

NEW EDITION

MacUser

1001

**HINTS & TIPS
FOR THE
MACINTOSH**

**Compiled and Edited by
Erica Litsky, Tracy Hines,
and the MacUser Staff**

MacUser

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MacUser 1001 Hints & Tips for the Macintosh

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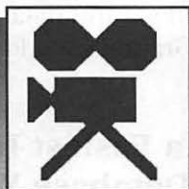
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ANIMATION



VIDEOWORKS

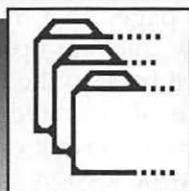
Each Animated Sprite Consumes Memory

Each animated sprite takes up memory space and slows down the program. When choosing how many objects you'll animate during each sequence, keep it simple for the best results.

Creating Self-Running Animations

Take a self-running animation from your VideoWorks files. Put your animation files on a disk with the VideoWorks player and set the Player to run as soon as the disk is inserted. Copy the System folder and the VideoWorks player from the MacroMind Utilities Disk to your blank disk, then copy the Demo List document from VideoWorks, and finally, transfer your animation files over. Select the VideoWorks Player icon on the new disk and choose Set Startup from the Special menu. Now, when the disk is inserted, it immediately launches into your animation.

DATABASES



FILE

Generating Line Fields At Insertion Points To Create Lists

Type Option-Return in a field to generate a line feed at the insertion point, which allows you to create lists. This embedded character acts like a normal carriage return when copied and pasted into a word processing or spreadsheet application.

Quickly Select The Entire Field

Shift-Click to select the entire field so that you don't have to scroll to highlight it.

Generating Exportable Tab Characters

Hitting the Tab key usually moves the cursor to the next field. However, you can generate Tab characters by holding down Option while pressing Tab. If data with embedded tabs is exported to a word processor, for example, the tabs will respond to the settings in the word processor, making it easy to format tables. Take care when using the same data in another database program, though, since the receiving database may confuse the Tab characters with field delineators, ruining the transfer's format.

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The Display Box Is Bigger Than It Looks

If the display box you've chosen for a field in your form design isn't large enough for the data you've entered, don't worry — while the box only displays the first part of the data, File saves the rest. You can see what's in the rest of the field by clicking a few characters before the end of the box and dragging off its end. This scrolls the text through the box for viewing. This only works horizontally in single line fields, and won't work vertically with multiple line fields.

Changing Field Formats While Preserving Your Data

There's a way to preserve data and still change the format of a field. First, open your form design and move the hide line so that all your fields are showing. Remember to show even hidden fields, since if you don't you'll lose their data.

Now, return to the data entry window and Shift-Click to select all the records in your database and copy them to the Clipboard. Then, use clear from the Edit menu to empty all your records and quit. When the dialog appears asking how to save the Clipboard, choose "Unformatted."

Then, restart File by double-clicking on your data file's icon and choose Show Form from the Form menu. Now reformat the fields, clicking OK whenever File warns you that you'll lose data. After changing the field formats, save the changes and return to the data entry window. Select a New record and Paste in your data from the Clipboard. Then, choose "By Name" when the dialog box comes up.

This only works if the database contains no pictures. Graphics are lost during this reformatting.

Enter Data Fastest In The Smallest Database Window

To enter data quickly, don't leave the database window open to the default screen size setting. Close it as far as it will allow, to display only two lines. Since File redraws the screen after completing an entry, keeping the window small requires the program to draw less. Hit the Enter key to go to the first field of the next entry.

If Your Select Bar Pushes Your Form Aside

The width of the select bar on the far left side of the screen in the data file display varies to accommodate the number of digits in the record numbers. If the bar gets so wide that it pushes your form partly off the page, fix it by opening the Form window, picking up the line, and then moving it back to the left. This may obscure some of your record numbers, and you'll have to reset it every time you start a new work session.

Keyboard Cursor Movement

File has provisions for using the arrow keys on the keyboard:

The right arrow moves the cursor to the next field, replacing Tab or Return;

The left arrow moves the cursor to the previous field, replacing Shift-Tab or Shift-Return;

The down arrow moves the cursor to the same field in the next record, replacing Command-Enter;

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The up arrow moves the cursor to the same field in the previous record, replacing Command-Shift-Enter.

Printing Solid Rules On The LaserWriter

When you print reports on the LaserWriter, rules will print as dotted lines. To print them solid, select Font Substitution from the Page Setup dialog. Font Substitution also makes sure that any of your total and subtotal fields, and your headers and footers, are printed in Helvetica instead of in Geneva.

Don't Use Embedded Tabs Within Fields When Exporting To Other Databases

If you work on a file you want to transfer to another database manager, don't use embedded (Option-) Tabs and carriage returns within fields. When you try to transfer the file later, the other database manager could interpret the embedded tabs and returns as regular ones. In most cases, this will render the transfer useless, since the importing database manager will interpret the tabs as field delineators, and the returns as record delineators. This messes up the order of your fields and records, generating so much extra work that you might as well create a new database from scratch.

Creating File Records With A Word Processor

You can create records in a word processor that will later be transferred into File. Don't type in the names of fields, since these will get Pasted in along with the data. Just type in the contents of the fields

in the same order as the fields on your File form. Follow each field with a Tab character, and mark the final field in each record with a carriage return.

If you have blank fields in your records, enter an extra Tab character for each blank. If a blank field is at the end of your record, you don't have to enter Tabs, since the carriage return will make the database manager ignore any remaining fields in the current record, instead starting with the first field of the next record.

Transfer the data into File by selecting all of the data. Put the cursor in front of the first character of the first record and press Shift-Click while placing the cursor immediately after the last carriage return.

Copy the records to the Clipboard, quit the word processor, and enter File by double-clicking on the file's icon. Go to the end of the database and select the new record by clicking on the selection bar to the left of the data window. Then, Paste your records into position, choosing the "by name" option. If anything doesn't look right, Undo the Paste and go back to the word processor file to fix the problem.

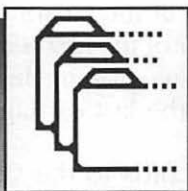
Saving Changes To Page Setup Parameters

If you change the page setup parameters of a report that's already been saved, use Save As... instead of Save after you make the changes. Using the standard Save will save only the changes you've made in the report design, without saving changes to page setup. When the Save As... dialog asks you if you want to replace the existing report of that name, click Yes and the page setup is permanently saved.

DATABASES

Saving Files In A Sorted Order

To save files in a sorted order, use Save Records As... before closing the file, after data has been sorted. This saves your information as a new, sorted data file. If you want to keep the unsorted file as a backup, close and save it in the usual way. If you don't need the old file, delete it, since it won't reflect changes made to the sorted file while it was open, and this keeps you from getting confused about which is which.



FILEMAKER PLUS

Solution For Label Peels On The ImageWriter II

When printing on the ImageWriter II, you might find it peels labels off pages and backs up. Just prior to printing your label layouts, choose Set Paper Size from the File menu and set the paper length extra long. Then, in Page Setup, turn "No Gaps Between Pages" on and specify Hand Feed printing. If you use, say, 1-inch, one across labels and set the paper length to 36, the printer makes 36 labels, skips the next two labels, and then prints the next batch of 36.

Hidden Credits

A humorous credit screen is embedded in FileMaker Plus. To see it, hold down

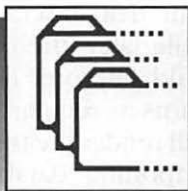
Option-Shift while choosing About FileMaker Plus from the Apple menu.

Entering Multi-Word Phrases As Search Identifiers

Use Option-Space instead of the space bar when you're entering multiple-word phrases to be used as search identifiers. That indexes both words as one, allowing searches by combinations or portions of all the words.

Entering Copies Of A Record

To enter a lot of copies of a record using the Command-M key combination, it helps to execute a find on the first record entered. Thereafter, the number under Found will increase by 1 each time you press Command-M. This allows you to keep track of how many records have been entered.



FILEVISION

Establish Help Files For Other Users Of Your Database

If other people will be using your Filevision database, establishing Help files in addition to your drawings will make things more convenient for them. In the Types menu, add a type called Help. Create one field in your data form and name it Instructions. Then, in the Name field, type

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in a message such as, "For Help screens, double-click the mouse." Take a rounded rectangle tool and placed a small shape in an unobtrusive but accessible place on the screen. Then, click on the rectangle and, with the Shift key depressed, select the text tool and type Help into the rectangle. Finally, go back to the dataform and type in your Help text in the Instructions field.

Controlling Object Sequence

You can control the sequence of objects when using the Next or Previous buttons by numbering your objects in the Name field. Numbers always take precedence over letters, which are alphabetized. So to move items to the top of the list, give them numbers as names.

Another way to control ordering is to use the same name, but put a number in front of it. This also shows you at a glance which data is linked. It works well if you need to show a series of steps in your drawing.



HELIX

Advance Planning Helps

To use one of Helix's abacus icons to perform complicated calculations, it's best to plan your function before building it in on the Mac. If possible, break the calculation into modules, then combine them

in the final calculation. This also means you can use the modules in other calculations without having to start over from scratch.

If you can't break a complex calculation into modules, plan it on paper first, then construct it on the Mac. A quick flowchart now can save hours of confusion later.

Viewing Entire Complex Calculations

Seeing the entirety of complex calculations can be difficult, since you have to view portions of it by scrolling the window. View the whole calculation by printing it out on the ImageWriter by selecting Print Scaled Image from the File menu. This doesn't work on the LaserWriter.

Avoiding Icon Confusion

Complicated relations clutter your work with a lot of icons. To keep from getting confused, name your most important and frequently-used icons in all uppercase letters to make them stand out. Then, move lesser-used icons off to the side of the window and arrange your icons in logical groups for easier tracking.

Save Time: Copy Old Calculations, Then Modify Them

To create a calculation with an abacus icon that differs slightly from another one that's already created, duplicate the original calculation's icon and then modify the copy to create the new calculation.

DATABASES

Save Time While Setting Up A New Relation

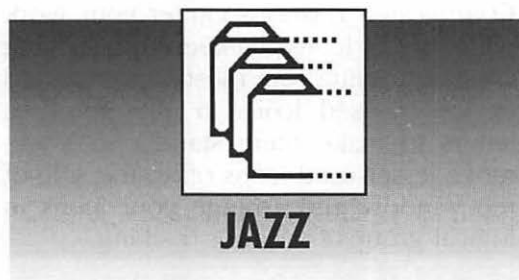
When setting up a Relation for the first time, several fields will probably have formats different from the default settings. Save time by creating one field with each of the formats you plan to use, then replicate them as often as you'll need (one for each format) and name them appropriately.

Moving A Single Tile

To move only one tile, click and drag anywhere on the tile except in an arrow or a blank space.

Moving Groups Of Segments Or Tiles

To move a group of arrow segments and/or tiles, use Shift-Click to select the individual elements to be moved, or surround the group with the selection rectangle.



Power Off Prior To And After Work Sessions

When you use Jazz, turn off the power switch on the Mac for a few seconds before and after you use the program. This is because the program adds its own embellishments to memory that can't be erased by the reset switch. Turning the

power off eliminates any leftover bits of program from the memory.

Link A Copied Graph To A New Worksheet

People who do a lot of graphics work can use ResEdit or another resource editor to link copies of worksheets and graphs to new worksheets. Edit #LFRF# and change the old file name to the new file name to quickly link the old to the new. Only do this with copies of your Jazz documents — never the originals.

SYLK File Conversion

If you're converting a SYLK file from another spreadsheet into Jazz, make sure that none of the cells in the file are formatted. Converting an unformatted file only takes a few minutes, and it saves a lot of trouble.

How Much Memory Jazz Allocates To Each Application

Jazz allocates specific memory sizes to each of its applications. If you close an application you aren't using, Jazz allows another application to use the extra memory to create larger documents. Jazz allocates:

237K	to the operating program
70K	to the spreadsheet (it requires only 3K if the database is already open)
97K	to the database (it requires only 30K if the spreadsheet is already open)
45K	to graphics
70K	to word processing
26K	to communications

DATABASES

Printing Empty Cells

When you create a database report, empty cells will print as zeroes. Get around this by entering Option-Space in any cell that you want blank for the printout.

Cutting And Pasting In Communications Mode

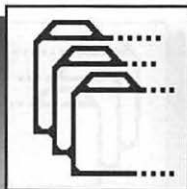
When using Jazz's communications option, cutting and pasting messages makes things work a little smoother. First, store all the messages you have to transmit into a word processing file on one side of the screen. Then cut them, one at a time, and paste them into the communications window.

Loading Jazz Spreadsheet Data Into Excel

Jazz can import data a number of ways, but it can't export in anything other than text format. It's possible, though, to load Jazz spreadsheet data into Excel. First, save each column of data as a text file, then load each into Excel, pasting it into its own column. Formula information isn't transferred, so you'll have to re-enter it in Excel.

If You Have Trouble Printing

Sometimes the program will tell you "This file can't be printed," and there seems to be no reason why. This happens because sometimes Jazz scrambles its own port configuration memory. The easiest solution is to make sure Jazz is told which printer it should use, and how that printer is connected, by selecting Chooser.



OVERVUE

Previewing Reports

Preview a report by saving it to disk, then opening it with a text processing desk accessory like MockWrite or MiniWriter. You'll be able to see and print the report, and can even make changes without re-opening databases.

Embedded Tabs When Exporting Data

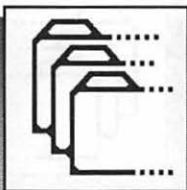
OverVUE doesn't use Tab characters to separate fields, which can cause problems when you try to Paste information into a database manager or spreadsheet that uses Tabs as separators.

To remedy the problems on files you'll be exporting, place a tilde character (~) between fields in the Report Generator.

Don't Use "Global Replace" If You Can Help It

In applying the Global Replace function, if the < or <= values are applied, you run the risk of trashing some data, especially if you're working in a numeric column. To side-step this problem, use the < or <= value with Select instead of Global Replace. After the selection is made, use Fill to replace the old data with the new, then Select All to get all records back on-screen.

DATABASES



REFLEX PLUS

Sorting Concatenated Fields

One of the more annoying things about using Reflex Plus is having to take several extra steps when sorting on a field that hasn't been expressly included in a report. For instance, to make a neater label, you might concatenate a last-name and a first-name field:

```
[First_Name&""&Last_Name].
```

As long as you're in the report, however, you won't be able to sort by the last name.

The simplest solution is to create a last-name field and hide it. You make room for it by making it a tiny size (such as 6-point Helvetica), shortening it as much as possible, and tucking it in some uncluttered corner of the report window (keeping it in its proper repeating collection if necessary). Make the last name field invisible by adding a carriage return with the CHAR function to its formula

```
[CHAR(13)&Last_Name]
```

so the field will show a blank spot and yet still sort correctly.

This method also works well if you want to search by zip code when you've lost it in a field formula such as:

```
[City&""&State&""&""Zip].
```

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ADOBE TYPE MANAGER

Undocumented Type Manager Tip

Here's a tip about Adobe Type Manager (ATM) that's not mentioned in the product manual:

ATM gives non-PostScript printers such as the ImageWriter and LaserWriter IISC the ability to print Adobe's PostScript fonts. The package includes the PostScript outline fonts for the four "basic" fonts as well as the corresponding bit-mapped fonts: Helvetica, Times, Courier, and Symbol.

If you have little need for math and Greek characters, you might be tempted to save disk space by not installing the Symbol font. But when you try to print one of the 18 characters that are also included in the other three fonts, you'll find that they print with a bad case of the jaggies.

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It turns out these characters are represented in the Helvetica, Times, and Courier PostScript files only by references to their locations in the Symbol font. Without Symbol available, your Macintosh has no choice but to print the bitmaps instead. If you want decent output for any of these characters, you must install the Symbol font — both the outline fonts and the bitmapped font.



GENERAL

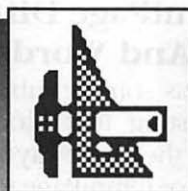
Generating Special Characters

Use the Option key to generate special characters such as the tilde (~, Option-N), registered trademark (®, Option-R), and delta (δ, Option-D). Use Key Caps under the Apple menu to view other special characters.

Getting The Command-Key Symbol

Many users are surprised that the Command-key symbol (⌘) isn't included in the Dingbats font — especially since Apple thoughtfully provides its logo (🍏) in the other LaserWriter fonts. In fact, the Command-key symbol is hiding in the Chicago font in another nearly untypeable location: ASCII 17. Only owners of keyboards with Control keys — which excludes you if you own a Mac Plus — can type this

symbol easily; they can access by pressing Control-Q. Chicago isn't a PostScript font, so if you need high-quality output, try ChicagoSymbols, a shareware PostScript font. (Send \$10 to Bradley Poulson, Northwind Enterprises, 4003 Martin Lane, Two Rivers, WI 54241.) If you own Altsys's Fontographer, you can use the accompanying DemoFont, which also contains the Command-key symbol.



LASERWRITER

Printing With Ligatures

If you're using a LaserWriter to print, don't forget the two "ligatures" that all the LaserWriter fonts provide: "fi" and "fl". These will make your text "extra tight" for best appearance. The "fi" is Option-Shift-5 and "fl" is Option-Shift-6. Don't forget the printer's quotes either: " Option-l, "Option-Shift-l, ' Option-l, ' Option-Shift-l.

There are several desk accessories and INITs available through on-line services and user groups that make using printer's quotes easier. The ligatures are probably easiest if you type in "fi" and "fl" normally and use a search-and-replace in your word processor before printing.

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OmniPage

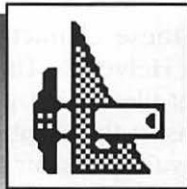
Edit With AppleScan To Help OmniPage Differentiate Pictures And Words

OmniPage has some trouble recognizing text and pasting text blocks. The less "traditional" the page layout, the more difficult it is for OmniPage to differentiate pictures and words.

AppleScan's editing tools offer a good remedy:

First, use AppleScan to get a picture of the page. The scanner settings should be 300 dpi, Line Art. After scanning, move to the document window and use the eraser, lasso, and selection-rectangle tools to eliminate graphics that crowd into text, and to move text into groupings that are more easily handled by OmniPage. Then, Save the document as a TIFF file.

Now, open OmniPage, choose Open from the File menu, and open the document you just saved. Choose Recognize from the Text menu. OmniPage runs through your newly-designed page flawlessly — and in record time!



PageMaker

Correcting Underscoring Problems

When making a "fill-in" sheet, the underscore characters you type at the end of each line will occasionally line up with the end of other lines. To correct this, after you've completed a page, draw a box over the edges of the ends of the lines which encompasses all of the associated lines. Give this box a white shade and "None" lines, so it can't be viewed. The objects behind it will be invisibly covered.

Getting PageMaker To Remember Page Setup Alterations

PageMaker will permanently remember page setup alterations if you choose Page Setup from the File menu with no document open and only the gray desktop showing. Every new publication you create will default to the altered settings.

Getting The Most Accurate Size Display

Although the 200% size has the most fractional markings on the rulers, it is not the most accurate size display. Since the printed version exactly matches the Actual Size display, always check it before doing your final printing.

DESKTOP PUBLISHING

Toggling To A MacPaint-Style Hand Tool

Hold down Option while clicking on your document in any other place but in a column guide. Use the hand to drag an image around the window and reposition your page.

Disabling “Snap To Guides”

You have the option of turning off Snap To Guides in the Options menu if you don't use them often. When making a move that isn't affected by these guides, be careful where you place the pointer. Position the pointer away from the guides when you start the move so that the item you're moving won't be affected by the guides.

You have the option of turning off Snap To Guides in the Options menu if you don't use them often. When making a move that isn't affected by these guides, be careful where you place the pointer. Position the pointer away from the guides when you start the move so that the item you are moving won't be affected by the guides.

Keeping The LaserWriter Up To Speed

If you've been using your LaserWriter to print documents from other applications, turn it off and then back on again before printing PageMaker documents. This is because PageMaker initializes the LaserWriter with Aldus Prep, but it doesn't replace the old Laser Prep file. Since both Prep programs are memory hogs, when the LaserWriter stores both files it slows down in printing speed. For the same reason, reinitialize the printer after finishing your PageMaker printing.

You might try reinitializing the printer whenever your network-connected printer seems to be printing too slowly.

Save Time When Switching Printer Drivers

Switching from the Aldus printer driver to the Apple driver for background printing under MultiFinder is a hassle if you rely on the usual, slow method of invoking the Aldus Print dialog box and selecting Change. You can make the change much more quickly by holding down the Option key while selecting Print from the File menu; then click on OK in the two resulting dialog boxes. You'll find yourself at the familiar LaserWriter dialog box, where you can specify the number of copies and pages to print. You've automatically switched printer drivers!

Printing a Publication From Page One, With A Title Page

You may want your publication to have a title page and then start the document with Page 1, but PageMaker doesn't let you treat the title page differently from your document (it also won't automatically number the pages starting with the second document as Page 1).

If you put the title page at the end of the document and turn off the Display Master option on the Page Menu for that page, you can use automatic page numbering for the document and still have a title page without a folio.

DESKTOP PUBLISHING

Creating Evenly-Spaced Lines In Difficult Places

There will be times when you want evenly-spaced lines in a place not easily divided by the ruler. You can create these lines easily:

First, draw and save your own simple ruler (with some division lines) in a PICT file (you can make these with MacPaint or MacDraw, for example).

Enter PageMaker and use the Place command to put your ruler on the page. Select the ruler and resize it to fit the space you need to divide. You can now draw lines using the ruler as a guide. When you're finished, remove the ruler.

Solution For Imported Graphics "Clipping"

When you open PICT files within PageMaker, you'll occasionally find a bug that clips off the top part of a graphic, especially if it consists of text placed above graphics. By placing a shape above the text and giving it no fill or pattern you can fool the program into including the full imported PICT file.

Toggling Between "Full Page" And "Fit To Window" Views

You can toggle between the Full Page and Fit To Window views by holding down the Command key while clicking in the page window.



PAGEMAKER 2.0

Selecting Closely-Packed Objects

Selecting closely-packed objects confined to a small space is easiest if you Command-click near the object you wish to choose.

"Guide Lock" Aids In Object Selection

It can be difficult to select items located on or underneath a guide without grabbing the guide by mistake. To lock the guides temporarily, use Guide Lock from the Options menu. This makes it impossible to select and move them accidentally. When you're done moving the objects, toggle the Guide Lock off by choosing it a second time.

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PAGEMAKER 3.0

Keyboard Command Shortcuts For Extended Keyboard Users

If you have Apple's Extended Keyboard, you can choose tools from the PageMaker Toolbox window by using the following undocumented key combinations:

- Control-Shift-F1 selects the Pointer.
- Control-Shift-F2 selects the Line tool.
- Control-Shift-F3 selects the Horizontal/Vertical tool.
- Control-Shift-F4 selects the Text tool.
- Control-Shift-F5 selects the square rectangle tool.
- Control-Shift-F6 selects the rounded rectangle tool.
- Control-Shift-F7 selects the Ellipse tool.
- Control-Shift-F8 selects the Cropping tool.

Printing Through The Manual-Feed Tray Of The Varityper-600

PageMaker has difficulty printing through the manual-feed tray of the Varityper VT-600. The problem isn't with the VT-600 but with the VT-600.apd (Aldus Printer Description) file that PageMaker uses to print.

You can alter the APD with Word or another word processor so that the file will work with the manual-feed function. Open the VT-600.apd in Word, find this line:

```
@ManualFeed: "none"
```

and replace it with these lines:

```
@ManualFeed true: "statusdict  
begin  
/manualfeed true def end"  
@ManualFeed false: "statusdict  
begin  
/manualfeed false def end"
```

Flowing Text Around Irregularly Shaped Objects

PageMaker 3.0 lets you flow text around irregular graphics using an invisible out line that text won't cross. This feature also lets text flow into an irregular shape.

Start by drawing or placing a graphic in a shape that you wish to replace with your text.

Using the rectangle tool, create two side-by-side rectangles to cover the graphic, with the two rectangles touching in the center of the graphic and extending across

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the width of the column and above and below the graphic.

Select the center text-wrap feature, (found in Text Wrap under the Options menu) for each of these rectangles. The invisible wrap control lines will appear, overlapping in the center.

Working first with the left rectangle, click along the right control line enough times to create the number of points necessary to outline the left side of your graphic. Use these points to stretch the control lines around the left side of your graphic.

Repeat the process for the right rectangle, using the left side of the rectangle. Make sure the top and bottom control lines still overlap at the center.

When you have the graphic outlined completely, delete it.

Now, choose the two rectangles and specify None under the Lines menu.

Flow your text into the column, and it will fill the area you created. Set the text to be justified to flow it properly across the area. This tip works best when you're working with small font sizes, tight leading, no paragraph breaks, no tabs, and a column width no larger than the size of your graphic.

Wrapping Text Around A Graphic, Then Captioning The Graphic

If you want to wrap text automatically around a graphic and then put a caption below or next to the graphic, you must increase the stand-off value of the text

wrap around the graphic on the side where you want the caption. If you're not careful, the text wrap area of the graphic will push the caption away, leaving it stranded right in the middle of the wrapped text again. Be sure that all the handles of the text block defining the caption are inside the text wrap area.

Place the text or begin the text block by dragging the text cursor, rather than just clicking it. Clicking forms a text block the width of the column or page, which usually makes it larger than the text wrap area. The result is that PageMaker will push the caption away. When you drag instead, you can make sure that the text block of the caption begins and ends inside the wrap area, so it will stay where you want it.

Changing the Default Settings When Laser Printing

The Default settings of the Aldus Printer Description (APD) files control the laser-printer screen quality, producing output at 60 lines per inch and placing half-tone screens at a 45-degree angle. You can change these default settings using a text editor.

With a text editor, open the APD file corresponding to the printer that you are going to use, and find the two lines:

@ScreenFreq:" and @ScreenAngle:"

Enter your desired screen frequency and the desired screen angle between the respective quotes.

Save as a text-only file. The laser printer

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will now produce the newly-defined screen definition when you print. For best results, don't use a screen frequency higher than 135 lines per inch, and set your half-tone screen angle to a multiple of 45 degrees.

Use The Wide Tabloid Page Setup To Print Two Pages On One Large Sheet

Most service bureaus charge less for printing one 11 x 17-inch sheet of paper or film than they do for printing two 8.5 x 11-inch printouts. You can take advantage of the price break by using PageMaker's wide tabloid page setup to lay out two pages on a single page. This also lets you produce bleeds (graphics that extend across two pages).

Here's an example of how to set up two three-column pages on one tabloid-sized page:

Set the left and right margins to be the outside margin measurements (since neither one is an inside, or bound margin, they should be equal). Next, choose the distance between columns and the number of columns, but choose seven columns instead of the more common six. The columns will be evenly spread across the two-page spread. To rearrange them, you need to know the width of the column you want. For a three-column page, the formula is $(8.5 (2 \times \text{the distance between columns}) - (\text{outside margin} + \text{inside margin}))$ divided by 3.

Starting from the left margin, measure the width of your column and then drag the left side of the first column guide to that

point. Zero the ruler to the right edge of the column guide, and repeat the procedure for the second and third columns. Then move to the right margin and repeat the measurements for columns six, five and four. The remaining "seventh" column (the one left in the middle) and adjacent column divisions will be equal to the two inner margins.

When printing proofs on a LaserWriter, make sure that you change the options at the bottom of the print dialog box so that the paper is set at Tall. At this setting, with the tile feature set at automatic and the overlap set at 0, the LaserWriter will print your proofs as neatly as if your layout were in an 8.5 x 11 format.

Laying Out 2 Pages On An 8.5x11-Inch Sheet Of Paper

To print two pages on a single 8.5 x 11-inch sheet, just create two columns on a letter-sized page turned on its side by entering 11 x 8.5 in the Page Setup dialog box. Remember, you can't use PageMaker's automatic page-numbering feature, since auto-numbering considers this setup to be one page.

Stopping PageMaker From Reformatting Text Imported From Word

When you first place a Word document into PageMaker 3.0 or 3.01, you place Word's style sheet into the PageMaker document's style sheet, even if you previously hadn't been using a style. In other words, the style is not actually created by PageMaker; rather, it's borrowed from Word.

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Once you've placed Word text into the program (and so, placed it in its style sheet), PageMaker will read whatever Normal text you place from Word, whether it's been formatted differently or not, as the same Normal style.

If you have several stories with different formats to place in your document, make sure to delete the Normal entry from the PageMaker style sheet before adding additional text. You can either add the styles you want in Define Styles under the Format menu while still in Word, or else save your formatting until you've imported all your text into PageMaker.

How To Save Revised Print Parameters

PageMaker saves updates to your print parameters (like Paper Source, Driver, Scaling, etc.) only if it perceives that you have changed the file. Even though you may only be opening the file to print it, your changed parameters will be lost when you close the file.

One solution is to do something and then promptly Undo it. For example draw a box and then delete it. Now PageMaker will perceive a saveable change, and your new print parameters will be saved within your file.

Using Pyro! To Force PageMaker To Update The Screen Automatically

One annoying flaw in PageMaker 3.0 is its occasional failure to update the screen (as when the print dialog box disappears, leaving a gaping "hole" in the screen text). Most users just scroll off the page

and then back again to recover the portion that was blanked out.

If you have Pyro! or another screen saver, there's a much faster way to force PageMaker to redraw the entire screen. Move the cursor to the sleep corner. When Pyro!'s start up screen shows, move the cursor back to the document. The fully updated page appears. It's a lot easier that dealing with the scroll bar.

Use Easy Access To Nudge Graphics Or Text A Short Distance

If you need to nudge an object just a tiny distance, you probably know that using the mouse to drag it is extremely inexact. Easy Access, an INIT that comes with the new System, can help.

Just press Command-Shift-Clear to turn on the Mouse Keys. Press the 0 key to lock the mouse button down, then use the numeric keypad to move the pointer (press 8 to move up, 6 to move right, etc.). To move the pointer one pixel on the screen, tap the key once. For a longer movement, hold down the key a little longer. Press the decimal point to unlock the mouse button, and press the Clear key to turn off Mouse Keys.

Hide The Guides And Rulers To Gain Some Screen Space On Plus And SE Screens

You can gain some space on the small Mac Plus and SE screens by hiding the guides and rulers. To navigate through your documents, use:

Command-Tab to move forward.

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Command-Shift-Tab to move backward.
Command-G to go to a specific page.

Select the hand tool and Option-Click with it to move around the page.

Keeping Colors In Order For Strippers And Pressmen

When printing a document with spot colors, PageMaker doesn't print color names on each separate plate if the image area occupies the entire printed page. This can prove especially confusing if you're printing multiple pages at a time. To keep your colors in order, insert a small text block in the top left corner of the document's master pages. Type in the name of a spot color you're using, and then make the text that color with the color palette. Repeat this for every color you use in the document.

You can stack all the text blocks on top of each other, so when you print out, the names will only print out in the pages that have those colors on them.

When you use this method, don't forget to tell the pressmen to cover the color designators when the page is exposed for printing.

An Easy Way To Track Hours Spent Working

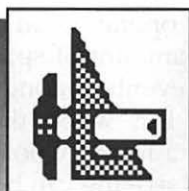
If you need to track how many hours you spend on a particular PageMaker job, you can create a small chart on the Pasteboard, just off to the side of a page. Create columns for Date, Time Started, Time Ended, and Hours Worked in the chart, using tabs. Each time you open the document, add a new row for the day and enter

the pertinent information. When you close the document, fill in the Time Ended column. Now you'll always have accurate data handy for invoicing that project, and it's a lot cheaper than buying a time-tracking program.

Opening More Than One Publication

Ever wish you could open more than one publication in PageMaker? If you have at least 3 megabytes of memory, a hard disk, and MultiFinder, you can.

Use the Finder to make duplicate copies of PageMaker and rename each copy (ie: PMK.1, PMK.2, etc.). For safety's sake, place each copy in its own folder with accompanying files. Then launch each copy under MultiFinder. You can now copy and paste whole pages between publications easily.



PAGEMAKER 3.02

Getting The Right Space Allocations When Dividing Space That's Not A Round Whole Number

One of the most-used functions of PageMaker is to divide an amount of space (vertical or horizontal) evenly among a number of increments. However, when this amount of space isn't a round, whole

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number, dividing and spacing can turn into a headache. To get the proper space allocations no matter what sized spaces you're using:

Draw a rectangle that is, for example, five inches in length, then divide it into five increments. Copy this segmented rectangle to the Scrapbook and use the Place command on the File menu to place the most recent Scrapbook file as a grouped PICT file.

You can resize this rectangle to fit into a longer area by grabbing one of the handles and stretching it. Now, you'll have five equally divided spaces, without going through the trial and error of measuring each area out.

Getting The Proper Spacing When Dividing Horizontal Or Vertical Space

A common operation in PageMaker is dividing an amount of space (horizontal or vertical) evenly among a number of increments. But when this amount of space is not a round whole number, the division and spacing can be problematic. Here's an easy way to get the proper space allocations:

1. Draw a rectangle that is, for example, five inches in length, and divide it into five increments. The rectangle should be divided into five 1-inch segments.
2. Copy this segmented rectangle to the Scrapbook and use the Place command on the File menu to place the most recent Scrapbook file as a grouped PICT graphic.

3. To resize this rectangle to fit into a longer area, grab one of the handles of the rectangle and stretch it.

Now you'll have five equally divided spaces without the tedium of trial-and-error measurement.



QUARKXPRESS 2.0

Improving The Printed Look Of AppleScanned Art

There's a problem with the way QuarkXPress handles line art saved as PICT files in AppleScan. An AppleScan PICT file placed into QuarkXPress looks fine on-screen, but prints out terribly with the LaserWriter. If you import the same file in the TIFF format, QuarkXPress automatically assigns a halftone screen value to the line art, which ruins its clarity.

A solution not documented in the manual is to save the line art in the TIFF format in AppleScan, then to hold down the Command key when selecting the file in QuarkXPress, using the Get Picture command. Doing this imports the file as non-halftoned line art. Now you can take advantage of nearly all the options on the Style menu, such as Negative, Contrast, and others which are not available for any graphics imported as PICT files.

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Wrapping Text Around AppleScanned Images

When irregularly shaped pictures are scanned with AppleScan and then imported into QuarkXPress, it is usually impossible to use the automatic text-wrap features. When text is wrapped around the imported graphic, it wraps only around the shape of the graphic box.

Here's a solution that allows you to wrap text around an irregularly shaped image imported from AppleScan:

While in AppleScan, select the irregularly shaped object using the Lasso tool. After the object is selected, AppleScan gives you the option to Save Selection as in the File menu. Save your image as a TIFF file so that it can be imported into QuarkXPress.

After you've imported the TIFF file, you can go through the normal steps to create a wraparound. The text will wrap perfectly around the shape of your object, and if you put the object into a rectangle picture box you can set the Text Outset to anything you want.



READY, SET, Go! 2.1

Importing Formatted Or Tabbed Data

If you're importing heavily formatted and/or tabbed data into Ready,Set,Go! 2.1, use

a screen-to-Clipboard desk accessory. Import your information in as a graphic or a series of graphics (take a bitmapped screen dump of word processor screens). Matching the MacWrite ruler with Ready,Set,Go's block layout makes this easy.

Only import finished documents, though, if you have to make corrections, you'll have to reimport the data again. This tip should work when you're using any program that accepts Clipboard graphics.



READY, SET, Go! 3.0

Wrapping Text Around Text

It's possible to wrap text around other text. Just choose Specifications from the Special menu and pick "run around." The resulting text can wrap around the text block just the way it works for a picture.

Viewing A Page At The Text Block Insertion Point

Using Command-1 to Command-5 to view a page can be annoying, since you always see the upper left corner of a page. To work around this, while the text tool is activated, click and hold the mouse button with the cursor in the text block you want to zoom to. Still holding down the button, hit the Command key to zoom to any factor. When you release the mouse

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button, the view will shift to show the insertion point in your text block.

You Can Only Import 32K Documents Or Smaller

If you're importing a complex PostScript document, check the size of the file first. It has to be 32K or less to import properly, since Ready, Set, Go! 3.0 is limited to 32K text blocks. Importing longer documents may be courting trouble, so break large files down into smaller ones before entering Ready,Set,Go!.

Use The Program's Drawing Tools To Save Printing Time

Although Ready, Set, Go! is usually excellent at importing 300 DPI graphics, try to make do with the drawing tools included in the program if your needs aren't too complex. It saves considerable time when you print out the page. You'll find you can create some pretty elaborate logos with imaginative use of the fill patterns and shapes, and your page will print almost as fast as a text-only document.

Bypassing The Get Picture Routine With The Clipboard

Although most people copy graphics from files using the Get Picture routine, you can skip a step by passing the image through the Clipboard instead. If you work with a drawing or painting program and Ready, Set, Go! under Switcher, cut the image to the Clipboard, switch to RSG, use the cropping tool to prepare the target graphics block, and then Paste. You'll still have the same control over the image as if you had imported it in through Get Picture.

Link Text Blocks In Exact Order, Page By Page

When linking text blocks together, make sure to link them in the exact order, page to page. The program won't assume that you want the blocks linked in numerical page order, but instead will take your commands literally. If you try to link up the blocks from front to back, the results will be a real mess.

Using ResEdit To Recover A Lost Application Icon

Sometimes Ready, Set, Go! 3.0 loses its application icon, which can result in a "Couldn't find the application" error when you try to open a Ready, Set, Go! document. If you have a copy of ResEdit, here's a fix to try:

On a backup of Ready, Set, Go! 3.0, launch ResEdit and select the Ready, Set, Go! 3.0 application. Choose Get Info from the File menu and click on the bundle box to turn it on. Then close the window and save the changes.

(Setting the bundle bit in an application specifies that the application "owns" documents and that it has its own individual icon.)

Now, double-click on the Ready,Set,Go! 3.0 application to open it and show its resources. Select NEW from the File menu and enter a new resource type of MRSN (all caps). A blank MRSN window opens immediately. Choose NEW again from the file menu and enter the following at the insertion point:

```
OB 56 65 72 73 69 6F 6E 20 33  
2E 30
```

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Now close the window, and you'll notice how the only listing in the MRSN window is highlighted. Choose Get Info from the File menu and change the ID name to zero. Finally, quit ResEdit and save the changes made to the Ready, Set, Go! backup. Now, just reboot the backup, and you're ready to work again.



READY, SET, GO! 4.0

Stretching Text Easily

There's a quick and easy way to stretch text as tall or as wide as you want. Start with a text block and type in the desired text. Then draw out a picture block to the size of the end product. If, for example, you want the text to come out half as wide and four times the height, create the picture block in that size.

Select the text block to be stretched by clicking on it, then Cut or Copy it. Now, ready the picture block as if it were to receive clip art, and then paste the text into the block. Select the Picture block, choose Specifications (Command-M), and use the Scale Across and Scale Down functions to stretch the text accordingly. The stretched text will now appear as you want it.

Wrapping Text Within Two Graphics

It's possible to wrap text within two

graphics to create interesting paragraph shapes like circles, triangles, or just about any shape you can imagine. Here's how: Draw the shape that you want the text to conform to with a graphics program like MacDraw. The trick is to draw it in two halves (such as two half-moons that together would form a circle). Copy and Paste each half of the drawing separately into the Scrapbook.

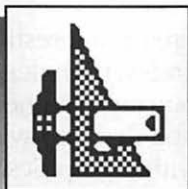
Now, boot RSG! 4.0 and create two graphic blocks large enough to accommodate your drawings. Make sure they butt up against each other. Then, paste your two graphics into these graphic frames — the left half into the left block, and the right half into the right one. The two halves should now resemble the graphic shape you want. Invoke the Specifications box (Command-M) for each graphic block and click Don't Print and Runaround Graphic (instead of Runaround Frame).

Then, create one text block as large as the two graphic blocks. Make sure the text block lies directly on top and covers these blocks. Put your insertion point in the text block and start typing or import a text file. The resulting text will take on the shape you created with the two graphics.

Use justified text if you want the text to conform exactly to the shape you've created. And set text repel distance to zero.

If you have problems getting the text to flow correctly into the shape, try drawing nonprinting lines above and below your graphic.

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READY, SET, Go! 4.5

Using Ready, Set, Go! To Produce Gray-Scale Characters

An undocumented feature of this program is its ability to produce gray-scale characters. Just make text different colors and print without the Color Separation option checked to get gray-scale characters when you print on a PostScript-compatible printer.

Getting Rid Of Unwanted Characters In Imported Text Files

You may need to import a text file into RSG 4.5 that displays unwanted or unknown characters on-screen. Files transferred from other computers or downloaded from bulletin boards often contain such characters, as do files from non-Macintosh operating systems. These unwanted characters often appear as little boxes.

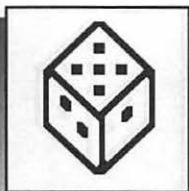
You can get rid of these characters by using the Replace command. Select the offending box or symbol by highlighting it. When you select Replace, the character is automatically pasted into the Find box in the dialog box. Move the cursor to the Change To box and press Option-D and then R (this specifies that you want the

replacement character to be a carriage return; or you can replace the nonprinting characters with a space or with nothing at all). When you click OK, all your unwanted characters will be deleted.

Increasing And Decreasing Text Point Size From The Keyboard

You can increase and decrease the point size of your text right from the keyboard. Select the text whose point size you want to alter. Press Command-> (greater than) to increase the text size one point at a time; press Command-< to decrease the size by one point.

GAMES



AIRBORNE!

Christmas Cactus

A special "Christmas gift" was written into Airborne's program. Once a year, on December 25, the cactus turns into a Christmas tree. You can see it any day of the year by setting the calendar on your Mac to December 25.



THE ANCIENT ART OF WAR

Keeping the Enemy From Multiplying

In this game, only 20 squads can be on the war map at any one time. You can keep your opponent from training more men by detaching squads (preferably in your fort) until the 20-squad limit is reached. Whenever one of your squads is wiped out, detach another one to retain the 20-squad limit. With small squads in your fort, you continue to gain men and your opponent continues to lose them.

Send Two Squads Against Forts

Using archers alone to overrun a fort can inflict a lot of casualties on your army. Instead, send two or more groups with a few men each just to occupy the enemy archers on the wall. Then, send in your regular units. They'll be able to sneak over the wall while the enemy is already engaged, and then the battle will take place in the courtyard — where you have better odds of winning.

The Coward's Way To Inflict Casualties

If your archer is outnumbered while fighting another squad, fire a barrage of arrows and then retreat. The arrows still move even after your men are safely off-screen, so you can whittle down enemy forces without taking any casualties of your own.

Don't Zoom In When Non-Archer Squads Attack Forts

Armies can't retreat unless you press the Zoom button during the battle. So, if an enemy squad is dumb enough to attack your fort without any archers, don't zoom in to see the battle. The attackers won't be able to retreat, so they'll eventually all be killed.

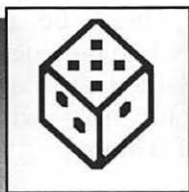
You Don't Need A Whole Squad To Capture A Flag

You can capture a flag without tying up an entire squad. Just detach one man into a new squad, then send him to the flag. As long as there is no enemy lurking nearby, a single soldier works as well as a full squad.

GAMES

Exporting Graphics

If you try to create a screen dump using the standard Command-Shift-3 combination, it won't work. Command-Enter takes a PICT file screen snapshot, which you can then edit into any graphics file.



ARKANOID

Get The Power Capsule You Want

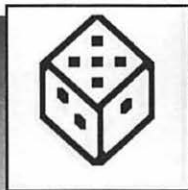
If you don't like relying on chance for the right power capsule to drop down, there's a way to make yourself a winner. First, boot the program and begin to play as you normally would. Then, type:

`dsimagic.`

Then, resume your play. You'll see a capsule called DS drifting down the screen. Catch it and press A to regain sound, then press the following keys to obtain the type of power capsule you want:

B= break to next round;
C=catch;
L=laser;
P=player (extra life);
S=slow.

On some earlier versions, when you press B, you see a screen called Boss Coming instead of the next level.



THE BARD'S TALE

Creating The Perfect Party

To complete the game, you'll need a Bard and three spellcasters, each of at least 12th level. Fighters are necessary at first to protect the rest of the party. When you first create your characters, make some extra fighters and leave them at the Inn to get later (when your first round of fighters is killed).

Survival In A Hard World

Working your characters up in level can be extremely frustrating, since it seems as if almost everything can kill them. A good way to build up some experience is to simply walk back and forth between the Inn and Garth's store during daylight hours. When you're really feeling brave, trek down south to the Temple (you can heal up there) and back again. Don't go out at night until you have at least 1 or 2 third-level characters, since the bigger monsters come out when the sun goes down.

When You Need More Money

You can double, triple, or even quadruple your money if you're willing to cheat a little. Pool the party's gold to a single character, then copy that character to another disk. Now, restart, using the backup disk to create a new character. Pool

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the gold to the new character and transfer him or her back to your game disk, where he hands off the gold to your party. The more often you do this, the more money you'll end up with.

Recharging Magical Items

When magical items are running low on charges, sell them to Garth and then buy them back. They'll be fully recharged again when you buy them.

Getting Quick Experience

One way to build up your characters quickly is to slay the Samurai on Rakhir Street. Heal seriously wounded characters, then go back and kill him again.

Getting Massive Experience

Once your characters are around level 10, advance them fast by defeating the berserkers at 5N, 12E, 2U in the Castle, which nets more than 50,000 experience points per character. You can do this without taking much damage by summoning a Red Dragon with at least 100 hit points, putting two fighters with an armor class of LO behind him, and having your Spellcasters toss mind-blast spells. The Bard should sing song number 3 or 5. Repeat this as often as you like, leaving the Castle to heal up between battles.

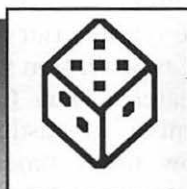
Develop Spellcasters Carefully

You need an Archmage as soon as possible. Start with a Magician and have him or her learn three spell classes, then switch to Sorcerer class and learn three more. Finally, switch to Wizard and learn three more, then make the final jump to Archmage. Develop one or two other

magic-users all the way through to the top levels before you switch them. Eventually they'll become far more powerful than the Archmage, but in the meanwhile you'll be able to use the widest variety of spells.

To Complete The Quest...

To find and defeat Mangar, you'll need the name of the Mad God; his eye; the Silver Square, Triangle and Circle; and the Onyx Key. The Master Key isn't vital, but having it will save you a lot of time in Mangar's Tower.

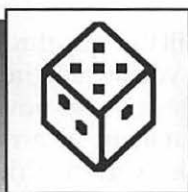


CYBORG

Updating Old Copies To Work With HFS

Cyborg wasn't designed to run on HFS Macs (which have been standard since the first Mac Plus was introduced). If you have an old copy of the game, first make a copy of the master, then use any file utility program like Fedit or HFS Locator Plus to rename the Finder on the Cyborg disk. (Call it anything except "Finder.") Then, reboot your Mac with a current System and Finder, and insert Cyborg into the external drive. Double-click on the icon, and you're ready to adventure.

GAMES



DARK CASTLE

Tracking How Many Times You've Won In A Session

If you're expert enough, you can track how many times you've toppled the throne. While typing your name into the Hall of Fame, type Option with any other key. This creates a Dark Castle symbol. Use the number of castle symbols to represent how many times you've finished the mission.

Keeping Your Shield Activated

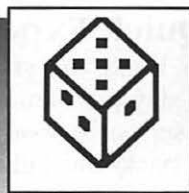
The shield usually lasts only about 3 seconds. You can keep wearing it indefinitely, though. When you activate your shield, hold down the key for about 2.5 seconds. Then, at the last moment, release the key and press it again quickly. Experiment with this to pick up the rhythm.

How To Walk On Air

It's possible to make your on-screen hero literally walk on air. Press the duck key with either the up or down key as you go up or down a staircase or ladder. When you reach the top or bottom, your character will seem to be walking on air. Once there, experiment with different commands to get some entertaining results.

Express Route To The Trouble Room

The easiest way to get to the Trouble Room is to push Door #3. You'll go to the Black Knight's first chamber. If you wait, the platform will slip out from underneath you, dropping your character down to Trouble #3, saving you the trip through the first two rooms, and possibly saving a few game lives as well.



DEJA VU: A NIGHTMARE COMES TRUE

Use The Note Pad To Keep Track Of Addresses

Use the Note Pad DA to jot down addresses, names, etc. That way, when you get into a taxi, you'll always have the exact information you need, when you need it.

Talking To The Woman In The Car Trunk

She's a little out of it, but she might respond to certain drugs.

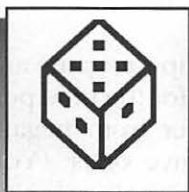
Don't Leave Home Without It

Keep your gun loaded and handy. You'll need it if you run into an alligator. Or worse.

GAMES

Never Let The Coppers Take You Alive

Don't enter the police station unless you're certain you've collected enough physical evidence to exonerate yourself from the murder.



FLIGHT SIMULATOR

Creating Poster-Sized Screen Dumps

You can create a huge, almost poster-sized screen dump of a Flight Simulator screen by pressing Command-Shift-5. The program then prompts you to insert a formatted disk with at least 200K free. After inserting the disk, click on the close box, and 12 large PICT files will be saved. The series can be printed and taped together to form a poster of your favorite exploits.

Access Five Hidden Situations

To activate five prerecorded situations that don't normally appear among your choices, start by choosing Load RAM From Disk from the Situation menu. The Flight Simulator disk ejects, and you'll be prompted to insert a disk containing a Situation file. Don't. Instead, reinsert the program disk. This confuses the program, which ejects the disk again, prompting

you to reinsert it. Do it again and you should be able to find those hidden situations.



INFOCOM TEXT ADVENTURES (ALL)

Mapping Is Essential

As simple as Infocom adventures appear on the surface, you can't get anywhere in the game without making a map. To do this, draw a circle at the first location and name it, with arrows to indicate which directions the exits are in. Then, when you go to a new area, connect the corresponding arrow with a new circle and repeat the process. This can help you avoid ending up as *grue-meat*.

Change Fonts For A Change Of Pace

You can add a bit of extra spice to your games by changing the display font to something prettier. Spellbreaker looks great in London; a nice simple Times font adds a down-to-business look to murder mysteries like Witness.

GAMES



KLONDIKE

Speed Counts As Much As Accuracy

Klondike scores you on how many cards you can move off the playing board, but that's only half the story. You lose points for taking too much time, and also for repeating the deck more than three times. For maximum high scoring, go as fast as you can.

Put Cards On The Board Before Moving Them Onto Aces

You score 5 points for every card you put on the board, and also score 5 points for every card you move onto the aces. Therefore, putting a card on the board and THEN moving it to the "off" piles scores you 10 points per card instead of only 5.

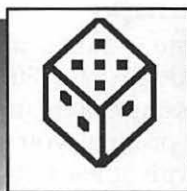
Don't Play Your Last Card Until You Have To

When the last card available has been played — even if that means turning over the one remaining card in the deck — the score freezes and you don't gain any more points for moving the cards off the playing board. So, when you're on the verge of winning, be sure to move off as many cards as you can from the playing board before you play the last card.

Attaining A "Perfect" Score

Even the fastest (and luckiest) player has trouble scoring higher than 4000 points, and 5000 or more practically qualifies as a world record. Still, you can amaze your friends by being the only kid on the block with a score in the high 9000's — if you're willing to cheat.

Simply boot up the game and leave it on long enough for the time penalties to roll the score over from negative numbers back to positive ones. (You can speed things up a little by continuing to turn over the deck after you've lost a game.) The next time the high scores appear, your name will be enshrined in the Number One position — with an "unbelievable" score.



MACGOLF

Putt Like A Pro

When you're on the putting green, make sure the wind is at zero. Then face away from the hole, and place the swing indicator at zero. Click once on the Up arrow and putt, recording how far the putt goes. Now, do the same thing again, except this time, click twice in the swing indicator's Up arrow. Keep doing this, adding one click each time, until you reach a full-strength putt. This helps you figure out how many clicks you need to do to get the ball to move different distances.

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MOEBIUS

Saving Your Most Experienced Fighters' Lives

Creating characters in Moebius is extremely time-consuming, since every new fighter has to be trained in three types of combat. When characters are killed later in the game (and their extra lives are used up), they're gone for good. Or are they? You can preserve your important characters by saving and quitting the game. Then, open up the folder with the game, select by Date under the View Menu, and then copy all the files with the current dates on them to a separate disk. Then, if a character dies, copy the backups into the game folder. Whenever your character advances in levels, wealth, and/or food, back him or her up again.

Be Nice To The Locals

How you deal with the citizens of Khan-tun directly affects the amount of clues and other help they give you. Don't pick fights where you don't have to.

Contents of Chests And Vials Is Random

You can maximize the type of treasure you get by saving the game before searching chests and vials. Then, if you don't like what you get, you can restart the game and search them again.

Close Doors Behind You

Guards often steal treasure from you. When you close doors after entering or leaving a room, you cut off their escape route, making it easier to reclaim your things without a long chase.

Tips For Fighting Guards

When a guard approaches, wait until he is just in front of you, then use low swings to hit his legs. After you strike him, immediately use an 'O' or an 'I' to deliver a hit to his head. Finally, use a 'K' or an 'L' for a mid-level swing to his arms.

Tips For Fighting Assassins

Punch Assassins in the face when they're almost on top of you. If you miss, hit the 'A' key to back out of range. Keep one finger on that key, and another on the 'X' to move forward. If you're about to lose a fight, Quit and restart from your last save.

Tips For Fighting Evil Monks

Stun evil monks with fireballs, then use long strides to overlap them and plant middle and high kicks to their faces. You can also paralyze a Monk before the battle starts, then kill him with a single hammer blow. This is handy when you're attacked by a group.

Practice Bare-Handed Combat Early In The Game

No matter what foe you're up against, bare-handed combat is a very reliable way to fight. Practice it a lot in the early stages of the game to gain expertise against relatively small enemies. The low

GAMES

kick is an excellent choice against all adversaries except Monks.

How To Kick 'Em Where It Hurts

An effective fighting method is to move into the center of the combat area and wait for your foe to advance, then kick him as he moves in.

In The Earth Realm...

A good strategy is to head for the Cistern, refill your waterskin, and clear a path due east to the Palace steps. Enter and confront the Overlord by moving north into the Palace Court. Make sure to get a hammer by defeating a guard. Don't go through the Astral Gate until you're a Level 10 with a full supply of food and water, and are in good health.

In The Water Realm...

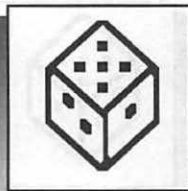
From the western land, swim north to the Palace island. Follow the path northeast to the Tower, then take the path west and southwest to the Palace steps.

In The Air Realm...

The Demon and the Condor can't be defeated, so just avoid them.

In The Fire Realm...

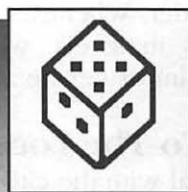
The Floating Skull can only be defeated with fire balls. The flames are a waste of time; avoid them.



ROGUE

Saving Characters From Automatic Deletion

Rogue deletes a character from the disk each time the character file is opened at the start of a saved game, making it difficult to re-save him — and impossible if he meets an untimely end. To avoid losing a really great character, save him and then eject the disk and lock it. Then, reinsert the disk and play the game. Since the disk is locked, the game can't erase your character. When you're ready to save his newest experience back to disk, eject and unlock the disk, then reinsert it to save it again.



SARGON III

Setting Handicaps

The game's normal settings are too hard for less experienced chess players. You can handicap Sargon for beginners by taking pieces away from Sargon's setup before starting the game. Handicap by pulling down the Options menu and selecting Change Board. Then, drag the

GAMES

pieces you want off the playing field and click OK to start the game.



SHADOWGATE

Use The Note Pad To Keep Track Of Clues

The Note Pad DA is useful for keeping notes handy. Just jot them on the Note Pad and you can refer to them whenever you need to.

Don't Ignite Torches Without Examining Them

There's a special torch you need to get through a certain section of the game. Examine all torches you find before lighting them, and save the one that looks different for a special situation.

Surviving The Dragon Room

You need several items located in the dragon's lair. To retrieve them with your hide intact, grab the shield first. You then have three more times to take more things (like weapons) before the shield melts under the dragon fire.

Let Randomization Work In Your Favor

The Sphinx asks you for a certain item, couched in the form of a riddle, when you enter the room it inhabits. However, the

exact item it asks for is randomly-generated. To increase your chances of having the item the Sphinx wants in your possession (or at least, know where to find it), save the game just before entering the room. If the Sphinx asks for an item you haven't located, just Quit and start again for a chance at better luck.



SHANGHAI

Remove Tiles When You Can See All Four Of Them

While you can't really cheat at Shanghai, you can vastly improve your chances for winning by trying not to remove any sets of tiles unless all four matches are showing. This guarantees that you aren't inadvertently trapping a tile under its only match.



SIMCITY 1.0

Collecting All The Taxes You're Owed

SimCity has an annoying habit of resetting the tax rate to zero when you load a saved

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city. If you save and quit from the loaded city mid-year, you'll find that when January rolls around, several months have gone by with no taxes being collected. This can devastate a city already on the brink of financial disaster!

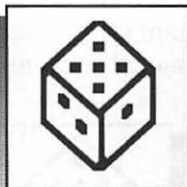
To avoid any loss of funds when you restart a game, immediately call up the Budget window and enter the tax rate.

Printing Cities With The LaserWriter

The game manual and Print dialog box warn that LaserWriter printing isn't supported, but that's not entirely true. The LaserWriter can indeed produce (limited) printouts from the game.

When you choose Print City from the File menu, you're offered two choices: print all on one page (this produces a reduced city map without fine detail) or print a tiled map (2-by-3 pages in size which displays buildings, roads and other fine details).

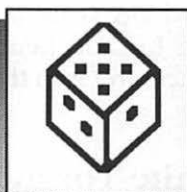
If you print to a LaserWriter, the 1-page map prints out just fine. Choosing the tiled map produces the first section or page of the map, but the remaining 5 pages must be printed with an ImageWriter.



SMASH HIT RAQUETBALL

Fast Shutdown

Make a fast shutdown from the game by pressing Command-Q to return to the Finder.



SPELLBREAKER

If At First You Don't Succeed...

It's a good idea to learn all spells more than once, since they don't always work. This isn't a problem with the "blorple" spell, or when you have the magic cube.

Which Cube Is Which?

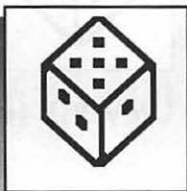
It's crucial to keep track of where each cube takes you, which you do by writing on them with the burin.

Don't Leave Home Without It

The zipper is extremely handy. It's used for storage. If you're told you're carrying

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too much to pick up something new, just stuff a few things into the zipper.



STRATEGIC CONQUEST PLUS

Attack On Each Move

Don't limit fighters to two attacks per round. Use the Move Later command after each attack to attack on each move. This works for all water pieces as well.

Regaining Full Naval Strength

Carriers and battleships can safely regain their full strength if you put them into port for repairs and then use Move Later until they're fixed.

Keeping Fighters Out Of Combat

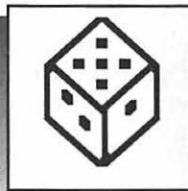
You can protect fighters from attack by leaving them in an empty enemy city.

When To Build Bombers

Start building bombers on day 30 to get a blast radius of 1. For a blast radius of 2, start on day 65.

Stealth Bombers On The Cheap

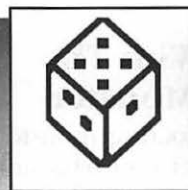
You can hide bombers by placing them on the same square as any other piece.



THROUGH THE LOOKING GLASS

Secrets Of The Cheshire Cat

Through The Looking Glass has a number of undocumented oddities. For example, clicking on the Cheshire Cat's left eye and watch the opposing pieces change at random. Click the cat's mouth and the playfield turns upside-down. Click the cat's nose to reverse all of your mouse movements on the screen. And click on the cat's right eye, and the black hole on the playing board multiplies until the entire board is eaten away.



UNINVITED

Keep Magic Words Handy On The Note Pad

The Note Pad DA is the perfect place to store magic words so they're always handy when you need to use them.

Making Friends With The Gremlin

The little animated gremlin who runs across the screen has an important item to

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give you. You can offer it a bribe by leaving the item in the room, then waiting there for the gremlin to appear. When you've offered the right gift, you'll earn a reward.

In The Greenhouse...

Water the plants. You never know what you might grow...or how it might come in handy later in the game.

In The Dungeon...

You don't have to read all the epitaphs you find on headstones. However, if you put flowers on a certain grave, you might find some appreciation from an "anonymous" benefactor.

A Circle Of Death?

The three caged animals will kill you — unless you cage the right one quickly. When you do, the other two animals distract each other.

Dealing With The Floating Monster

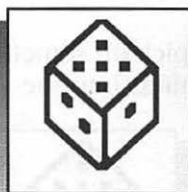
The weird, floating monster in the dungeon won't let you pass unless you give it something to distract it. Hint: it moves.

There IS A Way In!

The locked door in the study remains locked, but there is a way in. Don't waste your time trying to find it, though, since the way in is extremely roundabout, and you WILL find it sooner or later.

There IS A Way Out!

When the bathroom starts filling with water, wait until the water enables you to reach the light fixture and break the fixture to avoid drowning.



UNIVERSE II

Finding Your Way Around

Get a good astronomer and assign him as soon as possible. If his grade is lower than 14, hire another one and put him in school until he's a grade 18 or 19.

Don't Forget The Engineer

The engineer is your most important crew member. Get one who is at least a grade 10, and put him in school to advance to grade 18 or 19, then find another one who's grade 10 to use until the other one graduates.

Fuelish Is Foolish

Get a new converter and hyperdrive as soon as possible. The better ones are more fuel-efficient, so you can build up more money sooner.

Weapons Can Wait

Don't buy weapons for the first year, since you aren't strong enough to do much with them, anyway.

The Place To Get Ships

The best place to buy a ship is at Arbest, and it's also the best place to outfit it with the highest technology. Take at least 300,000 credits for your shopping spree.

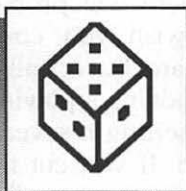
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Avoid Jumping From System To System

The most profitable trading routes are those that don't require system jumps, since they use the least amount of fuel. Pyxis is the most lucrative system overall.

Piracy Doesn't Pay As Well As Trading

Don't even attempt to pirate until you've learned the ropes as a trader. You have to know which items to sell where, and which items are worthless, or you'll starve to death. Mining is much more lucrative, anyway.



WIZARDRY

Avoiding Mistakes Getting Written To Disk

You just can't get a break in Wizardry. Unlike many other role-playing games, it writes every stupid mistake you make to the disk. There is a way to avoid this, though: when you're about to enter a situation that experience has told you is dangerous, just pop the disk (Command-Shift-1 or Command-Shift-2) and then enter the area. When the battle is finished, the program will ask you to reinsert the disk. If you didn't take any major losses, go right ahead. If you lost a major character, turn off the computer and reboot instead.

Dishonesty Pays Well

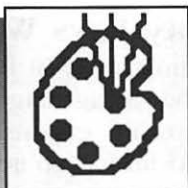
If you're willing to cheat for some extra gold, use the Swag bag to duplicate potions and other expensive treasures. When your roster has an item in the bag, you can switch rosters and the item will still be there. Just back up your roster, Give the item to the bag, and then Restore the roster. Keep the duplicated item, or sell it — or use this trick to equip every member of your party with a Wand of Conflagration.

Exit — Stage Right

You can quickly exit the maze on Level 10. Just walk into the little alcove right next to the entry point on that level.

Werdna Isn't (Always) So Tough

The final battle against Werdna and his buddies is harder at some times than it is at others, since the game randomly generates the number of monsters in his chambers. Pop the disk and lock it (see above) and then reinsert it. If Werdna has only two allies at his side, it's the right time to fight him.



ADOBE ILLUSTRATOR

Undoing A Move Even After Disabling “Undo Move”

There's a helpful way to Undo an accidental move, even if you've already clicked the mouse button and so lost the opportunity to Undo Move from the Edit menu. First, make sure that the same anchor points are still selected — if they're not, select the object.

Now, hold down the Option key as you click the Pointer tool. The Move dialog box will appear, showing a positive value beside “Move distance.” This value represents the distance in points of the LAST MOVE YOU MADE. All you have to do is make that value negative by inserting a minus sign in front of the positive number, and then click OK. Your anchor points will slink right back to where they were before you made the “wrong” move.

Moving Or Copying Objects In The Preview Mode

Although the Adobe Illustrator manual states that the current art file can't be edited in the Preview mode, there are some ways around that. You can move and copy objects in the Preview mode by using the Move dialog box.

Select the object you want to move or copy, and enter the Preview mode. While

there, hold down Option while clicking the Pointer tool in the toolbox to call up the Move dialog box. Now, just enter the distance and/or angle data you want and click OK (or Copy). The object will move or duplicate immediately and you'll be able to see exactly how this adjustment will affect your printed copy. You'll find this very useful in making changes to aspects of the illustration that you can only see during Preview.

Layering Graphics Higher – But Not At The Top

You probably already know how to take an object low in the painting order and bring it to the front of everything else. However, there will probably be times when you wish you could bring the graphic forward, but not all the way to the top, as if removing a playing card from a deck and inserting it several cards away from the top. If you cut the object and paste it in front, then you'll have to select all the other objects that are supposed to be in front of it, and then move them in front to achieve the proper layering. Sounds complicated, and it is. However, there is a simpler way:

Select the object that you want to bring forward, together with the forward object you want to move the first object directly behind. Group them while they're both selected by pressing Command-G. That's it! You don't have to cut and paste, and even if you Ungroup them, the layering change is preserved. The front-most objects can be left alone, with no editing at all.

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ADOBE ILLUSTRATOR 88

Working Around Text Elements

Illustrator 88 has problems creating text elements such as tabs or leaders. You can type in a row of periods, but trying to create leaders for a simple list of products and prices, for instance, is time-consuming. Stretching or shrinking the row to fit a specific width distorts it. One solution is to create a dashed line:

1. Draw a line with the pen tool.
2. Press Command-I to bring up the Paint dialog box.
3. Choose None for the Fill, and Black 100 percent for the Stroke. Enter a line weight (the default is 1 point), select the second choice for Caps, click on the Dashed button, and enter 0 in the first Dash Pattern box (constraining your dashes to be perfect circles or dots) and a number to specify the space (in points) between your dots.
4. To see your changes on screen, go to the Preview Illustration view. (Clicking on OK takes you back to the Artwork Only view, but you won't see the dashed line you just created.)
5. To modify the line, go back to the Artwork Only view. You can resize this line with the Scale tool so that it fits in any width without distortion.

Quickly Cancelling Preview Illustration Saves Time

You can cancel Preview Illustration by typing Command-period. This is useful if you're using patterns or color and the part you wanted to check has already been

GRAPHICS

previewed, since it can take several minutes for the entire illustration to preview fully.

Inserting An Object (Almost) In The Front

It's easy enough to take an object low in the painting order and bring it in front of everything else. However, you might want to bring it forward only so far — not all the way to the front. Here's a simple way to do it:

Select the object you want to bring forward together with the forward object you want to move the first object right behind. Group them while they're both selected with Command-G.

That's it. Even if you Ungroup the objects, the layering change is permanent, and the forward objects don't have to be shuffled around.

Extracting Illustrator 88 Graphics From PageMaker Files

Extracting Illustrator 88 graphics from PageMaker files can be done as follows:

1. Open the PageMaker document, choose Print from the File menu, hold down the Option key, and click on the OK button in the Print dialog box to bring up the PostScript Options dialog box.
2. Turn off the Download bitmap fonts, Download PostScript fonts, and Include Aldus Prep options. Name the file to make finding the PostScript

file easier; otherwise it will be called PostScript0 (1,2,3, and so on). Save the file either as EPSF or as Normal. Click on the Print button, and close PageMaker.

3. Open the resulting PostScript file with Illustrator 88. Illustrator recognizes only the PostScript code that corresponds to its file, and when the PostScript file is explicitly saved from within Illustrator, only that code is saved.

Create Distortion-Free Leaders With A Dashed Line

Using rows of periods to create leaders doesn't work well in Illustrator 88 because stretching or shrinking rows distorts the spacing between periods too much. You can work around this by creating a leader with a dashed line:

First, draw a line with the pen tool. Then, press Command-1 to invoke the Paint dialog box. Choose None as a fill, and Black 100 percent for the Stroke. Enter a line weight (the default is 1 point), select the second choice for Caps, click on the Dashed button, and enter 0 in the first Dash Pattern box and a number to specify the space (in points) between the dots. You can see your changes on-screen by going to the Preview Illustration view. If you want to modify the line, go back to the Artwork Only view. You can resize the line with the Scale tool so it fits in any width without distortion.

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Importing Illustrator 88 Files Into Quark XPress

Quark XPress lets you place and print patterned artwork created in Illustrator 88 if you save the Illustrator document as an EPSF file. You'll face a bottleneck in Illustrator, though: saving a single art file in EPSF can take several minutes. If you do a lot of saving and revising, you'll waste valuable work time.

Part of the delay in saving stems from Illustrator's tendency to create and show a Mac Preview image in its Print dialog box. You can stop this by unchecking the Preview and Print Patterns options in Illustrator's Preferences menu.

Now, when you save in EPSF there will be no lengthy wait. The image will print out correctly through Quark XPress, but it won't appear on-screen.

Making All Your Lines Thicker Or Thinner

You don't have to spend hours changing stroke attributes to, say, make all the lines in your document half as thick. There's an easy way to do it:

Select the necessary paths and activate the scale tool. Click on one of the selected anchor points while holding down the Option key to open the Scale dialog box. To thin all selected paths uniformly, scale the object larger in the Scale dialog with Preserve Line Weights selected, and then immediately scale the selection back to its original size with Scale Line Weights selected. (Make sure to Option-click on the same anchor point when reducing the object back down, so the object keeps its

original position on the page.)

The percentage you enter to scale the object back to its correct size must be fractionally inverse to the percentage to which you enlarged it (ie, a 200-percent enlargement is remedied by a 50-percent scaling factor; 500 is remedied by a 20-percent factor, etc.).

To make selected paths uniformly thicker, follow the same procedure, except choose Scale Line Weights while scaling up, and Preserve Line Weights while scaling down.

GRAPHICS



CANVAS

Creating An Accurate Display Of Proportional Rectangle Resizing

To accurately see the proportional resizing of rectangular objects, draw a diagonal line from one corner of the object to the other, and extend it, keeping it lined up against the two handles.

Now, grab a corner handle at the end of the diagonal line and resize the object while keeping the handle on that line. Finally, delete the line. As long as the handle is on the diagonal line, the object is in proportion.



CANVAS 2.0

Accessing An Undocumented Search-And-Replace Feature

You can perform an easy search-and-replace: Hold down Option while choosing Select All from the Edit menu. Then, make a selection from the Pen Pattern, Fill

Pattern, Foreground Color, Background Color, Pen Shape, Line, or Transfer Modes pop-up menu. Canvas will select all the objects with that attribute. You can now choose any attribute (such as fill patterns) that you want, to globally replace the selected attribute.

Displaying Small-Scale Fractions On-Screen

When using Canvas 2.0 for architectural or engineering drawings, choosing Show Dimensions in Fractions under Preferences will not give you fractions for small scales such as $1'' = 1'$ or $1/2'' = 1'$. You can't get fractions in your dimensions by typing in $1''=1'$ in the Ruler Manager.

If you want to display fractions on-screen for such scales, the right-hand side of the scale in the Ruler Manager box must always remain at 1". Then divide the left-hand side of the scale for whatever fraction of the inch you want. For example, if you need $1''=1'$, use $1/12''=1'$, which you enter as $.0833=1'$. Fractions now appear in your auto-dimension lines.

Getting Rid Of The Frame Around Each BitMap

Although Canvas' multiple layers and overlay modes let you superimpose bit-mapped objects over other graphics, the rectangular frame around each bitmap whites out everything below it, ruining the effect. If you try to make the bit-mapped object transparent by using the Not Or option in the Ink Manager, the background shows through the white border — but it also shows through any white inside your object! Here's a workaround for the problem:

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First, duplicate the bitmapped object, and use the paint bucket to fill in the frame area of the duplicate with black. Make sure the outline of the picture is a continuous line so the paint won't overflow the image itself. If the background is solid black with no patterns, skip the next three steps.

Second, use the Ink Manager controls near the bottom of the tool palette to change the object with the filled frame from Copy to the Not BIC overlay mode. The object will be invisible unless it is in front of another graphic, so don't lose track of its position.

Now, select the original bitmap with the unfilled frame and change its overlay mode to Or with the Ink Manager.

Then select Bring to Front from the Object menu to bring the object to the front of the display.

Finally, select both objects, place them exactly together with the Align command from the Object menu, and group them before clicking the mouse anywhere else. When laid over another object, the frame is transparent, but now nothing shows through the interior of the picture. Note that PostScript doesn't work with many QuickDraw overlay modes, so test print-outs are mandatory when using PostScript-compatible printers.

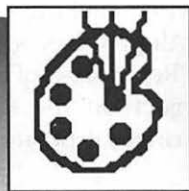
More Realistic Tracing

You can make your traces more realistic and closer to the original image by selecting the bitmapped object and choosing the Object command from the Object menu. Change the resolution in the dialog

box from 72 to 300 dpi. Click OK and close the box. Now auto-trace the object. This increased resolution creates more handles as well as drastically improving your traced image's appearance.

Switching Windows Without Using The Windows Menu

If you're working with Canvas on a large-screen monitor and have several windows open, using the Windows menu to switch between all your windows is a bother. An alternative is to Option-click anywhere in the title bar of a window (except the zoom or close boxes) to get a list of all open windows.



CRICKET DRAW

Creating A Partly-Dotted, Partly-Solid Element

If you want to draw an oval or circle that's partly solid and partly dotted lines, you can do a quick cheat to get it done. First, draw a number of evenly-spaced lines over the portion you want to make dotted (Cricket Draw's Grate tool is excellent at this) and then just make those lines white.

Use ALIGN OBJECTS To Control Object Placement Permanently

Cricket Draw contains a little-known trick

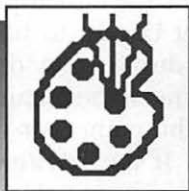
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that allows users to gain total control of object placement by using the Align Objects command. The ordering of objects drawn doesn't depend on their creation order or positioning, but rather in their layering. That means, selecting an object and choosing Bring To Front from the Arrange menu will later make that object the point of reference for future Align commands.

For example, when you have an object you'd like to align with other objects, select the item and choose Bring To Front from the Arrange menu. Then, Shift-Click on the other objects you want aligned (press Shift while clicking on each one), and choose Align Objects from the Arrange menu. Regardless of the alignment done, the object on the top layer will remain in its original position.

Printing Is Faster When You Ungroup Objects

When printing documents that contain a large number of grouped objects, you'll save printing time on LaserWriters by ungrouping your objects just before you print your document.



CRICKET DRAW 1.1

A Bug

This version has a bug that wasn't present in Cricket Draw 1.0. If you construct a two-sided open polygon and then add an arrowhead to the end, the arrowhead will appear correctly on-screen, but will print out at the intersection between the two lines instead.

The workaround is this: add an extra clickpoint to the polygon. For some reason, this results in a printout with the arrowhead positioned at the end of the polygon, where it should be. This will work every time.



FREEHAND

Placing Text Around The Outside Of A Circle

Although FreeHand has a feature to allow users to create text on a curved path, you'll probably find it a real challenge to accurately place text around the outside

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of a circle. The text normally starts to wrap clockwise around the outside of the circle beginning at the 9 o'clock position. To center a word or phrase around the top of the circle, first draw your circle. Then select the Text tool and click your insertion point above the circle. In the Text dialog box that appears, choose the typeface, font and style you want and type in the text. OK your selections. Now, select the text block and the circle and press Command-J to join your text to the circle.

When you've done this, you'll notice that your text has moved to the center of the curved path at the 3 o'clock position. Move it to 12 o'clock by using the Rotate tool to rotate the joined circle and text 90 degrees counterclockwise by dragging the bottom-right size box to the position of the top right-size box.

Wrapping Text Inside A Circle

Getting text to wrap counterclockwise along the inside of a circle is accomplished with a method very similar to the one described above. Center the text within a circle at the 6 o'clock position by following the instructions above, with a minor change:

Press Command-J to join the text and circle, then use the Mirror Reflection tool to flip the circle vertically. Now the text will be wrapped along the inside of the circle at the bottom.

Wrapping Text Above And Below A Circle

You can combine both of the effects described above, select both effects and choose Align Elements from the Elements menu. Then, hit the Center radio button for both Vertical and Horizontal alignment. The result is a circle with text around both top and bottom.

Opening Adobe Illustrator 88 Files With Freehand

While FreeHand can easily open Adobe Illustrator 1.1 files for editing, it usually can't open Adobe Illustrator 88 files. Here's how to bring your Adobe Illustrator 88 files into FreeHand:

Open the Illustrator 88 file with Illustrator 88, and Save As an Illustrator 1.1-compatible file to convert custom colors to process colors, and also to defeat masking and remove all patterns and placed or imported images. Don't worry, all your objects will be retained. Next, open the file using Illustrator 1.1 and then save it. Now you'll be able to open it with Freehand. If you don't have Illustrator 1.1, you'll have to open the file using a text editor capable of saving text-only files.

Change the second line from:

```
%%Creator: Adobe Illustrator 88  
(TM) 1.6
```

to:

```
%%Creator: Adobe Illustrator 88  
(TM) 1.1
```

It's important to remember that you'll have to delete the space before "Adobe".

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Now, save as TEXT ONLY, and open the file with a resource editor and change the Creator from ARTZ to ARTY. The resulting file can now be opened and edited with Freehand.

Simulating Filled, Outlined Text

Although FreeHand doesn't allow outlined text to be filled in with shading, there is a way to simulate that effect:

Create the shading color you want to use. Select the text tool and create a text block specifying outlined format.

Once you've clicked OK, go to the Edit menu and choose the Clone command. This will create a duplicate of the first text block right on top of the first one.

Double-click to edit the cloned block. Make sure the text is selected in the resulting dialog box.

Now, change the text effect box to read "solid" and [change to color box to be the color] you created to fill.

Then, click OK and immediately send that text block to the back. This trick works because outlined text in FreeHand is transparent, and lets the shaded text block show through.

Adding Variety To Lines With Zapf Dingbats

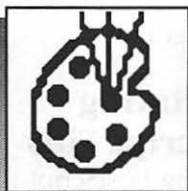
Unless you can program in PostScript, you'll probably find the fill and line options dull after awhile. You can expand

your options by combining two Free-Hand techniques with some ready-made PostScript images — Zapf Dingbats.

To convert any drawn line to a line made up of dingbats, use the "text on a path" feature. First, draw the line. Then choose the Text tool and create a single line of text in a small point font (6 point works very well) that's longer than your drawn line. Select both your text block and the line you wish to convert, and use the Join Elements command from the Element menu. That's all there is to it.

Using Zapf Dingbats As A Fill Pattern

You can also use dingbats as an unusual fill pattern in your objects by using the "clipping path" feature. First, create the area you want to fill. Then select the Text tool and create a block of text large enough to cover your fill area. Now, select the text block and use the Cut command to send it to the Clipboard. Finally, select the area to be "filled" and choose Paste Inside from the Edit menu. The same techniques work with other fonts, but if they aren't PostScript fonts you'll find them printed out as bitmapped characters.



FREEHAND 2.0

Quickly Deselect All Items In An Illustration

You can deselect all the items in an illustration by pressing the Tab key. This is particularly useful when you're in a close-up view and want to deselect an object without selecting a larger one behind it.

Drag A Small Object Without Grabbing Its Resize Handle

If you can't drag a small object without grabbing one of its resize handles, try drawing a large object next to it, selecting both, and then putting the pointer on the big object to move them as a unit. When the small object is in the correct spot, deselect both objects and delete the larger one.

Express Route To The Edit Dialog

You can get to the Edit dialog fast to alter a line, fill or color style. Just press Option and select the style from its menu.

Archiving Lines, Fills, and Color Styles

To save a reusable library of lines, fills, and/or color styles for use in other FreeHand illustrations, define the styles in a blank illustration file. You can also select a target printer and print settings, and add objects (like logos) that you want in every new document. Then choose Save As, name the file, click on the Template option, and save.

The next time you need these styles, use the template to create your illustration. You can even make these styles your FreeHand default setting by deleting the Aldus FreeHand Defaults file that came with the program and assigning that name to your template file.

Getting More Control Over FreeHand Tracing

Double-click on the trace tool to display the Curve and Corner dialog box, which lets you get more control over the number and kind of points FreeHand applies while it traces.

Getting The Most Out Of Tracing Gray-Scale TIFF Images

When tracing a gray-scale TIFF image, you'll get the best results if you make it into a black-and-white image first. Select the image, choose Element Info, and click on the Black and White option. Adjust the contrast and lightness to obtain the highest contrast, and then trace the image.

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Opening MacPaint Files Without Loading FreeHand

You can open any graphics file MacPaint can open just by double-clicking on it, the same way you would if you were using MacPaint.

Using a resource editor like ResEdit or FEdit, you can alter your FreeHand program so that it opens files like MacPaint. Within the resource editor, select the paint program you'd like to use (in this case, FreeHand). Check the field Creator and change what it says to MPNT. Then quit the resource editor and return to the Finder. You'll notice that your FreeHand icon now looks like the MacPaint icon. If the real MacPaint is on your disk, get rid of it, or this tip won't work.

As with any resource editing work, make changes only on a backup of FreeHand.

Faster Screen Redraws

For faster screen redraws, work in Keyline mode rather than Preview mode. In the Document Setup dialog box, select Faster for display quality. In complex illustrations, use Layer Control to view only the layers you need to see while you work. Move TIFF images, transformed text, and elements with complex fills to layers that are kept invisible until you need to see them.

If you have a color or gray-scale monitor, use the optimum settings (2 grays or 256 colors); also use 2 grays (black and white) when you're working on black and white illustrations.

If you don't want to wait for the screen to

finish updating, press Command-period to stop the redraw.

Faster Printing Of PostScript Fills

When printing PostScript fills to a LaserWriter, make the color parameter gray (either 0 or 1) instead of color to speed up printing.

Faster Printing Of TIFF Files

Make TIFF files print faster by using black and white images whenever possible. If you've applied color to a TIFF image, the color processing slows down printing tremendously.

Having Trouble Printing Custom PostScript Line And Fill Effects?

You can avoid problems when printing custom PostScript Line and Fill effects by making sure your UserPrep file is in the correct folder and is properly named. If UserPrep isn't in the FreeHand folder or the System Folder, you'll get an "undefined" PostScript error.

Compatibility Problems With Older Systems And LaserWriter Drivers

If your printer won't print a FreeHand file unless there is text on the page, it's because you have old or incompatible System and LaserWriter-driver files. When you update your System file, make sure to update your printer files as well.

The optimum versions for FreeHand are System 6.02 and LaserWriter driver 5.2, although you can use System 4.3 and LaserWriter 5.1 as well. Earlier system

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and printer files than these can cause trouble when you print.

If You Print A Lot Of Fonts With FreeHand

Using more than two or three downloadable fonts usually overtaxes a printer's memory and generates a PostScript error. Avoid this by going into the Page Setup dialog box, clicking the Options button, and checking the box marked Unlimited Downloadable Fonts in a Document. If you routinely print a lot of different fonts, set the above option as your default.

Make Sure All The Pieces Of Your File Fit On A Printed Area

When you print a file, FreeHand adds up the size of the illustration, any bleed that was added, and the space required for any print options you selected (such as crop marks and separation names). If all these pieces won't fit on the specified paper size—for example, adding crop marks to a letter-sized page and then printing to letter-sized paper with a LaserWriter—you'll receive an error message. When printing to a LaserWriter, turn off the options that print information beyond your illustration area, or select the Fit on Paper option in the Print dialog box.

If you use a Linotronic imagesetter, change the paper size to LetterExtra, which accommodates the crop marks.

Creating An Outlined Pattern Effect

When using one of the PostScript lines

from FreeHand's UserPrep file, you can create an outline of the PostScript line instead of a solid line:

First, choose PostScript from the Line menu, and type DOT (or any other file name) in the dialog box. Then tab to the PostScript entry box and enter "[DOT] 10 10 1 0 newrope" in the box. (The word in braces should be the name of the predefined pattern you want to use from UserPrep.) The four numbers refer to width (in points); height; the spacing between dots; and the color (0=black, 1=white). The last term, "newrope," is a routine from UserPrep.

Now, choose Lines from the Line menu and select the line name, DOT, you just created. Then click on the Copy button. The PostScript dialog box will appear with the attributes of the first line. Change the name to something like DOT2 and change the numbers in the PostScript entry box to "[DOT] 9 9 2 1 newrope". Then, draw a line with the line tool. Choose DOT from the Line menu and Clone (Command-⌘) the line.

Finally, return to the Line menu without moving the lines and select DOT2. When printed, the cloned line will print as white over the black dotted line underneath, giving the effect of an outlined pattern.

Centering Text Along The Outside Of A Circle

You can center text along the outside top and bottom of a circle by first making the two text blocks and setting the text to be center-aligned.

Draw a circle and ungroup it. With the

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knife tool, split the circle at the side points and delete the bottom half. Clone the top half and use the reflecting tool to make the clone the new bottom half of the circle. Then join each text block with its respective half of the circle.

To make the text run along the outside of the arcs, use the Element Info dialog box to align the text to the path, with the baseline (top half) and the ascent (bottom half) options.

Creating A Three-Dimensional Box

To create a 3-D box, first skew a rectangle upward to create one side. Then, clone it and use the reflecting tool to click on a vertical edge and move the clone to the opposite side of the original. Now, clone the second side of the box and ungroup the clone. Shift-select the lower left and lower right points of the cloned element. Release the Shift key, then click on one of these points and drag to create the top of the box. Finally, give each side an appropriately shaded fill or color.

Fixing Improperly Printed Strokes

When you specify a point size for the stroke of text in the Fill & Stroke dialog box, the stroke will be too large to print properly if the text isn't joined to a path. For painless printing, place a period before the point setting in the dialog box. For example, a stroke set at .20 points prints out as 20 points high.

Getting The Smoothest Graduated And Radial Fills

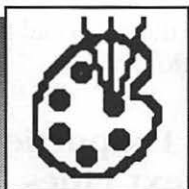
You get the smoothest graduated and radial fills by making sure that the print quality is set to Better. Lower screen rulings generally create smoother fills because they produce more shades of gray. However, screen rulings are closely related to printer resolution: a high-resolution image-setter gives you smoother grays, and sharper images, at higher screen rulings. (For a table of recommended screen rulings based on printer resolution, see pages 9-12 of the manual.)

For best results, print to the highest-resolution printer available. Also, smaller filled areas stand a better chance of being smooth than do larger filled areas.

When You See "PostScript Error: Undefined, Offending Command"

The above error message means your file has too many grouped subgroups. Ungroup some of them to solve the problem.

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FULLPAINT

Creating Dashed Boxes Or Lines

You can easily create dashed boxes and dashed horizontal or vertical lines:

Create a checkerboard pattern of two diagonally opposed, 4 x 4 solid boxes.

Select this pattern, then hold down Option while drawing a square, or Shift-Option while drawing a line.

Expanding Graphics To Fit An Entire Page

To get a drawn graphic to expand proportionally to fit an entire page:

Select the graphic with the Lasso tool and Copy it.

Then close your document and open a new one.

In the new document, triple-click the selection marquee and select Paste from the Edit menu.

The pasted graphic will expand to fit the entire page. The expanded graphic might require a little cleaning up before you print it out.

Creating A Custom Brush From An On-Screen Pattern

When you use the custom brush feature in FullPaint, click the pointer on any part of the Mac screen, and whatever is under the pointer will be turned into a brush and placed on the brush palette.



MACDRAFT

Producing Laser-Printable Diagonal Dotted Lines

To produce high-quality diagonal dotted lines, start by editing a pattern so that most of the pattern is black, with a one- or two-pixel column or row being white. Now confirm that you're drawing with a non-dotted line, and choose that special pattern you've drawn as the ink for the line by holding down Option while selecting the pattern.

Try drawing a few diagonal or dotted lines. Later, you can choose the special pattern for better control.

The Same Name Can Spell Trouble

Take care when naming your files. If you save with the same name as a MacPaint document in the same folder, the new MacDraft document will not be accessible from the application. The only way to open it will be to use a file editing tool like

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MacTools or FEdit. Open the file and change the creator to MDFT and type to DRWG. This will allow MacDraft to access the file again.



Create Original Patterns Easily

Want interesting, original patterns in MacPaint? Use MacDraft to create them. First, create a patterned object in MacPaint, then copy an area of the pattern and paste it into MacDraft. With the object selected, experiment with choosing different patterns from the Fill menu. The MacDraft pattern will overlap the MacPaint pattern, with almost limitless new patterns resulting.

Creating An Accurate Display Of Proportional Rectangle Resizing

To accurately see the proportional resizing of rectangular objects, draw a diagonal line from one corner of the object to the other, and extend it, keeping it lined up against the two handles.

Now, grab a corner handle at the end of the diagonal line and resize the object while keeping the handle on that line. Finally, delete the line. As long as the

handle is on the diagonal line, the object is in proportion.

Creating Proportionally-Spaced Text Lines

You can make lines of text with proportional spacing by creating each individual text object and then lining all objects up vertically. Now, select all the objects with the selection marquee and group them. By stretching the grouped text with the corner and upper/lower resizing handles, the vertical spacing between the lines changes proportionally.

Using Smoothing To Create Complex Arcs

MacDraw's arc tool is quite limited in the complexity and variety of arcs it can generate. But you can create complex arcs by using MacDraw's smoothing functions. Use the polygon tool to draw a two-vector shape, then select Smooth from the Edit menu. After experimenting with this technique for awhile, you'll be able to create some highly complex arcs.

Quickly Selecting The Last Tool You Used

To automatically select the last tool you used, hold down Command while pressing the mouse button.

Centering Items Perfectly In The Middle Of A Page

There's an easy way to center an item exactly in the middle of your page. Once the page has been created, type in the text you want to center, approximately where you want it placed. Then choose Reduce

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To Fit to create a rectangle wide enough to cover the entire width of the page. Choose None from the Fill menu, so you can see the objects behind the rectangle. Then, select the rectangle and Shift-Click the text item you want to center. Now, choose Align Objects from the Arrange menu and click on L-R Center, then click OK. Your text is now centered on the midpoint of the box.

Use this technique to center objects horizontally by clicking Top-Bottom instead of L-R.

Grabbing Tiny Resizing Handles

If you're working with very small objects, it can be hard to grab their resizing handles, and you might end up moving the object when you didn't mean to.

To avoid this, create a second, larger object, and then Shift-Click on both, group them and use the resizing handles on the larger element to shrink or stretch them both. When you've finished resizing, ungroup the two objects and delete the larger element.

Proportional Enlarging And Reducing

To reduce or enlarge an object proportionally, draw a one-inch by one-inch square (with Show Size active). Shift-Select this square with the object to be reduced or enlarged. Place the arrow cursor on the corner of the square and drag it to the size desired, pressing Shift while you do so to guarantee proportional enlargement or reduction.

Maintaining Fill Patterns When Exporting To Bitmap Programs

When you're transferring an object graphic to a bitmapped program such as MacPaint or FullPaint, you can maintain the original fill patterns ratio. Select the area that the object graphic will be pasted into by using the selection marquee, and then paste the graphic into the document. It will scale itself to the size specified by the marquee without distorting. If you resize the graphic after it's been deselected, though, you'll get a distorted stretch.

Selecting Multiple Objects At Once

Hold down Shift while selecting more than one object to have all chosen objects selected at once.

Duplicating Objects Easily

You can duplicate any single object or group of objects by selecting them and then choosing Duplicate from the Edit menu. If you move the first copy duplicated, and then duplicate that copy, your new duplicate will be placed in the same position the first copy originally occupied, in relation to the original.

To make a row of objects, put the first copy right next to the original image, then duplicate copies until the row is completed.

Toggling To The Grid Option

When the Grid option is turned off, you can temporarily use it by holding down Shift while you move an object. Press Shift after you've pressed the mouse button to pick up the object you want to move.

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Redrawing The Most Recently-Created Object

If you want to redraw the same type of object that you most recently created, you don't have to reselect the action from the icon panel. Just hold down the Command key and click at the place you want the new object to be drawn. The previous action is automatically selected with the Command key, so your image appears instantly.

Automatically Selecting Objects

All the objects drawn while the Command key is pressed are automatically selected when you release the Command key and the mouse button.

Creating New Font Sizes

You can create a different sized font by typing your text into MacDraw and then copying it into Microsoft Word, where it can be stretched or shrunk to any size you want. The new font will print out perfectly well on laser printers.

Selecting All Text Within A Block

You can select all the text within a block by triple-clicking on the text tool in the text block.

Always Use The Same System To Create, Display, and Print

A MacDraw document created with one System and called up with another might not show up at all, or might show up distorted. For example, if you create a

MacDraw figure using a 14 point font and then open the document using a System that doesn't contain that font in 14 point size, the character spacing will be computed incorrectly. The obvious solution is to make sure that any MacDraw System you use contains the same point sizes and fonts installed on any System you'll use to open or print the document.

Avoiding Text Default To The Geneva Font

If you want to use a specific text in MacDraw, change the font before you select the writing tool. If you don't change it, the font will automatically default to Geneva, and you'll have to choose a new font every time you switch into text mode.

Computerizing Your Autograph

You can keep your own signature on file in MacDraw, ready to affix to any document. First, write your name as large as you can, using the free-hand tool. Read that as Large. Use the Smooth, Unsmooth, and Reshape commands until you're satisfied with the results, and then Group all the letters and grab the lower right handle to reduce the signature to the desired size. Finally, paste it in the Scrapbook. You might never need a pen again!

Previewing Horizontal Layouts

Preview how your horizontal layouts will look when printed by selecting Wide from the Page Setup option in the Print menu. This will show you the horizontal orientation of your page.

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If You Can't Complete The Print Command...

Sometimes when you print a multi-page document, you might get a message that says the print command cannot be completed. The easiest way to work around this is to print only a few pages at a time.

Laser Printing Small, White Type

If you have trouble printing small white type with your laser printer, try typing the text in Outline style, then fill in the background and then stretch the object to double its size, both vertically and horizontally. Now, specify 50% reduction in the Page Setup dialog box. Your white type will probably print out much better.

Enlarging Or Reducing Can Clip Text

When you laser print a document containing text, you might experience clipped text printouts if you use more than a 150% enlargement or more than a 75% reduction.

See The Graphics, Not The Rectangle

To see a graphic image instead of a rectangle while moving images around your page, press Option.

An Easy Way To Create Perfect Hollow Lines

If you need to produce hollow lines, use the following procedure to raise the quality of your work:

First, draw your graphic, making all lines

with the third line thickness on the menu. When you're finished, Group all lines, duplicate the group, and set the line thickness of the duplicate lines to the second line thickness on the menu. Then, under the Pen menu, set the pattern of the duplicate lines to white. Now, select both groups and align both centers. The white group will "carve" out the centers of the thicker lines.



MACDRAW II

Creating A Pixel Ruler

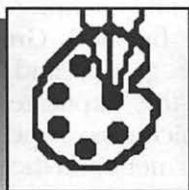
One of the oversights in Claris' MacDraw II is the lack of a standard ruler for measuring in pixels. You can create your own just by setting the scale ratio to 1:72 inches, setting Divisions/inch to 1, and unchecking the Show Unit Name check box.

Trimming File Space

The grouping information stored in MacDraw II files for complex grouped graphics can cause the files to increase in size — sometimes dramatically. If you need to trim some fat off a file, ungroup the grouped objects and then save the file.

This works for all the major object-oriented graphics programs, including Cricket Draw, Illustrator 88, and FreeHand.

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MACPAINT

Leave Enough Disk Room To Work

MacPaint requires a lot of free space — at least 100K or so — on the disk in order to work properly. If you're not using a hard disk, and are creating several documents, save them to a different disk for the time being. You can copy them back to your MacPaint disk for editing later, if you want.

Customizing Your Eraser

The standard eraser in MacPaint is a 16 x 16 pixel square. You can make it as thick, thin, or round as you like by selecting the Paintbrush tool and choosing white as your brush color.

Avoiding Pattern Distortion In Multiple Copies

Sometimes when you make multiple copies of your document, the patterns start to look distorted. This can be remedied by choosing the Grid option before making copies, since it creates an automatic grid that's 8 pixels apart, "gluing" your pattern down before it's copied.

Hints For Saving Disk Space

Another way to free up space is to remove the ImageWriter driver from your MacPaint system file. MacPaint doesn't use the driver to print documents.

You can also save several small MacPaint illustrations in a single file, instead of in individual files. MacPaint files take a minimum of 2K on-disk, per file.

Getting Where You Want In FatBits, Fast

You can take the express route into FatBits, and work on the exact area you want to, by selecting the marquee tool and using it to frame the part of your picture you want to work on in-depth. Then, just double-click on the Pencil tool, and you'll immediately go to a close-up of the area highlighted by the marquee.

Another way to access FatBits quickly is to choose the Pencil tool, hold down the Command key, and then point to the spot you want to work on and click the mouse button. Just click once; double-clicking will bring you right back into the "regular" bits mode. When you release the Command key, the Pencil tool will behave normally.

Moving The Page While In FatBits

When the Pencil tool is selected in FatBits, you can change the Pencil into a Hand tool by pressing the Shift button. This allows you to move the page without going back to the regular mode. When Shift is released, the Hand changes back into a Pencil.

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The Easy Way To Make Straight Lines

To make sure that the straight lines you draw are completely straight, with no jagged lines, hold down the Shift key while positioning and using the straight line tool. This constrains the line's movement to vertical/horizontal only.

Restraining Works Throughout The Program

The same restraint can be applied to the paint brush, pencil, spray can, or eraser tool. Just hold down Shift while using the tool.

You can even restrain the active window or the graphics elements in the Show Page mode by holding down Shift while repositioning your page. You'll be able to drag up, down, or to a 45-degree angle

Multiple Copies Of An Image

Make multiple copies of a graphic by highlighting the image with the Lasso or Marquee tool and pressing Command-Option as you click and drag the picture around the page.

Creating Multiple Copies In A Straight Line

Multiple copies of an image can be created and placed in a straight line by pressing Shift-Command-Option while dragging the image being copied.

Controlling Spacing With Multiple Copies

You can control the spacing between multiple copies by choosing a line width

that corresponds to the amount of space you want between each copy. Choose a narrow line width for closely-spaced copies, and a wider one for more distance between each illustration.

Stretching Images

To select an image, use the marquee tool to select the entire picture, then press Command while dragging the edges of the highlighted image. Drag from the edges, and one dimension of the image will be stretched. Drag from the corners and both horizontal and vertical dimensions of the image will be altered.

Keeping Patterns Intact While Stretching

You can keep patterns from distorting during stretching by holding the Shift key down while dragging the edges.

Stretching And Shrinking Rectangles Proportionately

When working with a rectangular graphic, you can control proportional stretching or shrinking by pressing Shift-Command while stretching from the edges. If you drag from the corner while holding down these keys, the proportions of the picture will remain intact. Drag from the sides, and the horizontal resizing is limited in proportion to the vertical position of the cursor.

Keeping Rectangle Patterns Intact When Resizing

Keep the pattern of your rectangle intact by holding down Shift while stretching.

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Changing Fonts Without Creating A New Entry Point

Changing fonts mid-text can be a problem, especially if you don't want to create a new text entry insertion point. But it can be done without changing the font already entered by pressing Enter and choosing the new font or style. Once this has been done, though, you can't back-space past the point where the Enter key was pressed.

Changing The Font Size Of Entered Text

You can change the font size of text that's already been entered by pressing Command and both arrow keys (< and >).

Changing The Font Of Entered Text

Change the font of text already typed in by pressing Command-Shift and the arrow keys.

Command-period changes the text to the next larger size.

Command-comma brings the text to the next smaller font size.

Command-Shift-period changes the entire entered text block to the next font shown on the font menu.

Command-Shift-comma changes entered text to the previous font shown on the Font menu.

Creating Ultrabold Letters

You can create extra-bold letters by entering your text in Bold and Outline from the Style menu. Then, use FatBits, or the paint bucket's Fill option, to fill in space inside each of the letters. The Fill selection gives letters a shaded look.

Creating Special Effects With Fonts

You can create interesting special effects with any font and MacPaint. Just type your letters on the screen the way you want them to appear. Then select all the text with the Marquee tool. Now, either trace the edges with a shadow (Command-Shift-E) or trace the edges normally (Command-E). Then, do a Command-Shift-E. Do it several times to create progressively wilder effects. You can fool around with other options, like inverting the image, to get the best results.

Grid Option Assists Text Entry

Use the Grid option while working on documents requiring a lot of text entry, since it makes it easier to align new text inserts.

The Fast Way To Edit Brush Shapes

Take the express route to the Brush Shapes window by double-clicking on the Paint Brush tool.

Edit Brush Shapes With A Font Or Resource Editor

Brush shapes can be edited with a font editor. Use one that has the ability to

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access fonts stored as resources with applications. The font stored in MacPaint is "12." It contains characters with ASCII values 120-151 that make up MacPaint's brush shapes. Just use the font editor's edit mode to alter these characters to the new brush shapes and save the changes you've made.

Erasing Large Portions Of The Screen

To erase large parts of your graphic quickly, select one of the shape boxes (choose the colored one, not the transparent version). Then pick white as your fill color and select the dotted-line (invisible) outline. Finally, draw the shape directly over the part of the screen you want to erase. You'll still probably have to clean up the edges with the eraser.

Another way to eliminate large illustrations is to choose Show Page from the Goodies menu. Move the page until your graphic has disappeared from the screen, then hit OK. When you reposition the page again, the section you moved off the screen will be gone for good.

The Lasso is useful for eliminating oddly-shaped illustrations. Outline the shape, then press backspace to erase it.

For large, uniformly-shaped areas, use the Marquee to highlight, then use backspace to erase.

Shadowing Images

Shadows can be added to MacPaint images. Just select the drawing with the Marquee. Now, hold down Shift and se-

lect Trace Edges from the Edit menu.

Lasso Tool Doesn't Have To Close Its Loop

The Lasso tool doesn't require you to completely encircle the object you're lassoing. When you release the button, the Lasso automatically completes the loop in a straight line back to the point where it started.

Merging Patterns In Shapes

It's possible to place one patterned shape over another without obscuring the original shape. Press Command while selecting the paint brush, spray can, paint bucket or shape drawing tools. When you select this mode, both shapes' patterns will merge at the points where they overlap each other.

Adding New Patterns To Your Palette

If you create or find a pattern that you'd like to add to the patterns palette, choose a pattern you think you can live without. Then choose Edit Pattern from the Goodies menu and click the mouse on the part of the screen that you want to copy the pattern from. The new pattern replaces the old one.

Using The Flip Horizontal Option To Create Gantt Charts

You can produce large drawings or Gantt charts easily by printing out large drawings in 8.5 x 11-inch sections on a LaserWriter, using the Flip Horizontal option to create a mirror image. Then, trim the

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pages and assemble with transparent tap on the back of the drawing. The resulting 300-dpi flipped-image montage can be used as a master in a blueprint machine.



MACPAINT 2.0

Using ResEdit To Change Default To Pixel Measurement

You can change MacPaint's default measurement from inches to pixels, which is particularly useful to programmers and to desktop publishers. Make a copy of MacPaint, and use ResEdit for a little surgery on the copy.

First, use ResEdit to open your copy of MacPaint. Open the PREF resource. Open PREF ID=128. On the line:

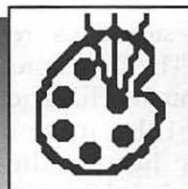
```
00000008  0008 017B 0009  
00D1
```

...change

"017B" to 007B".

In this position, 00 is for pixels, 01 is for inches, and 02 is for centimeters.

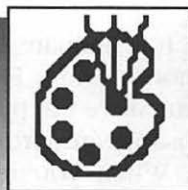
When you've made the change, Quit ResEdit and type Y to save the changes.



MAC 3D

Rotate Selection To Verify It

Sometimes it's difficult to select part of a complex model and know exactly which part has been selected. To verify, choose Rotate, and the currently-selected object will appear in the Show Selection window. Once you've confirmed exactly what you selected, click Cancel and you'll be back where you started — but with a better idea of what you're working with.



MAC 3D 2.0

Creating Endmarks On Arcs And Curves

Create endmarks on arcs and curves by attaching a small line to the end, then placing the endmark on that line.

Importing QuickDraw Graphics

Although the program has a Save As PICT function, a graphic saved as such comes through as a bitmapped image when

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opened in graphics or desktop publishing programs. To get a QuickDraw object from the program, copy the graphic to the Clipboard before copying it into the graphics program.

Adding Tiny Details

Add small details to a drawing easily by increasing the scale of the document. This enlarges the objects and makes it easy to draw in small details.

Dimensioning Edges On Rotated Objects

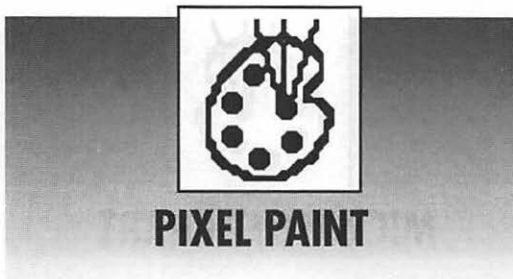
Dimension an edge on a rotated object by ungluing it down to its edges, duplicating the edge to be dimensioned, and then moving the duplicate away from the object and selecting Dimension.

Quickly Redrawing All Objects In A Window

Click in the empty area on the tool palette, right underneath the tool icons, to redraw all of the objects in the window.

Splitting Vertexes

You can split a vertex into two vertices to get a new edge. Just enter the Bevel window, select the vertex, and bevel by 1%.



"Animating" Drawings With Color Cycles

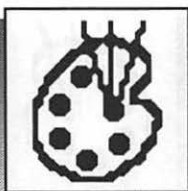
Here's a way to make PixelPaint cycle through colors on the color palette to "animate" drawings. It's a great way to bring a picture of a waterfall to life, or to make a daytime sky seem to pulse with clouds.

First, select the colors you want to cycle between by clicking the mouse on the color box and then dragging the cursor to the color you want. Then choose the second color.

After selecting colors, pick the selection tool, turn Caps Lock on, press the Shift key, and click the mouse button. To stop the cycling, click again.

This is quite spectacular if you copy a color Mandelbrot picture to the Clipboard, go into PixelPaint, and paste in the picture while in the Special Effects mode.

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MICROSOFT CHART

Exporting Charts To MacPaint

When copying charts to MacPaint, choose the option to copy "As it Appears on the Screen." Otherwise, the chart won't fit into your drawing window after it's been pasted in.

Cells Import As Individual Elements

When a graph created in Microsoft Chart is cut and pasted into MacDraw, each piece of the chart becomes an individual element. You can add a lot of spice by dressing up the chart lines to reflect what the chart says. For example, a dollar-figure chart could show stacks of dollar bills instead of dull bar lines.

Wrapping Text Pasted From The Clipboard

You can paste text from the Clipboard and have it wrap within an area. First, create the rectangle that you want to wrap the text within, and type any character (the space bar will do). Any text you now paste in will wrap to the size specified by the rectangle.

Centering Primitives

Center any of the primitive objects (circle, rectangle, etc.) on a page by drawing the object, Cutting or Copying it, and then clicking the pointer where the object's center of gravity should be.

Widen The Window When You Start Working

Always widen the window, chart area, and plot area to their maximum settings before you start working. To access the underlying series of windows, use Command-L (list).

Extra-Long Text In Headers And Footers

It's possible to create text in a header or footer entry box that's longer than the box itself. To edit the longer text, get at it by placing the cursor in the visible text near the right end of the entry box and then dragging off the end to scroll the text left and display the extra text.

Embedding Formatting Commands In Headers And Footers

You can embed formatting commands and other instructions in the text of a header or footer. These commands can be inserted in the Page Setup dialog box by typing the ampersand (&) and a letter simultaneously:

- &L: Align the characters that follow at the left margin;
- &R: Align the characters that follow at the right margin;
- &P: Print the page number;

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&D: Print the current date;
&T: Print the current time;
&&: Print a single ampersand.

Use White On Labels That Overlap Tabs

When using labels that overlap other parts of a chart, select a white background to avoid having pixels from the overlapped lines show through.

Add Legends Before Formatting

If you'll need a legend on your Chart document, add it before you start formatting, since Chart rearranges everything to make room for the legend. This rearranging can make a mess of the formatting you've created.

If You Link Chart Files To Multiplan

When linking Chart files to Multiplan, choose the type of data first, or else each series will be out of step and categories and values will be transposed. Also, changing the typeface of a linked series can sometimes unlink the two programs without warning!

Margin Settings Determine Printed Size Of Charts

Chart uses the margin settings established in the Page Setup dialog box to determine the printed size of a chart. If you want to change the size of your printout, just change the margin settings.

Let Chart Do Your Math For You

When you're creating a pie chart, let Chart work out the math for you. Just enter in the actual figures and let it calculate percentages. Otherwise, you won't be able to use percentage labels on your sectors, and you'll find that other statistical functions will be disabled, as well.

Modify Chart Files To Create Sequences Of Pie Charts

You can modify Chart files with a graphics program to create a sequence of pie charts on a page. Use the Plot Area grab handles from Chart to resize each chart before positioning and deselecting them.

Intersecting Gray Areas May Print Fuzzy

Intersections of gray areas that are easily distinguishable on your screen might print a little blurred, especially on the ImageWriter. Use dark outlines to emphasize each figure, or else alternate light and dark colors for best results.

Templates Save Time

Whenever you create a new kind of graph or chart, keep a copy in a library folder, since modifying an existing chart is a lot easier and faster than creating a new one from scratch. In creating a template, avoid using non-automatic text areas, since these will remain even after you've entered new data. When you use the template, always remember to Save As... and then name it, to keep your original template clean.

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Save As You Go To Prevent Confusion

When possible, save a number of Chart versions along the way, since the formatting commands can be complex. This helps you save time in the event of mistakes, since you can simply backtrack to an earlier version.

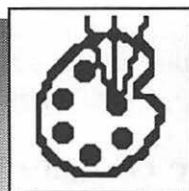
Tips For More Effective Charting

Dark patterns are much easier to understand, so as a general rule, use the darker patterns to display the most important figures.

Horizontal column charts are best suited to comparisons of series with few numbers and wider, less ordered variations.

Line charts are best used for displaying trends in time, where the relationship between two date figures is more important than the relationship between the target and actual figures.

Pie charts can only be used when your data adds up to 100%. Plus, each sector must exclude all members of the others. In designing charts, as in any other graphic, remember that when in doubt, simpler is better. A chart cluttered with too many labels and patterns is too distracting to be effective.



SMART ART 1.01

Using Smart Art To Preview EPSF Files

It can be a real pain to browse EPSF files. You can use Smart Art to browse because of the program's ability to preview unopened documents.

Just open the folder of EPSF files from Smart Art's Open dialog box and select the file you want to view. The preview window lets you zip through numerous files that are still displayed in a reduced, but recognizable, size.

Remember, though, you're only previewing files. Don't try to open these files in Smart Art.

Smart Art Can View Old LaserFX Files Through A Desktop Publishing Program

Smart Art can create screen images for the EPSF files produced by some of the earlier text special-effects programs such as LaserFX. These first-generation programs have some wonderful effects, but when you place them into a page-layout desktop publishing program, all you see on-screen is a gray box. Smart Art can fix that, provided that the creator program can save files in EPSF and that you're working

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with a 300-dpi PostScript printer.

First, save the effect as an EPSF document and open the document with Smart Art. Then, click on Smart Art's Reimage button. After a few moments, Smart Art creates a screen image of the text special effect.

Save the file from within Smart Art. When you place the new file in a DTP program, you'll see what the graphic will look like when it prints out.



Making Shadowed Text

You can create interesting shadowed effects on your text by selecting the font and style while in the draw mode, and then typing your text. (Hint: bold text looks best with this effect.) Switch to the Paint layer and choose a brush pattern, such as a simple dithered gray. Then, choose Text Pattern from the Style menu, and on another part of the page, type the text exactly the same as the text in the Draw layer. Now, switch back to the Draw layer and move the original text to create a shadowed effect. When you get the effect

you like, copy the shadowed text on to the Draw layer.

Enlarging Any Selection

You can enlarge any selection in SuperPaint to page size, or to any size you want. First, use the Lasso or Marquee tool to select the picture you want enlarged. Then, use Command-C to copy the graphic and press Command-A to select the screen. Next, press Command-V to paste and, after a few seconds, the selection will fill the entire screen.

If you want a smaller enlargement, instead of pressing Command-A to select the entire screen, use the Marquee to select the size, then press Command-V to copy the graphic.

You'll find this helpful when you enlarge graphics, since you can choose the size right away, instead of having to enlarge it step by step.

Moving Tiny Items Easily

If you seem to be going blind trying to move tiny objects around, try drawing a line near the object to be moved, then grouping the two objects together and using the line as a "handle" to move the tiny item to its new destination.

This also helps keep the Pointer tool from blocking your view. This also works in other graphics programs that allow object grouping.

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Using The Lasso While The Marquee Is Selected

While in the Paint layer, you can have the Marquee tool selected and still be able to use the Lasso tool. Just hold down the Option key to turn the cursor into a lasso, making it easy to select odd-shaped bitmaps on the screen.

"Nudging" Selected Graphics By A Single Pixel

While any item is selected with either the Lasso or the Marquee, you can "nudge" it in any direction by using the arrow keys. If your keyboard has no directional arrow keys, use Command-Y to nudge upwards; Command-J to nudge left; Command-K to nudge right; and Command-D to shift downwards.

Closing All Open Windows At Once

Hold down Option while selecting Close from the File menu and all windows that are currently open will close.

Crosshairs Can Help You Paint From A Centered Point

Instead of choosing Draw (Paint) From Center before drawing one of the Quick-Draw primitives to paint the shape from a centered point, you can double-click on the palette tool you select instead of just clicking. The icons in the palette will then show crosshairs to identify the difference.

Reversing The Pattern

When editing paint patterns or paint brush shapes, hold down Command while click-

ing the mouse anywhere in the pixel editing box to reverse the pattern, making black white, and white black.

Creating A Spattered Effect

You can create an interesting "spattering" effect by choosing the paint brush pattern that you'd like to spatter and then painting with the spray can while holding down Option. The faster you move the mouse, the further apart the spatters will paint.

Creating a "Screening" Effect

A great "screening" effect can be created by using Paint On Black and the selection rectangle, especially in conjunction with the Laser Grey patterns. If you don't like the effect, try moving the Marquee one pixel up or down to change most of the screen effects.

Smoothing Bitmapped Images For Laser Printing

If you have an extensive library of bitmapped clip-art, there's a way to smooth images for printing on the LaserWriter. Open your image in SuperPaint and Save it. Then Open the new document, hit the Place Laserbits command, and tell it to use the file you just created. The result will be a 1/16 original size document at 300 dpi, and it prints perfectly. Realize that the larger your original image, the longer it takes to print.

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Turn Smoothing Off To Speed Up Printing

When printing a Laserbits document, turn the smoothing effect off to speed up printing.

Lower Detail Level Speeds Smoothing

When using FatBits, don't immediately jump to the finest detail level. Instead, use the left side of the screen, which displays the actual appearance of the work, as your guide. If you can see all of the object you'll be working on, stay on that magnification level unless you really need a finer one. You'll save time smoothing work if you work in the lowest possible magnification.

Adjusting Length On Imported MacDraw Graphics

SuperPaint's print area is approximately 7 11/16 inches by 9 5/8 inches, which is slightly wider, and shorter, than MacDraw. A quick fix is to set the Page Setup to enlarge at 104%. This results in 10-inch lengths when you need them. Just remember to watch the width of your job, since it expands sideways as well, and also set the print dialog box to print only the first page. This circumvents SuperPaint's need to send a blank page through when enlargements are requested.

Creating An Accurate Display Of Proportional Rectangle Resizing

To accurately see the proportional resizing of rectangular objects, draw a di-

agonal line from one corner of the object to the other, and extend it, keeping it lined up against the two handles.

Now, grab a corner handle at the end of the diagonal line and resize the object while keeping the handle on that line. Finally, delete the line. As long as the handle is on the diagonal line, the object is in proportion.

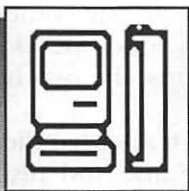
Opening MacPaint Files Without Loading SuperPaint

You can open any graphics file MacPaint can open just by double-clicking on it, the same way you would if you were using MacPaint.

Using a resource editor like ResEdit or FEdit, you can alter your SuperPaint program so that it opens files like MacPaint. Within the resource editor, select the paint program you like to use (in this case, SuperPaint). Check the field Creator and change what it says to MPNT. You'll also have to do this to the SuperPaint Prefs file. Then quit the resource editor and return to the Finder. You'll notice that your SuperPaint icon now looks like the MacPaint icon. If the real MacPaint is on your disk, get rid of it, or this tip won't work.

As with any resource editing work, make changes only on a backup of SuperPaint.

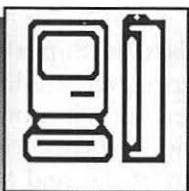
HARDWARE



AUDIO OUTPUT

Connecting A Stereo To The Mac

The proper cable to connect the Mac's audio output to a stereo system is often hard to find. Fortunately all it takes is a trip to your local Radio Shack. Look for Part Number 42-2153. It's a Y adapter with a mini mono phone plug at one end and a pair of RCA phono plugs at the other end. You may need more than 42-2153's 9-inch length. To extend this cable, use Radio Shack's 42-2472. You can use several of these if necessary.



DISKS

Ejecting Disks

There keyboard shortcuts to eject disks from disk drives using the Command-Shift keys.

Command-Shift-1 ejects a disk from the first drive;

Command-Shift-2 ejects a disk from the second drive;

Command-Shift-0 ejects a disk from a third drive.

To just eject a selected drive, press Command-E.

Noisy Disks Signal Trouble

If your disk makes more noise than usual upon being inserted into the disk drive, it might not have been aligned properly by the Mac. Eject it and try to boot it again. If a certain disk consistently makes unusual noise, back it up as soon as possible and don't save new data to it – the data may be corrupted.

Magnets Are Lethal To Disks

Never expose your disks to any magnetic force, since it can wipe your data clean off the disk. If possible, store disks away from metals such as file cabinets.

Also, avoid placing hard disks and floppy drives to the left of a Macintosh, since the power source (being on the left) has magnetic qualities.



HARD DISKS

Interleave Factor And Hard Disk Performance

The performance of your hard disk relates to its interleave factor. If you change machines or add an accelerator card, you may need to change the interleave. As a

HARDWARE

rule, drives attached to a Mac Plus work best with a 3:1 interleave; those attached to an SE require 2:1; and Mac IIs, IIfx's, SE/30s, and all accelerated Pluses and SEs work best if the disk has a 1:1 interleave. To see what that interleave is and to change it, use the latest version of Apple's HD SC Setup (which is part of the System Tools 5.0 or 6.0 package). Hold down Command-I after you arrive at the application's window to access the interleave areas of the program. Remember to back up your entire disk before changing the interleave. Changing the interleave requires reformatting the disk - an operation that destroys all the data on the disk.



HIGH DENSITY DRIVES

Mixing High-Density And Double-Density Disks

The high-density disks for Apple's new High Density (FDHD) drive can cause problems when you're dealing with earlier Macintosh floppy drives. Let's say you want to copy a file from an SE, Plus, or Mac II and bring it home to your SE/30 or IIfx, but all you have is a high-density disk. The standard Apple drive can format and write onto a high-density disk as if it were a regular double-sided, double-density 800K floppy, but when you insert that disk into an FDHD drive, it warns you, "This disk is not formatted for use in

this drive." The FDHD doesn't like a high-density disk formatted as an 800K disk because the extra square hole on the top left corner of the high-density disk tells the FDHD drive to read it as a high-density disk. To get around this, simply cover up the square hole with a piece of opaque tape. Then the FDHD thinks it has a standard 800K floppy and will read it.



IMAGE WRITER

What You See Isn't Always What You Print

When you print, the ImageWriter (I & II) uses a font twice the selected size (if it's available in the System) and then scales it down to produce high quality output. Fonts usually don't change from one size to the next. But Geneva is the exception that proves the rule: its lower case "y" in 12 point has a distinctly different descender than the 9-point "y" and both have different forms than the 24-point character. That means, when you print high quality in Geneva, you'll often get some characters that print quite differently than they display on-screen.

How To Access The Self-Test Mode

The ImageWriter II can run self-test samples of all three printing modes. To do this, turn the printer off and hold down

the Form Feed button while turning it back on. This starts the draft mode self-test. While it's printing, deselect the printer by pushing the Line Feed button and then push the Print Quality button to select a new mode. Then reselect the printer by pushing Line Feed. When the print head begins a new line, it will print in standard quality. Repeat step two to enter high quality mode.



IMAGE WRITER II

Producing Near-Letter Quality Printouts From The ImageWriter Without Editing Codes

There's an easy way to coax near-letter-quality printing from the ImageWriter II. Rather than using ResEdit or MacTools (we're not all hackers!) and the Print Merge function of Word 3.0, simply select draft mode when the print dialog box comes up on the screen. Then, using the selection switches on the printer, select the typeface that you'd like to use in near-letter-quality mode (check your ImageWriter II manual for details on how to select the various choices).

How To Obtain Best Print Quality Fast

Here's a way to obtain the fastest and best print quality from your ImageWriter II. You can access the ImageWriter II's built-in proportional fonts from within MacWrite or Microsoft Word. Certain fonts when printed with the "draft" quality access the printer's internal proportional fonts. These internal proportional fonts are: Boston II 10 and 12 point, Toronto 12 point, Chicago 12 point, Venice 14 point, London 18 point, Athens 18 point, and San Francisco 18 point. Other fonts, such as Geneva, use a monospaced font in draft mode that produces awkward spacing.

Using The ImageWriter And The HP PaintJet Film To Produce A Transparency

If you've ever needed an overhead transparency in a hurry (and in color, no less), here's an inexpensive solution.

By using HP PaintJet transparency film and an ImageWriter II printer, you can easily make a color (or black-and-white) overhead.

HARDWARE



IMAGE WRITER LQ

Extending The Life Of ImageWriter LQ Ribbons

Here is one way of extending the life of an LQ ribbon.

On the left side of the LQ (where the controls are), there is a small switch. When this switch is depressed, the printer knows that a one-color (black) ribbon is loaded. The black ribbons have a tab protruding that should depress this switch. Color ribbons do not have this tab. Make sure that the tab is depressing the switch. Then most of the ribbon surface will be used for printing.

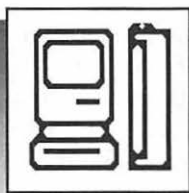
Seating The ImageWriter LQ Ribbon Properly

If the top edge of your ribbon is receiving the brunt of the printing load, you may not have the ribbon seated properly.

A well-worn LQ ribbon has four parallel wear lines spaced evenly up and down on its surface reflecting the up and down movement of the print head. An improperly seated ribbon defeats this motion, and the result is the characteristic top-edge fraying. In other words, you're using only one-fourth of your ribbon.

If you set up the printer as the manual instructs, there's every chance that you won't seat the ribbon properly, because doing so requires a degree of force and thumb pressure that most people will not instinctively apply to a new \$1,300 printer.

To seat your ribbon properly, you must apply very strong thumb or finger pressure to the extreme end of each of the little arms that extend out from each end of the cartridge. You will feel a very satisfying click when it is properly installed.



KEYBOARD

There Are Three Apple Keyboard Options

Mac SE and II buyers actually have three keyboard choices from Apple. They are the Standard, Extended and IIGS keyboards. The IIGS keyboard has the same key arrangement as the Standard keyboard but is about 10 to 15 percent smaller. The feel of the keys is also slightly different, and the individual keys are relatively unsculpted and easier to rearrange (if, for example, you want to change it to a Dvorak layout). If your dealer doesn't know what you're talking about, refer to Apple part number 658-4081.

Using The Key Caps DA During Keyboard Failure

If one or more of the keys on your keyboard ceases to function or in the middle of a letter or document and something similar happens to you, simply go to the Key Caps DA. Click the mouse on the inoperative key and that letter, number, or symbol will be shown in the text area at the top of the DA. Simply copy it from there and paste it where needed.

Another option, which works in any program that has a global search and replace feature, is to use a symbol that you ordinarily don't use in place of whatever the keyboard won't produce throughout the document. When you're done, use the Change command under the Search menu to have the program substitute the correct letter (or whatever) for the symbol. Paste the correct letter from the Key Caps DA straight to the Change To area of the Change dialog.

The Keyboard Remembers What You Type

The Macintosh has a very effective keyboard memory buffer. So, when you launch an application, you only have to wait about four seconds before starting to type, even if the application isn't fully set up on the screen yet.

Curing Keys With WD-40

There comes a time in the life of every Mac keyboard when one of the keys fails to work. How-to articles describe how to repair the keyboard by breaking out the trusty ol' soldering pencil, tearing the

keyboard apart, and replacing the individual key with one purchased from the local Apple dealer. Although this method does an admirable job, you may be uncomfortable doing this kind of minor keyboard surgery. There is an easier method that requires no soldering, based on the assumption that the key is probably suffering from a dirty contact and that the contact can be cleaned with a judicious application of a solvent.

Disconnect the keyboard from the Mac and carefully pry the key cap off the offending key. Now take a can of WD-40 (available at most hardware stores), insert the small straw that comes with the lubricant into the nozzle, and direct as short a spritz of WD-40 as possible at the point where the white key plunger enters the black body of the key.

Work the key plunger several times and then reconnect the keyboard to see if the key works. The first application of WD-40 may not do the trick, but the key should be resurrected by the second or third try.

HARDWARE



LASERWRITER

Avoiding The Startup Page Using The Paper Tray

One way to stop your LaserWriter from printing a page each time it's started on a temporary basis is to pull the paper tray out an inch or so (the distance isn't critical) when you start the LaserWriter. When the green light stops flashing, indicating the printer is warmed up and ready to go, push the tray back in.

A Manual Fix For Envelope Jamming

Envelopes frequently jam when going through a LaserWriter because they are too stiff to bend around the mechanism of the paper path.

The low-tech solution is extraordinarily simple and takes about two seconds. Before printing, break the spine of the envelope. Run the flap edge of the envelope between your thumb and forefinger, bending it at about a 45-degree angle as it passes through. Do this twice, bending once in each direction so that the envelope ends up flat. Avoid paper cuts entirely by folding the flap over backwards.

For an even better pass through the printer, break the stiffness along both

long edges. This makes the envelope more flexible and the likelihood of jamming is substantially reduced.

Paper Trays For Legal And Letter Size Paper

If you regularly use two kinds of letter size paper in your LaserWriter (for example, letterhead and regular paper), it's a good idea to get a second paper tray to avoid taking paper out and putting the other paper in constantly. However, don't get a legal size tray, on the theory that it would be handy to have both tray sizes. You'll discover your pages print misaligned. That's because the LaserWriter doesn't check to see what kind of paper is in the tray, but, instead, checks to see which size tray is inserted!



LASERWRITER II

Jamming With Envelopes

A simple solution to jamming envelopes in the LaserWriter II is to open the door at the end of the LaserWriter II so the paper path is straight.

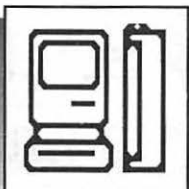
HARDWARE



MOUSE

Mouse Ball Sticking

To keep your mouse on the ball, check the ball your mouse is on. If your mouse sticks and hesitates, even after a thorough cleaning, it may be the ball that needs replacing. Take it out and examine it closely. If you see any small bumps or irregularities, you've found the culprits. You can get a new ball from your Apple dealer (Apple part number 699-8001 for the Plus or 699-8038 for the ADB) for about \$9.



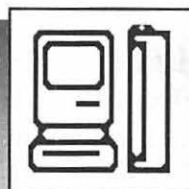
MAC PLUS

The Vents On The Top Of A Mac Plus

Don't block the vents on the top or the sides the Mac Plus, since it interferes with the circulation of cool air to the inside. Without adequate ventilation, the Mac Plus (and other models as well) may be permanently damaged.

When The Calendar And Clock Aren't Working On A Mac Plus

The alarm clock and calendar functions are regulated by the Mac's internal battery. In the Mac Plus, its compartment is located in the upper right side on the back of the machine. After about two years, the battery will give out. Replace it with an Everready 523BP, Ray-O-Vac RPX21, Duracell PX21 or Panasonic PX21, all of which are 4.5 volt batteries. You can find them at an electronics specialty store and through some Mac mail order houses. If the above symptoms are occurring on a Mac other than the Plus, the battery is a lithium battery, which lasts about 7 years and requires a Certified Apple Technician to replace it.



RAM

Upgrading The RAM In A Macintosh Plus And SE

Inside the Macintosh Plus and SE are four connectors for single in-line memory modules (SIMMS). A SIMM holds eight memory chips and snaps into one of the connectors. There are two kinds of SIMMs: 256K SIMMs (a quarter of a megabyte) and 1-megabyte SIMMs.

Your SE requires matched pairs of SIMMs, so here are your choices with four slots:

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one pair of 256K, two pairs of 256K, one pair of each kind, or two pairs of 1 megabyte. Multiplying it out, you can see that these four configurations give you 512K, 1 megabyte, 2.5 megabytes, or 4 megabytes, respectively.

The Mac comes initially with the 1-megabyte configuration – two pairs of 256K SIMMs. To upgrade, you can buy one or two pairs of 1-megabyte parts. But you have to remove one pair of 256K parts for each pair of 1-megabyte parts you install, because there are only four connectors.

So, if you buy the 2-megabyte upgrade package (one pair of 2-megabyte SIMMs), you remove 512K worth of memory from your 1-megabyte Mac and add 2 megabytes, giving you a total of 2.5 megabytes. If you buy the 4-megabyte upgrade (two pairs), you remove both pairs of 1-megabyte parts and replace them, leaving you with 4 megabytes.

Either way, you'll have some 256K parts left over. Some people use those to upgrade a 1-megabyte Macintosh II family models, because the Macintosh II has eight SIMM connectors internally.

Not all memory is the same – there are different speeds and shapes. Surface-mount or low-profile SIMMs take up less room but are more expensive than the bulkier DIP (dual in-line package) or high-profile SIMMs. (You need to worry about conserving space only if you plan to install other hardware – such as an accelerator board.)

You must also pay attention to speed. For the Plus, you shouldn't buy RAM any

slower than 150 nanoseconds. The maximum amount of memory you can have in the Plus is 4 megabytes. Unless you're really comfortable with opening your Mac, you should have your RAM installed by an authorized dealer.

Removing and installing SIMMs is not difficult, but opening up a Mac Plus or SE is. You need a special Torx screwdriver, and it helps to have a "spreader" tool to open up the case. You have to take special precautions to discharge the excess voltage on the cathode-ray tube so you don't damage internal components (either the Mac's or your own!). And you should use grounded wrist straps and static-reducing floor and table mats in your work area when you're dealing with SIMMs.



SCSI

SCSI Device Setup

Small-computer-system-interface (SCSI; pronounced "scuzzi") devices connect to the Macintosh by way of the SCSI port in the back of every Macintosh from the Mac Plus on up, but they also introduce complications in the way the Mac reads signals – even from an internal hard-disk drive. Some conflicts are serious enough to damage your data or Mac, but most are common and easy to fix. The two most

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common points of SCSI confusion are addressing and termination.

SCSI devices are connected in a single daisy chain. A single daisy chain should not exceed 18 feet in length and each device must have a unique numeric address between 0 and 7; the Macintosh is a SCSI device with address 7, and in an SE or II, an Apple-installed internal hard disk in an SE or II has a default SCSI address of 0.

Different devices have their addresses set in different ways – through software, through external DIP switches or simple push buttons or dials. Addresses must be unique, and two devices with the same SCSI address can cause System crashes or devices not to appear. Choosing certain addresses for each device is also important. When the Mac starts up, it checks to see if there is a disk with a System Folder in the floppy disk drives, then it checks for serially connected hard drives, and finally starts checking the SCSI chain. It looks at SCSI address 0 first and then jumps to address 6 and continues downward, booting off the first system it finds. The physical order in which you connect the SCSI devices doesn't matter - just their SCSI addresses.

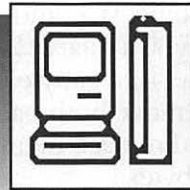
Termination is another SCSI principle. A terminator is a resistor that reduces signal echoing along a chain of SCSI devices. It is recommended that only the first and last SCSI device be terminated, for a total of two terminators.

The internal hard disk in an SE or II has an internal terminator, but if you have a

Mac Plus or an SE without an internal hard disk, then you need a terminator at both ends of a SCSI chain.

Many SCSI devices (hard disks, scanners) have internal termination, and the easiest way to find out – is to check the documentation or call the manufacturer, and avoid peripherals with unremovable terminators.

If a device does not have internal termination, then an external terminator can be placed into one of the two SCSI ports of the peripheral device, or into the cable before placing the cable on the SCSI port.



SOUND JACK

Silencing the Mac

If you're annoyed by the way the Mac beeps when it wants your attention, there's an easy way to get some peace and quiet. Pick up a Walkman-style mini jack (Radio Shack's mono-to-stereo mini jack will do fine) and plug it into the sound jack on the back of the Mac. From then on, the menu bar will flash to get your attention – in silence.

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THUNDERSCAN

ThunderScan 2.0/4.0 Running Under MultiFinder

Frustrated that neither version 2.0 nor 4.0 of ThunderScan will operate in the background with MultiFinder? Simply launch ResEdit, locate your copy of the ThunderScan software that you want to use for a background scan, and double-click on it to open. Locate the Size resource, double-click on it, then locate the 0 listing in the Size resource. Open this by double-clicking, at which time you should see the words "Can background" with two radio buttons to the side. Click on the 1, and then close the file and save changes. You can now run ThunderScan in the background with MultiFinder. You can also make most programs MultiFinder compatible, if they aren't already, by clicking on the "Juggler Aware" button in the Size resource just above the "Can Background" radio button.

Solving Distortion With Acetate

If you're getting a lot of unwanted distortion from your ThunderScan, and the program even crashes occasionally, try putting a piece of clear acetate over the item to be scanned.

Focus in the high 50s and great scanned images will reduce possible distortion. Be sure the acetate lines up with the left-hand edge of your document to be scanned. Also clean the lens on your scanner and adjust the height of your scanner cartridge (according to your printer manual) for optimum focusing.

Adjusting Lines In A ThunderScan Image

If you sometimes have trouble with just a few lines of a ThunderScan image, it may be because the scanner is having trouble with the end of the timing tape installed on the left end of the ImageWriter roller.

The easiest way to see if this is your problem is to scan an image at least 3 1/4 inches long that contains a series of vertical lines. Watch the Image window closely as the end of the timing tape passes under the scanner. If you see part of the vertical lines displaced to the left, it is probably because the timing tape doesn't reflect light back to the scanner accurately and the scanner misses its timing for a line or two. The problem is more noticeable if you magnify the image being scanned.

An easy way to fix the problem is to carefully apply some typewriter correction fluid even with the edge of the tape to fill the gap. If you accidentally get correction fluid on the rubber roller, it can be removed with isopropyl alcohol.

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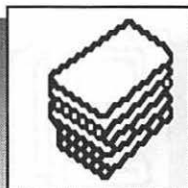


VIDEO

Care and Maintenance Of The Screen

Turn the screen intensity down when you're not using the machine. This prevents images from burning into the video tube. Using a program like Screen Saver or Pyro accomplishes the same thing.

HYPERCARD



HYPERCARD

Working With The Tools Menu On An Mac SE

When you're authoring HyperCard stacks on an SE, you don't always have a convenient spot to stash the tools menu. You can hit the Tab key to go from button or field mode to browse mode, but this has the sometimes undesirable side effect of selecting the first unlocked field. The contents of fields can be lost this way. This can be avoided by adding these lines to the Home Stack script:

```
on tabKey
  get the tool if it is "button tool"
  or it is "field tool" then choose
  browse tool
  pass tabkey
end if
end tabKey
```

If you have the extended keyboard, you can change tools by using the function keys. Put the second group of lines below into the Home Stack script:

```
on functionkey num
  put "browse, button, field
  select" into fKeys
  if num > 4 and num < 8 then
    get "choose" && (item (num-4)
    of fKeys) && "tool"
```

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```
do it
else
pass functionkey
end if
end functionkey
```

Don't use F1 through F4, since these are reserved for Undo/Cut/Copy/Paste.

Outlining Hidden Buttons

Pressing the Command and Option keys simultaneously will outline all buttons, however Hidden buttons are only outlined in Button mode — other buttons will be shown in Button and Browse modes.

While in Field mode, you can outline all fields, whether hidden or not, by pressing the Command, Option, and Shift keys simultaneously. This is very useful when learning programming techniques from other stacks. Version 1.2 has a command to show all buttons.

Using Font/DA Juggler Plus To Minimize Disk Space

To use Font/DA Juggler Plus to minimize the size of HyperCard stacks, first, use the Fkey/Sound mover, included with Font/DA Juggler, to create the sound files. Hold down the Option key while opening files to open a HyperCard stack. Then create new Fkey/Sound mover files, and copy the HyperCard sounds to the new files. Font/DA Juggler Plus can open these new Sound files at any time. Up to 12 sound files can be opened. The only limitation on the number of sounds is disk space. You can switch sets of sounds quickly and easily.

One problem: HyperCard can play only HyperCard sound resources. The Mac II beep sounds that come with Font/DA Juggler Plus cannot be played in HyperCard.

Reports

While using HyperCard-compatible Reports, you can encounter an unusual problem. In the HyperCard script editor, using the Tab key simply realigns the indentation in the script. However, when using Reports' script editor, pressing the Tab key actually inserts a character (probably a tab character) that shows up as white space. When the script is executed, HyperCard cannot interpret the added character and this results in a "can't understand" error. To fix it, you must delete the added character. So don't use the Tab key in HyperCard Reports' script editor.

Printing A Range Of Cards

The HyperCard printing options allow only the printing of the current card or the entire stack. But if you create a button on any card of your stack with the following script, you'll be able to print a range of cards that you specify.

```
on mouseUp
ask "First Card to Print?"
put It into Start
ask "Last Card to Print?"
Put It into Finish
open printing with dialog
repeat with counter = start to finish
print card counter
end repeat
close printing
end mouseUp
```

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Opening A Card To The Current Date

If you'd like an appointment stack that'll always show the current day's card whenever you open the stack, do this: Make a copy of the Appointment stack contained in Stack Ideas, create three months' worth of cards, then open the stack's script via the Stack Info dialog box and enter this script:

```
on openStack
    if field "date" is the long
    date then
        exit openStack
    else
        find the long date
        push card
        hide message box
    end
end openStack
```

The next time you open the stack, the current day's card will be on top. If it's not, see if there's a card with today's date. If there isn't, open the Message box, type extend, and press Return. That should do it. To check this, open the Message box again and enter find the long date, press Return, and the current day's card should appear.

Adjusting The Find Command

The Find command of HyperCard searches only for the first occurrence of a string in a stack. The Find menu item continues its search for the next occurrence of the string in the stack after the Return key is pressed.

If you want to prompt the user of your stack with a personal message (not the standard Find of the Message box), and want to continue the search after the first

match, use the "Ask" dialog box to enter the string to find. Then "type" it in the message box with the Type command.

All this can be done with the Message box hidden if the BlindTyping is set to true. Here is an example of a script of a "Find" button:

```
on mouseUp
    go first card
    ask "Find what word or group
    of words?"
    type "find" & quote & it & quote
    & return
end mouseUp
```

If you type "Macintosh" as the string to find, HyperCard will itself type the string "Find Macintosh" in the visible or invisible Message box, and will itself depress the Return key to begin the search. The next time you press the Return key, the search will continue, as with the Find menu item. With the command Find It (it = "Macintosh"), only the first occurrence of the string "Macintosh" would have been found, and the Return key as a "continue the search" command would not have worked.

Adding A Phone Hang-Up Script

When dialing numbers from the Address stack that comes with HyperCard, there is no obvious way to hang up once a number is being dialed or has been dialed. You can solve this problem by adding a background button to the address stack that sends a hang-up message to the modem. The script is:

```
on mouseUp
    send "dial" & quote & quote &
```

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```
"with modem" & ~ quote & "+++  
ATHO" & quote to HyperCard  
end mouseUp
```

This sends a hang-up message to the modem. If you have the phone off the hook, you will still be connected until you manually hang up.

Dialing With A Prometheus Modem

In HyperCard, using the dialing feature with a Prometheus modem can be a little difficult if the modem doesn't switch from data to voice transmission. Prometheus thinks this is a bug in HyperCard, but, not so.

In the Phone Stack that is supplied with HyperCard, open the Stack script. Find the code that reads: then send "dial" & quote &~ dialNumber & quote .. Change it to read: then send "dial" & quote &~ dialNumber &";H" & quote ...

Now the modem will switch to voice transmission immediately after dialing a number.

Expanding The Cursors In HyperCard

If you want to expand the cursors of HyperCard, make the ones you need with ResEdit, and call them from HyperCard by indicating the ID Number. The browse tool and all other HyperCard icons and cursors are in the Font resource of HyperCard, shown as a strange "12 ID 31756." You may not be able to open a resource with the ID number set so high. You can change the ID number, temporarily, to a lower number using Get Info from the

menu bar. Now you can open the resource, make your changes, then reset the ID number to the the previous value. Be sure to save the changes.

Printing A Card With Better Quality

If you want to print a card from a stack with better quality, especially text, export the card data to a Paint program, and print in the best quality available.

Getting The Name Of A Tool With HyperTalk

If you need HyperCard to select a tool or pattern from the Tool menu or the Patterns menu but you're not sure what it's called, follow this procedure:

1. Tear-Off the menu that has the item in question.
2. Select the tool or pattern that you plan to use.
3. Type "get the tool" or "get the pattern" into the Message Box and press Return.
4. Type "it" into the Message Box and press Return.

The Message Box should contain the exact name (or, for patterns, a number) that HyperCard needs to identify that item.

Uninterrupted Keying While Refreshing Settings

Showing the time in a stack is nice, but it becomes a pain in the mouse if the stack

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is used for keyboard input. At the end of each minute, HyperCard updates the time. If you happen to be typing when the clock strikes, HyperCard abandons the Text field to update the Time field. One way to ensure uninterrupted keying is to have HyperCard only refresh the time when you are not keying. The following lines in your stack script will do just that (assuming a field named "Time" is in the background):

```
on openField
    set lockText of field "Time" to
    false
end openField

on mouseLeave
    set lockText of field "Time" to
    true
end mouseLeave

on idle
    if lockText of field "Time" =true
        then put the time into field "Time"
    end if
```

Adding The Time In Any Stack

It's easy to show the time in any stack. Start by creating a field in the background called Time. Then add this short script to the existing background script, if any:

```
on idle
    put the time into field "Time"
    pass idle
end idle
```

If you want to add this feature to a single card rather than to all the cards of a background, simply create a card field named "Time." The script should now be

added to the card script, changing the second line to put the time into card field "Time".

Compacting HyperCard Stacks With Hypertalk

HyperCard stacks can be real memory hogs, especially if you modify them occasionally. The HyperCard manual suggests you look at the amount of free space in the stack by selecting Stack Info from the Options menu. If there is a lot of free space, you can reclaim it by selecting Compact Stack from the File menu. If you forget to do this, your stack can grow to twice its normal size.

Start by choosing the Authoring level from the home stack. Then go to the desired stack and choose Stack Info from the Options menu. Click on the Script button and add the following script:

```
on closeStack
    if the freeSize of this stack > 0
        then doMenu Compact Stack
    end closeStack
```

Another alternative script is the following:

```
on closeStack
    get the freeSize of this stack
    if it > 1024*10 then doMenu
        Compact Stack
    end closeStack
```

This script will automatically compact the stack if you exit it and it has more than 10K (1024 = 1K) of free memory. If there is already a script for this stack just add the new part at the end, and if there is already an "on closeStack" script, just add

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the two lines before the “end closeStack.”

Changing The Default Font In HyperCard

HyperCard uses the default (application) font to label icons as well as in the message window. It's also used as the default font for the Text tool and new fields. To make HyperCard use your favorite font as its default font, change your application font using any of the several excellent public domain and low-cost shareware programs that will do this. For example, to set the icon font to Geneva 9 you'll need to make the following changes using FEdit Plus or MacTools.

Change:

6720 3F2D F31E

To:

6720 3F3C 0003

The final 0003 is what sets Geneva.

Using Alphanumeric Keys To Set Polygon Shapes

When using the Polygon tool, it is not necessary to complete each polygon by clicking where you started drawing the polygon. If you are in the Fill mode, you can complete the polygon and fill it by typing any alphanumeric key.

Outline mode acts differently. When you type an alphanumeric key in that mode, the polygon lines stop where you last clicked the mouse. These methods work in MacPaint, also.

Blind Typing Out Of A Jam

The message box is always there, even when it's not visible, just blind type your message, such as “open resedit” or “go home.” Don't worry about getting the capitals right, but be sure you put spaces where they belong. Using this technique can get you out of a jam, such as when you use Recent to go to a card which you then discover has no menu or working buttons.

Attaching FONT Resources To Stacks

If you write a stack that includes text fields that use particular fonts, you can ensure that they will appear in your chosen font no matter what fonts other end users have available in their System. Using ResEdit, copy the Font ID number of the font you want to lock in from the System file. Then paste this ID number into the Font file in the stack you want that font used in. Even if there wasn't a Font file to begin with, pasting in the Font ID will create one.

Now when others open your stack, the fonts included within that stack appear in the text menu in HyperCard, along with the System fonts. You no longer have to worry about your stack using the default fonts and not looking the way you had planned it. Remember that Fonts (and sounds) take up large amounts of space in a stack.

Seeing All Hidden And Transparent Buttons

It's easy to see where all the buttons are, including hidden and transparent buttons that have been painted over, on a Hyper-

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Card card. All you have to do is press the Command and Option keys at the same time. All buttons will be outlined with a dotted line.

Returning To The Finder Instead Of HyperCard

If you want to return to the Finder rather than to HyperCard when quitting applications or documents launched from HyperCard, hold down the Option key while quitting.

Creating A Scrapbook Of Buttons

Often when creating a new stack you'll want to use the same buttons on different cards, with different backgrounds. If you save these buttons in the Scrapbook, you lose all identifying information, and can easily forget which button is which. The solution is to create a "ScrapCard" on which to save these buttons. First, add a new card at the end of the stack. Paste any button you intend to use again onto this card. Now all you need to do is press Command-4 to get to the ScrapCard (be sure to leave it as the last card in the stack), choose and copy the appropriate button, press Command— to return to the card you were working on, and paste the button in.

Putting HyperCard Into MacroMaker Macros

HyperTalk is a verbose language – and typing commands is often tedious. But thanks to Apple's MacroMaker, typing HyperTalk scripts can be a breeze if you turn the most commonly used words into macros:

1. When MacroMaker's active, its Cassette icon appears on the menu bar. If it's not active, put MacroMaker into your System Folder and restart.
2. Launch HyperCard. Record your macro from any stack, at any card (but not from the scripting window, which won't let you do anything other than enter and edit scripts).
3. Select Start Recording from the Macro Maker menu (the Cassette icon starts flashing).
4. Type in your most frequently used HyperTalk commands, bearing in mind that you won't see what you've typed.
5. After entering each command, select Stop Recording from the MacroMaker menu (the icon stops flashing).
6. Assign a keystroke to the macro you've created—Command-Shift-U for on mouseUp, for example — and store it.

Setting Control-Key Combinations To Set The User Level

An easy way for Mac SE and II owners to switch between user levels is to create Control-key combinations by inserting the following lines into the Home stack:

```
on controlKey x
  if x=49 then set the user Level to
  1
  else if x=50 then set the user
```


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```
Level to 2
  else if x=51 then set the user
Level to 3
  else if x=52 then set the
user Level to 4
  else if x=53 then set the user
Level to 5
  else pass control Key
end controlKey
end if
end controlKey
```

Now you can press Control and any number from 1 to 5 and be transferred to that user level.

If you've ever wanted to make your HyperCard stacks like real Mac applications with an About . . . command in the Apple menu, copy the following resources (with ResEdit) to your stack from HyperCard itself:

```
DLOG "About" ID=2002
DITL "About" ID=2002
STR# "About" ID=2002
ICON "Bill" ID=2002
ICON "Hypercard" ID=1001
```

Once you've loaded the resources in your stack by means of the scary magic of ResEdit, you can alter them to your heart's content without actually modifying the originals in HyperCard. To do so, make STR# read whatever you want; move, add, or delete any of the icons; or place your own text inside the DITL. You can even move the DLOG box elsewhere.

Now, when you open your HyperCard stack, the About . . . command will really tell other users what your stack is all

about. So if you're tired of the same old HyperCard programming team, add a little spice, delete Bill's lovely face — and put in whatever you want.

Speeding Up The Performance Of HyperCard And SuperCard By Turning Off Color

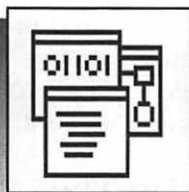
The speed of HyperCard varies depending on the color setting, but in general you will gain significant speed if you are using a color monitor and the color is turned off completely when you are moving a lot of monochrome images. For HyperCard, as well as SuperCard, if you have 256 colors, you should use either no color or 256 colors (2 colors or 256 colors).

In the Control Panel, the Control Panel Device (CDEV) called Monitors lets you adjust the number of colors your monitor shows. If you have 256 colors, your monitor will typically be at 2, 4, 16 or 256 colors.

Loading Fonts Into HyperCard Stacks With The Font/DA Mover

With the Font/DA Mover open to fonts, you can load fonts into HyperCard stacks if you hold down the Option key while clicking on the Open button for the second window. This lets you access and open applications and stacks in the Font/DA Mover window.

INTEGRATED



WORKS

Moving A Selected Range Of Cells In The Spreadsheet

While in the spreadsheet, you can quickly move a selected range of cells by holding down Command-Option while clicking in an empty cell. The cell that you click in will become the upper left cell of the moved range.

Using A Word Processor To Change Fonts

Although the spreadsheet has no font changing capabilities, you can move a block of cells from a spreadsheet to a word processing document via the Clipboard, and then change the font, sizes or styles in the new word processing document. The only problem with this is that you lose the display grid, if you had one. Works' drawing functions allow you to easily reintroduce one.

Sorting Columns

The program's spreadsheet can sort rows, but there is no direct way to sort columns. A column sort can be performed by selecting and copying the range of columns you want to sort. Then paste this selection into a new spreadsheet using Paste With Options instead of the standard Paste. Choose Both Formulas And

Values and Transpose, and click OK. Then reselect the range (it's now in a row) and use the Sort command from the Edit menu. Once the sort is completed, cut the data and then paste it back into the original range, using the Paste With Options command and Both Formulas And Values and Transpose options selected.

Microscrolling

When horizontally scrolling, your view usually shifts a fixed length. Scrolling in the word processor happens one inch at a time, while scrolling in the data base or spreadsheet moves you one column. Hold down Shift while scrolling to microscroll, allowing you to position all or parts of a window more exactly.

Hanging Up Fast In Telecommunications Mode

While in the communications mode, you can quickly hang up the phone or modem by typing Command-=.

Pasting In Data Without Field Names

If you have cut or copied information from the database, hold down Option while pasting it into a word processor to avoid pasting in the field names along with the data.

Saving Files With Return At End Of Each Line

Hold down Option while saving a word processor file as text (Export File) to save the file with Return characters at the end of each line. This will come in handy when transmitting text files.

INTEGRATED

Bringing The Bottom-most Window To The Front

When working with multiple documents, type Command-comma to bring the bottom-most window to the front. Use this to quickly switch between different documents you're currently working on.

Entering Page Breaks From The Keyboard

Enter a page break without having to go

to the Format menu by hitting Shift-Enter while you're typing. The page break will be entered at that point.

Quickly Accessing Graph Specifications Dialog

Double-click in a chart window to quickly bring up the graph specifications dialog box, which allows you to change the graph.

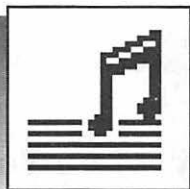
MUSIC



CONCERTWARE

Keep Instrument Files In The Same Folder As The Player

ConcertWare was designed before the Mac used the HFS filing system, so it might tell you it can't find the Instruments you're using, if they're stored in a different folder than the Player file.



DELUXE MUSIC CONSTRUCTION SET

Hooking Older Mac Models Up To Your Stereo

You can get really great sound from older (128K or 512K) Macs when working with DMCS or other music software. Hook the Mac up to your stereo with a cable that has a mini phone plug on one end and a pair of phono plugs on the other. Put the phono plugs into the equivalent AUX jacks on your stereo, then fit the mini phone plug into the back of the Mac, near the modem port.

MUSIC

When you do this, remember to turn the volume slider all the way down on the Control Panel or else the music will distort. You should also set the External Speaker option on. Then, set the stereo to Mono, turn it on, and make music to your heart's content.

Hard Disks Incompatible With Earlier Versions

Earlier versions of DMCS don't work with hard disks. When you would normally see a prompt to insert your key disk, your hard disk will bomb instead. The only solution is to upgrade.

Don't Modify The Program's System Fonts

DMCS uses special musical notation fonts which won't work properly after they've been modified.

Save Only When You Have Enough Room On Your Disk

Make sure you have plenty of room on-disk before saving a file. If the disk is short on memory, the program could destroy your file instead of prompting you to insert a new disk.



PROFESSIONAL COMPOSER

Workaround For Ignored Rehearsal Marks

Use the Print Parts option under the File menu to "consolidate" rests in parts. However, in all parts other than the first, rehearsal marks will be ignored if rests precede AND follow the rehearsal mark. You can fix the problem by inserting a thick barline from the palette at the left side of any measure in which a rehearsal mark is inserted. Any barline at rehearsal marks, other than the standard one, force Professional Composer to break consolidated rests around rehearsal marks in parts where rests precede and follow the mark.

Place Ties And Articulations After Transposing Parts

When working with transposing instruments, make sure to place your articulations and ties AFTER you Transpose Parts. This is because the program won't allow for the fact that the direction of note stems often change after transposition. Your articulations and ties will often end up on the wrong side of the notes, and redoing all of them can be tedious work.

MUSIC



QUARTERSTAFF

Let Your (Laser) Printer Do The Walking...

If you have access to a laser printer, choose Print from QuarterStaff's File menu while your Map window is active to create a complete map of the area—including unexplored places and even hidden rooms.



STUDIO SESSION

Note Entry Shortcut

There's a quick way to enter notes with Studio Session. After putting any note on the staff, hold the mouse button down. Dragging it left or right changes the duration, and dragging up and down changes accidental. After moving one way back and forth, you'll have to click again to make a different kind of change.

PRESENTATION



MORE

Personalizing Your Startup Screen

Consider what you want to do with your customizable startup screen before actually creating it, since once you've customized it, you're stuck with it.

Displaying More Than One Level Of Headline

Sometimes you'll want to display more than one level of headline in a single bullet slide chart. To do it, Cut or Copy to the Clipboard each outline section that you'd like to see appear on one bulletchart slide. Open a document window and Paste in the contents of the Clipboard. The indentations remain intact. Edit the leader characters to your satisfaction, then go to the Bullet Subheads dialog box and turn off the Subheads, then leave on Documents. Your slides will show multiple levels when you do bullet chart presentations.

PRESENTATION

Centering Bullet Charts For Printing

To center a bullet chart on a page when printing, make sure to turn on the **As Shown When Printed** in the **Bullet Options** dialog box. If you don't, the chart will print the way it looks on-screen.

Indicating Where Sum Total Should Go

The **Calculate** command normally positions the sum total at the start of a headline, although if there is already a number in the headline, the sum total will replace that number. To indicate exactly where the sum total should go, place a "\$0.00" in the location you want to specify.

Hiding Numbers From Calculation

You can "hide" numbers from the **Calculate** command. **MORE** considers numbers containing a slash (/) to be dates, while it thinks of numbers containing a colon to be times. That means, any figures that contain these characters will be ignored when the **Calculate** command is executed.

Dollar Figure Takes Precedence Over Other Figures

If a headline contains both a dollar figure and a non-dollar figure in the same headline, the dollar figure takes precedence for calculations, while the other figure is ignored. For example, if you put both an expense amount and the date of the expense in the same headline, put a dollar sign in front of the expense and for calculations, the date will be ignored.

Hide A Headline While Reorganizing Outline

You can reorganize an outline by dragging a headline under another headline that has collapsed sub-headlines and "hiding" it there. This lets you clean up your outline and concentrate on organizing the main details.

To move a headline under another one, select the headline you want to move. Then place the pointer to the right or left of the headline (or on the headline, if the **Recognizes preference** is set). Now click. The pointer changes to a right arrow. Hold down the mouse button and **Option**, and drag the pointer underneath and to the right of a headline with collapsed subheads. Finally, release the mouse button. The chosen headline is now "hidden" at the end of the collapsed sub-headlines.

Fast Access To Tree Size Dialog

You can quickly access the **Tree Size** dialog box by double-clicking on any of the orientation icons (the first four icons at the top of the **Tree Chart** palette). This dialog box lets you alter the exact dimensions of the boxes in your tree.

Quickly Opening Tree Options Dialog

A quick way to open the **Tree Options** dialog is to double-click on any of the box shape icons in the **Tree Chart** palette. This dialog box lets you adjust the patterns of the lines and boxes in the **Tree**, and also allows adjustment of grid lines, rulers, and page lines.

PRESENTATION



MORE 1.1

Toggle Between Headlines And Document Window

You can quickly toggle between a headline and its document window by pressing Option-Enter.

Key Equivalents Work In Dialogs

For all dialog boxes where there is no text input, you can use C for Cancel, O for OK, Y for Yes and N for No. If there are text entry boxes, use the Command key along with the key for choosing the button.

Quickly Cancelling Dialogs

You can cancel any dialog by pressing Command-period.

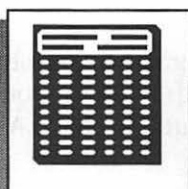
Reversing Text Entry Point

While the Tab key advances through text entry boxes of a dialog, Shift-Tab moves the text entry point in reverse order.

Entering Tabs Into Headlines

Enter tabs into a headline by typing Option-Tab.

SPREADSHEETS



EXCEL

More Than A Megabyte's Wasted

Early versions of Excel (until version 1.5) access only the first megabyte of memory. If you have more than that installed in your Mac and use the program under Switcher, make sure to install it in the first memory slot to give it the lowest possible memory allocation.

Customizing Chart Formats

If you use charts a lot and like to use custom chart formats built from those already available, this tip will make your charting chores more palatable.

You can store libraries of custom chart formats, instead of re-creating a custom format every time you need it. Simply use

SPREADSHEETS

the Clear command to empty the formulas of a chart with a format you find particularly useful, and use Save As to store it to disk.

To use your custom chart format, copy the data from the worksheet that you want to see in the chart and use Paste Special to paste the formulas into the formatted chart window. You now have the data illustrated in your custom chart format, without spending an hour or so to re-create that custom format.

If you encounter a situation where you can't copy the data directly (a discontinuous selection, for example), select the data you want charted and create a new chart file. Then open your customized chart file. Do a Select Chart on the customized chart file, use the Copy command, and then switch to the new chart file. Use Paste Special to paste the format of your customized chart file onto the new chart file.

Single-Letter Command Selection

You can quickly select commands within most dialog boxes by typing the first letter of a radio button command. That often selects the command without your having to actually click the mouse on the button.

Selecting The Entire Worksheet

You can select an entire worksheet without using the mouse by typing Command-A. This is the equivalent of clicking in the upper left corner of the worksheet.

Show Or Print All Worksheet Formulas

To show or print all the formulas in a worksheet (rather than the data), open a new macro sheet, copy the required cells from the worksheet, and paste them into the macro sheet. If you don't include all related cells, the cell references within the macro sheet may be incorrect or misleading.

Insert New Row/Column Without Using File Menu

You can select Insert to insert a new row or column without going back to the file menu every time. Hold down Option while clicking on the row or column in which you want to add a new area.

Automatic Dates In Column Heads

There's a way to make Excel automatically fill in the dates at the heads of columns. For example, to fill in months, select the cells you want to fill in with the months (12 in this case). Then, choose Number from the Format menu. Type "mmm" into the dialog box for abbreviated months, or "mmmm" to have the month names spelled out. Then, without deselecting the cells, enter 1 in the first cell and press Enter.

Now go to the data window and choose Series. Then, in the dialog box, select Series in Row, Type Date, Month Date Unit, and increment of 1 without a stopping point.

Finally, go back to the spreadsheet, type

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2 in the second cell, and press Enter. The dates should appear in the columns. You can experiment with this method to see how it works for other time increments as well.

You can also use the NOW() function to enter the current date or time into a cell. Define which part of the information should be displayed by selecting

DAY(), HOUR(), MINUTE(),
MONTH(), WEEKDAY(), or YEAR().

The formula for entering the current month in a cell would be:

=MONTH(NOW()).

Displaying/Printing Columns Starting With Zero

Some zip codes have leading zeros (for example, 05091 for Woodstock, Vermont). If you always want Excel to display and print these zeros, select the row/column in question and select Number... from the Format menu. Type in five zeros at the bottom of the dialog, then click OK. The selected area will now allow for zip codes with zeros as their first digits.

Copying A Spreadsheet As A Graphic Image

Excel has a feature that allows you to copy a portion of a spreadsheet as a PICT file, instead of having to copy only the numbers. Select the area of the spreadsheet you want and choose Copy Picture from the Edit menu. (To get this option to appear, hold down Shift before clicking on the Edit menu.) The selection, along

with row and column headings, will now be in your Clipboard, where you can transfer it to another program like MacDraw for resizing or “dressing up.”

Highlighting Multiple Cells

Highlight a large number of cells by clicking on the top left cell of the range and choosing Go To... from the Formula menu. Then specify the lower right cell of the desired range and press Shift while clicking OK or pressing Return.

Cursor Key Movement

When a group of cells is highlighted, you can't move the cursor outside the selected area if you're using the keyboard to control it. However, you can use the cursor keys to move around within the selected cells. When the cursor hits the bottom or the edges, it will wrap to the other side.

Naming Cells In Columns Easily

If you find yourself entering a column of labels, only to have to manually name each cell in the column just to the right of the labels for use in formulas, here's an easier way: Select the first cell that you want to have the same name as the contents of the label cell to its left. Then use Command-L (or choose Define Name from the Formula menu) and press Return. Excel will automatically assign the contents of the label cell to the left as the selected cell's name.

SPREADSHEETS

Centering Tables With Borders

To center a table with a border, increase or decrease the left margin. Check your centering by viewing the page with the Preview option in the Print dialog. The left and right margins will both appear if the table is centered. Only the left margin appears in the reduced view if it is not.

Remove Formulas To Trim Document Space

When entering a formula into a cell, press Enter or Return to confirm the formula. The results will appear in the cell, but the formula is saved with the sheet. Press Command-= instead and the results of the formula will be entered into the spreadsheet, while the actual formula is lost. (If a new value is entered into a variable cell in the formula, the results won't change.) Use this method to trim a few K from your saved document when disk space runs tight.

Enter Some Text Strings As Formulas

You might find that entering some text strings into a cell produces odd results. For example, pasting 10A into a cell results in Excel displaying 10:00 A.M. Work around this by entering the text as a formula. Instead of 10A, type = "10A", and the cell will show 10A.

Copying Cell Groups For Page Layout Applications

When copying a group of cells to be used in a page layout application, highlight the cells and then press Command-Shift-3 to

copy cells, divider lines, and any other information in the spreadsheet. It will be converted into QuickDraw, so when you paste it into a word processor or desktop publisher, it can be easily resized while retaining its full resolution.

Reopen Macro Sheet To Recompute Macro Functions

You can only use macros from open macro sheets when building your spreadsheet. If you close a macro sheet containing a macro that a cell in your open spreadsheet refers to, the value of the affected cell will change to "#REF!". The way to recompute your functions is to reopen the macro sheet.

Using XMODEM To Import Lotus 1-2-3 From MS-DOS Machines

If you import Lotus 1-2-3 worksheets from a PC by modem, use XMODEM. If the terminal program on your Mac has selectable MacBinary, turn it off. If you use XMODEM, only 7 of the 8 data bits per byte come through, so the transfer is useless. If MacBinary is used, the first 128 bytes of data will be lost.

Command Key Combinations To Select Page Setup Options...

Excel provides command key combinations for almost all the choices in page setup and print dialogs. In both, Command-C or Command-period select Cancel, and Command-O or Return/Enter selects OK.

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For The ImageWriter Page Setup Dialog...

Command-U activates "US Letter"
Command-A activates "A4 Letter"
Command-I activates "International Fanfold"
Command-T activates "Tall Adjusted"
Command-5 activates "50% reduction"
Command-N activates "No Gaps Between Pages"
Command-P activates "Print Row and Column Headings"

For The ImageWriter Print Dialog...

Command-B activates "Best"
Command-F activates "Faster"
Command-D activates "Draft"
Command-A activates "All"
Command-H activates "Hand Feed"
Command-P marks "Preview"

For The LaserWriter Page Setup Dialog...

Command-U activates "US Letter"
Command-A activates "A4 Letter"
Command-B activates "B5 Letter"
Command-F marks "Font Substitution"
Command-S marks "Smoothing"
Command-P marks "Print Row and Column Headings"

For The LaserWriter Print Dialog...

Command-A activates "All"

Command-F activates "From...To"
Command-M activates "Manual Feed"
Command-P activates "Paper Cassette"
Command-N activates "No" (for No Cover Page)
Command-L activates "Last Page" (for cover page)
Command-H activates "Help"

Formatting Commands In Headers And Footers

To embed formatting commands or other instructions in the header or footer of an Excel document, insert the commands in the Page Setup dialog box. The keyboard equivalents are:

&L: Align the characters that follow at the left margin
&C: Center the characters that follow
&R: Align the characters that follow at the right margin
&P: Print the page number
&D: Print the current date
&T: Print the current time
&F: Print the document name
&B: Print the left, center, or right side of the header or footer in boldface
&I: Print the left, center, or right side of the header or footer in italics
&&: Print a single ampersand.

Extra-Long Text In Headers Or Footers

You can enter header or footer text that's longer than the box can display. If you

SPREADSHEETS

need to edit this text later, view it by placing the cursor in the visible text near the rightmost end of the entry box and then dragging off the end. The text will scroll to the left and the extra text, already highlighted, will appear.

Hiding Sensitive Data From View

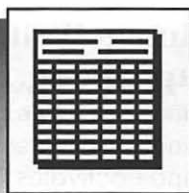
Using the Cell Protection command only hides formulas from being viewed. To really protect sensitive information, eliminate the column containing the data from view. Select all of the columns you want to hide, choose Column Width from the Format menu, and set the width to zero. Although hidden, the values will still be used in computations.

Now, protect the document with a password. No one will be able to view the hidden data without knowing your password and unprotecting your document.

Protecting Sensitive Information While Working On It

To protect documents from prying eyes while you're working, open a new document before opening the confidential one. Then use the new document's size box to make it as small as possible, and move it to the bottom of the page, so low that only its title bar shows. Finally, open the confidential document.

If you're intruded upon while working, double-click the new document's title bar and it will instantly cover your private information.



EXCEL 1.5

Quickly Returning To Where You Left Off

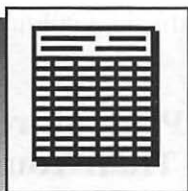
When you're using several worksheets, charts and macros simultaneously, quitting the application and later returning to where you left off can be painful — you have to open every worksheet, macro, and chart separately.

However, Excel lets you return to where you left off with the Resume Excel icon, which is created after quitting Excel. It works only if you haven't tried to use Excel with another worksheet.

If you want to save a configuration, drag the Resume Excel icon out of your System folder and rename it. Resume Excel remembers all the windows last opened, their positions, and the locations of all files.

This also works in earlier versions of Excel, where the Resume Excel icon appears in the folder that was open when you launched the application.

SPREADSHEETS



MULTIPLAN

Quick Column Additions

Quickly add a new column to a spreadsheet by holding down Shift while clicking in the head of the column directly to the right of the position you want to insert the row at.

Copying Rows and Columns Into Word Processor

It's easy to copy the rows and columns of your spreadsheet into a word processor. Just select all the cells in the spreadsheet and Copy them to the Clipboard. Then, launch your word processor, making sure its tab settings correspond to the spreadsheet's column widths. Then, Paste in the data from the Clipboard.

Sorting A Series Of Rows

To sort a series of rows, select all the filled-in cells in the column containing the "field" you want to sort on. Then choose the Sort... command. In the dialog box, click your sorting choice in ascending or descending order. The information in columns other than the one you sorted on will be rearranged to reflect the sorted column.

Extra-Long Header Or Footer Text

You can create a header or footer that's longer than the box can display. To edit or view this text, place the cursor in the visible text near the right-most corner of the entry box and drag off its end. The text will scroll to the left and the "hidden" text appears, highlighted and ready for editing.

Recalculating New Values Or Formula Entries

If you're having a problem because new value or formula entries aren't recalculated into the rest of your cells until the document is saved, you must have turned off the Automatic Calculation feature. You can either just use Calculate Now from the Calculate menu (also accessed with Command-=) or you can reactivate Automatic Calculation from the Calculate menu.

Rounding Off Half-Pennies

If your spreadsheet contains dollar figures with decimal places less than a penny, Multiplan executes the calculations exactly, using those values. You can choose the Round function to round the figures off to two decimal places before calculation, if you don't need such exacting figures.

Fixed Numbers Act Like Text

If you display a number with the Fixed function, it will act like text and can be treated as such for concatenation.

SPREADSHEETS

Use Forced Page Breaks When Printing Large Sheets

When you're printing large sheets of Multiplan documents, it's easier to use forced page breaks. These break up the spreadsheet into printable units. Then select pages from the Print dialog box.

This may sound cumbersome, but it's a lot easier than constantly selecting areas to print from a large spreadsheet.

Squeezing More Data On A Page

You can squeeze a little more data on a page by choosing a page size in the Page Setup menu that's larger than the actual size of the paper you're using.

Another way of getting more data on the page is to select the Page Setup option and set all page margins to 0.

Tall Adjusted Print Option Looks Good, Takes Longer

The Tall Adjusted printout is much darker and more legible than the printout you get using just the Tall setting. However, Tall Adjusted pages take almost twice as long to print.

Simulating Freeze Titles Option On Printout

You can simulate the Freeze Titles screen option on your printouts if you want to. Copy and paste an extra titles column at the leftmost side of each page, then obscure the column from view by dragging from its right, over the dotted lines. You won't see it on-screen, but the printer

will produce the titles column in its proper position.

You Can Print More Columns Than You Think

Multiplan can print columns up to 128 characters wide with the orientation printing option, even though you can't enter numbers over 99 in the Column Width dialog box.

First, open the spreadsheet and Show Values. Then, use Column Widths to set the column width to exactly half of the width you want for the printout. Finally, select Show Formulas, and the column width will double to what you want.

If you choose Column Width again, you'll get an "Invalid Column Width" message, but this won't affect any printing or operations.

Highlighting Sections With A Graphics Program

It's not impossible to highlight particular sections of a Multiplan sheet. However, pasting the documents into a graphics program like MacDraw lets you add tints to highlight headings and important totals.

Showing Cells That Need Alteration

Use the Protect Document and Remove Cell Protection options together to set up a model in which cells that might require alteration show up as highlighted and unprotected. Then, to make changes, you can move instantly between these unpro-

SPREADSHEETS

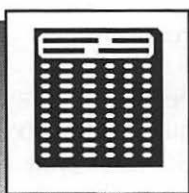
tected cells by using the Enter key. A plus is that row and column lines are suppressed on a protected sheet, making them cleaner looking and easier to read.

An Easy Way To Unprotect Protected Spreadsheets

To recover protected spreadsheets, all you have to do is open the protected document and Save As. Pick a new file name, Save, Close, and then open the Saved copy and get to work. Protection doesn't transfer to new copies of old documents.

Putting Titles At The Top Of Lists After Sorting

If you compile lists and want the title at the top after the sorting, type a space before the title. This space has a lower ASCII code than any other single character.



WINGZ

Using HyperScript To Add Hide And Show Commands

You can use HyperScript to easily add Hide and Show commands to the Sheet menu.

First, select New Script from the Script

menu, and then type the following script (the indents are unnecessary):

```
select menu "sheet"  
add menu separator  
add menuItem "Hide" command  
    "repaint off"  
        hide sheet hide tool box  
hide entry bar  
    select report border no  
line border  
    repaint on  
    repaint window"  
add menuItem "Show" command  
    "repaint off"  
        show sheet show tool  
box show entry bar  
    select report border  
single line border  
    repaint on  
    repaint window"
```

The Repaint Off command in this script stops Wingz from redrawing the screen after hiding each element, which would slow down the script. The No Line Border command hides the border that Wingz normally draws around every printed sheet.

5 Ways To Extend Your Wingz

Wingz features a HyperScript programming language, which lets you easily create custom features and menus. You don't have to be a programmer to use the following scripts. To enter a script into Wingz, select New Script from the Script menu; type the text of the script; and then save it, using whatever name you like. To run the script, select Run Script from the Script menu and open the file containing

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your script. If you create a script named Startup and put it into the same folder as Wingz, it will be executed automatically each time Wingz is launched.

1. Improved date formats

Wingz's five date formats all use hyphens, but you may prefer Excel's compact m/d/yy format. This script replaces the fourth date format (mm-dd-yy) with m/d/yy. The fourth format was chosen for modification because Wingz uses it by default for entering a date into a cell, but you can change the script to substitute this new format for any of the five Wingz formats:

```
select menubar "main"  
select menu "format number"  
select menuitem "MM-DD-YY"  
rename menuitem to "M/D/YY"  
date 4 "m/d/yy"
```

The new date format is not stored with spreadsheets — to use it, the script must be executed each time you start the Wingz program, making it a good candidate for placement in your Startup script (see item 5).

2. Restoring row height and column width

Wingz lets you adjust the height of rows, but this ability is a mixed blessing. Rows are narrow, and it's easy to accidentally change the height of a row when all you actually meant to do was select it. Once it's been changed, there is no simple way to restore a row to its original height. This script does exactly that — all selected rows are reset to their default height:

```
row height 240
```

The 240 measurement is in TWIPs, Wingz's standard unit of measure. One TWIP is 1/20 point, so 240 is 12 points, the standard row height. A similar script restores default column widths:

```
column width 1480
```

3. Setting row height and column width

This script allows you to set the height of all selected rows by simply entering the desired height, in points, into a dialog box:

```
row height value(dg:dgask  
("Enter height in points", round  
(rowheight () / 20, 0), 5)) * 20
```

The dialog box initially displays the height of the first row in the selection. The dg:dgask function, which ships with Wingz, displays a dialog box with a message and a text field in which the user can enter a response.

It takes three arguments: the message string, the initial value to display in the response field, and that field's desired size in characters. The multiplication and division by 20 handle the conversion of values between points and TWIPs.

A similar script lets you set the width of all selected columns:

```
column width value (dg:dgask  
("Enter width in points", round  
(column width () / 20, 0),5))*20
```

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4. Time made simple

Wingz is not smart when it comes to accepting time values. For instance, if you enter 10:35 or 12:30pm into a cell, Wingz does not understand that you are entering a time — it interprets the entry as ordinary text.

This script converts the text in the active cell to a genuine time value and then formats the cell to use the HR:MN AM format:

```
put timevalue (cell ()) into  
range (makecell (col (), row ()))  
format time 2
```

5. Putting it all together

This script combines all the previous scripts and includes an additional script for selecting the last cell in a spreadsheet. Directly out of the box, Wingz won't let you select the last cell — this script defines the last cell. The Startup script provides the new date format and then creates a Goodies menu that has an entry for every one of the remaining commands. Be especially careful to type the script exactly as it is shown here: Quotation marks in the scripts appear doubled when they are embedded as menu commands in the Startup script. Name this script Startup and put it into the same folder as Wingz; that way, you'll get the Goodies menu automatically each time you launch Wingz.

```
{set 4th date format (the default date  
format) to m/d/yy}
```

```
select  
menubar "main"
```

```
select menu "format number"  
select menuitem "MM-DD-YY"  
rename menuitem to "M/D/YY"  
date 4 "m/d/yy"
```

```
{create Goodies Menu}
```

```
add menu "Goodies" with 6 items
```

```
{restore selected rows to default height}
```

```
add menuitem "Fix Row Height"  
command "row height 240"
```

```
{set row height in points}
```

```
add menuitem "Set Row Height..."  
command "row height value  
(dg:dgask (""Enter height in  
points"", round (rowheight () / 20,  
0)) * 20"
```

```
{restore selected columns to default width}
```

```
add menuitem "Fix Column  
Width" command "column width  
1480"
```

```
{set column width in points}
```

```
add menuitem "Set Column  
Width..." command "column width  
value (dg:dgask (""Enter width in  
points"", round (columnwidth () /  
20, 0)) * 20"
```

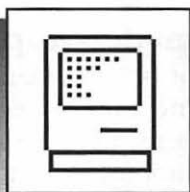
```
{convert current cell's text representing  
time to time value}
```

```
add menuitem "Fix Time"  
command "put timevalue (cell ())  
into range (makecell (col (), row  
())) format time 2"
```

SPREADSHEETS

```
[select last cell in spreadsheet]
add menuitem "Select Last Cell"
command
"define sel, lastrow, lastcol
repaint off
select Active Cells
sel = selection(1)
lastrow = rowof(sel) + rows(sel) - 1
lastcol = colof(sel) + cols(sel) - 1
select range range
(makecell(lastcol, lastrow))
repaint on
repaint window"
```

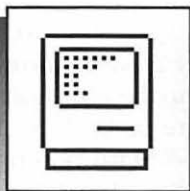
SYSTEM ENHANCEMENTS



ALARM CLOCK DESK ACCESSORY

Why Your Menu Bar Or Apple Is Flashing

If your menu bar (or the Apple icon at the top left of the screen) is flashing and you don't know why, chances are it's because someone set your alarm clock. Choose Alarm Clock from under the Apple menu and click on the tiny flag at the far right side of the window. From there, choose the alarm clock icon (in the far right corner). Look into the middle section of the window – see that small switch image on the left? Set it to the up position by clicking on it, and your alarm should stop flashing.



APPLE FILE EXCHANGE

Fooling The SuperDrive

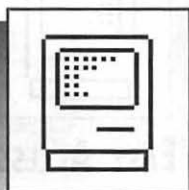
Here's a tip aimed at people who do a lot of MS-DOS-to-Macintosh conversion, using the Apple File Exchange. IBM PS/2s and compatibles that use a 3.5-inch 1.44-

SYSTEM ENHANCEMENTS

megabyte drive can read, write, and format a high-density disk at the lower 720K density. Unfortunately, when trying to read these disks on a SuperDrive-equipped Macintosh, Apple File Exchange assumes that it formatted at the 1,440K density. AFE is looking at the extra notch on the disk before it attempts to read the actual format.

You can fool the SuperDrive hardware into thinking it has a standard DS/DD (double-sided/double-density) disk by using a piece of tape to cover the extra notch (or to further confuse the issue, you can use a write-protect sticker, as used on those archaic 5.25-inch floppies).

Also, AFE displays hidden files, such as the desktop, and seemingly transfers them to an MS-DOS disk. However, the only thing that gets transferred is an empty file that is hidden on the MS-DOS side (i.e., the file's contents are not transferred, but a hidden file is created). If you make a habit of hiding your data files under a security program, you'd best un-hide them before trying to transfer them to an MS-DOS disk.



APPLETALK

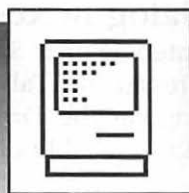
Finding A "Lost" Printer

Sometimes the reason for printing prob-

lems is software-based. For example, if you use a printer over AppleTalk, you might one day find that the printer doesn't show up in the Chooser Printer dialog-box. If this happens to you, first Quit the application and make sure your disk contains all the files you need. If it does, try this:

In the Choose Printer dialog box, if the printer you need doesn't show up as a print option, disconnect AppleTalk and close the dialog box. Then, reopen the dialog box and select AppleTalk Connected. Hopefully, the missing printer icon will mysteriously reappear so you can select it and try to print again.

Another resort is to reinstall the printer drivers in your System Folder.



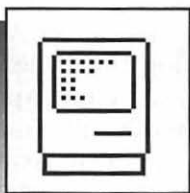
DESKTOP MANAGER

Substituting The Desktop Manager For The Finder

The Finder uses the Mac's Resource Manager, which was designed to work with 400Kbyte floppies, to maintain the Desktop file. So it is not efficient when you begin to build up 1000 files or more; it is especially noticeable when copying and moving files takes a long time. The Desktop Manager is a Finder enhancement

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which speeds up the Desktop maintenance over a network. It is included with the AppleShare server disk, and used automatically if present in System 6.0 and later. To reduce the amount of time the Finder spends maintaining the Desktop, put the Desktop Manager file in the System Folder and reboot. Your single Desktop file will be replaced with two invisible files, Desktop DB and Desktop DF.



DIALOG BOX SHORTCUTS

Switching Drives In The Dialog Boxes

When presented with a Save or Open dialog box, pressing the Tab key is a shortcut to clicking on the Drive button. It selects the next available disk drive.



DIRECTORY DIALOG BOX

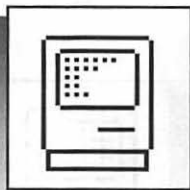
Three Ways To Search The Directory Dialog Box

You have just selected Open from the File menu to find yourself staring at a folder

with multitudes of files. How can you speed up your search for a file that's in the middle or toward the bottom of the list?

1. Scrolling or using the arrow keys lets you see every file in a folder, but these are also the slowest ways to search the directory dialog box.
2. No matter how you have your view set in the Finder windows, the directory dialog box always lists files in alphabetical/numerical order. Typing the beginning letter (or number) of the filename takes you right to the file or to a range close to it. If the file is near the bottom, try typing Z.
3. Typing the tilde (~) key takes you to the very bottom of the list.

These techniques also work on windows in ResEdit, Symantec Tools, DiskTop, and DiskTools II, but they don't work with all file editors. You might find other instances in which these work.



EASY ACCESS

Using Easy Access

Easy Access is a startup utility which comes with recent versions of System software for those who can't use a mouse.

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Easy Access turns the numeric keypad into a substitute mouse. Put Easy Access into your System Folder and restart your Mac. Command-Shift-Clear invokes the Easy Access-mode mouse keys. The 5 key performs the mouse-button functions (clicks and double-clicks), and the other numeral keys from 1 through 9 move the mouse. The 0 key locks the mouse button down, and the Period key unlocks it. This is documented in the New Features Update bundled with System 6.

Sticky Fingers Feature Of Easy Access

Sticky Keys is a feature of Easy Access that allows single-finger operation of the keyboard.

To turn the Sticky Finders feature on, press the Shift key five times in a row. Be careful not to move the mouse at all while pressing Shift, or you'll have to start all over.

A Frozen Screen May Really Be Easy Access

Here is a simple tip for those who often use cursor keys in Easy Access. If your screen freezes and it appears that your Mac has bombed, always try pressing the period key on the numeric keypad. You may have accidentally hit the keypad 0 key, causing the mouse to stay clicked and creating the illusion of a System error.

With Sticky Keys turned on, the “modifier” keys (such as Shift) can be pressed before the key they modify, rather than at the same time. Pressing the modifier key once modifies the next keystroke only;

pressing it twice locks it on until it is turned off by being pressed again. Multiple-modifier key sequences (like Shift-Option) can be executed using Sticky Keys. An indicator in the menu bar shows you which modifier key is active.

With Sticky Keys turned on, you type as usual until you want to type a multiple-character keystroke. Instead of pressing the keys together, you can now press one of the modifier keys, and the icon in the menu changes to a down arrow indicating that the last key you typed is still pressed.

The other half of Easy Access, Mouse Keys, uses the numerical keypad for mouse movements by pressing the keystroke combination Command-Shift-Clear.

Using Easy Access For Fine Tuning Graphics

Easy Access was meant primarily to aid physically impaired Mac users who have trouble using the keyboard and the mouse. But any user can profitably use the utility from time to time. For example, using the Mouse Keys function of Easy Access, you can easily implement a “nudge” command, which moves a selected object one pixel at a time in any direction. Such a command exists in SuperPaint and Cricket Draw but is sadly lacking in many other draw programs — like FreeHand. Here are the steps:

1. Make sure Easy Access is in the System folder when you start (or restart) your computer. You have to be using System 4.1 or later.

SYSTEM ENHANCEMENTS

2. Open your draw program and position the pointer over the item you want to nudge. Click the item to select it.
3. Press Command-Shift-Clear to turn Mouse Keys on. With Mouse Keys on, the numeric keypad operates as a mouse substitute.
4. Press the keypad's 0 key to lock the mouse button down. (This is an electronic locking, not a physical one.)
5. Tap any of the keys surrounding the 5 key to move the selected item exactly one pixel in the direction specified by the position of the key. For example, the 2 key moves the item straight down, the 8 key moves it up, and the 6 key moves it to the right.
6. When you've nudged the object into place, press the keypad period key to unlock the mouse button. You can leave Mouse Keys on as long as you don't need to use the keypad for regular input (the Enter key is unaffected by Mouse Keys, however). To turn Mouse Keys off, press Clear on the keypad.

Mouse Keys can be incredibly useful for very fine mouse movement — and it's lots of fun once you get used to it.



FINDER

Keep Folders Small

The more items there are in a folder, the longer it takes to open it, so you want to keep folders small. On the other hand, when folders contain fewer items, folder nesting becomes deeper. You'll want to find a balance between too many items in a folder and too many levels of nested folders. Some programs locate files by using their full pathname. This includes the name of the volume the file is in and every folder name, in order, on the path to the file, with each name separated from the next by a colon (:). For example, the full pathname to WriteNow 2.0 in the hierarchical organization might be like this — Hard Disk:Applications: Word Processing:WriteNow:WriteNow 2.0. As you can see, the deeper folders are nested, the longer the pathnames get. Most programs can't handle full pathnames longer than 255 characters. This 255 character limit is also a reason not to make file or folder names too long.

RAM Caching

When you activate RAM caching in the General section of the Control Panel DA, remember to reboot the machine. Only then will the RAM cache activate. The same applies to turning the RAM cache off.

SYSTEM ENHANCEMENTS

Changing Close In The File Menu

In the Finder, holding down the Option key while pulling down the File menu changes the Close menu item to Close All.

Rebuilding The Desktop Of A Disk

Holding down the Option and Command keys when the Finder launches rebuilds a disk's desktop. Rebuilding the desktop speeds up the process of launching applications. Be aware that you will lose any comments in the Get Info box of all documents and applications when you rebuild the desktop.

Clicking And Dragging Files And Folders

When a folder is shown by name, date, or kind, many users feel compelled to double-click or drag a file by the itsy-bitsy icon on the far left. Even though this works just fine, it's unnecessarily precise and can slow you up. You can, in fact, click or drag a file anywhere in the row (including the white space after the name). If you're double-clicking, however, avoid the name column because two clicks there makes the name editable and puts an insertion point where you clicked.

Organizing Applications

If you regularly use many applications and want to keep them all handy, the usual solution is to group all of them in a single folder on your hard disk. Unfortunately, many applications require that you keep several utilities and sample files in the same folder as the application,

which makes spotting the application itself difficult. You can remedy this problem by hiding these utilities outside the visible window or by burying them in folders within the application folder, but there is a better way:

Create an empty document in each of the applications you use regularly and keep it in a folder separate from the application. When using one of these blank documents to create a new file, choose Save As to save the new file and to preserve your template. Lock the empty document (using Get Info); this will prevent you from making any changes to it.

These blank pages take up little memory and can be customized to your particular needs and serve as style sheets.

Organizing Icons Alphabetically

Here's a quick way to alphabetize a column of icons: Select them, drag them to a new folder, set that folder to View by Name, then reselect all the files and drag them back to the original folder, and don't forget that you can make a column look tidy by dragging a selection rectangle around it and then choosing Clean Up Selection from the Special menu.

Neatness Counts

It's worth the effort to arrange your desktop neatly – and to keep it that way. You can size and place windows so that as you open nested folders, the display is compact and all the windows are visible. You can also drag a folder to the desktop and keep it there over the span of your

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project, making it easily accessible. Later, you can select the folder and use the Put Away command in the File menu to return it to its home location.

Tab Stop Assignments In The Finder

You can save a considerable amount of horizontal space by resetting the generous tab stops Apple assigns in the Finder. To do so, run ResEdit and open the Finder on the disk you want to change (do this on a copy of the Finder other than the one you are currently running), open LAYO, open LAYO=ID 128, scroll down to the Tab-stop labels, and substitute the following values:

Tab stop 1	20
Tab stop 2	114
Tab stop 3	154
Tab stop 4	208
Tab stop 5	304
Tab stop 6	352
Tab stop 7	384

You can change these values to suit your preferences. These values save the most space without obscuring too much of the column's contents.

Opening Applications Easily

The mouse button on the Mac is buffered so, when you need to open an application directly on one of your hard disks, just make sure that all the images of the folders and the application's icon are aligned. Let's say that you have a folder on your desktop called "Word Programs", inside of which are several folders containing various word processors and as-

sociated files. Odds are that there is one application you'll use more than the others, such as Word 3.01, that is in a folder by the same name. Click open the Word Programs folder, and align the newly opened window so that the Word 3.01 folder is directly over the outline of the Word Programs folder (This might take a few tries). Once they are aligned, open up the folder called Word 3.01 and align the application Word 3.01 in that window with the previous windows.

Now when you want to open your most used word-processing application, all you have to do is place the arrow cursor in the middle of the Word Programs folder and click six times to open the two folders and launch the application. No more moving the mouse each time a folder window is opened to get the next folder to open. And this trick still allows you to keep a neat desktop with everything in its correct folder.

Finder Tips

When in the Finder, here are some reminders and advanced tips:

1. If you hold down the Option key while opening a folder or disk, the window opens only temporarily. When you launch an application and then return to the Finder, the window will be closed.
2. By holding down the Option key while closing a window, you can make all the windows on the desk top close.
3. When you hold down the Com-

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mand key and click in the title bar of an inactive window, you can move that window on the desktop without activating it and bringing it to the front.

Cleaning Up Windows In The Finder

Want to neaten the appearance of the application and document icons inhabiting windows in the Finder? Open the window you want to tidy up. Go to the View menu and set it so that the window is showing your applications and documents by Name and not Icon or Small Icon. Use the Select All command under the Edit menu. Drag everything out onto the Desktop and wait a second or two while the Finder catches up with you. Go back to the View menu and reselect By Icon or By Small Icon — whichever you prefer. Then go to the File menu and select Put Away. Your applications and documents will begin quickly arranging themselves in the window in alphabetical order.

Running A Mac With A Copilot

Did you know that you can run Macs from the SE and II families with a real live copilot at your side? Just have your nearest Mac expert bring a second keyboard (and mouse) to your desk and plug it into one of the Apple Desktop bus (ADB) ports on the back of your Mac.

The extra keyboard and mouse turn your Macintosh into a state-of-the-art training system, complete with room for a copilot. Your resident expert can sit beside you

and demonstrate various techniques. This gives you the chance to try out the techniques yourself without having to share the keyboard or mouse.

Preventing Pirating Of Applications From Your Hard Disk or Network

Here's a way to stop people from pirating applications from a hard disk or a network:

First, create a blank document with the application you want to protect and give it a name similar to that of the application (such as "Word 4" for Microsoft Word 4.0)

Next, use ResEdit to make the program invisible (highlight the application name, choose Get Info from ResEdit's File menu, and click on the Invisible box). Quit ResEdit and restart.

Copying Disks From The Finder

When using the Finder to copy a disk, you can avoid typing the new disk name. Simply click on the icon of the original disk and select Copy from the Edit menu (Command-C), then click on the icon of the disk.

Getting Screen Shots On A Mac II

In order to get Command-Shift-3 (the System utility that creates MacPaint-type snapshots of the screen) to work on a Mac II, configure the video card to use only two shades of gray. If the card is con-

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figured for 4 or 16 shades, the Command-Shift-3 combination won't work.

Virus Protection

Here's a very simple and effective way to protect programs on your hard disk from virus infection.

While in the Finder, do a Get Info on each of the programs on your disk and click in the Locked box at the upper-right corner of the window (see Figure 1). This usually protects the selected file from accidental deletion, but it also guards it against virus contamination, since it prevents new resources from being written to the application. Don't forget to protect mini-applications like Font/DA Handler.

Vivid Color Icons

If you have a color Mac, you can change the way colors are used with icons and change the colors displayed on the Color menu using an application called Layout (Latest version is 1.9). Layout is a free but copyrighted resource-editing tool by Michael O'Connor that is available on CompuServe and other on-line services.

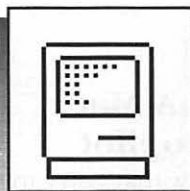
Open Layout and select Color Style from the Options menu. This will bring up two radio buttons labeled Normal Color Style and Alternate Color Style. Click on the latter for more-vivid icons. You'll also see eight color bars like the bars on the Finder's Color menu. Click on any color and use the Color Picker to change its value. Quit, saving your changes (you can reestablish the old colors later by choosing the default).

A Pre-Trash Folder

For those who worry about throwing files in the trash and then later regretting the decision, just create a new folder on your startup disk called "Pre-Trash", "Today's Garbage", or the like and place it above or next to the true trash on the desktop. You could even place it so that it mostly covers the icon. Then, instead of throwing files directly into the trash, put them first into the pre-folder. At the end of every session, you can calmly sort through the files placed in this folder and render judgment on them — no more accidental trashing of vital documents.

Quick Disk Erase

The quickest and easiest way to erase a disk is to copy a blank disk over it. To do this, just insert a blank, formatted disk in a drive and drag its icon onto that of the disk you want to erase. You'll usually save a minute or so over using the Special menu's Erase Disk command.



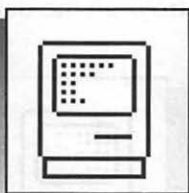
FKEYS

Testing Fkeys With ResEdit

If you are looking around in a file with ResEdit and you see an Fkey resource, or you just want to try an Fkey before putting it in your System file, you can try the Fkey while in ResEdit. The system looks through the chain of open files, not just the System

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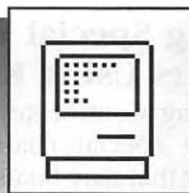
file, to find Fkeys. Since ResEdit has opened the file, when you press Command-Shift-N, where N is the ID of the Fkey, the Fkey is invoked. The most recently opened file is searched first, so even if the Fkey you want to try has the same ID as an Fkey in your System file, the Fkey you want to try is invoked instead of the one in the System file.



Font/DA Mover

Adding And Removing Fonts From HyperCard And Other Applications

Sometimes you want to add and remove fonts from an application (as opposed to the System). On launching Font/DA Mover, you'll see a list of all the fonts in your System file. To open the font file of any application – or even a HyperCard stack – press the Option key while clicking on the Open button. Font/DA Mover works the same with applications as it does with System files. You can have two applications open simultaneously to swap fonts, or just one to remove them.



Fonts

Screen Font Alignment

Most Macintosh screen fonts supplied by Apple and all LaserWriter fonts have constant-width digits. It's been a standard in typography since the birth of financial printing. So if you're having trouble lining up columns of numbers, try the following suggestions.

In spreadsheet programs such as Excel, use a cell format that has a constant number of places after the decimal and left-align them. Using the General format in Excel with numbers that vary in precision is a sure way to have your columns wander. Similarly, in word processors, use a right-aligned tab and keep a constant number of places after the decimal or use the decimal tab that many word processors include specifically for this purpose – it aligns a tabbed column on the decimal point (or on the right if no decimal point is present). Both MacWrite and Word include decimal tabbing. Remember – use the Tab key, not spaces, before each number in the column.

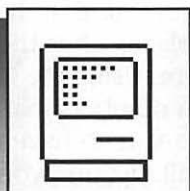
The presence of non-digit characters, such as commas, parentheses, and dollar signs, may alter the alignment of digits in columns, but they shouldn't be a problem if you use them consistently.

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Obtaining Special Characters Using Key Caps

The following Control keys within Key Caps define special characters in the Chicago font that may be useful: Control-Q (⌘), Control-R (✓), Control-S (♦), Control-T (♣).

If, in the text of your document, you are using any other font besides Chicago, the symbol will appear as a box outline. To get the symbol in your text, highlight the Key Caps line and choose Cut or Copy from the Edit menu. Close the Key Caps, place the cursor where you want the character, and choose Paste from the Edit menu. The box outline will appear. You must select the box and change your font to Chicago for that space.

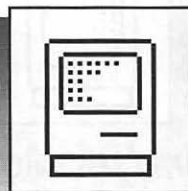


HARD DISKS

Interleave Factor And Hard Disk Performance

The performance of your hard disk relates to its interleave factor. If you change machines or add an accelerator card, you may need to change the interleave. As a rule, drives attached to a Mac Plus work best with a 3:1 interleave; those attached to an SE require 2:1; and Mac IIs, IIfx's, SE/30s, and all accelerated Pluses and SEs work best if the disk has a 1:1 interleave.

To see what that interleave is and to change it, use the latest version of Apple's HD SC Setup (which is part of the System Tools 5.0 or 6.0 package). Hold down Command-I after you arrive at the application's window to access the interleave areas of the program. Remember to back up your entire disk before changing the interleave. Changing the interleave requires reformatting the disk - an operation that destroys all the data on the disk.



INITs

The Scoop On INITs

An INIT is an initialization resource — a System resource that is loaded into the part of the Mac's RAM called the System heap and run as part of the normal startup procedure. You can buy INITs commercially or download public-domain INITs from a bulletin-board service (BBS). INITs are generally neither menu- or Command key-driven; they are designed to function automatically.

When INIT-based utilities first appeared, there was no way for the average user to install them into the System file. Developers invented their own installation methods, and some neglected to provide a way to remove INITs when they were no longer wanted. What users needed was

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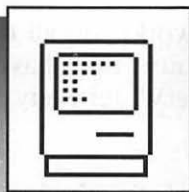
an INIT equivalent to Apple's Font/DA Mover.

Responding to this need, Apple released INIT 31. It worked at startup, searching the System folder for any files of type INIT and loading the enabled ones it found. So now you can simply drag an INIT into the System folder and INIT 31 would do the rest.

Because INIT 31 executes only at startup, the Mac must be rebooted before a new INIT becomes active. To disable an INIT, simply remove the file from the System folder and reboot. The INITs that are active in your System file will usually display a small square icon at the bottom of the screen during startup.

Loading INITs At Startup Time

INITs (or Startup documents) placed in your System Folder will normally be loaded and active in the System upon starting up your Macintosh. When starting up your Mac you can actively not load certain INITs by holding down the Shift key until the menu bar appears. This is an option that not all developers take advantage of, so some INITs will work and others will not respond to this key press. Suitcase and On Cue are two INITs which do respond to this action.



LARGE FILES

Transportation Of Files Larger Than 800K or 1440K (High Density Disk)

If you have to split up a file too large to fit on an 800K or 1440 K (High Density) floppy so that you can take it to a service bureau there is a solution. If you have a program for backing up your hard disk, bring a copy of it with you the next time you visit the bureau. If a file becomes too large to save to a floppy-disk, use the backup program to back up the file (the program will break the file up – you can restore the fragmented file on your hard disk when you get home).



LASERPREP

Mixing Various Macintosh Models On An AppleTalk Network

Do you have a mix of Mac 512Ks, Pluses, SEs, and Mac II models on your Ap-

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pleTalk network? Are all the 512K users cursing because they have to manually reset the LaserWriter every time they want to use it?

The problem is that the LaserWriter driver and LaserPrep programs versions 4.0 and later (supplied with all Macs after the 512KE) initialize the printer differently than the version 3.0 programs supplied with the 512KE. The version 4.0 programs offer the user the options to reinitialize the printer (from their computer) if needed, while the version 3.0 programs simply return an error message and abort the print job. A possible solution is to upgrade the 512Ks to System 4.0, but Apple does not recommend this, and System version 4.0 needs more memory than a 512K can afford to give to the System.

The real solution is to trash your old version 3.0 LaserWriter and LaserPrep programs and copy the version 4.0 LaserWriter and LaserPrep programs onto your System version 3.2 disk. Do this only on a copy of your System.

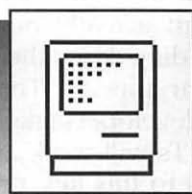
The new driver and prep programs work fine with the older System and they fix the "Can't Initialize Printer" syndrome for good. The version 4.0 LaserWriter and LaserPrep files can be identified by the creation date of April 14, 1987, which is available in the Get Info window.

Using The LaserPrep File With Non-Apple Laser Printers

If you've purchased a laser printer other than an Apple LaserWriter, you've proba-

bly found that "Smoothing" does not work. The LaserPrep file checks to see whether the printer is a LaserWriter. If not, the bit-smoothing algorithm is not loaded into your printer. If you have a file editor utility, such as FEdit, it is possible to enable bit-smoothing for any laser printer. First, copy LaserPrep from your system folder to a blank floppy disk.

Use FEdit to open the floppy volume. Use "Display Sector in ASCII" under the Display menu. Turn "ASCII Modify" on in the Edit menu. Perform an ASCII search to find the string: "0] ifelse exch" Change the "0" to a "2." Do a "Write Sector" from the Edit menu. Quit FEdit and return to the Finder. Make sure you save a copy of the original LaserPrep before you perform the next step. Copy the modified LaserPrep to your System Folder. If you printed a document before modifying the LaserPrep file, cycle power on the printer, and when you print your next document, smoothing will work.



LASERWRITER

Using Different Versions Of The LaserWriter Printer Driver On A Network

When using AppleTalk on a network, make sure all Macintoshes have the same

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version of the LaserWriter driver in their System Folder, assuming you are using a version of the LaserWriter driver which is less than version 5.2. The LaserWriter driver from System version 6.0x and 7.0 can be mixed on a network without reinitializing the printer.

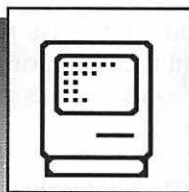
Using ResEdit To Place The PostScript File Option in the Print Dialog Box

Pressing Command-F after clicking on OK in the LaserWriter dialog box writes the PostScript output, minus the Laser-Prep file, to a file. But some applications intercept this Command-F event, preventing the file from reaching the LaserWriter driver.

1. In ResEdit, open the copy of the LaserWriter driver, version 5.2 or 6.0, and select DITL from the list of resources.
2. Using the Open as Template option (labeled Open As in earlier version of ResEdit), select DITL ID = -8191 to open it as a DITL resource.
3. Find the Item for Disk File with a Display rect (display rectangle) of 0 0 0. Change the Display rect to 49 320 65 400. Save your changes, and exit from ResEdit.
4. When the LaserWriter Print dialog box appears, you should see a new option called Disk File. Clicking on it results in the creation of a PostScript file of the output called PostScript0 (or 1, 2, 3, and so on). This

file will appear in your System Folder or in the Spool Folder within the System Folder.

5. To avoid confusion with other LaserWriter driver files on your hard disk, rename this altered driver. You'll have to select this driver from the Chooser to access it after you've changed its name.



MACROMAKER

Fixing Transposed Letters With A Keystroke

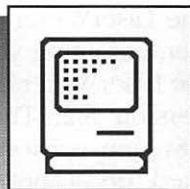
If you catch yourself making typos such as typing teh for the, you're not alone – transposing letters is one of the most common typing mistakes. Here's a macro that fixes transposed letters with one keystroke. It can be used with MacroMaker and Word, or you can use the same general procedure with AutoMacIII, MindWrite, or other combinations of word processors (that support the arrow keys) and macro programs.

1. If you don't already have MacroMaker installed, put a copy of the MacroMaker file, which comes on the Macintosh Utilities Disk 2 in System 6 and later, into your System folder. For MacroMaker to take effect, you have to restart your Mac.

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2. Place the cursor immediately after any two transposed letters in your word processing document (if you've just typed them, this is where the cursor will be anyway).
3. From the MacroMaker menu, select Start Recording.
4. Press Shift-left arrow to highlight the second of the two letters to be swapped (don't use the mouse to highlight the letter, or the macro will operate only on this position of the screen).
5. Cut this letter (with Command-X).
6. Press the left arrow to move the cursor to the left of the first letter (again, do not use the mouse).
7. Paste (Command-V) the second letter on the left side of the first letter.
8. Press the right arrow to return the cursor to its original position following both letters.
9. Immediately select Stop Recording from the MacroMaker menu.
10. Give the macro a name, such as Swap Letters or transpose, and assign it a keystroke.
11. Store the macro.

To use the macro, make sure the cursor is positioned immediately after the transposed letters and use the keystroke you assigned in step 10.



MACROS

Tempo

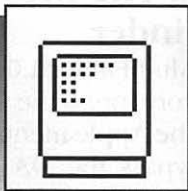
When composing macros, avoid the use of the cursor keys. Use the keypad equivalents instead. By doing so your macros will work both in Microsoft Word's outline mode and also in the regular text mode. Remember that Word assigns special outlining functions to the cursor keys but the keypad equivalents function the same in either mode. For example, to construct a type transposition macro, instead of Shift-Left cursor arrow, Command-X, Left cursor arrow, Command-V, Right cursor arrow — use the following: Shift-4, Command-X, 4, Command-V, 6.

Tempo 1.2

When writing macros using Tempo 1.2 inside of an application, it can be tricky to save a file to a particular folder different than the one it was loaded from. Tempo starts at the main or root directory of the disk when doing a Save As in a macro. Although one can use mouse clicks to step down through the folders, if you later add to or otherwise change the list of folders on your disk, this approach can land you in the wrong folder when using the macro. However, it's possible to set up the proper path by using the Open command first, before the Save As. The Open command allows you to type the characters of the

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folder's name, and the inverse selection bar will automatically jump to the matching folder in the list. You can press Return and repeat this process until you've reached the folder that you wish to save the file in. At this point you cancel the Open and perform your Save As to the subfolder that has now been set up. Even if you add a lot of new folders, your macro will still function correctly.



MAP CDEV

Magnifying The Map Control Panel Device (CDEV)

The Apple documentation on the Control Panel Map utility mentions that if you want a magnified map image, you should press the Option key while clicking the Map icon. This results in an image that's so magnified as to be virtually unusable. What the manual doesn't mention is that you can get a slightly magnified version of the map by pressing Shift while clicking the Map icon.

Changing The Map Figure

The world map image in Apple's new CDEV Map can be copied to the Clipboard simply by choosing Copy from the Edit menu when Map is on-screen. Make sure the city name box is not highlighted

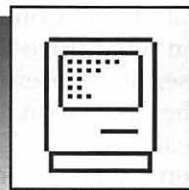
(or you will copy the name instead of the map). So what's so great about that? Several things.

First, if you have a color system, you can copy and paste the map image into a program like PixelPaint, color it, and then copy and paste the colored version back into the CDEV's window. Oceans could be blue, continents in contrasting colors, and so on.

If you live in a black-and-white world, you can still modify the map in MacPaint, using patterns instead of colors.

And in any case, you have a fairly decent world map that you can store separately with your clip art for use in other documents.

And, by the way, you don't have to worry about cutting or clearing the map image accidentally — only Copy and Paste work from the Edit menu while you have the CDEV open.



MULTIFINDER

Starting MultiFinder Temporarily When In The Finder

While running the Finder, you can start the MultiFinder without restarting your

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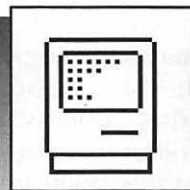
Macintosh by double-clicking the MultiFinder icon (in your System Folder) while holding down the Option and Command keys. The next time you do Restart, you will be back in the Finder.

Loading Desk Accessories Into The Finder's Application Heap

Under MultiFinder, holding down the Option key and then selecting a DA (desk accessory) loads the DA into the Finder's application heap instead of loading it into the DA Handler.

Reinserting Disks To Find Disk Icons

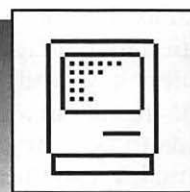
It's often necessary to return to the Finder from an open application for file information. But when you are working under MultiFinder, open documents obscure the desktop, hiding the disk icons you need. One way to open a disk's window from beneath the clutter is to eject it, using Command-Shift-1 or Command-Shift-2 (depending on what drive the disk is in) and then reinsert it. Reinsertion automatically causes the disk's icon to be selected (even if you can't see it). Then you will be able to open it with Command-O, and its window will pop to the forefront.



MULTIFINDER 1.0

Bypassing The DA Handler In MultiFinder

When using MultiFinder 1.0 and selecting a desk accessory, press the Option key as you click on the Apple menu. The DA you select will bypass the DA Handler and operate only in the application you're currently using. Bypassing the DA Handler allows DAs such as Icon Maker to perform properly while using MultiFinder. Make sure you've allocated enough memory to the application (use Get Info) so that the application and the DA can run at the same time.



PARAMETER RAM

Resetting The PRAM In The Mac

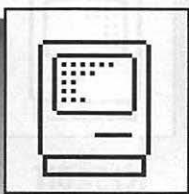
The parameter RAM (PRAM) is where the Mac stores basic information like the time and default font (and other things) that it must know when you start it up. It's

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powered by the battery. And occasionally it gets fouled up and must be reset.

On Macs and Mac Pluses resetting the PRAM is simple. Just shut the machine off and remove the battery for 5 or 10 minutes. It's impossible to do that on the SE or the II, however. But Apple has provided another way to reset the PRAM. You must be using Control Panel 3.1 (or higher). Version 3.1 is included with System 4.1 and Finder 5.5. Here's what to do:

As you select the Control Panel hold down the Shift, Option, and Command keys. You'll get a dialog box asking if you want to zap (reset) the parameter RAM. Select Yes, and then Restart your Mac. This will set most of the PRAM to zero, and will change all your Control Panel settings to default settings, but will not reset the clock. Reset all your other options as they were or as you wish.



PARTITIONING SOFTWARE

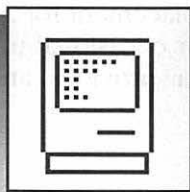
Partitioning Your Hard Disk

Partitioning software (including ALSoft's MultiDisk, FWB Software's Hard Disk Partition, and the HD Partition program in Symantec Utilities for Macintosh) divides your disk into multiple volumes, each of which is its own "virtual" disk. You can use partitions to help organize your files.

They're a great aid with most backup programs, which work volume by volume. If you create a small partition for your recent documents, you can back up that volume daily and the backups will go quickly. Keep older documents in a separate partition. For security, partitions can be password-protected, and if you share your hard disk, partitions can give all users their own private work areas.

You can keep older versions of software in a separate partition for when it's necessary to use an old version of a program. You don't want both the old and new version on the same volume, because when you double-click on a document, you don't know which version of the application will open.

The Finder also slows down when a disk has too many files and the System Desktop file gets too big – so partitioning your disk limits each volume to a size the Finder can manage.



PUBLIC FOLDER

Moving Files From One Mac To Another With Public Folder

In the past, if all you wanted to do was move a file from one Mac to another,

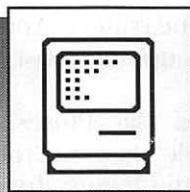
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SneakerNet was one of the few viable options – unless you spent money on commercial networking products. Now there's a better solution, aptly named Public Folder. This handy network file-transfer utility is distributed free by Claris to registered owners of its products, and is also available from most on-line services and user groups.

Public Folder is a Chooser document that allows you to designate a folder on your hard disk as public. You can't send a file anywhere, but any file you put into your public folder can be retrieved by anyone else on your network who is using Public Folder.

When people are moving a file from your Mac to theirs, you will feel a performance hit—your mouse may become twitchy and reaction time may be slower than usual, however Public Folder moves files rapidly from one Mac to the other, the speed depending on network traffic.

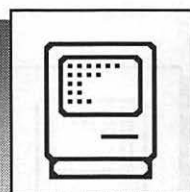
It is not a replacement for AppleShare or TOPS, but for occasional transfer of files Public Folder provides an elegant answer.



QuicKeys

Using QuicKeys To Print

If you program QuicKeys to scan the menus looking for "Print..." and find that it doesn't work in some applications, remember that some applications do the ellipsis after Print with three periods and some do it with Option-semicolon. They may appear the same on the screen, but to QuicKeys they're quite different. Solution: Define an application-specific QuicKeys file for each of these applications.



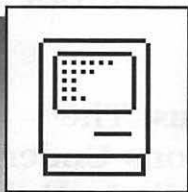
ResEdit

Reducing The Amount Of Space Between Files

When you have many documents in a folder, you can use the By Name option in the View menu to see more of my documents at one time, though they still have large spaces between them. To reduce the amount of space and make more files visible, modify the Finder using ResEdit.

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To do this, run ResEdit and open the Finder on the disk you want to change. Double-click on the LAYO resource. Double-click on LAYO = 128. Click once on the gray part of the scroll bar. Change the number in Line Spacing from 16 to 11. Save the Finder and quit ResEdit. Now your documents will be listed in a tighter format.



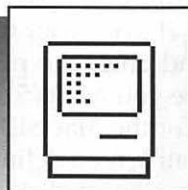
SOUND CONVERTER

Editing Sounds

When you want to turn sounds into sound resource files, the sounds are often at the wrong sampling rate. A utility called Sound Converter converts SoundEdit, SoundWave, or SoundCap files into sound resources and lets you choose the sampling rate when you convert sounds (although it doesn't let you change the sampling rate of an existing sound resource).

Sound Manager is a sound-manipulating shareware utility that can do any type of conversion, play sounds, and let you do some light editing. But you'll also need SoundEdit (one of the applications that is included with Farallon's MacRecorder sound digitizer) if you want to change the sampling rate of the resource. Sound Manager can convert sounds to SoundEdit format; SoundEdit can save the sounds with a different sampling rate (although it

can convert only from faster rates to slower rates).



STEPPING OUT II

Disabling Stepping Out II Upon Launching An Application

Stepping Out II is a useful addition to the Mac, giving the effect of a larger screen. Many people keep it on all the time. But some programs, particularly games and telecommunications software, are better off without it. To save yourself a trip to the Control Panel DA, launch your program while holding down the Option key, and Stepping Out II will automatically shut off. You should use the Control Panel to turn it back on when you Quit, though. This is an undocumented and handy reversal of Stepping Out's QuickStart feature.

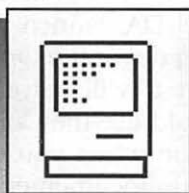
Stepping Out As A Screen Shrinker

The DA Stepping Out II is a screen extender that allows the creation of large virtual screens on the Mac. Although most people can readily see the benefit of this (particularly for the 9-inch screen of the Plus and SE), there is another benefit for those who would rather use a larger monitor while developing applications for the smaller, standard screens.

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Stepping Out II also functions quite effectively as a screen shrinker. Creating a small screen size is simple. First, call up Stepping Out II from your Control Panel. Click New and enter the pixel count for the screen size you want (512 pixels wide by 342 high for the Mac SE). Then, enter a name for your screen definition (such as "Mac SE Screen") and click Save. Finally, highlight the name of your new screen setup and click Set. If you have enough memory reserved for the new screen (and assuming that Stepping Out II is active), the change takes place immediately, otherwise, you will first need to reboot.

Once all this is accomplished, you can easily switch from one screen size to the other by simply turning Stepping Out II on or off from the Control Panel.

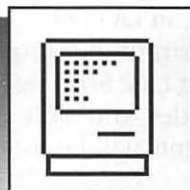


STUFFIT

Automatically Unstuffing All Archived Files

StuffIt, which has become the industry-standard utility for archiving and compressing Macintosh files, has a hidden (and very handy) feature. After selecting the archive you wish to open (or after clicking in the About box if you opened an archive and not the program itself), hold down the Shift key and StuffIt will

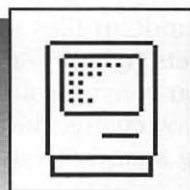
automatically select all the files, decompress them, and save them to disk.



SUITECASE

Getting Just The Applications Under The Menu While In MultiFinder

If you use Suitecase and you don't want to scroll to the bottom of the Apple menu to see what applications have been launched, hold down the Option key while selecting the menu. The DAs are not listed, and you have easy access to the applications list.



SYSTEM

Slimming the System Folder

What doesn't belong in the System Folder? Many applications, DAs, fonts, sound files, and sometimes dictionaries, filters, and help files. A rule of thumb here is to

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take out items such as prefs files or dictionaries if the application doesn't require their presence in the System Folder. Sometimes the System Folder sprouts new files on its own. Word, for example, puts Word Temp files into the System Folder. These are temporary files that Word fails to clean up. Just make sure you quit the application first before deleting its temp files; otherwise, your Mac may crash.

What does belong in the System folder? System files, Control Panel devices (CDEVs), startup documents, and Chooser documents (PRERs and RDEVs) all belong there. Also include any utility whose documentation specifies such placement or that won't work unless you place it there (these will mostly be INITs).

Consign everything else to a utilities folder (outside the System Folder), along with any of the above file types for which you have no present need. If you are not sure of a file's status, click on a questionable file's icon and type Command-I (Get Info) to bring up the file's Info box, or view the System Folder window as text (under the VIEW menu) to see if the file fits into any of these categories.

Launching An Application From A Floppy Disk Without Switch-Launching

Pressing the Option key while launching an application from a floppy disk equipped with its own System Folder prevents switch-launching – that is, you can continue operating under the current System (as opposed to the floppy's System-note

that System 5.0 (and later versions) will not let you switch-launch from a hard-disk drive unless you hold down the Option key.

Selecting A New Active System Folder

To bless or select a new active System Folder, hold down the Option and command keys while double-clicking on the Finder icon in the desired System Folder.

Turning The Color Off Of Color Monitors To Speed Application Performance

If your work doesn't depend on color, you should turn off the color display. Color can really cost you time in ordinary operations such as scrolling. The two main time consumers are:

1. The cost in time required to put the color in, including the time needed to make appropriate color choices.
2. The cost incurred in using the color file, which will take up more disk space and time than a monochromatic document.

In the Control Panel, the Control Panel Device (CDEV) called Monitors lets you adjust the number of colors your monitor shows. If you have 256 colors, your monitor will typically be at 2, 4, 16 or 256 colors.

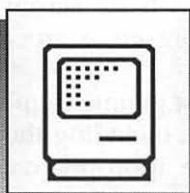
Creating a Finder-less Startup Disk

When you need to create a disk with a

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System folder and an application, and want the System on the disk to be as small as possible you may be able to get along without a lot of the common files listed above.

One way to trim the disk is to manage without the Finder. You can get rid of the Finder completely on a startup disk: Eliminate all folders by placing everything on the desktop and make an application on the disk the startup file. You can do this by selecting the application's icon (or launching it if you're in MultiFinder) and selecting the Set Startup option under the Special menu. When you use this Finderless disk, you'll see at least one Finder-related error message that you can ignore.

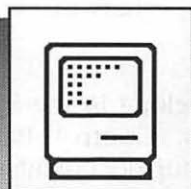


SYSTEM ERRORS

How To Avoid Restarting The Macintosh During A System Error

To avoid restarting your Macs if a serious system error occurs you can press the interrupt switch (also known as the programmer's switch) when your Mac bombs and typing "G 40F6D8." This works fine on a Mac Plus, but not on a Mac SE or a Mac II. To accomplish this on a Mac SE, use the procedure above, replacing "G40F6D8" with "G409B24". If you are

using a Mac II, substitute "G4080D5CE" for "G40F6D8." This method has been used many times to copy files from a RAM disk after a system error occurred. If you use this method however, you should keep in mind that a serious system error really does mean serious. Your safest bet after copying the files is to restart your computer.



THUNDER II

Don't Wait To Finish Searching Before Choosing A Correction

Most people assume that you have to wait for Thunder II to finish searching through its voluminous dictionaries before you can choose the correction—but you don't. As soon as the word you want appears in the list, type the number beside it to make the correction. If you're certain that the word flagged will not be in the dictionary (as is the case with names, for example), click on the Add to Dict. button. Thunder II immediately lets you append the word.

TELECOMMUNICATIONS



COMPUSERVE

Cutting Noise On CompuServe

On CompuServe, as on any other network, line noise can ruin an upload or download. To cut out the noise, make the first character in each "typing" command in your macro the control character that says to the network, "Ignore what I've typed so far." This cuts down on problems associated with your program's reading noise input as your typing. When you're on CompuServe, type Control-U. This tells the service to ignore noise.



GENERAL INFORMATION

Getting Cheap Practice

If you're new to telecommunications, or are just getting to know a new telecommunications program, you don't have to pay a lot of expensive connect charges while you learn how to upload and download on networks. Contact your lo-

cal Macintosh users' group or an experienced friend and get the phone number of a free local bulletin board. Practice uploading and downloading on the free network.

Once you know your way around the local network, look for shareware and public domain libraries, where you might be able to download programs for far less than you'd be charged by a national network.

When Call-Waiting Disconnects Transmissions

If you have call-waiting and a modem, you can run into a lot of interrupted telecommunications sessions. A little-known trick is to add "*70" on touch tone phones, or to dial 1170 on pulse phones, just before the number to be dialed in your modem dial command. This disables call waiting. This tip may not work in all areas of the country. Ask your phone company for more details.

Telephone Noise Can Interrupt Transmissions

If you experience continued failures midway through transmission while using a protocol transmission, your problem could be telephone noise. Try getting a cleaner connection by hanging up and redialing.

Disabling Internal Modem Speaker

The internal modem speaker of a Hayes-compatible modem can be temporarily disabled. Just type ATM0 from your terminal program and press Return. The com-

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mand will be acknowledged by an "OK." Turn the volume back on by typing ATM1 and pressing Return.

Getting Your Program To Wait Longer To Redial

Many terminal programs allow users to change the amount of time that the modem waits for a carrier before redialing when in auto-redial mode. The command `ATS7=x` sets the number of seconds the program waits, with X= the default number of seconds. Default value is usually 20 seconds, but you can change it to almost any number less than 255 by changing the default value.



InBox

Setting The Time On The Message Server

The Mac that runs your InBox mail system resets all of the Macintoshes on the network to its clock. So, if you are frequently resetting your clock, check the server clock.



MacTerminal

How To Use Cursor Keys Instead Of The Mouse

If you prefer using cursor keys to mice while connected to a remote computer, hold down Option to transform the cursor into a four-way, VT100-type arrow cursor that can be moved where you want. Then click the mouse. The cursor key sequences will be transmitted to the remote computer.

Command Key Combinations

MacTerminal's key combinations always work when you're off-line; they're less reliable while you're connected. The combinations are:

- Command-H: moves the cursor back one space
- Command-I: moves the cursor to the right, stopping at the next tab market
- Command-J: moves the cursor down one line
- Command-K: moves the cursor down two lines
- Command-M: moves the cursor to the start of the current line
- Command-G tells the Mac to sound a tone.

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Use Hard Backspace When Correcting Mainframe Data

When you're communicating with mainframes, pressing Backspace will not correct data stored in the mainframe, even though it corrects your screen display. To remove the character you backspaced over on the mainframe as well, use Command-Backspace.

Create Replacement Mac-To-Mac Document

The program supplies its own Mac-To-Mac document with preconfigured terminal settings. If you've accidentally trashed this document, you can make a replacement:

Start by pulling down the Settings menu and change the dialog boxes in Terminal Compatibility, and File Transfer, in that order. In the Terminal Settings, click New Line, Local Echo, On Line, Auto Repeat, and Auto Wraparound to On; in the Compatibility Settings dialog, choose 8 bits per character, No parity, No handshake, and the baud rate the host computer will use; in the File Transfer Settings dialog, choose XModem, Retain Line Breaks, Word Wrap Outgoing Text, and Remote System equals MacTerminal. Leave all the other default settings, and save the document as "Mac To Mac."

Avoiding System Hang

Once in a while, MacTerminal will hang up after the host computer has answered the call. If you're using a Hayes-compatible modem, solve the problem by inserting a few commas after the phone number. Each comma causes the modem to

wait two seconds, allowing MacTerminal to register the fact that a connection has been made.



MODEM

Quiet Dialing

If you're using a Hayes-compatible modem and don't want to hear all those beeps and clicks during dialing, turn off the speaker using the ATM0 command. To turn it back on, type in ATM1.

If You Can't Connect, Tell Your Modem to Wait Longer

If you have trouble connecting to an on-line service, adjust the length of time the modem waits for a carrier signal before it hangs up and redials. The command ATS7=x sets the number of seconds the modem waits for a carrier. The default value for x is 20 seconds, but you can substitute a new number of seconds for x.

When Call-Waiting Disconnects Transmissions

If you have call-waiting and a modem, you can run into a lot of interrupted telecommunications sessions. A little-known trick is to add "*70" on touch tone phones, or to dial 1170 on pulse phones, just before the number to be dialed in your modem dial command. This disables

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call-waiting. The tip may not work in all areas of the country. Ask your phone company for more details.



QUICKMAIL

QuickMail Tips

QuickMail Power CE Software's QuickMail 2.0, on its way to becoming the most popular electronic-mail program for the Macintosh, is an efficient system – especially if you use some of these hints.

1. Tired of scrolling through a long directory every time you want to send a message to the person at the bottom of the list? An easy way to force names to the top of the list is to use QuickMail's Group command to create a group for the person (yes, a group can have just one member). Groups always appear at the top of the directory list.
2. Want to know if someone read your message but don't want to be interrupted by a return receipt? Select Preferences from the QuickMail menu and click on Log Handling. You can then enable your Mail Log. A Log entry shows who has read each message and when.
3. Tired of sending the standard retraction "Ignore that last message - I forgot to ..."? You can un-send a message that hasn't yet been read by using the Mail Log (but only if you have it enabled).
4. Is QuickMail more like SnailMail for you? Here's how you can speed things up: In the Preferences dialog box, uncheck "Fill folders when opening" and disable your Mail Log (yes, we know that the last two tips told you to use the Mail Log, but there we were talking about features, and here we're talking about speed). Select and file new messages before reading them; this moves them from the server to your own hard disk, speeding up access.
5. Want to read a message you've filed on your hard disk but don't want to log in to a Mail Center? Use QM Remote. It can open text files as well as QuickMail letters you've filed.
6. Too busy to be bothered with opening your QuickMail? Often, the substance of a message can be expressed in the title, leaving intricate details for the body of the message. For example, instead of entitling a message "Meeting Reminder" and furnishing the date and time in the body of the message, you can entitle it "Meeting 10/22 1 P.M." The title then acts as an effective reminder. You get all the information you need just by looking at the QuickMail window. (However, QuickMail truncates long message titles to fit into the main QuickMail window.)

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7. Wish you could attach messages to Apple's Alarm Clock DA? Use Quick Mail to address a message to yourself and press the Delay button to postpone sending it until a specified date and time.



RED RYDER

Disabling The Opening Screen

Disable the opening screen by creating a dummy file (such as a text file with a single character in it) with the name RRJ\$, then place it in the same folder in which you keep Red Ryder.

White Night, the commercial upgrade to Red Ryder, has a menu option to disable the opening screen automatically.

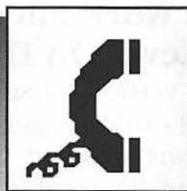
Turning The Mac Into A Mainframe Terminal

You can use Red Ryder to turn your Mac into a mainframe terminal. The ability to write procedures simplifies logging on, and you can use the VT100 emulation mode to produce a good full-screen terminal. The ability to define macro keys and have thirty of them available at a mouse click reduces the need to remember a jumble of mainframe commands. Perhaps the most convenient feature of all is the ability to copy from the screen by

dragging the mouse. Combine this feature with the Paste to Modem command, and an IBM mainframe can be given a substitute clipboard.

Smooth Scrolling in TTY Mode

Implement smooth scrolling in TTY mode using Red Ryder. Just select VT100 Mode from the Special menu and then check the Smooth Scroll Mode box. Red Ryder will now produce smooth scrolling, even in TTY mode. This only works with version 9.4 or higher.



SMARTCOM II

Capture Routine Saves Only Selected Text

If you capture data to disk after receiving a transmission, highlight the text you want to save. The Capture routine saves only selected text, so if you save a file with nothing selected, nothing is what you'll end up with.

Saving Text From The Capture Buffer

If you accidentally Close your document without having saved the contents of the capture buffer, don't panic — yet. Try reopening a communications document. If you didn't use the Clear command from

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the Edit menu to purge the buffer before you closed the transmitted document, the text is still in the capture buffer, and it will appear in the document window. This won't work if you accidentally Quit Smartcom, though.

Save And Save As... Don't Save What's In The Capture Buffer

The Save and Save As... commands only save the settings, not the data in the capture buffer.

Put Your Work Files At Root Level On Disk

Some earlier versions of Smartcom (2.1a, for example) can't recognize documents or applications that are in folders on anHFS system. Remember to put your work files on the root level before starting and you shouldn't have any problems. (Version 2.2b corrects the folder problems.)

Use Different System File When Using Sidekick

If you'll be using Smartcom II with Sidekick desk accessories, replace the System file with a new one. Hayes removed some resources from the Smartcom II System, and this can cause operating problems with Sidekick.

Forcing Smartcom To Use Text Protocol

Instead of Sending a file, Paste it from the Clipboard. This makes Smartcom use a text protocol, even if MacBinary or Hayes Verification protocol has been selected.

WORD PROCESSING



FULLWRITE PROFESSIONAL

Don't Try To Print With The Tall Adjusted Option Turned Off

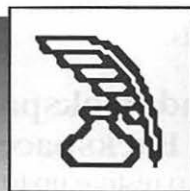
What you see on-screen isn't necessarily what you get printed out when you're using an ImageWriter printer. When trying to print across the full width of the page when the Tall Adjusted option is off, you won't get the complete data on your printed page. The solution is to always print with the option turned on.

If you don't want to reset the print options every time you open the application, you can use FullWrite's stationery documents to save.

First, start a new file. Check the Tall Adjusted on the Page Setup dialog box, then do a Save As... and click on the File Format button. Then select FullWrite Professional Stationery. Name the document "FullWrite Stationery" and save it in the same folder as the FullWrite application. Remember to spell "stationery" correctly!

When you've finished, every time you open FullWrite or ask it to create a new document, it will use the "FullWrite Stationery" file as its default. In addition to any font or style settings you want to

reuse, the stationery document will remember the Tall Adjusted setting, so you won't have to reset it again.



MACWRITE 4.5

Save As Text When You're Exporting Files

While there are a few word processors that can't recognize and open MacWrite files (most notably Microsoft Word), in general you'll find it easier to export data to other programs or via modems by saving it as a Text Only file. The Text format is easily transmissible over ASCII data lines, and works well when you're transferring data to other types of computers.

Numbering Pages Using The Page Icon

The page icon in the Header automatically begins numbering pages at 1. You can change this by selecting Set Page #... from the Format menu. To eliminate the number on the first page, select Title Page from the Format menu.

Decimal Tabs Override Regular Tabs

When you drag a decimal tab on to a regular tab, it automatically overrides the tab stop and turns it into a decimal tab.

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The tab marker may look like a regular tab, but it will behave like a decimal tab. To get a good look at which kind of tab is placed on the ruler, click on the tab marker or move it around to reveal which tab it really is.

Command-Backspace Restores Backspaced Text

If you want to restore up to 50 characters of text that you backspaced over, press Command-Backspace. This is especially useful if you want to insert a word without taking your hands off the keyboard.

Hidden Spaces Can Affect Printouts

If your text doesn't print correctly after you've set up tabs for columns, check problem lines or columns carefully to see if any spaces were mistakenly entered there. As soon as these inadvertent spaces have been erased, your printouts should come out spaced the way you meant them to look.

Lack Of Disk Space Can Cause Printing Problems

You can run into trouble trying to print documents if there isn't enough space on the disk to save the document to the buffer. If your disk is too full to print, either delete some files or else transfer the document to a less-overburdened disk. In a pinch, you can print a few pages at a time.

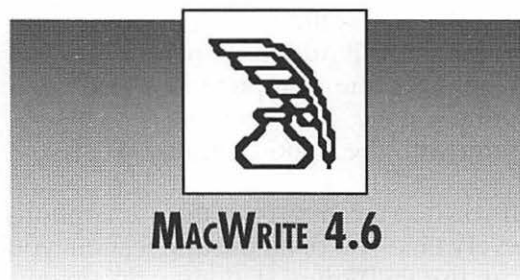
Identifying Hookup Problems

If you're getting the message that your document can't be printed, try again,

watching the dialog box while the Mac tries to print. If the Mac displays the message "Looking for the ImageWriter/LaserWriter" for longer than usual and then tells you it can't print your document, check all the connections to be sure the printer is hooked up correctly.

When MacWrite Says It Can't Print A Document

If you try to print a document from the desktop, only to be told that you can't, launch MacWrite by double-clicking it. Then, close the new file and open the one you want to print.



Using Cursor Keys Instead Of Mousing Around

MacWrite 4.6 gives you the option of using cursor keys instead of the mouse to perform various functions.

To go to a point in a text passage, just use the Arrow keys:

To go to the beginning of a line, press Command-Right Arrow Key or Command-Left Arrow Key to go to the beginning of a line.

To go to the bottom or top of a page,

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press Command-Up Arrow or Command-Down Arrow.

To move the cursor left or right one word at a time, press Option-Right Arrow or Option-Left Arrow.

To move up or down a paragraph at a time, press Option-Up Arrow or Option-Down Arrow.

Select a paragraph, letter, word or page by pressing Shift simultaneously with the above instructions.

New Keyboard Sequences

When going from Mac write 4.5 to 4.6, there are new keyboard sequences. The most noticeable is the use of the Cursor Keys.

To go to a point in a text passage, just use the Arrow keys.

To go to the beginning of a line, press Command-Right Arrow key or Command-Left Arrow key.

To go to the bottom or top of a page, press Command-Up or Command-Down Arrow key.

To go left or right a word at a time, press Option-Right or Option-Left Arrow key.

Finally, to go up or down a paragraph at a time, press Option-Up or-Down Arrow key. You can select a paragraph, letter, word, or page by combining these key combinations with the Shift key.

Numeric Keypad Commands

There are a few keyboard commands which can be useful:

The asterisk (*) on the numeric keypad helps to highlight characters and words. If you select a few characters with the mouse and discover that you missed a letter or two, the asterisk key extends the selection by one character for each press.

Extend your selection rapidly by holding down the asterisk.

Command-* (using the asterisk from the numeric keypad) selects the entire line from the position of the cursor to the end of the line.

Option-* (using the asterisk from the keypad) selects one word at a time. The + key causes the selection to be made to the left of the cursor instead of to the right.

The = and / keys highlight all of the line above or below, up to the point directly above or below the cursor.

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MACWRITE 5.0

When The Spell-Checker Tells You The Clipboard Is Too Large

If your Mac doesn't have a lot of extra RAM, sometimes running MacWrite 5.0's spelling checker might result in the message, "The clipboard is too large to transfer for use by desk accessories or other applications." You won't be able to use the spelling checker again until you quit MacWrite and then reopen the program or file you want spell-checked.

Picking Up Where You Left Off

You can zip off to the insertion point you last saved off at by pressing Enter on the numeric keypad when you launch the file.



MACWRITE II

Nifty Smart Quote Feature

The new MacWrite II has a nifty smart-quote feature that automatically converts the typewriter-style single- and double-quote marks (like "this") to the more-professional – looking curly quotes.

What do you do if you customarily use special foreign quote marks (such as guillemets in French, Italian, and German)? You can change MacWrite II to be smart in any language by changing the SMQT resource with ResEdit. Open the resource and substitute the guillemets (both single and double) for the curly quotes. The keystrokes for << and >> are Option-backslash and Shift-Option-backslash, respectively. The keystrokes for < and > are Shift-Option-3 and Shift-Option-4, respectively. Close ResEdit and save the changes you've made. Now the program will smartly insert the new types of quote marks as you type.

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TEACH TEXT

Placing Pictures In Teach Text Documents

To place pictures in Teach Text documents, type Option-space where you want the picture to appear. The pictures must be stored as resources of type PICT in the document, copied there by ResEdit. The first Option-space is drawn as picture 1000, the second as 1001, etc. Leave enough blank lines after the Option-space so the picture does not cover the following text. To make the document read-only, change the file type to "ttrt." Teach Text will display additional lines of credits while holding down Command-option and selecting About Teach Text.



WORD

Fast Save Uses Disk Space

Microsoft Word has a Fast Save feature, which lets you save files relatively quickly in exchange for greater disk-space consumption.

When the Fast Save option in the Save As dialog box is checked, Microsoft Word doesn't actually delete text or graphics that you remove from a document; it just skips over them when you're displaying, editing, or printing the document. So, files don't get smaller when you delete things from them, and there is more overhead when you add new information. When you choose Save As and uncheck the Fast Save check box, Microsoft Word actually erases all the deleted information, so the file size should decrease.

Spell-Checking Without Putting The Cursor At Document Top

It's possible to run your spelling checker on a Word document without having to move all the way back to the beginning. First, select the entire document by moving the cursor to the left margin, where it changes into an arrow, and then click the mouse while pressing the Command key. When you run your spelling checker, the entire document will be checked in a single pass, without the annoying "Continue Check from beginning" message.

Re-spacing Between Letters

Word creates its own "normal" spacing between letters, based on the type and size of the font you're using. The problem is, sometimes the spacing created isn't exactly what you want.

You can fix spacing between letters by selecting the text you want to change, choosing Character on the Format menu, and then selecting Expanded when the list of options appears. The program will

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suggest an expansion amount in the By box. Override this suggested spacing by typing in any value from .25 to 14 points. As you experiment with different results, you'll find the re-spacing that works best for you.

Hiding Outline Headings

People who compose a lot of outlines will be vexed to find that most headings must be left out of the finished product. You can delete the outline headings manually, but in a long document this can be extremely time-consuming and can hinder your efforts to revise the file later.

A solution is to use Define Styles to create a style sheet on which all outline styles are based. Its style would be the same as Normal Text. Using Define Styles again, you can define each of the subsequent outline styles as being based on this "normal" style by entering that name in the "based on" box. Now, any changes you make to the definition of the base style will automatically be made to all outline styles.

When you've finished composing and want to hide the outline, choose Define Styles and add Hidden Text to the style definition. All outline heads will vanish, unless you select Show Hidden Text. When you print documents created with this method, be sure Print Hidden Text isn't selected in the Print Dialog Box.

Using Define Styles To Create Outline Styles

A problem with Word's outlining capabilities is that there is no Hide Outline

Headings command. Often, one wants to compose in an outline, but most headings must be left out of the finished product. You could delete the outline headings manually, but this can be very time consuming in a long document and can also hinder future document revision.

The solution is to use Define Styles to create a style sheet on which all outline styles are based. You could call this "base style." Its style would be the same as Normal Text. Again, using Define Styles, each of the subsequent outline styles should be defined as being based on this Normal style by entering that name in the Based On Box. Now, any changes made to the definition of the base style will automatically be made to all outline styles.

When you have finished composition and want to hide the outline, choose Define Styles and add Hidden Text to the style definition. All outline heads will vanish (unless you select Show Hidden Text). When you print, make sure Print Hidden Text is not checked in the Print Dialog Box.

"Auto-Date" Headers And Footers Can Be Copied Or Pasted Anywhere In A Document

When you paste "auto date" headers and footers anywhere you want in your document, it continues to change automatically whenever you start a new document. This is especially useful if you work from templates.

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The “auto-date” can be distinguished from text by using the Show Paragraph command (press Command-Y), which displays a dotted outline around all “auto-dates.”

This also works for time and page numbering. As an extra shortcut, try pasting “auto-date” into your glossary and then add it to your Work menu.

Key Strokes For Line Formatting

In Word, the Return key is used to end a paragraph, while Shift- Return is used to end a line without creating a new paragraph. Shift- Return works fine as long as it isn't used in a justified paragraph. In the latter case, the line created with Shift-Return is justified – something most people will want to avoid. And you can avoid it by pressing Shift-Option-Return.

This undocumented method of concluding a line is very useful for lines within a justified paragraph that, for example, are to contain only a mathematical equation located at a center tab. It's also the only way to create the appearance of multiple justified paragraphs within a single box. Simply apply the boxed format to the paragraph and conclude each pseudo paragraph within the box with a Shift-Option-Return. The concluding line of each “paragraph” will not be fully justified.

Incidentally, the Shift-Option-Return symbol that appears when Show ¶ is active looks just like the Return symbol.

Accessing The ImageWriter's Built-In Fonts

Word provides an easy way to access the ImageWriter's built-in fonts.

In the lower-left corner of the Word window is a rectangular box that usually contains a shadowed page number. Click in this box and the word Code appears. This invites you to type a decimal (not hex) character code. Press Return to place that character in the text.

The decimal code for the escape character is 27 (this appears as a small box in your Word document). To access the variety of special fonts and font sizes built into the ImageWriter, simply add the escape codes at the beginning of your document and, if desired, at other points in your document. To do this, click in the Page box, type 27 in the place of Code, and press Return. Then in the main window, right after the small box that should now be showing, type the letter that will tell the ImageWriter what to do. Here's a partial list:

- Esc n (Extended character set = 9 cpi)
- Esc N (Pica = 10 cpi)
- Esc E (Elite = 12 cpi)
- Esc p (Pica proportional)
- Esc P (Elite proportional)
- Esc e (Semicondensed = 13.4 cpi)
- Esc q (Condensed = 15 cpi)
- Esc Q (Ultracondensed = 17 cpi)
- Esc A (6 lines per inch)
- Esc B (8 lines per inch)

When you're ready to print, make sure that you have Typewriter selected in the Chooser. Do not choose ImageWriter.

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Condensing The Space Between Italicized Characters

Sometimes Word puts too much space between italicized words (especially if each word is capitalized, as in subheads or titles). Simply condensing italicized type usually results in squished type. But if you turn on Show from the Edit menu, you can select the space markers between the words and condense only them by using the Condense feature found in the Character dialog box. You can condense by anything from 0 to 1.75 points. After you've highlighted the first space mark and condensed it, go on to the next space mark, highlight it, and press Command-A ("Again") so you don't have to reenter the values in the dialog box.

Dialog Box Command Keys

Word allows users to substitute command key combinations for mousing in all dialog boxes. Any dialog box can be canceled by using Command-period.

In The Save As... dialog box:

- Command-S saves the file;
- Command-C cancels;
- Command-D switches drives;

In the Open... dialog box:

- Command-O opens the highlighted file;
- Command-C cancels;
- Command-D switches drives;

In the OK or Cancel dialog box:

- Command-O presses the OK button;
- Command-C cancels the box.

In the Change... dialog box:

- Command-F finds the next;
- Command-C selects Change Selection or Change All.

Creating Double And Triple Lines In Word

Set Below and Double borders on the Paragraph selection under the Format menu to create a double line underneath a paragraph. For a really interesting effect, go to the paragraph directly below the double-underlined one and set the borders for Double and Above. The results will be three horizontal lines.

Changing Your Personalization Of The Master Disk

Word lets you "personalize" your master disk by entering your name and/or organization into a dialog box. Unfortunately, once you do it, all future backup copies will display this information in an Info box as soon as you open the application. Even though Word's documentation states that your disk will be "permanently marked," you can change the personalized information display pretty easily using a file editor like FEdit or ResEdit. First, display Word's data fork with FEdit. Pull down the Options menu and select SET EOF or SET END OF FILE. Then select ZERO, which eliminates Word's data fork.

The next time you run Word, it will prompt you to enter the "personal" information again, as if you had a brand-new master copy. (This also works with the personalization screen of Excel.)

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Finding The Next Occurrence Of A Format

To find the next occurrence of a font or character format, put the insertion point within an example of whatever format you're searching for and type Command-Option-Q. Word will then search for the next appearance of text with the same formatting as that around the insertion point and select it.

To make using style sheets faster, you can add unique letters or numbers to your style-sheet names that let you call them up by these characters rather than the sheet's full name.

Open the Define Styles dialog box, select a style sheet, type a comma after the sheet's name, then enter the character you want to use. The next time you want to apply this style, just type the abbreviation.

Placing A Box Around Text

Here are two ways to place a box around text while in Word.

If the text isn't justified, select all but the last paragraph to be boxed and then use the Change command to replace all the paragraph markers (^p) with line returns (^n). This tricks Word into thinking it's looking at one large paragraph, so you can now apply whatever formatting you like from the Paragraph Dialog box. You can do the same thing with justified text, but to prevent partial lines from spreading across the page, replace the normal spaces with non-breaking fixed spaces (Option-spacebar or Command-spacebar).

For paragraphs that have different margins or indents, you can use Side by Side formatting to create your boxes. Insert a graphics box in its own paragraph above the paragraphs to be boxed, making sure that its left margin lies to the left of the text you want to enclose. Size the box to the appropriate width and length, and then add whatever outline formats you wish. Select the box and the paragraphs and apply the Side by Side Paragraph format. You can check the results in Page Preview and resize the box as necessary.

Placing A Background Screen Behind A Paragraph

There are times when you may want to accent Word paragraphs with a background screen. The following PostScript command, placed before a paragraph, will do the job:

```
para. 0 0 moveto 0 1000 rlineto
1000 0 rlineto 0 -1000 rlineto
closepath gsave .97 setgray fill
grestore
```

This instruction must be in PostScript style, which is one of Word's automatic styles and can be applied by entering PostScript in the Define Styles dialog box. The value 1000 will handle any paragraph up to 13 inches square, but if you want a smaller area, which will also print faster, you can pick a more realistic value by multiplying the number of inches by 72 and using that result. You can adjust the intensity of the gray scale by changing the .97 next to setgray. The closer this value is to 1, the lighter the screen. Word considers the space above and below your

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paragraph to be part of it, so some white space may get filled unless you use the Paragraph command and set this space to zero.

Printing Legal-Sized Documents On The Laserwriter

You might find that trying to print legal-sized Word documents on a LaserWriter results in the top two inches of text being cut off. The solution to the problem is to select a larger printing area.

Just hold down the Shift key when you choose Page Setup. After selecting Legal Size, click the Option button. Choose Larger Print Area from the Option menu. Your documents should print without any problems.



WORD 3.0

PostScript Code To Place A Border Around A Page

Here's a PostScript sequence that places a border around an entire page:

```
. page .  
/wp$new [ newpath 36 36  
moveto wp$x 72 sub 0 rlineto 0  
wp$y 72 sub rlineto wp$x 72 sub  
neg 0 rlineto closepath ] def 4.0  
setlinewidth wp$new stroke
```

This sequence places a box with a 4-point-wide border indented 36 points from every edge. The number 72 is simply 2 x 36. Change 36 to 72 and 72 to 144 to achieve a 1-inch border and modify the number before the word setlinewidth to suit your needs.

Marking A Document Draft

If you want to mark a draft Word document to print out on a LaserWriter as such, insert, in PostScript style, the text below in a header before the normal header information. You can also insert this code just before the first paragraph on each page of a document, but putting this into the header saves you a lot of pasting and formatting. And in case you need reminding: to format this text in the PostScript style, select it, go to the Define Styles menu, and type PostScript.

```
.page.  
/TM {wp$y wp$top sub} def  
/LM [wp$left] def  
/RM {wp$x wp$right sub} def  
/printline TM 100 sub def  
/putcenter  
{dup  
RM LM sub  
exch stringwidth pop sub  
2 div LM add  
3 -1 roll moveto} def  
/AddToPath
```

```
{ putcenter  
true charpath  
} def newpath  
/Times-Bold findfont 140 scalefont  
setfont  
printline (D)  
AddToPath
```


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```
printline 140 sub (R)
AddToPath
printline 280 sub (A)
AddToPath
printline 420 sub (F)
AddToPath
printline 560 sub (T)
AddToPath
gsave
0.9 setgray fill
grestore
```

When you print your document, this code will place the letters "DRAFT" centered down the page in a light gray.



WORD 3.0X

Numeric Keypad Equivalents For Mac SE And II Users

Here are some shortcuts for Mac SE and II users who work with numeric keypads:

/ repeats the last thing you did.

* scrolls down one line when pressed and released, or scrolls continuously when held down.

+ scrolls up one line when pressed and released, or scrolls up continu-

ously when held down.

- extends the selection to the next occurrence of any item you enter, such as characters, paragraphs, number signs, bullets, etc.

= finds the next Search Item, even if you've cancelled the Find dialog box.

0 returns the cursor to its last three locations, one location for each press of the button.

5 returns to the regular screen from Page Preview.

Shortcuts When You "Save As..."

There are a number of keyboard shortcuts you can take if you'd rather work through the keyboard than the mouse:

Command-S saves the file.

Command-E ejects the disk.

Command-C cancels the dialog box.

In the Delete dialog box, the same commands work, except that Command-S activates the Delete command.

Using MacDraw To Convert Typed-In Capitals To Lowercase Letters

Word can't convert text that was typed in capitals into lowercase letters. Pressing Command-Shift-K toggles between text "as typed" and all uppercase, but it doesn't convert text initially typed as capitals into lowercase letters. Also, the capitalizing

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effect can't be used in a document saved as "Text Only." There's a work-around to this problem if you have a copy of MacDraw:

Text copied from Word can be pasted into MacDraw. Then, select the pasted text while in MacDraw, and choose Lower-Case from the Style menu. Then, copy the text and paste it back into your Word document. The text will now be permanently saved as uppercase letters...even if you save the document as Text Only.

Using Uppercase Commands When You're Using Capitals In A Document

If a large amount of your document is going to be typed in capital letters, use the All Caps character format (Command-Shift-K) instead of the Caps Lock key. This lets you check your text for spelling errors without deselecting the default Ignore Words in All Caps setting, and also lets you change the text back to normal lowercase format (including proper nouns, as long as you remember to Shift when you type) by removing the All Caps selection.

Creating Structured Footnotes

The footnote command may be very useful, but if you try to create scientific structures such as "...can be found in several review articles 1-12" it can be a trying experience. You can work around this limitation by using Word's hidden text feature.

While typing a manuscript, use the footnote command to enter all of the footnotes. Separate the first and second footnote numbers with a hyphen or an em dash, and then separate the rest of the footnotes with commas. This creates a list of reference marks that display as "...can be found in several review articles 1-2, 3, 4, 5, 6, 7, 8, 9,10, 11, 12."

Next, select the second through the next-to-the-last numbers, including the last comma (in this example, 2-11). Format the selection as Hidden text, using the Character command in the Format menu or by typing Command-Shift-X. The modified sentence displays and prints as "...can be found in several review articles 1-12" when the Show Hidden option in the Edit Preferences dialog box is not selected.

Creating A Solid Underline

When using Word to create a form, you can't rely on using a series of typed underline characters to create a solid line. Some fonts show the line on-screen as being solid, but when you print them out the results will be far less even. To make a solid line that stays solid when you print it out, set Underline as your style and then type in blank characters with the space bar. If you press the Command key while typing, you'll create "hard" spaces, which the program will keep on the same line.

How To Keep Outline Entries Intact

When an outline is renumbered, so are entries that start with numbers. A work-around is to choose Styles from the For-

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mat menu to set the font for your various outline levels to some font that doesn't use the square symbol (the one you get when you press Option-H). Palencia is one such font.

Every time you type a number which starts an entry in the outline mode, precede the number with the Option-H square. When you renumber and leave the outlining window, the square characters will disappear.

This allows your outline to print, and you won't lose any of the data or text you entered.

Copying Parts Of A Style Sheet

It's possible to copy one or just a few styles from one Word document's style sheet to another, without bringing in the entire style sheet. First, open the document that contains the style(s) you want to copy. Select a paragraph that's formatted in that style (to copy several different styles, copy a series of paragraphs).

Now, open the document to which you're going to copy the styles, and paste the paragraphs into the style sheet. The new styles are now a part of the old style sheet. So now, you can delete the text you pasted in, and the styles will remain in the document.

Spell-Checking Around Ligatures

If you use a lot of fi and fl ligatures in long documents, you'll save time running the spelling checker by replacing the charac-

ter pairs "fi" and "fl" with the ligatures AFTER the spell-checking is completed. The spelling checker can't recognize ligatures as alphabetic characters, and you can't add words that contain them to your dictionary. So, if you put the ligatures in before running the spelling checker, the program regards any remainder of a ligature word to be misspelled – unless the remainder happens to match a word in the Main dictionary.

After the spelling checker has finished running, go to the start of the document (Command-Keypad 9), open the Change dialog box (Command-H), set the replacement parameters, select Match Upper/Lowercase, and click Change All.

Avoiding Disk-Swapping Hassles

A lot of people use several different document disks during a single work session. If you do, and you work on a floppy disk-based system, you can avoid a lot of disk-swapping by double-clicking on the Word application, instead of a document, when you start working.

Correcting Pagination Problems With Serial Printer Drivers

When you use the serial printer driver with either a 12- or 15-pitch printer, you must first set the line spacing for all paragraphs, or the pagination will be incorrect. When you create a new document, first go to the Paragraph dialog box under the Format menu and set the line spacing to 12 points instead of the default spacing, "auto."

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If you are having problems printing an existing document, select the entire text and then go to the Paragraph dialog box and do the procedure described above.

Twelve is the proper setting to emulate a single-spaced typewriter which produces 6 lines per inch. To emulate other spacing, set a value of 72 divided by the number of lines per inch.

Pasting Some Graphics Can Cause Problems

When pasting a graphic from an object-oriented program (such as MacDraw), you might experience some problems if the graphic's rightmost element is a vertical line. To get the line to appear, place a non-printing character, like a space, just to the right of the line. The character won't show up when you print the document, but Word will no longer think that the line is the rightmost object on the screen, so it will allow the entire drawing to be pasted in.

Speeding Up The Graphic Redrawing Routine

Word can take what seems like forever to redraw a complex graphic, especially one that has had smoothing activated for its curves. You can avoid this by creating a special Graphics style for each graphic, and including Hidden as one of its characteristics. Make sure that your Preferences setting has Show Hidden Text set to Off. Now, you'll be able to quickly scroll through and edit text in the document, without having to wait forever for graphics to redraw.

Just remember to redefine your Graphics style by cancelling the Hidden characteristic before you print or repaginate.

Code-Replace Capability Comes In Handy When You Import Text

A little-known Word feature is an ASCII code search-and-replace capability that comes in handy when you use Word to edit and reformat text files created on an MS-DOS-based computer. To find a particular ASCII code within a Word document, type a caret (Shift-6) followed by the decimal value of the ASCII code in the Find What dialog box.

Here's an example, based on a typical PC text file imported into a Mac environment: First, select Change from the Search Menu or type Command-H.

Then, replace the double carriage-return / line-feed (CR/LF) pairs at the end of each PC text paragraph with a special Mac character as follows:

Click the I-beam to the left of the first character in the file. In the Find What box, type `^13^10^13^10` (13 is the decimal value of the ASCII carriage-return code; 10 is the decimal value of an ASCII line feed).

Now, in the Change To box, type Option-8 to get a bullet or another special Mac character not used in the file. Click Start Search or Change All to make the changes. Then, replace the CR/LF codes at the end of each line within paragraphs with a space: With your insertion point at the top

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of the document, enter ^13^10 in the Find What box; in the Change To box, type one space; and then click Start Search or Change All.

Finally, go back and replace the special Mac character (like the bullet) you used to mark the end of PC text file paragraphs, with a Return. First, click the I-beam at the top of the file. In the Find What box, type a bullet (or whichever special character you used). In the Change To box, type ^p (a caret followed by a lowercase p represents a Word Return character). Click Start Search or Change All as you did before.

You can also use this ASCII code search feature to fix PC word-processing documents within Word. For example, some PC documents contain normal text with only occasional ASCII control codes (such as decimal value 12 for form feeds or 9 for tabs). Use FEdit Plus or another file editing utility to examine the codes in the PC document, and then use the technique described above to search for and delete these codes within Word. For a complete list of the decimal values of all ASCII codes, see the Appendix of the Word manual.

As it happens, you can also reverse this process. You can replace Return characters in a Word text file with ASCII CR/LF codes. This allows you to create files that PC friends and co-workers can use.

Of course, only perform the search functions on a backup copy of your file, just to be on the safe side.

Printing Long Documents With Page Numbers

The Word manual describes a rather involved procedure for people who need to print long documents (meaning documents composed of several Word files) that have page numbers. One particularly annoying hoop you have to jump through is having to repaginate each part of your document, finding out what its last page number is, and then having to set up the next file so that it starts with the next page number.

There is a work-around to this situation. Choose Page Setup for each file, and type the file name of the next file, as the manual says. Then, WITH THE EXCEPTION OF THE FIRST FILE of the set of files composing the document, blank out the Start Page Numbers At box. That is, leave a 1 in the Start Page Numbers At box for the first file, and erase the 1 in that box for all the other files. Now, reopen the first file of the document and tell the Mac to print.

The entire document will print out with the right pagination, without your having had to repaginate each file.

This only works if you begin printing with the first file of the series. If you print a file that appears in the middle or end of the set of document files, you'll have to follow the instructions in the Word manual.

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Cleaning Up Returns In Print Merge Documents

When creating a list of names or addresses, for example, for print-merging in Word, making sure you have appropriately "Commanded" and "Shift-Returned" each and every set of data can be unnerving. (Remember a Return is only entered at the end of each record, while a Shift-Return may be used for arranging the data more logically.) To eliminate most of the problem, you can use the Document Renummer command to number each set of data which isolates the entries with just a Return instead of the desired Shift-Return. Where you find the erroneous Return, put the cursor in front of the entry and press the Delete key, then press Shift-Return. Using the Document Renummer command also lets you know just exactly how many names or addresses you have.

Changing The Length Of Word's Menu Titles

You can't change Word's menu titles to something less verbose with a utility such as ResEdit, because Microsoft doesn't use menu resources. So, use a file editor such as FEdit and perform an ASCII Search for the capitalized word "Document." This reveals the program area where the names of menu titles are stored. Each title is preceded by the length of the title. For example, change the 8 in front of "Document" to 3, then issue the command WRITE SECTOR. That's it. Using this technique, you can completely rename or shorten Word's menu titles. If you rename titles, make sure your new titles are no longer than Word's old ones.

Finding The Missing Comma in Data Record

The easiest way to find a missing comma in a data record, while doing a Print Merge, is to select the New Document button in the Print Merge window. This creates a document on the screen. When you come across the "Missing Comma in Data Record" dialog box, quit the Merge and scroll the document to the last record. The next record in your data file is the one with the problem. Once you have a successful Merge to the screen document, select Print and you are assured of printing the entire batch successfully.

One Way To Count Words

Here's one way to count words in Word 3.0 and 3.01.

Make a copy of your document and use that, as this procedure will change the document. Select Change from the Search menu. Enter w (the white spaces) in the Find What box and n (end-of-line marks) in the Change To box, then choose Change All. When this operation is complete, you'll find the number of changes (which is very nearly the number of words) in the lower left corner.

If, by mistake, you do this on your original document, all the words will be arranged in a column. Save the situation by closing the document and clicking No when the dialog box asks if you want to save the changes.

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How To See The Size Of A File Without Returning To The Finder

Here's a good way to see how big (in K) your Word 3.0X files are. This method works without having to return to the Finder.

Start by saving the document. Then close its window and choose Delete from the File menu (if you don't see Delete, that means you're in Short menus and must change to Full or Normal menus). Select the document you wish to see the size of from the list. The size will be shown under the buttons. This size is rounded down to the nearest kilobyte. (That's different from the Finder, which displays the size to the nearest K rounded up; and Get Info, which shows the exact size in bytes. Here's an example: The file is actually 9728 bytes long. Get Info will show that number or 9.5K; the View option of the Finder will show 10K; and the Delete dialog will show 9K.) Remember to hit the Cancel button after you check the size.

When You Get The "Missing Comma In Data Record" Error Message

Word's Print Merge capability requires that you separate field names with commas or tabs. Unfortunately, when you accidentally omit one, the program simply puts up an error message, without telling you where your comma might be missing. Instead of going through each and every record you're working with, you can use this shortcut:

Count the number of commas in the header record, and then use the Change command to systematically isolate the record that's missing a comma. You do this by entering a comma into both the Find What box and the Change To box. Then select sections of records and start searching.

Word counts the number of changes that it makes, and puts that number into the lower left corner. If the number of changes is not evenly divisible by the number of commas in the header record, you know that the defective record is somewhere in the records you just selected. If the number is evenly divisible, you can move on and select another section. Continue this process until you narrow down the data records sufficiently to isolate the one or more records with missing commas.



Word 3.01

Accessing Help Fast

You don't have to dig out your manual every time you need help, if you have Apple's Extended Keyboard. The key, labeled "Help," is right under the F13 key. When you press it, you'll see a question mark appear. This is your cursor. Move

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it to whatever you want explained, including menu choices, and then just click the mouse for the help you need.

If you don't have the Extended Keyboard, press the Command key and the ? key to get the question cursor.

Word Features Not Appearing In The Menus

Word 3.01 has several features that are only accessible through the use of special key combinations. These features normally never appear in menus. Yet, working with the program would often be simpler if they did.

Let's take the example of Insert Page-Break. The only way (normally) to access this feature is to type Shift-Enter. Here's how to make this feature a menu choice. Start with a blank document. Be sure you are in Full Menus mode. Type Shift-Enter to produce a forced page break. Select the dotted line that results by clicking in the Selection Bar (the column at the left of the screen where the cursor points northeast instead of northwest). Then choose Glossary from the Edit menu. Type in a descriptive name, such as "PageBreak," and click on the Define button. Next, press Option-Command-+ (plus sign) and click on the name Pagebreak in the glossary list. A Work menu will be created (or added to, if you already have one), in which the new glossary entry will be found. Now whenever you want to insert a page break, just go to the Work menu and select one.

This method will work with the other key combinations Word forces you to memo-

size. These include: Section Mark, Command Enter, End-of-Line Mark, Shift-Return, Optional Hyphen, Command—(hyphen), Non-breaking Hyphen, Command-~(tilde).



Word 3.02

Repaginating Without Crashing Using Word 3.02 And The Laserwriter II SC

Opening a document in Word 3.02 and then doing any procedure which repaginates the text causes a Bomb message and a crash.

To correct this, select the LaserWriter II SC driver using the Chooser every time you open Word. Do this even if the LaserWriter II SC driver is the only one in the System folder, and it's already been chosen while you were in the Finder or another application. Once you've chosen the LaserWriter II SC while in Word 3.02, you'll be able to switch applications and print with no further problems.

Swapping Adjacent Paragraphs

Want to swap the positions of two adjacent paragraphs quickly, without using multiple executions of Cut, Copy, and Paste?

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Highlight the paragraphs and check the alphanumeric position of the first word in each paragraph. Then use the Sort command (Word will sort in ascending order) or Shift-Sort (descending order) according to the alphanumerics. With a little forethought, you can figure out how to move two paragraphs around a third paragraph that separates them. You can also install markers at the heads of as many paragraphs as you wish to rearrange.

Use Sort and remove the markers when you're finished. The variations of Sort are endless once you get the hang of this useful and underused tool.

Bonus Disk

Word 3.02 and above come with a Bonus Disk, with a DA called Word-Finder. The thesaurus only works with Word or the Finder — it only functions if the information in the About... box of the active application says "About Microsoft Word...", "About MS Word...", "About Word...", "About Finder...", or "About DAs...".

Using ResEdit, you can customize Word-Finder to work with any application that has a MENU resource. First, open ResEdit and then open the desired application. Open the application's MENU resource and open MENU ID=1. Change the first menu item to "About Word..." (with three periods!) and save your changes (see Figure 3). WordFinder can now provide you its riches in the modified program.

Using The ASCII Code Search-And-Replace Capability

Microsoft Word 3.02 and above have an ASCII code search-and-replace capability that can come in handy when using Word to edit and reformat text files created on an IBM PC or PC clone. To find a particular ASCII code within a Word document, type a caret (Shift-6) followed by the decimal value of the ASCII code in the Find What dialog box. Here's how to use this feature to fix a typical PC text file imported into the Mac environment (always work on a backup copy of the file you wish to convert):

1. Select Change from the Search Menu (Command-H).
2. Replace the double carriage-Return / line-feed (CR/LF) pairs at the end of each PC text paragraph with a special Mac character as follows. Click the I-beam to the left of the first character in the file. In the Find What box, type ^13^10^13^10^ (13 is the decimal value of the ASCII carriage-return code; 10 is the decimal value of an ASCII line feed).
3. In the Change To box, type Option-8 for a bullet (•) or another special Mac character not used in the file. Click Start Search or Change All to make the changes.
4. Now, replace the CR/LF codes at the end of each line within paragraphs with a space: With your insertion point at the top of the document

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enter ^13^10 in the Find What box; in the Change To box, type one space; and then click Start Search or Change All.

5. Finally, go back and replace the special Mac characters (used to mark the end of PC text file paragraphs) with a Return. First click the I-beam at the top of the file. In the Find What box, type a bullet (or whatever special character you used). In the Change To box, type ^p (a caret followed by a lowercase p represents a Word Return character). Click Start Search or Change All as before.

You can also use this ASCII code search feature to fix PC word-processing documents within Word. For example, some PC documents contain normal text with only occasional ASCII control codes (such as decimal value 12 for form feeds or 9 for tabs). Use FEdit Plus or another Mac file editing utility program to examine the codes in the PC document, and then use this technique to search for and delete these codes within Word. For a complete list of the decimal values for all ASCII codes, see the Appendix in the Microsoft Word manual.

By the way, the reverse of this process works as well. You can replace return characters in a Word text file with ASCII CR/LF codes. This allows you to create readable text files for your PC friends and customers without leaving your Mac.

Making Word Finder Work With Any Application

Word 3.02 and above come with a Bonus Disk, with a DA called Word Finder. The thesaurus only works with Word or the Finder – it only functions if the information in the About... box of the active application says “About Microsoft Word...”, “About MS Word...”, “About Word...” “About Finder...”, or “About DAs...”.

Using ResEdit, you can customize Word Finder to work with any application that has a MENU resource. First, open ResEdit and then open the desired application. Open the applications MENU resource and open MENU ID=1. Change the first menu item to “About Word...” (with three periods!) and save your changes. Word Finder can now provide you its riches in the modified program.



WORD 4.0

The Word Screen Saver

Ordinary screen savers may dim your screen or offer fireworks and clock displays, but in Word 4.0, there's an animated display that is quite beautiful in color. Select Commands from the Edit menu and choose Screen Test from the list of commands in the dialog box. Click on the Do button. If you click once while

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the images are dancing across the screen, a dialog box will let you customize the display or cancel it.

Smoothing The Transition From Word 3.0 To Word 4.0

1. Word 3 and Word 4 can coexist on the same hard disk, each with its individual preferences file in the System folder, but we recommend against keeping the old version on-line. Documents have the same creator and type IDs in Word 4 and Word 3, so keeping track of document versions can get very confusing. If your Word 4 is sensitive to errors in its preferences files, however, and it might be a good idea to erase the "Word Settings (4)" file in the System folder and redefine your preferences if the application is bombing.

2. It's easy to move your personal style definitions from Word 3 to Word 4. Simply go into Word 4 and select Define Styles. Then use the Open menu item to open a Word 3 file, which makes all its styles available. Any styles you want to keep in Word 4 can be saved with the Set Default button.

3. Word 4 retains the ability to deal with any ASCII characters, invisible or otherwise, by specifying their numeric equivalents. In the older version, you could find the value for a selected character by clicking on the page number at the lower left corner of the screen. In the new version, Command-Option-Q is the only way to show the numeric equivalent.

4. Word documents that are "fast-saved" cause problems for Working Software's Spellswell spelling checker and may be

troublesome for other applications that try to convert them. There is a clever work-around, however, that allows you to change Word's default format from Fast Save to normal. Use Word 4's Commands menu to add Fast Save Enabled to a menu such as the Edit menu. Once it is on a menu, you can select it to uncheck it, and it will remain off until you specifically turn it on again.

5. Finally, for a little fun, select About Microsoft Word... , then click on the Word icon while holding down the Command key.

Creating Tables With Varying Column Widths

The Insert Table command in Word 4.0 only lets you create a table with columns of equal width. Ordinarily, you have to struggle with the column markers across the ruler to vary the column widths, but there is a shortcut that makes it easy:

1. Say you're creating a three-column table with one narrow column on the left for labels and two wide columns to the right for entries. As you create the table, enter 5 in the Number of Columns box.
2. Select all the cells in the second and third columns by holding down the Option key while dragging the mouse over these columns.
3. Choose Table from the Edit menu and select the option for merging the two columns. Repeat this procedure with columns 4 and 5.

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You now have a three-column table. To get a narrower first column and wider entry columns, just increase the number of columns in the table by a factor of 2.

Creating An On-line Hints Menu

Word users have been inundated with documentation, help files, and third-party books discussing all the program's intricate features. Trying to keep track of all this information in its present state is mind-boggling but worth the effort.

To have this information literally at your fingertips, create a file named Hints in which you store a personalized set of commands, shortcuts, and tricks that you want to keep at your fingertips. Give this Hints file menu-bar status by adding it to the Work menu. Press Command-Option-+ (plus symbol). When the cursor turns into the plus symbol, click on your Hints document, either in the Open dialog box or in its title bar (if it is the active document).

Word will create a Work menu on the right-hand side of your menu bar or add your Hints document to an existing Work menu.

Launching MacWrite Documents With Word

Whenever you double-click on a plain-text MacWrite document (such as the documentation files you download frequently from bulletin boards), it won't open unless you have MacWrite on your disk. As a lot more people use Word 4.0 than MacWrite, here's a way to make

Word 4.0 automatically open those MacWrite documents in its own format when you double-click on them.

First, make a backup copy of MacWrite (if you have it installed) on a floppy and then delete it from your hard drive.

Next, make a duplicate copy of Word 4.0 on the hard drive and rename it MacWord. By using ResEdit, you can change the Creator of MacWord from MSWD to MACA (highlight MacWord and choose Get Info from the File menu). Make the changes in the Creator box.

Now, when you double-click on a MacWrite document, MacWord will launch and the document will be converted automatically.

Quickly Adding Fonts To Word's Font Menu

If you need to add font names to Word 4.0's Font menu, pressing Command-Option-+ each time can get tedious in a hurry. Here's a fast, undocumented way to add all the currently installed fonts to your menu.

Choose Commands from Word's Edit menu, and choose List All Fonts from the list of commands. Then click on the Do button.

The menu bar will flash as Word adds suitcase fonts one at a time to the Font menu.

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A Patch For Fractional Font Widths On ImageWriters

If you do not own Adobe Type Manager, and you are using Microsoft Word, there is a patch – a set of modifications to Word – that allows for fractional font widths on ImageWriters. It's called WORD4MOD.SIT. (It should be available from the usual shareware outlets such as user-group libraries, BBSs, and so on. On CompuServe it's called WORDMO.BIN in the Macintosh Productivity Forum's word-processing library.)

Installing the patch requires familiarity with ResEdit (available from the same outlets). Obligatory ResEdit warning: Never use ResEdit on an original or master of anything. Always work on a copy. And don't forget to lock your master disks. That way, if you happen to make a mistake and damage something, you can always make a fresh copy from the master disk.

Recovering Word Temp Files

Before you save a Word document, Word sets up a temporary file and places it in the System Folder. If your system has crashed and you want to try recovering a Word Temp file, you can try opening it by holding down the Shift key and choosing Open Any File from Word's File menu. That should enable you to open the Temp file (try the one with the highest number). If you want to, you can add the Open Any File command to your menu permanently by using Word's command option, which you'll find on the Edit menu.

Kerning With The Displace Command

Microsoft doesn't mention kerning anywhere in the Word manuals, but you can do rudimentary kerning with the Displace Command. To kern two characters:

1. Choose Show ¶ from the Edit menu.
2. Place the cursor between the two characters you want to kern.
3. Press Option-Command-backslash and then type the letter D (the formula code for Displace).
4. Press Option-Command-backslash again, and then type the letters BA (the formula code for Backward).
5. Enter the number of points to kern (in whole points).
6. Follow this with both open and close parentheses () to end the formula. The code you see on-screen should look like this: \d\ba3 () (using 3 points as an example).
7. Choose Show again or print your text, to see the difference in spacing. If you save this formula as a Glossary item, you'll have to enter it only once.

Inserting The Date Into Documents

Word lets you insert the date into documents through its Commands dialog box, but you're stuck with its date formats, which include the day of the week (ex-

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cept for the short format – for example, 3/31/89). If you want a date such as March 31, 1989, you'll have to suppress the weekday in the System file with ResEdit 1.2. (Try this on a copy of your System file before you change your working System file.)

1. Open the System file and scroll down to it11.
2. Open it11. Select it11 US" ID=0 and open it.
3. Next, click on the Suppress Day box (see Figure 2).
4. Close ResEdit and save the changes. Open a Word document. To get the date, make sure you're using Full Menus and select Glossary from the Edit menu. You'll see the following date entries: date - now - abbreviated, date - now - long, and date - now - short.

Select either the long or the abbreviated format and click on Insert. The date will appear either as March 31, 1989, or as Mar. 31, 1989, respectively.

Using Insert Graphic To Speed Printing Time

Inserting a graphic in a word-processing document can significantly increase printing time. Here's a trick for trimming your printing time on working drafts and proofs. Measure the illustration's height (many object-oriented draw programs have a Show Size option). Insert the graphic into a Word document. With the graphic selected, choose Paragraph from the For-

mat menu. Type a minus sign in the Line Spacing box and then enter the graphic's measurement. The minus sign adjusts the paragraph's height to match the size of the graphic.

Select the graphic again, choose Character from the Format menu, and format the graphic as hidden text. When you print draft documents, be sure Print Hidden Text in the Print dialog box is not selected. The illustrations will be replaced by an appropriate amount of white space, and you'll know where your page breaks are. When you're ready for the final version, recheck Print Hidden Text, and the graphics will print properly.

Inserting PostScript Code In A Word Document

Placing bits of PostScript code (or even lengthy routines) into a Word document is simple. But Word requires that you first clearly define what part of the page will be affected by the PostScript code. Is it going to affect the entire page (for example, a box enclosing the page) or just a paragraph or inserted graphic?

You define the boundaries by inserting a group command immediately before the page element it will affect. In Word 3.02, you could use three such commands: .page., .para., or .pic. (referring to the entire page, the next paragraph, or the next graphic insertion). Version 4.0 has added .cell. and .row. to facilitate PostScript manipulation of tabular material.

1. Group Commands – Group commands create a drawing rectangle that specifies the overall size of a PostScript

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graphic. The actual dimensions of the graphic never have to be entered, because the command gathers this information from Word itself. The drawing rectangle created by `.page.`, for example, is determined by the page size you've specified with the Page Setup command. If your page is 5 x 7 inches, the drawing rectangle mirrors those measurements exactly. Most other group commands, such as `.p a r a.` and `.p i c.` let you focus on increasingly smaller or more precise areas of the page – a paragraph, or a graphic frame within a paragraph.

After the group command is entered, you can enter PostScript code you've written or copied from another source. Here's a simple example that places a 5 x 7 -inch box on a page. At the top of the page, type the following:

```
.page.  
newpath  
.25 setlinewidth  
126 144 moveto  
360 0 rlineto  
0 504 rlineto  
-360 0 rlineto  
closepath  
stroke
```

Anyone with PostScript savvy will notice some peculiarities here. The primary one is that the PostScript inclusion hasn't been bracketed by a `save /restore` or `gsave /grestore` pair, which prevents certain PostScript operators (rotate, for example) from changing the graphics environment of the entire page. Why this apparent breach of PostScript etiquette? Because

the group commands automatically bracket each grouping of PostScript code with a `save/restore` couplet.

You might also notice that the origin point (0 0) in Word's version of the PostScript coordinate system corresponds exactly to that found in PostScript itself. This means that the origin point (0 0) is found at the lower left corner of the current drawing rectangle, whether it is a page, paragraph, or graphic frame.

2. Creating Global Commands – When PostScript requires specific measures or positions that can't be referred to through the built-in variables, the dimensions are expressed in points. If you feel more comfortable working in inches, simply place the following code after a group command such as `.para.` or `.page.` (and, of course, format it in Word's PostScript Style):

```
/inch (72 mul) def
```

Then you can use code such as `1 inch 1 inch moveto` instead of `72 72 moveto`. The routine you've inserted automatically multiplies the inch units by 72, converting them into PostScript's point system.

Ordinarily, such a routine applies only to the drawing rectangle indicated by the group command. So if you had a `.page.` and several `.para.` PostScript groups on the same page, you would have to insert `/inch 172 mul def` in each group. When Word scans the page for PostScript, it does each group in turn and discards the variables or routines of that group as soon as it has been processed. Even routines or

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variables placed after the `.page.` command can't be used by other groups on the same page.

3. Executing The PostScript Code – If you print the document now, you won't magically have a PostScript-generated box on the page. The code prints as ordinary text. To have it executed, you must do several things.

First, select the PostScript code (including any group command). Then hold down the Shift key and pull down the Format menu. You'll see that Styles has been replaced by the All Styles command. All Styles has several predefined styles, including one called PostScript. Select it and click on OK. The PostScript code has now been changed into a form that will be interpreted rather than printed. To see the code after this point, make sure that Show Hidden Text is selected in the Preferences dialog box (Edit menu). You can't see the results of your tinkering by using the Print Preview command; you must print the document on a LaserWriter.

When you print, make sure that Print Hidden Text isn't selected in the Print dialog box and check the Chooser to make certain that Background Printing is turned off. If Background Printing is left on, the PostScript effects will be shifted down and to the right from where you want them on the first page of the document. Subsequent pages will print correctly.

4. Modifying Word's PostScript Code Style – The on-screen appearance of Word's native PostScript style leaves something to be desired. Fortunately, you can easily modify most of the attributes.

While holding down the Shift key, select Define All Styles from the Format menu. Select PostScript. The description box defines the style as "Normal + Font: 10 point, Bold Hidden." The main culprit here is Bold, which makes the type hard to read. So just pull down the Format menu while the dialog box is showing and turn off Bold. You can safely change anything in the PostScript style other than the Hidden attribute.

Using PostScript To Place Screen And Crop Marks

1. Screen Marks – If you want to place, say, a gray screen behind a single paragraph, you do not need to know the precise location and size of the paragraph.

First, remember that the group command `.para.` creates a drawing rectangle that corresponds to the size and position of the paragraph it precedes. And Word has another card up its sleeve – built-in PostScript variables. There are 22 variables, which will aid you as you develop code. For a list of the variables and their descriptions, see pages 285 and 286 of the User's Guide.

To make a screened paragraph, we need the variable called `wp$box`. Here's what you need to type in front of the paragraph and then format in Word's PostScript style by formatting the code in the Postscript format by holding down the Shift key and selecting All Styles:

```
.para.  
9 setgray wp$box fill
```

By the way, you don't have to use carriage returns, although they make the code

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more legible. You could simply type:

```
.para.  
.9 setgray wp$box fill
```

In any case, the variable `wp$box` is equivalent to defining a drawing rectangle the same size as the paragraph. Without it, you'd have to determine the coordinates of the paragraph (with a ruler on a printout) and type something like:

```
12 6 14 4 moveto  
360 0 rlineto  
0 504 rlineto  
-360 0 rlineto  
closepath  
fill
```

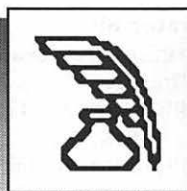
These are hypothetical coordinates, but you can see the advantages of having the variables. You save a lot of typing, and you don't need to figure out specific positions or dimensions.

2. Crop Marks – An even clearer example is crop marks, one of six routines included in the PostScript Glossary that accompanies Word 4.0. After the actual crop marks are defined, the routine places them at the corners of the page. Ordinarily, you would have to know or calculate exact positions for the marks, a painstakingly bothersome task. But with judicious use of some of Word's variables, you can avoid the hassle:

```
wp$left markl sub whitel sub wp$y  
wp$top sub moveto markl 0 rlineto  
stroke
```

The variables `wp$left`, `wp$y`, and `wp$top` refer to the left margin, the drawing rectangle's height, and the top margin

respectively. You don't need to get the dimensions from the Page Setup dialog box. Word fills in the appropriate numbers when the file is interpreted and sent to the printer. And if you change the page size, you don't have to go back to the code and insert new dimensions.



WRITENow

Setting Up Informal Style Sheets

You can set up informal style sheets, using the dummy formats that you frequently use, in a document template that is kept open whenever you're working in WriteNow.

When you need a style, just switch windows, click on the paragraph containing the format you need, and copy the ruler (Command-1). Then switch back to the document window and paste the ruler in (Command-2). Although this method only copies ruler settings (not font or style changes, for instance), it can still be a real time-saver. It also helps ensure that your documents all have a uniform style.

Later, if you want to change a particular format, you can use WriteNow's identical ruler feature. Just select the text from the first occurrence of the format to the end of the document and then hold down the Shift key while making the change in its ruler.

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