

INSTALLATION AND PROGRAM NOTES FOR WINLINK

Release 1.1

December 26, 1994

This is the first production release of WinLink. After field testing this product for over 18 months I feel that we have a solid *initial release*. Prior users of this product will be pleased to know that extensive work has gone into WinLink since the last test release of beta version 1.DS. The emphases had been placed on cleaning up bugs, inconsistencies and the likes rather than implementing a slew of new features, although some have been added. This will certainly not be the last release you will see. I still have some more things I want to add to the product relatively quickly but I chose to release WinLink as it is now to satisfy the need for a cleaner product. Maintenance releases will be forthcoming through the same channels where you found this release.

I hope you will enjoy this product as much as I have enjoyed working on it. Your constructive comments are always welcome.

My special thanks go to Victor Poor for helping me over the rough spots and to the tireless Beta testers Bob, Craig, Ken and Steve who have done a wonderful job in ringing out this product.

73's

Hans A. Kessler - N8PGR

Installation Notes

This installation assumes you have Windows 3.1 up and running and are already familiar with operating under it. If not, get help from someone who is familiar with Windows.

This product will **not** run under the older Windows 3.0 or the new Windows NT. It does, however, run fine under Windows for Workgroups (3.11). Preliminary tests of WinLink under Windows 95 (code named *Chicago*) are successful and by the time you can get this product on the market it will be solid.

To install or update the system simply insert the install disk in a diskette drive and using the Windows Program Manager run SETUP.EXE and follow the directions on the screen.

If you have received the system as a single self extracting file, expand

the file in a scratch directory and then using the Windows Program Manager run SETUP.EXE and follow the directions on the screen. Delete the scratch directory after the completion of installation.

NOTE: It is highly recommended that you use the default directory names at least until you are fully familiar with Winlink. It will not be difficult to re-install later with other directory names if you have some reason to do so.

Updating an Existing Installation

If you are updating an existing installation the install program will not overwrite existing directories, messages, or configuration data. If you have not previously used the default Winlink directory names you will need to enter the correct directory at the first prompt.

The Winlink Program Group

The installation will ask you if you want to create a new Winlink Program Group. If you do, a program group will be created with an icon for each of the Winlink programs as well as icons for viewing and editing a number of important files. **Even if you already have a Winlink Program Group it is recommended that you allow SETUP.EXE to replace it with a new one.**

The icons for AMTOR, CLOVER, and PACTOR will come complete with configuration files with the name "HF" in each case. The icon for PACKET will reference a configuration file with the name "VHF". If you already have port configuration files with these names SETUP.EXE will not overwrite or modify them.

For those ports you do not intend to use simply delete the icons. For those ports you wish to use, double click the icon and then from the running port program configure the port as desired.

Once the ports are configured as desired copy those icons you wish to start automatically on power up into the **Startup Program Group**. You may run more than one of any given type of port. Just use a unique name for each instance of a port of the same type.

As in APLINK, Winlink does not configure the *packet* TNC. You must set the correct parameters for the TNC before using it with WinLink. The parameters are the same as used with APLINK. See the APLINK

documentation if in doubt.

Converting from APLINK

If you are converting from APLINK to Winlink you will need to convert your message files. To accomplish this, set the parameter OLDDATA=C:\APLINK in WINLINK.INI (where C:\APLINK is the current APLINK directory) and then run C:\WINLINK\BIN\OLD2NEW using the Windows Program Manager. You only need to run this once to set up Winlink with your current messages and user data.

Do not run OLD2NEW when any other WinLink tasks are running. OLD2NEW writes (or rewrites) files that are normally controlled by the common DLL but it does not access the files through the DLL so causes a conflict.

The Configuration File - WINLINK.INI

A configuration file will be created (if it does not already exist in your system) when you run SETUP.EXE. You will be prompted for your basic station data. Packet autoforward data however is not automatically configured and you will need to do that with Windows Notepad. If you allowed SETUP.EXE to create a Winlink program group for you only need to click on the Configuration icon to bring up the file.

The **[AUTOFORWARD]** block specifies stations you may forward to automatically on packet (and later on AMTOR and Clover if automatic becomes legal). You may specify up to 32 stations. Each station fills a parameter **BBS00** through **BBS31** and is in the following format:

BBSnn=<call>, <port name>, <minutes>

where <call> is the call of the BBS including the SSID (if there is one), <port> is the name of the packet port forwarding is to occur on (not the COM port but a name assigned to the Windows task, see below), and <minutes> is the number of minutes past the hour that forwarding is to occur on. Use -1 if you don't want hourly forwarding. You may manually start automatic forwarding anytime but the station must be in this file.

Following the **BBSnn...** line is the routing information for that station. It consists of text to be transmitted alternating with text to be looked for in response. The response text can be any string of characters that

may be imbedded in a response. Responses that do not contain the looked-for string are ignored.

Here are some examples. This one is for a station that is reached via a direct connection:

```
BBS04=W1ABC-6, VHF, 30  
C W1ABC-6  
4RE-  
END
```

In this example, we connect with "**C W1ABC-6**" and look for "**4RE-**" as an indication of a successful link. "**4RE-**" is part of the station's SSID, [4RE-02.12-HMR\$], assuming it is a station running an AA4RE BBS. Using the SSID as the final test of a link is a good idea since it absolutely confirms that you are connected to a valid BBS. Following the route you must always include an 'END'.

Here is a more complex example:

```
BBS06=W1ABC, UHF, 45  
C SAT440  
CONNECTED  
C W1ABC-3  
4RE-  
END
```

Here is an example of a connection through Texnet:

```
BBS00=KE5HE, VHF, 10  
C ALAMO  
CMD  
C % HRN @ BRAZOS,0  
OK  
MBO  
W5SMM  
END
```

In this case the final response is my own call since I happen to know that once I am linked to the KE5HE BBS I will get "W5SMM de KE5HE...".

You may put the **BBSnn** entries in any order and the entries do not have to be contiguous. For example you can use **BBS07** and **BBS03** and without using any others. The **WINLINK.INI** file is case insensitive. For example, "CONNECTED" will match with "connected".

If during the link-up process the system receives a message containing "**DISCONNECTED**", "**FAIL**", or other similar text indicating a failed link the process will be aborted immediately. If the link does not complete in 6 minutes, it will be aborted.

PROGRAM NOTES

FORWARDING - Automatic packet forwarding only occurs if there is traffic to forward. If you manually forward however, the far station is called even if there is no traffic. An option to poll a far station for traffic automatically will be added eventually.

UPDATE - Update is run from the Message Manager. For it to do its thing the Message Manager must be left running. It can be minimized to an icon.

Update is not quite the same as in APLINK. It marks messages canceled 24 hours after forwarding but they can still be accessed by the Message Manager. After 7 days they are **removed** from the system - not archived, **removed**. Any canceled bulletin is removed from the system 7 days after its arrival. Packet bulletins are canceled after 21 days. Others have to be manually canceled.

Update does not shut the system down. Everything runs, right through update. You can manually update anytime. Click File/Maintenance from the Message Manager.

LOGS - The channel logs are *not* altered at update time. They run continuously and upon reaching a size of about 40,000 characters are truncated back to about 30,000 characters. In this way the last 30-40 thousand characters received are always in the log.

MULTIPLE PORTS - You can run multiple ports but you must never run two ports with the same name at the same time. For example, you can run a packet port named "VHF" and one named "UHF" at the same time but not two named "VHF". Names are completely arbitrary. You may name ports anything you want within the limits of 8 letters and digits.

IDLE TASKS - There is no reason to leave the other tasks running but there is no harm either. The port tasks are completely independent of any other tasks and will function any time they are running. They access the message and user data files through a common DLL. The

only reason to leave the Message Manager running is to have the automatic update.

SOUND - The sysop alarm uses the sound features of Windows. If you have a sound card then whatever tone sequence is programmed for the "Question" (Control Panel/Sound/Events) will sound when there is a sysop alarm. If you do not have a sound card only a standard DOS "beep" is heard and you must be right next to the computer to hear it.

MBBIOS - WinLink does not use the Windows-provided communications drivers but the familiar MBBIOS instead. This provides for compatibility with other BBS-related programs that use MBBIOS (or other compatible TSRs such as BPQ). (Getting BPQ to work with Windows is *NOT* the WinLink author's problem.)

MBBIOS or BPQ should be run as TSRs always before Windows is started. This is best accomplished by putting the command in the AUTOEXEC.BAT file.

CHANGING FILES - Data that is read in from the [WINLINK] data block in the WINLINK.INI file is only read at the time a given task starts. All other file data; the [AUTOFORWARD] block, the FORWARD.APS file, the INTRCPT.APS file, and any data updated by the Message Manager and User Manager is immediately current in all tasks.

CRT - Winlink assumes you have at least a VGA with 640 x 400 pixel screen size or better. A Hercules mono card should also work ok. An EGA card may give pretty poor results.

EVENT LOG - A program (EVTLOG.EXE) for logging all messages originated, received and sent has been included. The program writes to a file named EVTLOGnn.APS where nn is the number of the current month. The file is in the sub-directory named in the **LOGS=** parameter in the **WINLINK.INI** file. Beware that WinLink does not delete any of the EVTLOGxx files. Once you cycle a year's worth of logs you must manually delete the prior year's log. If you don't do that data in that months' log will accumulate, combining last year's and this year's data.

The program opens as an icon and is normally left as an icon. To run a summary of a month's, traffic double click the icon, click **Summary** and click the desired month. The program will create a file with the summary data and open **Notepad** to display or print it. The program will return to an icon at the end of a summary while leaving the Notepad open to read the results.

The EVTLOG.EXE program only updates the log about every 10

minutes. If you look for a message record immediately after an event it will probably not yet be in the log.

There is no need to run EVTLOG.EXE if you do not want to accumulate traffic data. Otherwise run it continuously to be assured of logging all messages. Failure to run it for short periods of time (a day or so) should cause no harm. It will read the MCB file and 'catch up' when it is run.

REJECTED MESSAGES - Since WinLink release 1.0 incoming messages are now being checked for its BID/MID. If a message is found to be already present in the system it will be rejected. Although earlier versions of WinLink checked the MID on incoming messages, too, the new version **solicits** the MIDs by advertising the **M** feature in its SID. Likewise, WinLink will respond to the **M** feature of a forwarding station and send the MID of a message along. When you find rejected messages in **your** system directory (an asterisk in the message status) it means that you attempted to forward it to a station that already has that message. Rejected messages purge automatically from the system after 7 days.

CONFIGURING THE MESSAGE MANAGER - A separate parameter block has been established in the WINLINK.INI file for the Message Manager. This block begins with "[MESSAGE MANAGER]". The UPDATE= parameter should be moved to the block and the following additional parameters are permitted:

```
PENDING=YES  
PRIVATE=NO  
NTS=NO  
BULLETINS=NO  
HELPS=NO
```

The values shown are the defaults. Each parameter should be either YES or NO. These values set the initial search parameters for the message list. No parameter needs to be entered into the {MESSAGE MANAGER] parameter block if the default is acceptable.

FORWARD.APS, INTERCEPT.APS, INFO.AMT, INFO.CLV, INFO.PTC, INFO.PKT. Files - These files are all found in the C:WINLINK\APDATA subdirectory and are the same format as found in APLINK. Refer to APLINK documentation for specifics. These files must be edited to suit your particular station one Winlink is installed.

OWN HEADERS - If you are using Winlink as a personal mail box and not as a system for handling traffic for others then you should not generate your own header when you create a new message. Headers should be started with the first BBS that handles your message. To prevent your own header from being added to a sysop or reply message simply leave the ROUTE= parameter blank in the WINLINK.INI file.

LR (LIST RECENT USERS) - This command has been added to all channels with version 1.DQ.

PACTOR LONG PATH CALL - The Pactor call dialog now allows you to specify long path timing.

The New ROM for the AEA Family of Controllers - In December 1993 AEA released a new ROM for the PK-232 and other AEA controllers. This has made some much needed improvements in Pactor mode. Version 1.1 of WinLink will automatically sense the ROM version and set its internal operating mode. You are advised to check the **EPROM button** in the AMTOR and PACTOR port screen if you are using an AEA product. It will identify the ROM version in use. If it is outdated I strongly suggest you purchase an update from AEA. The older versions do not permit for smooth forwarding of messages and you are faced with repeated link turnaround problems.

This new ROM also implements a combined AMTOR/Pactor mode. This mode does not provide a way to signal a scan controller that a valid call has been detected. Because there is typically a significant delay before the controller begins responding to a call a scanning device will frequently move to another channel before a link can be established.

Because of this problem I do not intend to support this mode until AEA can introduce a fix. **Please do not ask me to support this mode.** If it is important to you, contact AEA and let **them** know.

***** Post 1.DS Notes *****

Starting with version 1.0, this product is now maintained by Hans A. Kessler - N8PGR. WinLink has been recompiled with a newer version of C++. Please note that this code will still run on \286 CPUs at present. I would very much like to discontinue this support as Windows has a terrible time running on these older style machines. I will be looking to your feedback and propose to use only protected mode 386 code in the future.

You will find several enhancements as well as many bugs corrected. In

particular, the following should be noted:

- Messages from the Packet port are now marked in UTC
- The MESSAGE MANAGER has received the following enhancements:
 - o The directory layout has changed. It shows the expanded routing to the destination. To make room for that, the 'filed' column was reduced to show the filed date only (MM/DD) and the 'subject' column was shortened. Note that the directory layout for remote inquiries has NOT changed. Anyone logging into WinLink and requesting one of the 'list' commands will receive the old style directory. The same thing is true if anyone is making DLL requests for this information.
 - o The UPDATE function from the FILE menu has been moved into a new screen that is activated using the **MAINTENANCE** option in the FILE menu.
 - o A Message **directory validation** has been added to the maintenance window. It serves as a diagnostic tool while debugging is still taking place. It's result will tell you how many messages in all (accounting for every type) are in the system.
 - o An **Orphaned Message** option scans the MESSAGES directory and makes sure that all message files (pure numeric file names without an extension) listed there are also listed in the WinLink directory. All orphaned file names will be displayed giving you a chance to delete them, one by one. These files were created by earlier versions of WinLink every time a link timed out. Older systems may have a lot of those files hanging around. Later versions of WinLink will have that problem corrected.
 - o The **automatic update time** is now also listed on the maintenance screen. This is the same value as located in the WINLINK.INI file, parameter UPDATE=xx.
- The WinLink Editor will no longer abort with a GPF when the setup screen is incomplete (either 'Subject' or 'To' fields are missing.)
- The PACTOR port can now correctly accept call signs with a suffix or a region prefix. E.g. N8PGR-2, W8/N8PGR or N8PGR/MM are all treated as N8PGR (receipt of such calls used to abort WinLink.)
- The USER MANAGER received a 'Refresh' option in its menu.
- The Pactor port will validate the call sign prior to a manual call or call/autoforward.
- WinLink will send the MID to a forwarding station if that station

identified itself with a "M" option in its feature list of the SID. This feature is experimental until some final rules are established. It is currently implemented on the Pactor and Packet ports. Message forwarding amongst WinLink stations will include the MID with release 1.0. The internal, automatic generation of a MID still takes place, but **only if no MID was received** with the original message.

- The status update to external WLM_LINKSTATUS requests on the Pactor channel has been corrected. This allows TY1PS the scanner to stop scanning when the monitor status is selected.
- The Pactor controller has undergone major revisions as related to the hardware interface. You will notice a much smoother operation, particularly after error conditions had occurred. The dreaded PROTOCOL ERROR should also be a thing of the past, although it can still occur, but only if a *true* protocol error occurs.
- The Pactor port now responds with 'illegal command' when it doesn't understand what was asked, however, this is **only for keyboarders** not when a BBS is connected to WinLink (an SID was detected).
- A new feature is added to the MESSAGE REPLY. It will automatically place the originating BBS in the AT address, unless the addressee is listed in the INTERCEPT file. WinLink gets the information from the first routing header of the original messages. You can now also overwrite the AT field of a new message no matter what the INTERCEPT file says.
- All LIST and READ commands among the various modules have been standardized. They now all work and react the same. The problems with QTC>0 , followed by 'No Files Found' is also fixed.
- WinLink has been normalized as to the time notations. They are ALL in local time, except where specifically noted. The only UTC notations are in the message headers. The Log files are also listing the opening of the Logfile and the opening of the BBS in local time. The logfile will now also list the last time it was truncated. The underlying theory is that all events that happen at your station/site should be tagged in that time zone. It is information that never leaves your station and therefore should be listed in ones familiar terms (local timezone).
- Please note that the online help files are still being worked on and have not changed since 1.DS.

- There is a set of four new HELP.* files included in this update, one for each port. They list the current instruction set and a brief explanation of each. If you are upgrading an existing WinLink, the SETUP program does not automatically replace your own help files in the APDATA directory. Look at the HELP files included with this update (they are not compressed) and determine if you wish to change or replace your existing ones. You may use the WinLink Editor or the Windows Notepad to change the text.

Known Problems

The following are known problems that have not been corrected in this release:

- o The extended character set (8-bit) for Pactor is not implemented yet. I know my European friends are not happy to hear this. Unfortunately this is one of those can of worms and I wanted to get you this release out first.
- o Hardly any changes were made to the CLOVER port. I have a short list of minor problems that need addressing. I will be working on that module soon.

Things to look out for in the near future

Here are some of the new things that will be forthcoming sometime next year

- Automatic forwarding of bulletins
- Full 8-bit implementation on Pactor
- Data compression on Pactor and Clover
- Mail bundling together with data compression
- Support for other hardware, once it becomes available to me:
 - o Clover PCI 4000/M
 - o AEA PK900
 - o PacCom
 - o Pactor-2
 - o G-TOR

The following is a copy of the update message included with the

WinLink Update 1.0 ->1.1

WinLink Update Notes

WinLink Release 1.1

December 26, 1994

Statement by the author

I find it most unprofessional that certain individuals feel they need to express their feelings about WinLink publicly, using unpolished, rude and vulgar language and pass such messages through the airwaves. I have a policy of always helping where help is needed and to work with anyone who has ideas to improve WinLink. All you need to do is ask!

Now that I got that off my chest.....

On a lighter note:

I keep a list of WinLink users that wish to receive updates, news and the likes on Compuserve. If you like to be on that list pass me a short message. Tell me if you would like to receive information only or automatic updates and releases as well. I will send you the requested information automatically using the *collect option* to keep my expenses within limits. You may reach me at 71327,3541.

I wish everyone a very happy and prosperous New Year with good health and good propagation.

73s,
Hans - N8PGR

The following modules received changes with this update:

AMTOR, PACTOR, PACKET, CLOVER, EDITOR, MESSAGE MANAGER

The following has changed:

1. The automatic **BID/MID generation** did not pick up the

correct MID when there was one. This is now corrected. What happened was that WinLink generated a MID when it should not have. The fact that WinLink chose to drop the underscore had nothing to do with this.

Here are the rules WinLink adheres to:

- Messages generated in WinLink (using the message manager) will receive a MID. It is generated using the message number and the station's call sign, separated by an underscore. The underscore is dropped when the message number goes past 100,000 to conform to the 12 character overall limitation.
- MIDs and BIDs are **passed to the next station** during forwarding as follows:
 - a) over the AMTOR channel
 - b) over the PACKET and PACTOR channel when the *receiving station* identifies itself with the **M** feature in its SID. If the **M** feature is not set it will be the receiving's stations responsibility to handle the BID/MID.
 - c) CLOVER is not covered as of yet (no MIDs are sent. BIDs were always sent)
- When a message is **forwarded into** WinLink with **no** BID/MID on the Sx line (\$MID) WinLink will internally generate one as follows:
 - a) if there is one in the original routing header WinLink will pick it up from there, otherwise...
 - b) ... it will internally generate one using the original file number and the originating station call and the formula described above.
 - c) If a messages enters WinLink without any header (such as a Keyboarder's initial entry or a message that lost it's headers) WinLink will generate one as described above, using the WinLink station call as the callsign.
- When you copy a message, the new message receives a new MID

Important Note regarding rejected messages

SYSOPS should monitor their directory for Rejected messages and take action where appropriate. In the past (before

WinLink introduced the MIDs) messages left WinLink and god only knows what might have happened to them. Now you may see a rejected status (indicated by an asterisk in the status column). There can be many reasons why a message or a bulletin is rejected, but most notably because the receiving station already has it. Other reasons can be round-robin forwarding: two stations forward messages into the same regions to each other. In the past messages just bounced back and forth until one of the sysops finally noticed it.

If the Sysop takes no action on a rejected message it will purge from the system within 7 days of arrival or initial forwarding whichever comes first.

2. The following is fixed in the **FACTOR** controller:

- The initialization will now work correctly. You may again switch between AMTOR and FACTOR use of the same controller without having to do an extra *reset*.
- The occasional dropping of the link on an initial Link has been fixed.
- The TNC's DCD is now always turned on. This will help those stations that use this signal to stop a scanner.
- The PKROM parameter in the WINLINK.INI file is no longer needed.
- Forwarding problems with MSYS and FBB systems have been fixed.
- EPROM verification has been added. There is a new button in the Controller/Port screen, try it!

3. The **AMTOR** controller also has the EPROM verification added for the AEA models.

- The TNC's DCD is now always turned on

4. MESSAGE MANAGER

The Message Manager had several problems where it tagged the wrong message at times or copied the wrong message. This has now all been fixed. You are now able to read a message, go and reply, make copies or whatever, still while on the original message and the

system will handle it all fine.

You are now also able to change a message's Subject and it will reflect on your own Message Directory. The directory is also updated if the file size changes.

Distribution places for WinLink

This as well as future copies of WinLink may be downloaded from the following sources:

ADRS LL BBS: USA 813-922-5904
Compuserve: HamNet Forum, Library 9
Internet: stennis.ssc.nasa.gov 148.114.0.217
(as of Jan 4, 95) /pub/winlink
Log in as "anonymous"

There may be secondary sources as well, but the above listed three (3) are the only ones I keep current.