# S O F T W A R E  S U B S C R I P T I O N  U P D A T E

PRODUCT: microExlorer System Software — RELEASE NUMBER: 6.1
SOFTWARE UPDATE SERVICE P/N: 2553547-1000 — DATE: 11-05-90
SOFTWARE PACKAGE P/N-REVISION: 2552710-0001*G
UPDATE PACKAGE P/N-REVISION: 2552710-1001*G

DOCUMENTS SHIPPED WITH THIS UPDATE:

1. 2555022-0001*D Explorer Release 6.1 Software Release Information and Installation Guide for microExplorer Delivery Software
2. 2552701-0001*E microExplorer User's Guide (Change Package 2)
3. 2563075-0001*A+ License Agreement

MEDIA SHIPPED WITH THIS UPDATE - Media Subassembly 2555032-0001*G:

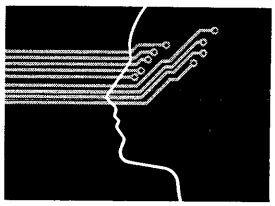
Disk Box #1, including these disks:

| | |
|---|---|
| 2555011-0001*E | Host Driver |
| 2555011-0002*E | System Files #1 |
| 2552715-0001*D | System Software #1 |
| 2552715-0002*D | System Software #2 |
| 2552715-0003*D | System Software #3 |
| 2552715-0004*D | System Software #4 |
| 2552715-0005*D | System Software #5 |
| 2552715-0006*D | System Software #6 |
| 2552715-0007*D | System Software #7 |
| 2552715-0008*D | System Software #8 |
| 2552715-0009*D | System Software #9 |

Disk Box #2, including these disks:

| | |
|---|---|
| 2552715-0010*D | System Software #10 |
| 2552715-0011*D | System Software #11 |
| 2552715-0012*D | System Software #12 |
| 2552715-0013*D | System Software #13 |
| 2559093-0001*C | Update Disk |

# Explorer™ Release 6.1
# Software Release Information for
# microExplorer™ DELIVERY SOFTWARE



2555022-0001*D

# Explorer™ Release 6.1
# Software Release Information and Installation Guide for
# microExplorer™ DELIVERY SOFTWARE

# MANUAL REVISION HISTORY

Explorer™ Release 6.1 Software Release Information and Installation Guide for microExplorer™ Delivery Software (2555022-0001)

Original Issue.....April 1988

Revision A.....July 1988

Revision B.....December 1988

Revision C.....Septemmber 1989

Revision D.....October 1990



The system-defined windows shown in this manual are examples of the software as this manual goes into production. Later changes in the software may cause the windows on your system to be different from those in the manual.



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# Explorer™ Release 6.1
# Software Release Information for
# microExplorer™ DELIVERY SOFTWARE

## 1. CONTENTS OF THIS DOCUMENT

This document describes the content of Explorer Delivery System Software Release 6.1 (TI Part Number 2552710-0001). This software will execute only on the microExplorer and cannot be used on other members of the Explorer family. These notes summarize modifications since the 6.0 release and any last minute changes in the software and documentation.

## 2. CHANGES SINCE RELEASE 6.0

The following changes have been incorporated into the 6.1 Delivery package.

**microExplorer Release 6.1 Font Installation**

In release 6.1 the microExplorer application fonts are being supplied as the Font/DA Mover font file, microExplorerFonts. In previous releases the fonts were included as resources on the microExplorer application itself. The purpose of this change is to circumvent a problem in PrintMonitor, which can cause the microExplorer to quit unexpectedly while printing a screen or file. The problem can be avoided by installing microExplorer fonts in the system file instead of on the application itself.

This change means that you will need to use the Macintosh™ utility Font/DA Mover to copy the fonts from microExplorerFonts into your Macintosh system file. If you are unfamiliar with this utility, please refer to the Font/DA Mover chapter of the "Macintosh Utilities User's Guide" for assistance. If you do not have the utility installed, you can install it from your Macintosh Utilities diskette.

Previously, the microExplorer referenced font resources by font ID instead of font name so there was a potential problem in which third-party fonts could get mapped to microExplorer fonts. If this happened, then you would see an unfamiliar font in use when booting the microExplorer. In release 6.1 we are using the font name instead of the font ID, so this should no longer be a problem.

**Expertelligence Action 2.0 and microExplorer 6.1**

Lisp patches in microExplorer release 6.1 supercede the Action!™ 2.0 file NEW-MODE. Likewise, certain resources of the release 6.1 TbServer supercede those of the "Action! 2.0" icon. Therefore, before running Action! 2.0 on microExplorer release 6.1, you need to perform the following steps:

1. Use ResEdit to replace the following resources of the Action! 2.0 icon with those of release 6.1 TbServer's icon.

   . Open the resource fork of a COPY of "Action! 2.0" icon.

   . CUT the CODE and EVTS resources from Action's resource fork.

   . Open the resource fork of release 6.1 TbServer's icon.

   . COPY these same resources from TbServer's resource fork.

   . PASTE them into Action's resource fork.

   . SAVE the changes made to Action's resource fork

These changes made using ResEdit provide Action with the latest (mac-side) TbServer functionality.

2. Do NOT load the Action! file NEW-MODE.XLD into the microExplorer 6.1 environment. This interum file was needed to run Action 2.0 on microExplorer 6.0, but is unnecessary with microExplorer 6.1.

## TbServer

Release 6.1 includes a redesigned toolbox-interface server, TbServer, that fixes several existing problems and provides some performance improvements. The new TbServer is provided in microExplorer release 6.1 to coordinate with ExperTelligence's Action! release 2.0. There are several reasons why your mac applications will benefit from using the new TbServer:

An asynchronous problem known as the "hanging bug", which occurs when the TbServer is brought to the foreground has been fixed.

The "random" mouse events bug has been fixed. This problem manifests as a menu item being suddenly selected though you never let go of the mouse button.

Other random problems that you think are timing related are probably fixed.

The 32 bit Quickdraw problem that copies garbage onto the screen and sometimes hangs the system has been fixed.

An optimization has been added that keeps the application's grafport state on the lisp side thus reducing the number of calls across the nubus to read grafport data.

A version number has been added to simplify TbServer identification. The format of the version number is MX_RELEASE.MPW_RELEASE.VERSION, which readily tells you which microExplorer release the TbServer goes with, which version of MPW it was built with, and the TbServer version itself.

## 2.1 System Requirements

The changes to the mac-side TbServer required corresponding lisp-side changes. The new TbServer will only work with microExplorer release 6.1 and later.

## 2.2 Application Upgrade

There are two methods you can use to upgrade existing microExplorer mac applications to the new TbServer:

1 Use ResEdit to upgrade certain resources of an existing application. This method is useful for testing purposes.

2 Rebuild the application from scratch using MPW. This method is recommended for software management.

The following steps will assist you in upgrading an existing application using ResEdit:

. Open the resource fork of a COPY of the application.

. CUT the CODE, TIMX and EVTS resources from the resource fork.

. COPY these same resources from the new TbServer's resource fork.

. PASTE them into the mac application's resource fork.

You do not need to know what other resource changes have been made to the mac application, so the upgrade is relatively painless. Usually applications based on TbServer will have been modified to include various icon information, strings, fonts, etc.

The ResEdit noticeable differences between your old TbServer and the release 6.1 TbServer are characterized as follows:

| Resource | Release 6 TbServer | New TbServer |
|---|---|---|
| TIMX | "microExplorer Toolbox Server" | "microExplorer Toolbox Server Version 6.3.04" |
| CODE | 21 resources | 21 resources |
| EVTS | ID = 0 | ID = 2 |

TIMX is the bundle bit resource and has been extended to include the TbServer version number. Its format has been described above.

CODE resources remain equal in number, however, the new TbServer contains the changes described above.

EVTS is an events resource used to designate which mode of operation the application is using. In order to use the new TbServer the resource ID must be 2. Any other value will be treated as 0 and will cause the new TbServer to operate in the old mode.

Once you have throughly tested your ResEdit'ed version, you will want to relink your application with the new TbServer. After completing the 6.1 software installation, just follow your usual build procedure. The build process will include in your application the new CODE, TIMX and EVTS resources from TbServer and TbServer.r.

## 3. KNOWN PROBLEMS

**Macintosh Operating System Version 6.0.x Compatibility**

- The MacroMaker™ Macintosh utility is not compatible with the microExplorer environment. Erratic behavior and system lockups may result if the microExplorer application is running and MacroMaker is present in the System folder. If the user performs an upgrade to OS version 6.0.x, the MacroMaker application must not be installed in the System folder. It may, however, be placed in any other folder.

- The microExplorer application cannot determine if the MultiFinder is the startup application. No diagnostic message will appear if the microExplorer application starts to boot with the MultiFinder disabled. Instead, the system will lock up shortly after reading the load band. After performing an upgrade to Macintosh System 6.0, make sure you enable the MultiFinder using the Set Startup facility of the Finder.

**Interaction with Other Macintosh Applications**

- The presence of certain Macintosh applications can cause the microExplorer to exhibit erratic behavior, or even to experience a hard crash during boot. This is of particular danger with programs that are installed at system boot time (such as Startup documents and Control Panel documents). If you experience any unexplained behavior running the microExplorer, first remove

all non-standard software from your Macintosh system (especially non-standard software in your System Folder), restart the Macintosh, and relaunch the microExplorer.

**EtherTalk Hardware Contention**

- Macintosh programs that utilize an Apple™ EtherTalk™ board may interact badly with the microExplorer. Several symptoms are possible. If the other program is running when you attempt to launch the microExplorer, the microExplorer may crash during boot. If the microExplorer is running when you attempt to launch the other program, the other program may fail to launch properly or may later get an error when it tries to access the EtherTalk hardware. Note that this behavior may be observed anytime an EtherTalk board is present in the Macintosh chassis.

  The Internet Intermail™ application is an example of such a Macintosh program. If it is present in your System Folder it will be installed when you boot the Macintosh. Subsequent attempts to launch the microExplorer will result in the Macintosh crashing.

**Boot**

- Do not use non-ASCII special characters in your hard disk names. Use only letters, numbers, and special characters in the ASCII character set. Otherwise, the system may freeze during boot.

- The "microExplorer" (Texas Instruments Logo) icon in the "MicroExp" directory will be chosen over a newer icon with a different name. This can result in an older icon (driver) used to boot the microExplorer when clicking on any of the HyperLisp buttons in a Hypercard stack that select a Explorer window. This can cause unpredicatble problems and crashes since you will not get the newer driver as desired. RULE OF THUMB : Do NOT rename NEW drivers. If you want to keep old drivers around for some reason, rename the OLD drivers so that THEY WILL NOT BE selected.

**File System**

- If the time set on the Macintosh is in the past, access to files with a creation date later than the set time will cause an NFS™ stale file-handle error. If you encounter this error, ensure the time set on the Macintosh is correct.

**Disk Save**

- The "Estimated Time Left" figure is usually wrong. It is too low at the start of the save and too high near the end. Furthermore, the "percent complete" may go over 100% near the end of the save.

**Kernel**

- SUBTYPEP sometimes incorrectly returns NIL when the arguments are flavors that have not yet been instantiated.

- If *PRINT-CIRCLE* is globally set true, this can cause the debugger to repeatedly display ">>Error: ... Error while printing error message:" when trying to report certain kinds of errors. If this happens, try pressing CTRL-ABORT and then (SETQ *PRINT-CIRCLE* NIL).

**Toolbox Server**

- At times your TbServer or other Macintosh application may evolve to such an unresponsive state that the only way to recover is to abort the application. This is normally done using TMON (or

MACSBUG) or by killing the associated lisp process. Once the application has been aborted, you should be able to cleanup your environment without having to reboot the microExplorer by executing the function MAC-APPLICATION-CLEANUP. This function will dispose of the lisp-side processes and application channels associated with TbServers and other Macintosh applications. Once it has completed, you should be able to relaunch the TbServer or other such applications. Remember that all of your mac-side objects became garbage when you aborted out of your Macintosh application. You must reinitialize these objects before trying to access them. Referencing garbaged objects will likely result in a system crash.

**Miscellaneous**

- The "Set Boot" item of the "Options" menu bar item is experimental and it is not functional in this release.

# 4. INSTALLING THE DEVELOPMENT SYSTEM SOFTWARE

## 4.1 Introduction

This section tells you how to install microExplorer Delivery System Software.

NOTE: The diskette labeled "microExplorer Update Disk" (TI Part Number 2559093-0001) contains last-minute changes to the software that are necessary for proper microExplorer system functioning. These changes must be applied to your system load band via the **sys:install-update-from-diskette** and **load-patches** Lisp functions after the system installation is complete. See paragraph 4.11, The UPDATE Diskette, for further instructions.

If you purchased the full microExplorer system, all necessary software has already been installed on your hard disk. However, keep in mind that you will need to load the last-minute Lisp changes into your Lisp system via the **load-patches** procedure after booting the microExplorer. See paragraph 4.11, The UPDATE Diskette, for further instructions, then proceed to section 2, Launching, in the *microExplorer Development Software User's Guide* after completing this introduction. (For more information on loading patches see section 10, Maintaining Your System Configuration, in the *microExplorer Development Software User's Guide*. For information on how to build patches permanently into a load band, see the discussion of **disk-save** in the *Explorer Input/Output Reference* manual.)

Before you attempt to install the Delivery System Software, be sure that you have already installed the microExplorer processor board and any optional memory expansion boards in the Macintosh II chassis. See Section 2, Installing the microExplorer Processor Board, in the *microExplorer User's Guide* for the hardware installation procedures. Also, be sure that you have completed the preparations described in the following paragraphs.

NOTE: The remainder of this section applies only if you purchased a microExplorer Upgrade Kit and if you are installing the software for a microExplorer Delivery configuration (TI Part Number 2552715-0001). Be sure that you have a minimum of 15MB of unused disk space for installing the microExplorer Delivery System Software.

### 4.1.1 Become Familiar With Apple Utilities

You will be installing from diskette media and need to know how to transfer material from diskette to your Macintosh hard disk. Most of this material is discussed in the Macintosh II owner's guide. For information about Apple's HDBackup program, see the *Macintosh Utilities User's Guide.*

While the backup program is restoring diskettes, it will show a dialogue box with messages about progress and requests to load disks. Be aware that an icon may not appear in the upper right part of your screen while that dialog is displayed.

4.1.2 Have the Software Media Handy

Have the set of diskettes labeled "microExplorer System Software" (TI Part Numbers 2552715-0001, -0002, -0003, and so on) accessible.

Also have ready the set of diskettes labeled "microExplorer Host Driver" (TI Part Number 2555011-0001) and "microExplorer Development System Software System Files Disk #1" (TI Part Numbers 2555011-0002).

4.1.3 Have the MultiFinder Utility Ready

Not only must you have Apple's MultiFinder utility installed on your Macintosh, but you must also have it selected as the Startup application for your hard disk. See the Set Startup command in the *Macintosh MultiFinder User's Guide* for details.

The following paragraphs describe the installation procedures. If you do not need the detailed explanation given in the following numbered steps, use only the text immediately following each paragraph title as a simplified guide to installation.

**4.2 Copy the Host Driver Diskette to Hard Disk**

The microExplorer Host Driver diskette contains folders with code needed for the microExplorer installation and operation. Before you copy the contents of this diskette, verify whether you have an existing microExp folder on your hard disk. To do so, double-click on the hard disk icon (if it is not already open), and view its contents.

If you have an existing microExp folder, perform the steps in paragraph 4.2.1, microExp Folder Already Exists, to copy the contents of the Host Driver diskette. If not, skip to paragraph 4.2.2.

4.2.1 microExp Folder Already Exists

If you have an existing microExp folder, be sure the desktop of your Macintosh is open. Perform the following steps:

1. Insert the Host Driver diskette (TI Part Number 2555011-0001) into the disk drive of your Macintosh. An icon representing the diskette appears on the Macintosh desktop.

2. Double-click on the Host Driver icon. A window appears, displaying the directory of icons found on the Host Driver diskette.

3. Using the techniques described in the Macintosh II owner's guide, drag the contents of the Host Driver diskette to the microExp folder.

4. A dialog box appears, asking whether you want to replace existing versions of the files in the microExp folder.

5. Click on the OK button to signify that it is okay to replace the existing files.

6. Unload and remove the Host Driver diskette by dragging its icon to the trash can.

7. Proceed to paragraph 4.3, Copy the System Files Diskette to Hard Disk.

### 4.2.2 microExp Folder Does Not Exist

If you do not have an existing microExp folder, be sure the desktop of your Macintosh is open. Perform the following steps:

1. Insert the Host Driver diskette (TI Part Number 2555011-0001) into the disk drive of your Macintosh. An icon representing the diskette appears on the Macintosh desktop.

2. Select the Host Driver icon by clicking the mouse once.

3. Drag the Host Driver diskette icon to the icon representing your Macintosh's hard disk. Click OK on the dialog box that appears because the disks are of different types.

4. Unload and remove the Host Driver diskette by dragging its icon to the trash can.

5. If the directory listing for the hard disk is not already open, double-click on the hard disk's icon to open it. You should see a new Host Driver icon.

6. Using the techniques in the Macintosh II owner's guide, rename the new Host Driver icon to microExp.

## 4.3 Copy the System Files Diskette to Hard Disk

The microExplorer System Files diskette contains many of the tools and Lisp system files required for developing applications. The diskette is numbered TI Part Number 2555011-0002. To copy this diskette, be sure the desktop of your Macintosh is open. Perform the following steps:

1. Insert the System Files diskette (TI Part Number 2555011-0002) into the disk drive of your Macintosh. An icon named "System Files 1" representing the diskette appears on the Macintosh desktop.

2. Double-click on the System Files icon. A window appears and displays the directory of icons found on the System Files diskette.

3. Using the techniques described in the Macintosh II owner's guide, drag the contents of the System Files diskette to the microExp folder on your Macintosh's hard disk. This microExp folder was created when you copied the contents of the Host Driver diskette to your hard disk.

4. Unload and remove the System Files diskette by closing its window and dragging its icon to the trash can.

5. Double-click on the microExp folder. A window appears and displays the directory of icons inside the microExp folder.

## 4.4 Restore the Delivery System Software Diskettes

The Delivery System Software diskettes contain a large image file (also referred to as the *load band*) for the Delivery System Software. You will restore this file from these diskettes using Apple's HDBackup utility. For information about how to use this utility, see the paragraph on Restoring a Single File in the *Macintosh Utilities User's Guide.*

Notice the numbering of the Delivery System Software diskettes. Only their dash numbers differ. Using the HDBackup utility, sequentially restore these diskettes to your Macintosh's hard disk. For the Delivery

System Software, begin with diskette number 2552715-0001 and continue with diskette numbers 2552715-0002, -0003, and so forth until all diskettes have been installed.

NOTE: If more than one file appears in the HDBackup Dialog box, select only that file to be restored which contains the **.load** suffix (note the leading period) in its name.

### 4.5 Move the Restored File to the microExp Folder

The HDBackup utility restores the Delivery System Software file directly to the top level of your Macintosh hard disk. This file has a name that uses an *xxxx*`.load` naming convention, where *xxxx* may vary according to which software release you have. After the file is restored, you must move it into the microExp folder. The microExp folder was created on your hard disk when you copied the contents of the Host Driver diskette. If you are unable to move the file without an error, close and reopen the folder containing the restored file, and then try to move it again.

The name of the file created by the HDBackup utility may have a numeric prefix (such as **1.K817.LOAD**). If so, close and reopen the folder containing the restored file. If the name retains its numeric prefix, remove the numeric prefix by renaming the icon. Using the preceding example, the new name would be **K817.LOAD**. For information about renaming icons, see the Macintosh II owner's guide.

NOTE: If your folder was displayed on the desktop under another folder, the icon representing the restored file may not be visible when the HDBackup utility has finished. Select the disk's top-level folder in order to see the restored file's icon. If it is not there, examine the contents of other folders on your system's hard disk.

### 4.6 Install the Required Fonts

The microExplorer maps most Explorer fonts to their Macintosh equivalents. Some of these fonts are supplied by Apple, but are not already installed in the System file. The table below lists which of the Apple fonts are referenced by the microExplorer, and which are not.

Any members of the Required Fonts list that are not installed in your System file are generated by the microExplorer by scaling an already installed font with the same typeface but different point size. The resulting characters are usually misshaped. For example, the Texas Instruments Incorporated banner in the boot logo will be misshaped if the Times 18 font is not installed.

If your display contains misshaped characters, and if you would rather have a one-to-one mapping that results in a cleaner display, use Apple's Font D/A Mover utility (described in the *Macintosh Utilities User's Guide*) to verify which Apple fonts are not presently installed in your System file.

After identifying the fonts you need, install them from the Fonts file supplied in the Font/DA Mover folder on your system's Utilities 2 diskette. For Macintosh System 6.0.2, you would need to install Helvetica™ 9, Symbol 12, Venice 14, Times™ 9, and Times 18.

See section 2, Changes Since Release 6.0, in this document for instructions on installing microExplorer fonts into the system folder.

| REQUIRED FONTS | | OPTIONAL FONTS | |
|---|---|---|---|
| **Typeface** | **Point Size** | **Typeface** | **Point Size** |
| Chicago | 12 | Athens | 18 |
| Courier | 10, 12 | Cairo | 18 |
| Helvetica | 9, 10, 12 | Courier | 9, 14, 18, 24 |
| Geneva | 9, 10, 12, 14, 18, 20, 24 | Helvetica | 14, 18, 24 |
| | | London | 18 |
| Monaco | 9, 12 | Los Angeles | 12, 24 |
| Symbol | 12 | Mobile | 18 |
| Times | 9, 10, 12, 18 | New York | 9, 10, 12, 14, 18, 20, 24 |
| Venice | 14 | San Francisco | 18 |
| | | Symbol | 9, 10, 14, 18, 24 |
| | | Times | 14, 24 |

### 4.7 Run the MakePFiles Utility

The microExplorer Lisp environment requires at least one page partition-file, which is used as swap space (or page area) for its virtual memory. You create the initial page partition-file with the MakePFiles utility. To run this utility, perform the steps in the following paragraphs.

#### 4.7.1 Launch the MakePFiles Application

The MakePFiles application resides in the microExp folder. This folder was created on your hard disk when you copied the contents of the Host Driver diskette.

1. In the window displaying the directory icons for your hard disk, open the microExp folder by double clicking the mouse on the microExp folder icon. The microExp window appears with the icon that represents the MakePFiles application.

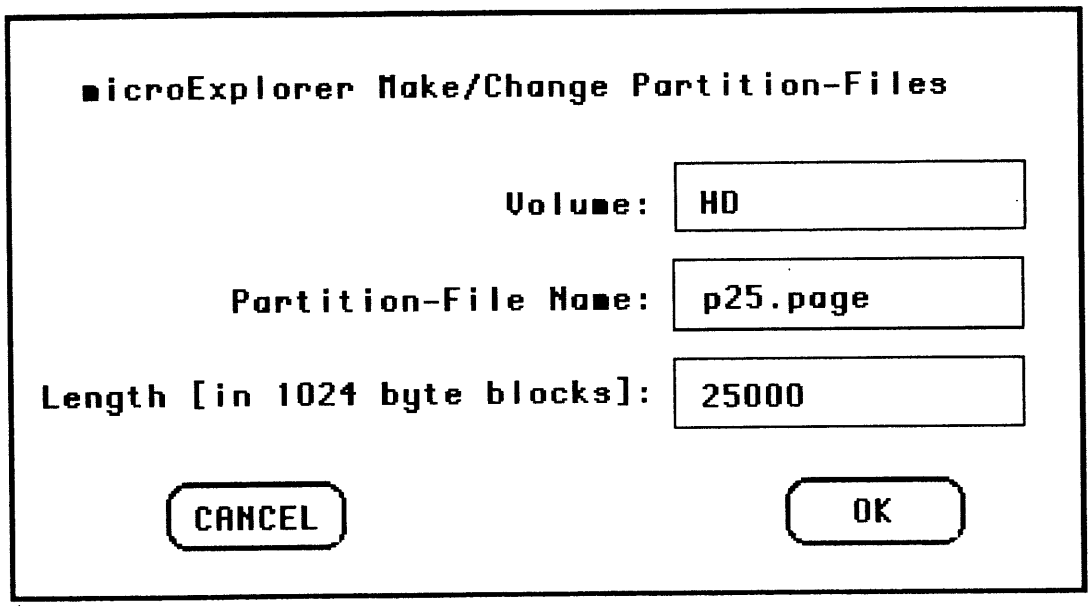
2. Double-click on the MakePFiles icon. The MakePFiles window appears. Also, the Make title appears in the menu bar.

#### 4.7.2 Create a Page Partition-File

Now that the MakePFiles application is open, you must create the page partition-file for your microExplorer.

As a rule-of-thumb, you should create the largest page partition-file possible, leaving several megabytes of disk storage free for normal Macintosh operations and file creation. Most applications will run acceptably with the total paging area about twice the size of the load band. The more paging space allocated (up to 128 megabytes), the less garbage collection will need to be done.

1. From the menu bar, slide down from the Make title to the Make command. The Make/Change Partition-Files dialog box appears, as shown:




The **Volume** prompt requests the volume name of your hard disk. Enter the name of your hard disk. The default volume name is HD.

2. The **Partition-File Name** prompt requests the name of the page partition-file. Enter a name that adheres to the following format:

**p*n*.page**

You *must* end the name of the page partition-file with the **.page** suffix. For *n*, enter a numeric value that approximates the size (in megabytes) of the page partition-file for your system. The larger the page partition-file, the better performance you will get from the microExplorer. However, you are limited to the amount of free space on your hard disk drive. The default value, **p25.page**, is the name for a 25 megabyte partition file. It should be acceptable for most systems; if not, enter the correct value for your system.

**CAUTION: It is not a good idea to specify more than four characters in the first part of any partition-file's name. For example, the three letter p25.page is correct, but the five letter p0025.page name will be interpreted as p002 by the microExplorer.**

Make certain that each partition-file has a unique name. Use only alphanumeric characters in the first part of the name. Also, take care not to add any blanks, tabs, or other invisible characters to the beginning or end of a partition-file name.

3. The **Length** prompt requests the length (in 1024-byte blocks) of your page partition-file. Using the previous example, your page partition-file is 25MB, or 25,000 blocks long. Enter that information according to the value you have chosen for your page partition-file.

4. After confirming that all the requested information is correct, click on the **OK** button to activate the MakePFiles utility. Click on the **CANCEL** button if you have changed your mind.

5. After the MakePFiles utility completes, exit MakePFiles. To do so, press and hold the Apple key; then press Q. You are now ready to launch the microExplorer.

   The MakePFiles utility is discussed in greater detail in section 9, Partition-Files, in the *microExplorer Development Software User's Guide*.

### 4.8 Contents of Your Hard Disk

After you have completed the steps described in the earlier portions of this section, the following items should be on your hard disk:

| | |
|---|---|
| Macintosh System folder | Contains code used by all applications running on the Macintosh |
| Macintosh Utilities folder | Contains the utilities that enabled you to install the Delivery System Software |
| microExp folder | Contains the items listed in paragraph 4.9 |

### 4.9 The microExp Folder After Installation

| Contents | Description |
|---|---|
| microExplorer application | The microExplorer application itself. |
| MakePFiles application | Used to create or modify partition-files. |
| TbServer application | Used to make Macintosh Toolbox calls from the microExplorer environment. |
| Color-Qix application | An example toolbox interface application. |
| Startup file | Identifies parameters needed at launch-time. See Section 2, Launching, in the *microExplorer Development Software User's Guide* for details. |
| Load partition-file | Contains the Lisp environment loaded at launch time. |
| Microcode partition-file | Contains the Lisp microcode environment. |
| Page partition-file | Used by the microExplorer for virtual memory swap space. |
| ExpSys folder | Contains Lisp systems, tools, and code for inter-environment communication. Includes the UBIN folder which has the TBL and CRASH files. These files contain information needed for error reporting and crash analysis. |
| MacSys folder | No files present in this configuration. |
| HyperLisp folder | Contains materials that enable communication between HyperCard and the microExplorer. |
| microExplorerFonts | Contains the fonts that are moved into your system folder. |

### 4.10 Starting Up Your New System

Proceed to Section 2, Launching, in the *microExplorer Development Software User's Guide* for information about starting up your new system.

### 4.11 The UPDATE Diskette

The UPDATE diskette (TI Part Number 2559093-0001) contains last-minute Lisp patches that should be applied to your Lisp system after it is booted. These patches can be loaded directly from diskette by executing the following form:

```
(sys:load-patches-from-diskette :options '(:noselective))
```

More commonly, you will want to install the updated materials on your SYS host where **load-patches** will pick them up automatically. This can be done using the **sys:install-update-from-diskette** procedure. **sys:install-update-from-diskette** will copy the patches to the proper patch directories on the SYS host, as well as any updated source files provided on the UPDATE diskette.

NOTE: The **sys:install-update-from-diskette** procedure should be performed last, after all other installation steps are completed. In addition, you should be sure to load all patches on the UPDATE diskette into the Lisp environment (via the **sys:load-patches-from-diskette** procedure) before using **sys:install-update-from-diskette.**

After the **sys:install-update-from-diskette** has been performed, you can load patches each time you boot by using the **load-patches** procedure. Alternatively, you can load patches once and then **disk-save** the patched environment. A simple method of ensuring that patches are always loaded when you boot the microExplorer is to put the form `(load-patches :noselective)` in your login-init file. For more information on loading patches and updates on diskette, see section 10, Maintaining Your System Configuration, in the *microExplorer Development Software User's Guide*. For information on how to build patches permanently into a load band, see the discussions of **disk-save,** section 6.7, Saving a Modified Lisp Environment, in the *Explorer Input/Output Reference* manual and in the section 9, Partition-Files, in the *microExplorer Development Software User's Guide.*

Note that because the patch directory overhead files for all microExplorer subsystems are not shipped with the system (in order to conserve disk space), warning messages such as the one below may appear when a **load-patches** is performed.

```
Skipping system EH, whose patch directory
   SYS:PATCH.EH;PATCH-5.PATCH-DIRECTORY#> cannot be accessed.
```

#### 4.11.1 Factory-Installed Software Considerations

If your microExplorer system came with software factory installed, the equivalent of **sys:install-update-from-diskette** has already been performed on your hard disk, so that the patches and other updated materials are already on your disk volume. After booting your microExplorer you will need to load the patches via the **load-patches** procedure.

#### 4.11.2 Examples Using sys:install-update-from-diskette

Both **sys:load-patches-from-diskette** and **sys:install-update-from-diskette**, are documented in section 10, Maintaining Your System Configuration, in the *microExplorer Development Software User's Guide.* For ease of installation, some examples are given below.

**Example 1:** You have just finished installing the Development Software with Network Option from tape onto disk volume HD, which is the `defaultdevice` in your Startup file. You want to install the update materials onto the same disk volume. After booting the microExplorer and performing **sys:load-patches-from-diskette** to load all patches, you would perform the UPDATE installation as follows:

```
(sys:install-update-from-diskette :to-host "lm")
```

**Example 2:** Same as Example 1 except that disk volume HD is not the `defaultdevice` in your Startup file. After booting the microExplorer and performing **sys:load-patches-from-diskette** to load all patches, you would first set the SYS host to your local host with directory translations pointing to HD. This can be done using the following:

```
(net:add-logical-pathname-host
   "SYS" "lm" (name:make-microExplorer-sys-translations) "HD")
```

Then you perform the UPDATE installations as follows:

```
(sys:install-update-from-diskette :to-host "SYS")
```

Note that **sys:install-update-from-diskette** has a **:print-only** keyword which when true will inhibit any actual copying operation and only display where the files would be copied.

While the UPDATE files are being copied you may be prompted about whether various files named MAKEFILE (with no file type) are character files. Answer Y to any such questions.

### 4.11.3 Future UPDATE Diskettes

At the time of this writing, only one UPDATE diskette is included with microExplorer software packages. However, future software updates may require more than one UPDATE diskette. If so, they will be named "microExplorer Update Disk #1", "microExplorer Update Disk #2", and so forth, and have TI Part Numbers 2559093-0001, -0002, and so on. Both **sys:install-update-from-diskette** and **sys:load-patches-from-diskette** will handle multiple-diskette update sets by prompting the user for additional diskettes.

Future UPDATE diskettes may also contain the Macintosh microExplorer applications (microExplorer, TbServer, and so forth). If present, these applications would be located in the UPDATE diskette's microExp folder. These applications cannot be copied to other Macintosh disk volumes using **sys:install-update-from-diskette.** Instead, you must copy them using Macintosh copy facilities (by selecting the microExplorer application icons in the Finder and dragging them into your microExp folder).

## 5. ADDITIONS/CORRECTIONS TO MANUALS

The following changes and additions should be made to the *Macintosh Toolbox Interface* (TI Part Number 2559092-0001). Refer to *Inside Macintosh* for documentation of the new traps and constants.

**Chapter 3 QuickDraw**

***Page 3-17***

In the last paragraph discussing the method tb:Rect := replace the incorrect sentences as follows:

Incorrect:

"In each case the argument(s) define the new top, left, bottom, and right coordinates of the modified rectangle."

Correct:

"In each case the argument(s) define the new left, top, right, and bottom coordinates of the modified rectangle."

Incorrect:

"Four arguments are top, left, bottom, and right specifications similar to tb:!SetRect."

Correct:

"Four arguments are left, top, right, and bottom specifications similar to tb:!SetRect."

**Chapter 4 Color Manager**

Add the following constant:

!minSeed

**Chapter 6 Color Picker**

Add the following constant:

!MaxSmallFract

**Chapter 11 Menu Manager**

Add the following constant:

!hPopUpMsg

**Chapter 12 TextEdit**

***Page 12-4***

The example for tb:!TEInsert is incorrect. It should be replaced with the following example:

```
;;; Output "hello world." to a TERec
(make-instance 'tb:TERec)                    ; make an instance of TERec
(setf hndl  (tb:!NewString "hello world."))  ; get a handle to string
(tb:!hLock hndl)                             ; lock the handle, then...
(setf text-ptr (tb:deref hndl))              ; dereference it into a ptr
(send text-ptr :+ 1)                         ; skip over length byte
(tb:!TEInsert text-ptr 12 myTEHandle)        ; output the string
```

(tb:!DisposHandle hndl) ; dispose of our handle

*Page 12-5*

The argument list for tb:!TEScroll is incorrect. It should be replaced with the following:

tb:!TEScroll dh dv hTE

**Chapter 21 File Manager**

Add the following traps:

!AllocContig, !LockRng, !unLockRng

*Page 21-14*

In the example function OPEN-FILE replace the local variable "theNewHandle" with "theNameHandle".

**Chapter 22 Printing Manager**

Add the following constants:

!DraftBits,!GetRotn, !GetRslData, !iprEvtCtl, !lHiPaintBits,!lHiScreenBits, !lPaintBits, !lPrDocClose, !lPrDocOpen,!lPrEvtAll, !lPrEvtTop, !lPrLFStd, !lPrLineFeed,lPrPageClose, !lPrPageEnd, !lPrPageOpen, !lPrReset,lScreenBits, !NoDraftBits, !SetRsl

**Chapter 25 Serial Driver**

Add the following constants:

!dtrNegated

**Chapter 27 Operating System Utilities**

Add the following traps:

!Environs

**Shutdown Manager (No Chapter)**

The following traps have been added for the Shutdown Manager:

!ShutDwnPower, !ShutDwnStart

# 6. CUSTOMER INTERFACE TO TI

## 6.1 Problem Reporting

If you experience problems with either hardware or software, please report those problems as soon as possible. A detailed description on how to submit bug reports is summarized here.

There are several ways to create online bug reports from a microExplorer. Note that you must be running the microExplorer Development System software in order to have access to the Zmacs Editor's bug reporting facilities, and you must have the Network Option software in order to use the Mail system. If you do not have access to the necessary Development System software, simply send a brief description of your problem to the address given below. The methods you can use to create online bug reports are:

- You can press CTRL-M while in the error handler if the bug causes the machine to enter the error handler.
- You can use the function **(BUG)** from any Lisp Listener.
- You can use the Zmacs command META-X Bug.

With any of these means, you are presented a Zmacs buffer in which to describe your problem. The system captures your hardware and software configuration information for you. When you finish filling in the form, you can use one of these means to get the report to Texas Instruments:

- Mail the bug report by filling in the address in the TO and SUBJECT fields at the top of the form and pressing the END key. If you have access to Arpanet mail (or CSNET mail), you can mail the form directly to Texas Instruments at `EXPBUG@CSC.TI.COM`. Otherwise, mail it to a local bug report mailbox. The EXPBUG mailing list is read by Texas Instruments only.
- Write the form to a file using the Zmacs command CTRL-X CTRL-W and specifying a file name. Transfer the file to the TI-CARE$^{SM}$ Bulletin Board via modem at phone number (512) 250-6112. The ID "exp bugs" can be used as both login ID and password for the TI-CARE bulletin board. If you are unfamiliar with Bulletin Board use, TI-CARE Support Services can provide you with more information on these procedures.
- Write the form to a file using the Zmacs command CTRL-X CTRL-W and specifying a file name, print the report, and send it to Texas Instruments at the following address:

EXPLORER BUG REPORTS
Texas Instruments
P.O. Box 149149 - M/S 2201
Austin, Texas 78714-9149

If you encounter a critical problem that needs immediate attention, please contact TI-CARE Support Services for help in the United States. The phone number is (512) 250-7407. You will need to supply your Technical Support ID when making the call.

International customers with questions or problems should contact the Texas Instruments organization in their local country. The local TI organization is able to provide hardware and software support services. In addition, the local software support organization will be able to provide any patches available for customers.

### 6.2 Hardware Service

If your Explorer hardware needs service, you can reach Texas Instruments Field Service in the United States at (800) 572-3300. You will need to supply your system serial number when making this call. International customers with questions or problems should contact the Texas Instruments organization in their local country.

### 6.3 Explorer Mailing Lists

There is a public mailing list on the Arpanet to which anyone with Arpanet access can add themselves:

```
Info-TI-Explorer@SUMEX-aim.stanford.edu
```

To add yourself to this list, send a message to `Info-TI-Explorer-Request@SUMEX-aim.stanford.edu`. This list is intended for discussion of general Explorer issues and is supported by Explorer users and not by Texas Instruments. However, by sharing the experiences with other users, Explorer users will be more productive. Texas Instruments personnel do read messages on these lists.