the macro file, "MACRO.G". When the file has been completely read, the program will resume taking its input from the keyboard (or remote).

You can also execute a macro from most of the major function menus with the new "=" command. If it's available, pressing the "=" will prompt you to enter the letter code (A-Z, 0-9) of the macro to run.

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#### Appendix III - Macros (cont)

... Macro file coding rules ...

A macro is a plain, ASCII, text file with key codes in it.
 Each regular key (not control) appears as you would enter it.
 Control and Cursor keys are entered as symbols (see below)
 More than one line can be used; no continuation symbols are needed.
 Naked spaces are \*not\* interpreted and can be used for clarity.

Here's a list of the symbols allowed in a macro file: Note: The fancy brackets {} are required.

- { } ..... True SPACE (because naked spaces are ignored)
- {Up} ..... Cursor Up
- {Down} ..... Cursor Down
- {Left} ..... Cursor Left
- {LWord} ..... Cursor Left, 1 Word
- {Right} ..... Cursor Right
- {RWord} ..... Cursor Right, 1 Word
- {PgUp} ..... Cursor Page Up
- {PgDn} ..... Cursor Page Down
- {Home} ..... Cursor Home
- {End} ..... Cursor End
- {Esc} ..... Escape Key
- {CR} ..... Enter Key
- {Tab} ..... TAB Key
- {BS} ..... BackSpace Key
- {DelHom} ..... Same as Ctrl-Home (eg, del text to start of field)
- {DelEnd} ..... Same as Ctrl-End (eg, del text to end of field)
- {Del} ..... Same as DEL Key

### Appendix III - Macros (cont)

{Ctl-c} ..... Where 'c' is A-Z. Use for unlisted Ctl-Keys.
{Rem} ..... Ignore rest of line, treating it as a remark.
{Stop} ..... For Testing: Terminates macro. Not usually needed.
{###} ..... Pause for ###/10 seconds (0-255). Eg, {30} = 3 Secs.
All Else .... All other non-space chars are taken, as is.

For Example, the following macro would clear the opening parameter screen, invoke the OutboundMgr, and switch the display to Zone 2. If this macro were called MACRO.Z, then you would run with the "-[Z" switch. Note the use of spaces and {Rem} for clarity and for adding annotations.

{Cr}	{Rem}	Clear parameter screen	
OZ2	{Rem}	Run OutBound, Show Zone 2	

Notes:

- 1) This feature is not intended to be a full macro facility but only as a replacement for DOS redirection with a few added features.
- 2) Since the "-]a" command stores all keystrokes used during an entire program's run (right up to and including the final exit commands), such an unedited macro, would mimic the entire session, returning you back to DOS. To quickly create a macro that will perform a series of Bonk commands and then just stop at some point within the execution sequence, you can use the -] switch to record a run session that does what you want. Then edit the macro to truncate it at the point you want it to stop.
- 3) You don't need to use the -] switch if you know what keystrokes you want in a macro. Just create a text file with your editor and call it MACRO.a where 'a' is a letter of your choice.
- 4) When the end of a macro is reached, manual input resumes.

5) Beware of cases where a string you want to input contains a text fragment that is the same as a macro symbol. The macro interpreter will take it to be the macro symbol.

There is no easy way to avoid this type of (rare) conflict. If you do have to enter such a conflicting piece of text, you could use the trick of first entering a non-conflicting part of it, then a {Left}, then a {Right}, then the rest.

Eg, to enter the true text of {Rem} into a string field, you could use the sequence of "{{Left}{Right}Rem}". The first "{" would be entered as is since no symbol match would be found. The cursor movements break up the string but do nothing else. The final "Rem}" is would also be entered as is since it would not match any symbol.

6) Related to Note 5, beware that the RECORD macro switch "-]m" will record all true text entry without any check as to whether that text happens to be the same as a macro command. Eg, if you entered the text "{CR}" into a field, manually, the keystrokes would be stored just as that and, upon playback, would be taken to be the "{CR}" macro, not as the actual text.

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Appendix IV - Modem Ring Watch

RingMode BEEP is a feature that can be set to monitor the modem on COM1 or COM2 for a RING signal and BEEP the speaker each time an incoming RING signal is detected. This is useful when you plan to work in the program for long periods of time and want to know when there is an incoming call so you can exit and run your BBS or netmail software to handle it.

The command line switch to set the RingMode is ...

-YB{port} {port} 1=COM1 2=COM2

Eg: -YB2 Monitor RING on COM1

The equivalent configuration file statement is ...

RingMode BEEP {1 2}

Eg: RingMode BEEP 2 Beeps speaker with each RING on COM2:

Notes on RingMode:

- This feature requires that you have a FOSSIL interface installed

   as you would if using Opus or Binkley. If none is detected and RingMode is enabled, then the program will issue warning, refuse to run, and exit to DOS.
- 2. The port monitored by the RingMode will almost always be the same one you use for your Opus or BinkleyTerm connections but you can choose the other one if you can find a reason to do so.

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## Appendix VI - Additional Notes

#### MEMORY USAGE

Bonk can use up to about 300k of memory when heavily used with very active systems and DOS doesn't handle running out of memory very gracefully. Bonk tries its best to catch memory run out conditions but, still, under extreme load in tight memory layouts, it is possible to crash it if you try hard enough.

Merging of File Lists

Whenever a merge of file attach lists is triggered by such things as address or handling changes, there is no check on duplicate files that may result when the original list and the merged list both contain the same file name. The resulting file will then contain the exact sum of the original two file lists, one after the other. For the time being if you see that happen, you can correct the listed "xxxxxxx.?LO" file with your text editor.

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