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Customer Service Assistance

Please read these Release Notes carefully. If you have any questions concerning this software release, our Customer Service personnel will be happy to assist you. You can call our office at (206) 828-9001 during working hours, which are 8:00 a.m. to 6:00 p.m. Pacific Standard/Daylight Time, Mon - Fri.

Conventions Used in This Document

We use the following conventions for indicating command line format:

<table>
<thead>
<tr>
<th>Convention</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOLD CAPS</td>
<td>Anything shown in large bold characters must be typed exactly as shown.</td>
</tr>
<tr>
<td>italics</td>
<td>Anything shown in italics is variable information for which the user provides a specific value.</td>
</tr>
<tr>
<td>()</td>
<td>Parentheses must be typed. It is usually sufficient to type only the first parenthesis; the second is optional.</td>
</tr>
<tr>
<td>[]</td>
<td>Anything shown enclosed in square brackets is optional. The square brackets themselves are not typed.</td>
</tr>
<tr>
<td>&lt;&gt;</td>
<td>Anything shown enclosed in arrow brackets indicate keyboard characters.</td>
</tr>
</tbody>
</table>

All punctuation marks included in the command line format (e.g., commas, parentheses, angle brackets, underscores, hyphens) are required in the format unless otherwise indicated. Square brackets are not typed.
NEW FEATURES AND ENHANCEMENTS

Section 2

The following are new features and enhancements that are in UpBoard Version 92a, and have been added to the UpBoard Application Environment.

Boot Banner Enhancements

In addition to the amount of memory on the UpBoard the Boot Banner now displays the amount of PC memory (including extended or expanded memory) which is available for use by the UpBoard system for tape buffers and disk caching.

Also, if there is not enough PC host memory to operate the QIC (1/4" cartridge) tape device, a message to this effect will be displayed as part of the Boot Banner.

Extended Memory Handling

The UpBoard software now supports DOS XMS (Extended Memory Standard) and EMS (Expanded Memory Standard) drivers. If an XMS or EMS driver is loaded at PC boot time (in CONFIG.SYS) the UpBoard allows that driver to handle high memory for the system. If no driver is loaded then the UpBoard software will handle high memory.

NOTE: Since extended memory is not used on XT's or 286-based machines, the /EX boot option (to enable Extended Memory) is ignored.

Peripheral Enhancements

Multiple Hard Disk Drives Supported

The CONFIGURATOR now recognizes all disk drives that are present on the PC and allows the creation of one (1) UpBoard partition per disk. The partitions are automatically linked together by the CONFIGURATOR so that they appear as a single volume to the UpBoard O/S.

When configuring multiple disk drives you must create and format an UpBoard partition on the first drive, then change to the second drive and create and format an UpBoard partition on that drive. If the system supports more than two (2) drives this step must be completed for each drive on the system.

Hardware Handshaking Supported

Version 92a now supports full hardware handshaking protocols for serial lines. In addition to CTS/RTS and DSR/DTR the UpBoard also supports automatic LOGOFF when DCD-drop is detected. For more information on setting handshaking please see the TCL Verb Enhancements sections on SET-PORT and ENABLE-DCD-LOGOFF.
Monolith Econocom 4/8/16 Adapters Supported

The 92a CONFIGURATOR now has specific options for the 4, 8, and 16 port versions of the Monolith Econocom serial adapters. Previous releases only had options for the Econocom 16.

Note: Please refer to your Econocom Manual for correct switch settings on both Rev.1 and Rev.2 models. Of special interest would be the settings for hardware handshaking (switches 4 and 5) now that this feature is supported by the UpBoard.

Monolith Flexcom 9000i Intelligent Controller

Version 92a of the UpBoard software introduces support for Intelligent Serial I/O adapters. The Monolith Flexcom 9000i is one intelligent serial I/O adapter for which Seattle Lab has prepared a device driver to support the UpBoard environment. The driver for the Flexcom 9000i, called "FLEX9000.SYS", can be found on the UpBoard Installation Disk in the "DRIVERS" directory. For more information on installing and configuring the 9000i please refer to the configuration notes on this device at the end of this document.

DigiBoard C/X Intelligent Cluster Controller

The DigiBoard C/X Cluster Controller is another adapter which Seattle Lab has written a device driver supporting the UpBoard environment. This driver, called "CXDRIVER.SYS", can be found on the UpBoard Installation Disk in the "DRIVERS" directory. For more information on installing and configuring the C/X please refer to the configuration notes on this device at the end of this document.

General Serial Interface

The General Serial Interface (GSI) is a system interface provided by Seattle Lab so that third-party developers can create device drivers for intelligent serial I/O adapters. For more information on this feature please contact our office.

PicLan (Novell Network) Support

Version 92a provides full support for the PicLan software package available from Modular Software. PicLan provides terminal access capabilities for any DOS workstation on a Novell network to the UpBoard host. Up to 62 concurrent terminal sessions (depending on the number of licensed users for the UpBoard and PicLan), running at an effective baud rate of 180K baud, can be initiated from the network through a single Ethernet adapter installed in the UpBoard host.

PicLan also provides fast and reliable file transfers from Pick to DOS / DOS to Pick, and the ability to redirect spooler jobs to Novell job queues.
BASIC Enhancements

SYSTEM(23)

SYSTEM(23) now returns the UpBoard serial number.

TCL Verb Enhancements

ABS-VERSION

The ABS-VERSION verb has been added to the system and returns the current version of ABS.

CONFIG-VERSION

The CONFIG-VERSION verb has been added to the system and returns the current version of the UpBoard CONFIGURATOR.

DISABLE-DCD-LOGOFF

The DISABLE-DCD-LOGOFF verb has been added to the system in Version 92a and is used to disable automatic logoff when DCD drops. This command can be executed from any port for any other port or range of ports for which DCD logoff should be disabled. The syntax for DISABLE-DCD-LOGOFF is:

DISABLE-DCD-LOGOFF  (start-end)

ENABLE-DCD-LOGOFF

The ENABLE-DCD-LOGOFF verb has been added to the system in Version 92a and is used to enable automatic logoff when the system detects a drop of the DCD line. This command can be executed from any port for any other port or range of ports for which DCD logoff should be disabled. The syntax for ENABLE-DCD-LOGOFF is:

ENABLE-DCD-LOGOFF  (start-end)

EXE-VERSION

The EXE-VERSION verb has been added to the system and returns the current version of the UPBOARD.EXE which is running.

FILES-VERSION

The FILES-VERSION verb has been added to the system and returns the current version of the BASE FILE system.

MONITOR-VERSION

The MONITOR-VERSION verb has been added to the system and returns the current version of the UPBOARD.MON monitor which is running.
BREAK-LINE

The BREAK-LINE verb has been added to the system in Version 92a and provides the capability of sending a break to any terminal on the system. The syntax for BREAK-LINE is:

```
BREAK-LINE  port.number
```

SET-PORT

The SET-PORT verb has been added to the system to provide additional capabilities for setting individual port characteristics (beyond those provided with SET-BAUD) and increased compatibility with other Pick/R83 based systems. The syntax for SET-PORT is:

```
SET-PORT  port,baud,parity,data.bits,stop.bits,prcl
```

- **port** = port number or port number-port number for a range of ports (i.e. 1 or 1-17)
- **baud** = the baud rate (from 300 to 38400)
- **parity** = O (odd), E (even), or N (none)
- **data bits** = 5, 6, 7, or 8
- **stop bits** = 1 or 2
- **prcl** = X for (X)on/off, C for (C)ts/rts, or D for (D)sr/dtr handshaking protocols.

SET-VTAPE

The SET-VTAPE verb has been added to the system and is used to select tape operations to a virtual (disk) file. Before the system used SET-TAPE to set both physical tape devices and virtual tape. This could cause the system to set tape operations to a virtual tape file if the name of physical tape device was incorrectly specified, thus, causing a "mount next reel" message to appear when all available DOS file space was used.

The SET-TAPE verb is still used to select a physical tape device for tape operations. Optionally, you may use the verbs SET-FLOP, and SET-FLOPPY to select floppy, and SET-SCT to select 1/4" cartridge or DAT.

The syntax for SET-VTAPE is:

```
SET-VTAPE   pathname filename
```

For example:

```
SET-VTAPE F:\VTAPE\FSAVE.TAP
```

would specify the file FSAVE.TAP in the directory VTape on drive F as the virtual tape file.
TCL Verb Enhancements

(Continued)

VERifier Enhancements

The VERSION verb has been modified to return the current version information for all of the software components of the UpBoard system, including:

- UpBoard CONFIGURATOR
- UPBOARD.EXE
- UPBOARD.MON
- ABS
- Base File System

Pick/PC Verb Compatibility

Seattle Lab has added twenty-seven (27) new verb definitions for additional compatibility with Pick/PC. These new verbs and equivalent pre-existing verbs are:

<table>
<thead>
<tr>
<th>New Verbs</th>
<th>Pre-existing Verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FILES</td>
<td>:FILELOAD</td>
</tr>
<tr>
<td>BREAK-KEY-OFF</td>
<td>DISABLE-BREAK-KEY</td>
</tr>
<tr>
<td>BREAK-KEY-ON</td>
<td>ENABLE-BREAK-KEY</td>
</tr>
<tr>
<td>CHECK.FILES</td>
<td>VERIFY-FILES</td>
</tr>
<tr>
<td>CHECKFILES</td>
<td>VERIFY-FILES</td>
</tr>
<tr>
<td>CL</td>
<td>COPY-LIST</td>
</tr>
<tr>
<td>DCD-OFF</td>
<td>none</td>
</tr>
<tr>
<td>DCD-ON</td>
<td>none</td>
</tr>
<tr>
<td>HUSH</td>
<td>ECHO OFF</td>
</tr>
<tr>
<td>LIST-PORTS</td>
<td>LIST-LINES</td>
</tr>
<tr>
<td>MESSAGE</td>
<td>MSG</td>
</tr>
<tr>
<td>RESTORE-ACCOUNTS</td>
<td>RESTORE SYSTEM *</td>
</tr>
<tr>
<td>SET-DATE-EUR</td>
<td>DATE-FORMAT (I)</td>
</tr>
<tr>
<td>SET-DATE-FORMAT</td>
<td>DATE-FORMAT</td>
</tr>
<tr>
<td>SET-DATE-FORMAT-FR</td>
<td>DATE-FORMAT (I)</td>
</tr>
<tr>
<td>SET-DATE-FORMAT-GR</td>
<td>DATE-FORMAT (I)</td>
</tr>
<tr>
<td>SET-DATE-FORMAT-IT</td>
<td>DATE-FORMAT (I)</td>
</tr>
<tr>
<td>SET-DATE-FORMAT-SP</td>
<td>DATE-FORMAT (I)</td>
</tr>
<tr>
<td>SET-DATE-FORMAT-UK</td>
<td>DATE-FORMAT (I)</td>
</tr>
<tr>
<td>SET-DATE-FORMAT-US</td>
<td>DATE-FORMAT (A)</td>
</tr>
<tr>
<td>SET-DATE-STD</td>
<td>DATE-FORMAT (A)</td>
</tr>
<tr>
<td>SET-FLOP</td>
<td>SET-FLOPPY</td>
</tr>
<tr>
<td>SET-DATE</td>
<td>SET-DATE</td>
</tr>
<tr>
<td>SET-TIME</td>
<td>SET-TIME</td>
</tr>
<tr>
<td>T-VERIFY</td>
<td>:FILELOAD (DV)</td>
</tr>
<tr>
<td>TERM-TYPE</td>
<td>TERM-TYPE</td>
</tr>
<tr>
<td>TO</td>
<td>LOGTO</td>
</tr>
</tbody>
</table>
SYSPROG Front-End

Seattle Lab has developed a new front-end to the SYSPROG account based around SB+ from System Builder Technologies. The existing Sysprog menu can still be accessed with the command "SYSPROG-OLD."

The new front-end uses standard conventions throughout, including:

- **ESC** - backs up one field in a screen, or returns to the previous menu.
- **F1** - Help key.
- **F2** - SAVE and/or ACCEPT screen option parameters.
- **F3** - "Intuitive Help" key displays list of options/choices for field.

When first installing Version 92a you should define terminal definitions for each port on the system for proper terminal operation. To do this you would select "System" from the main menu, then "SB+ Setup", then "Port Configure". Within this screen you can receive a listing of available SB+ terminal definitions by hitting an "F3" at the "Terminal Id" field. If your functions keys do not work correctly, you can emulate them by hitting the "CTRL" key, followed by an "F", and the desired number.

To exit the SYSPROG menu to system TCL you should hit the number zero (0). To return the main menu you should type "MM".
Software Resolutions
Since Version 91a

- QIC tape code revised to eliminate bug that could cause data errors on tape (i.e. Item Size Error, File not on stack messages).

- PC disk caching (extended memory /EX option) can now use up to 8 megabytes of PC memory. Previously the system would not boot with SMB PC memory.

- Caliper/Sankyo/Monolith QIC tape handling has been revised to reduce tape hangs on that device, especially after rewinds.

- Incremental restore now works after restore from the Coldstart prompt or :FILELOAD command.

- Control character are not echoed when echo is off. Previously control characters were echoed even if echo was turned off.

- The NUM() function in BASIC could report non-numeric strings as numeric if the first characters in the string were numeric. It now checks the whole string.

- Pushing a null string in BASIC could cause a "Forward link 0 register 5" abort in some cases.

- SYSTEM(17) now reports hold file numbers reliably.

- Fixed SPOOLER status routine to correctly report whether the spooler is active.

- The LOGON verb would sometimes report failure when it actually had succeeded, simply because it did not wait long enough to check for success. It now waits longer and checks more intelligently.

- Date is now always advanced at midnight.

- Formerly, the system automatically tried to adjust the time when Standard Time changed to Daylight, and back. It did so incorrectly. Now the system lets the user handle resetting the time when the need arises.

- The compiler "X" option now works correctly.

- A multiplication error in the monitor has been fixed. This error was reported by Compu-Sheet users.

- IMPORT and EXPORT could fail because DIR had used up all available PC memory. DIR now returns memory correctly.

- The UPBOARD.EXE program now retries reading partition table and bad track map if first read attempt fails.
Known Problems

- Shared PC interrupt vectors now handled according to IBM specification.

- Fixed bug in BASIC CONVERT statement.

- BASIC READV now handles attributes/values longer than 32K.

- All levels of LOCKS have been improved.

- Error in sorting null fields has been fixed.

- Processes using LIST-LOCKS will hang.

- RESTORE MISSING ACCOUNTS from the new SYSPROG front-end does not work.