mini'app'les

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Apple Computer user group newsletter

Volume XII No 7 July 1989

Calendar of Meetings and Events

WHO	WHEN	WHERE	WHAT
North Shore Mac Users Group	Tues. July 4 7:00 pm	Grand Marais Library Grand Marais, MN	Please check meeting date with Jim Ringquist, Note 15
Mac Users	Thur. July 6 (6:30) 7:00 pm	Hennepin County Library, Southdale Branch, 70th & Xerxes, Edina, MN	Soft PC and SuperMac Products— Door Prizes—Notes 16 & 14
Mac Computer Art & Design Group	Mon. July 10 6:45 pm	The Graphics Department 411 2nd Ave. North, Mpls.	Tour of a Mac open access design studio, Note 7
MicroSoft® Works™ S.I.G.	Tues. July 11 6:30-8:45 pm	Washburn Community Library 5244 Lyndale Ave. S., Mpls.	Note 13
Apple II Users (Note Location Change)	Wed. July 12 7:00 pm	Washburn Community Library 5244 Lyndale Ave. S., Mpls.	Word Processing Note 11
New Richmond Branch	Wed. July 12	New Richmond Technical School	John Hackbarth 715-246-6561
Board Meeting	Thur. July 13 7:00 pm	Brookdale Hennepin Area Library 6125 Shingle Creek Pkwy., Brooklyn Ctr.	Members welcome, Note 1.
Fourth Dimension™ Group	Mon. July 17 7:00 pm	Hennepin County Library, Southdale Branch, 70th & Xerxes, Edina, MN	Note 2 Small Meeting Room, 2nd Floor
Macintosh™ Programmer	Tues. July 18 7:00 pm.	Hennepin County Library, Southdale Branch, 70th & Xerxes, Edina, MN	Note 2 Small Conf. Room, 2nd Floor
MacCAD/E User Group	Tues. July 18 7:00 pm	Heath/Zenith Computers Shady Oak Road, Hopkins, MN	Note 8
Apple IIGS S.I.G.	Wed. July 19 7:30 pm	First Tech Computer 2640 Hennepin Ave., Minneapolis	Note 12
HyperCard™ Group	Mon. July 24 7:00 pm	Hagen Office Equipment 801 W. 77-1/2 St., Richfield, MN	Note 4 - Tentative, check before coming
Mac Novice User Group	Mon. July 24 7:00 pm	Highland Branch Library 1974 Ford Parkway, St. Paul, MN	Note 9
Northwest Branch	Tues. July 25 7:00 pm.	Rockford Road Library 6401 42nd Av. N., Crystal, MN	Note 6
Mac Desktop Publishing SIG.	Wed. July 26 7:00 pm	First Tech Computer 2640 Hennepin Ave., Minneapolis	Note 3
AppleWorks© S.I.G.	Thur. July 27 7:00 pm	Murray Junior High School 220 Buford, St. Paul, MN	Multi-Computer Seminar (see Announcements), Note 10
North Shore Mac Users	Tues. Aug. 1	Grand Marais Library, Grand Marais	Note 15
Apple II Users	Wed. Aug. 2	Washburn Community Library, Mpls.	Other Languages (than BASIC), Note 11
Mac Users	Thur. Aug. 3	Hennepin County Library, Southdale	Notes 16 & 14
Microsoft® Works™ S.I.G.	Tues. Aug. 8	Washburn Community Library, Mpls.	Note 13
New Richmond Branch	Wed. Aug. 9	New Richmond Technical School	John Hackbarth 715-246-6561
Board Meeting	Thur. Aug. 10	Brookdale Hennepin Area Library	Members welcome, Note 1
Mac Computer Art & Design	Mon. Aug. 14	Mpls. College of Art and Design	To Scan or Not to Scan, Note 7
Macintosh Programmer	Tues. Aug. 15	Hennepin County Library, Southdale	Note 2
MacCAD/E User Group	Tues. Aug. 15	Heath/Zenith Computers, Hopkins	Note 8
Apple IIGS S.I.G.	Wed. Aug. 16	First Tech Computer, 2640 Hennepin	Note 12
Fourth Dimension™ Group	Mon. Aug. 21	Hennepin County Library, Southdale	Note 2
Mac Desktop Publishing SIG	Wed. Aug. 23	First Tech Computer, 2640 Hennepin	Note 3
AppleWorks© S.I.G.	Thur. Aug. 24	Murray Jr High, 2200 Buford, St Paul	TO UltraMacros & Lining, Note 10
HyperCard™ Group	Mon. Aug. 28	Hagen Office Equipment	Note 4 - Tentative, check before coming
Mac Novice User Group	Mon. Aug. 28	Highland Branch Library, St. Paul	Note 9
Northwest Branch	Tues. Aug. 29	Rockford Road Library, Crystal	Note 6

Notes:
1. Dave Laden 488-6774
2. Ian Abel 824-8602
3. Charles Bjorgen.................633-8850
4. Mike Carlson 866-3441
5. Wesley Johnson 636-1826
6. Jere Kauffman 535-6745
7. Joy Kopp 440-5436
8. Bill Langer 937-9240
9. Tom Lufkin 698-6523
10. Dick Marchiafava 572-9305
11. Tom Ostertag.............488-9979
12. Mark Evans 377-9000
13. Ed Spitler 432-0103
14. David Stovall.............474-8015
15. Jim Ringquist 218 387-2234

Coordinators - Please Call John Hansen (890–3769) by the 1st Friday in order to have your meeting listed correctly!

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Board Members:

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SIG: Apples	Tom Ostertag	488-9979
Membership	Ian Abel	824-8602

Coordinators

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Shows & Conventions	(Your Name Here?)	
Northwest Branch	Jere Kauffman	535-6745

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	AppleWorks	Dick Marchiafava	572-9305
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		Mike Carlson	866-3441
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	4th Dimension Prog	Ian Abel	824-8602
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	Smalltalk	Martin McClure	227-9348
	DeskTop Publishing	Charles Bjorgen	633-8850
	MicroSoft Works	Ed Spitler	432-0103

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Apple // DOM Editor	Tom Gates	789-1713
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CP/M	Open	

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- Medical	Stewart Haight	644-1838
- CP/M	Jim Rosenow	(414) 261-2536

Circulation this issue: *1100*

Questions — Please direct questions to an appropriate board member. Technical questions should be directed to the Technical Director.

Membership — Send applications for membership directly to the Membership Coordinator: Ian Abel 824-8602
PO Box 796
Hopkins MN 55343

Current membership dues are $20 for the first year and $15 thereafter. All members receive a subscription to the newsletter and all club benefits. New members receive a special package of member lists and software catalogs.

eDOMs		At Meetings	Mail Order
Members:	5 1/4" eDOMs	$3.00	Add
	5 1/4" System	$1.00	$1
	3 1/2" Apple/MaceDOMs	$5.00	per
	3 1/2" System	$3.00	disk,
Non-Members:	5 1/4" eDOMs	$6.00	Max
	3 1/2" Apple/MaceDOMs	$10.00	$4.00

Send orders to Mini'app'les at PO Box 796, Hopkins, MN 55343, attention eDOM Sales or MaceDOM Sales.

Dealers — Mini'app'les does not endorse specific dealers. The club promotes distribution of information which may help members identify best buys and service. The club itself does not participate in bulk purchases of media, software, hardware and publications. Members may organize such activities on behalf of other members.

Newsletter Contributions — Please send contributions on Mac 3 1/2" disks, or via telecommunications, directly to the Newsletter Editor. Contributions on 5 1/4" disks should be sent to the club PO Box, and marked: "Newsletter Submission".

Deadline for publication is the **1st day** of the month preceding the month in which the item might be included. An article will be printed when space permits if, in the opinion of the Newsletter Editor, it constitutes suitable material for publication.

Meeting Dates — Please phone calendar announcements to John Hansen 890-3769.

Mini'app'les Mini'Info Exch BBS — Club members may utilize the club's BBS: Telephone No. 892-3317

Advertising — Direct all advertising inquiries to the club's Advertising Coordinator: Bob Lowe 612-933-0464
PO Box 796, Hopkins, MN 55343

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AppleLink
UG0012
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In This Issue

The Fine Print

GS/OS

System   Finder   HyperCard 1.2.2

HyperCard 1.2.2 is now available!

✓ **System Updates for Macintosh**
✓ **ProDOS and DOS 3.3 systems for Apple II/IIGS**

Apple II SIG July 12 Washburn High Word Processing	MacUsers—July 6—Southdale Lib. Proactive Marketing with SuperMac and Soft PC Door Prizes of SuperMac Products

Mini'app'les BBS — 892-3317 (New Tel No!)

August Mini'app'les Newsletter goes to press July 10.
Please observe minimum one week leadtime.

Membership Application and Renewal Form   7/89

Name: _____.

Address: _____.

City:_____.

State: _____.

ZIP: _____.

Home Phone: (_____) ___ - _____

Work Phone: (_____) ___ - _____

New Member ( )   or   Renewal ( )

Spouse's name: _____.

Childrens names: _____.
(if interested in computers) _____.

Sponsored by: _____.

I own or use a:

Mac+ ( ) SE /SE30( ) MacII/IIx/IIcx ( )
Apple //or //+or //e ( ) //GS( ) //c( )
Other   ( )

Special Interests - Check all that apply.

Programming	( )	Spreadsheets	( )
Business	( )	DT Publishing	( )
Education	( )	Novice	( )

Make checks payable to Mini'app'les
Mail to: Membership Coord
Ian Abel
PO Box 796
Hopkins MN 55343

Allow 3-6 weeks for processing
Club Dues: $15/yr + $5 application fee .

Announcements

Notice
**This is
a bigger newsletter with lots of
interesting topics and a new
format!**

**Please help us to continue to
make this happen!**

Wanted
Editors for Monthly Columns
in this Newsletter

**Help us promote your pet
topic?**

We need members to assist in
collecting and editing articles
on specific topics; examples:

Desk Top Publishing,
Excel Tips,
Apple II Databases,
Hypercard Tips, etc.

Call Dan Buchler at 890-5051

Macintosh Computer Art and Design (MCAD) User Group Meeting Topics
by Joy Kopp

The Macintosh Computer Art and Design (MCAD) User Group meets on the second Monday of the month at 6:45PM. The location of the meetings is the Minneapolis College of Art & Design, room 325 Computer Lab., unless otherwise noted.

Jul 10: Field Trip to The Graphics Department

On July 10, 1989 MCAD will visit The Graphics Department, an open access design studio offering the latest hardware and software for the Macintosh. The studio is available to any and all Macintosh designers and artists for an hourly fee. Please join us at 6:45 PM for an introduction to this unique service facility.

The Graphic Department
Chuck Burr 371-0733
411 2nd Avenue North, Minneapolis

Aug 14: To scan Or Not To Scan. Is It A Question?

August 14th, the MCAD group returns to room 325 of the College for a presentation by attorney and Mac user *Chris Sandberg*. Mr. Sandberg will lead a discussion on copyright implications of scanning and digital image manipulation.

If you change just one pixel, is it yours? Come and find out.

Sep 11: The Mac as a Pre-Press Link

Bob Mueller, from Imagination Factory Graphics, will be the speaker at MCAD's September 11th meeting. He will discuss the use of the Mac as a front-end to page makeup with a pre-press link. "Pre-press" has traditionally meant the process of taking camera-ready art to film, then stripping and assembling the film in preparation for color separation and printing. The Mac now enters this process with electronic assistance.

Oct 9: Imaging! Imaging! Imaging!

Making pretty color pictures on a Mac has always been easy. Getting them off the screen and ontof film or paper has not.

Join us on October 9th for a research update on imaging technology from the people who invented the process. *Mike Newman*, Crossfield/DICOMED, will share results of his latest research efforts in finding new and successful ways to output a color Mac file to film and paper. These are the people who brought us images of Jupiter from the Voyager satellite in the 70's. Now, they've turned their attention to the Mac. Join us for a glimpse of the latest in technological advances.

Nov 13: That's All Folks!

MCAD meets from February through November. This year, we've decided to end the meeting year with a bash. We've opened each meeting with introductions around the room, now it's time to do the Mac Mingle!

Location and party agenda to be announced.

Join the MCAD group for these informative and entertaining events. For any questions or suggestions for future meeting topics, contact
Joy Kopp... 440-5436

Mac Users coming up
by Tom Edwards

The July 6th meeting of Mac Users will be at the Southdale Hennepin County Lirary (see map on page 6). This meeting continues the peripherals presentation from ProActive Marketing. (**Bring your membership card for the drawing!**)

For those that have a Blue Streak fixation, there will also be a demo of **Soft PC**, a program that does a personality transplant on your Mac.

The August 3rd meeting will feature a demo of Hewlett-Packard printers, with assistance from Bob Heine from the St. Louis office. This will include the DeskJet+ and the DeskWriter, a new Mac-specific device that has just been introduced.

The AppleWorks Advisor
A Column For Users Of AppleWorks
by Dick Marchiafava

Sometimes it seems there will be nothing to write about relative to AppleWorks when the time comes to set this words down in the word processor. However, in more than 3 years of writing this column, the rich environment surrounding AppleWorks comes through with material worth commenting on.

New Beagle Bros Programs

At this time, the news in the AppleWorks world is from Beagle Bros. The Beagle Boys have announced 5 packages, 3 of which pertain to AppleWorks. The programs applicable to AppleWorks are TimeOut TeleComm, TimeOut ReportWriter and GS Font Editor.

Although other publications have written about packages as though they are shipping now (early June), I have been informed by the Beagle Buddy Coordinator, Chuck Newby, that TeleComm and ReportWriter have not yet begun to ship. He thought that these may begin shipping in July.

Beagle Bros now publishes Point-to-Point, a stand-alone communication program which was formerly marketed by Pinpoint.

Alan Bird's excellent utility, Program Writer which was marketed by him when he and Mark were running Software Touch, has been reissued as a Beagle product.

GS Font Editor

This program is shipping now. The product name misleading. It sounds as though there is nothing about GS Font Editor which would have anything to do with AppleWorks. However, TimeOut SuperFonts uses the GS type of fonts that this program can edit.

Fonts in Apple GS programs on an Apple IIgs can be edited or created with GS Font Editor. In addition, GS Font Editor can be used to edit fonts used by TimeOut SuperFonts and also Publish It! and can be used with Apple //e and //c computers.

TimeOut TeleComm

This program has been in the works for quite some time. I thought that it was close to release a couple of times before. It appears to be nearly ready to ship soon.

TeleComm, like all the TimeOut modules, is an AppleWorks resident program. As the name states, it is a telecommunication program which works within AppleWorks, using the AppleWorks interface and command structure.

TimeOut ReportWriter

ReportWriter is a complete surprise to me. This product may be the most significant and powerful add-on for AppleWorks, when all it's capabilities are understood and utilized.

The AppleWorks data base is a list handler, a "flat" data base. You are limited to whatever information you can fit into 30 categories, and the report formatting capability is very limited.

ReportWriter will address these shortcomings because it is a relational report generator. ReportWriter can use data from as many as 11 different AppleWorks files, which can be a mix of data base, spreadsheet and word processor files.

Reports can contain 250 fields and can be 127 lines by 240 characters. There can be unlimited sub-totals and totals. Reports print to disk and can be print on screen or with a printer.

There are extensive functions available within ReportWriter which make it flexible and powerful. With this tool, you should be able to get any type of report imaginable from AppleWorks.

Just to make it even more interesting, ReportWriter is said to be capable of posting data back to AppleWorks files!

Location Map:
AppleWorks SIG
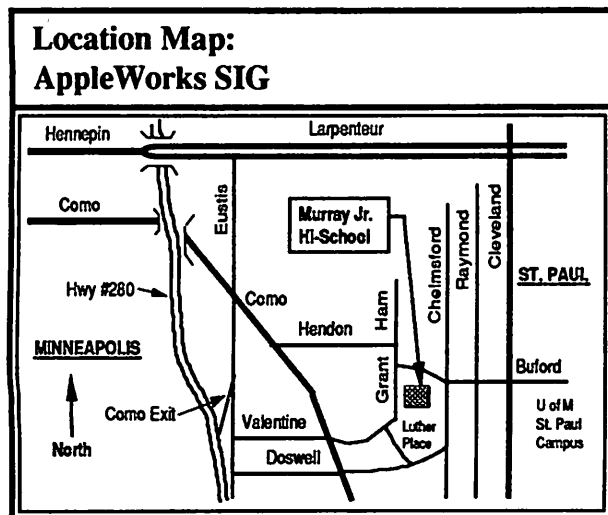
New Members: April and May
Sponsoring Members

Dan Buchler	J. Edward Wheeler

New Members

Name	Zip	Phone
Gloria Gunkle	55033	612-437-9778
Anthony Saxton	55107	612-293-1294
Glen F. Anderson	55108	612-646-7377
Hoyt M. Hsiao	55121	612-835-7356
Kathy H. Drazen	55122	612-452-4155
Mark Koivisto	55343	612-544-5434
John Somerville	55346	612-934-4588
Robert C. Fellows	55416	612-925-4090
Eric B. Holland	55420	612-888-9830
Craig Tharaldson	55423	612-869-1072

Trouble Shooting The Beagle

TimeOut Products For AppleWorks

by Beagle Bros
via Beagle Buddy

Part I: TIMEOUT

Problem: You can't make a backup copy of your new disk without getting an error message.

Beagle Bros program disks are unprotected and copyable. You can and SHOULD make a backup. But if your master disk has become damaged during shipping, it won't copy. Just send it back to Beagle Bros with a note that you got a bad disk. We'll replace it at no charge.

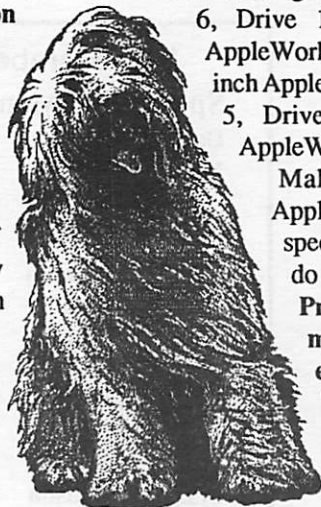Beagle Bros, Inc. 6215 Ferris Square, Suite 100 San Diego, CA 92121

All TimeOut programs come on both 5.25 and 3.5 inch disks. It's very unlikely that both disks could be damaged. If you have both types of disk drives, try using the other disk. It's probably OK. If you have only 5.25 inch disk drives, take your 3.5 inch disk to your dealer and ask him to copy the files to a 5.25 inch disk so you can use it immediately. Of course, we'll still replace the damaged one.

One note about making backups: if you are using Copy II+, make sure that you use the disk copy option, and NOT the bit copy.

Problem: You get the message "Unable to recognize this version of AppleWorks" during TimeOut installation.

The TimeOut series of AppleWorks enhancements is designed for use with AppleWorks v2.0 and later. You can see which version of AppleWorks you have by checking the title screen when you boot up AppleWorks.

If your AppleWorks is v1.0 to v1.3, you'll need to contact Claris, the publisher of AppleWorks to obtain an upgrade. Their telephone number is: 800 544-8554. The charge for the upgrade is $75.

If you have a recent version of AppleWorks (v2.0 or later) and you still get the "Unable to recognize" message, then you will have to send your master TimeOut disks back to us for an update. The address is in the back of your manual.

Beagle Bros has recently instituted a standard updating policy! Your purchases of updated versions of our software (ie. from v1.6 to v1.7) are priced at $10.00 each.

It is suggested by Beagle Bros that users update their program disks only if they are experience problems. They want users to utilize the Beagle Buddy support network to get updates.

Problem: You get a "BREAK" or "No device connected" message when you install TimeOut.

During TimeOut installation, you need to specify the Slot and Drive of your AppleWorks disk. The location you give is the one in which you boot your AppleWorks disk when you use AppleWorks. The standard locations are:

Slot 6, Drive 1, for 5.25 inch disk drives on the IIe. Slot 6, Drive 1, for the 5.25 inch internal drive on the IIc. Slot 5, Drive 1, for 3.5 inch drives on the IIe, IIc, IIc+ and IIgs.

You will get these error messages if you specify a Slot and Drive for AppleWorks that does not have a disk drive connected, or if your AppleWorks startup disk is not in the drive.

To correct the problem, do the installation again. This time, select Slot 6, Drive 1 as the location of AppleWorks if you are using a 5.25 inch AppleWorks disk. Select Slot 5, Drive 1, for a 3.5 inch AppleWorks disk.

Make sure your AppleWorks disk is in the specified drive when you do the installation.

Problem: You get the message "Getting errors trying to load TimeOut applications at AppleWorks"

when you boot your AppleWorks disk.

TimeOut is a kind of program selector. Installing TimeOut does NOT automatically give you QuickSpell, SuperFonts or any of the other applications. TimeOut simply interrupts AppleWorks and then runs one of the applications. To work effectively, TimeOut needs to know where your applications are. You will get the message "Getting errors trying to load TimeOut applications at AppleWorks" if your applications have not been copied to your AppleWorks disk.

3.5 inch disk users: Select "Copy files to TimeOut applications disk" from the TimeOut installation menu. Just follow the instructions on the screen. TimeOut installation will then be complete.

5.25 inch disk users: There is not enough room on your 5.25 inch AppleWorks disk to hold your applications. So, you cannot have your applications on your AppleWorks disk. You need to make a separate applications disk. If this is your only TimeOut program, your backup copy will be your applications disk.

For one 5.25 disk drive: enter Slot 6, Drive 1, as the location of your applications disk when you install TimeOut. When you boot up AppleWorks, you will get the message "Getting errors trying to load applications at Slot 6, Drive 1". Place your TimeOut disk in the drive and select "Try again" from the menu. Your applications will then be ready to use.

For two 5.25 inch drives: enter Slot 6, Drive 2, as the location of your applications disk when you install TimeOut. Make sure your applications disk is in Slot 6, Drive 2, when you boot up AppleWorks and your applications will be loaded automatically.

Problem: You get the message "Getting errors trying to load TimeOut Applications at..." when you boot up AppleWorks.

Your TimeOut applications can be anywhere; on a floppy disk, on a ram disk, or on a hard drive. The "Getting errors trying to load TimeOut applications" message means that one of the following has happened:

A Beagle Buddy's Buddy

GOTO 11

BEGINNERS' CORNER

APPLESOFT BASIC

By Tom Alexander
Formatting Numbers

"**A**pplesoft BASIC is a crummy programming language. It doesn't right justify and format numbers.", quoth the dissident.

True enough but that shouldn't make you throw up your arms in despair. It simply offers the BASIC programmer another challenge. The results can be downright awesome.

Let's look at a small example for starters. You want to show on the screen a column of numbers and their sum. The numbers are: 4,724.10, 13.87 and 523.00. These are represented in the array variables N (1), N (2) and N (3). The sum, N (4), is calculated:

```
780   N (4) = 0: REM * Initialize
790   FOR X = 1 TO 3: N (4) = N (4) +
      N (X): NEXT X: PRINT
```

Applesoft will print the numbers as follows:

```
4724.1
13.87
523
5260.97
```

Not very elegant. You would gain neither the admiration nor the respect of your peers or underlings. Your seers would cast aspersions upon you. Ok. Let's fix it up.

First, you must convert all the numeric variables to alpha-numeric variables. Why? Because you can do all sorts of manipulations with alpha characters that you can't do with numerics. You have to fill two decimal places where there weren't

zeros and decimal points. Remember, Applesoft BASIC doesn't print numeric leading or trailing zeros. Eg: N (1), 4724.1, must appear as 4724.10.

A couple of years back a member gave me a neat little one line subroutine that does this (See Author's Note Below):

```
100   DC$ = RIGHT$ (STR$ (INT (DC
      + (DC < 0) * 1 + (DC > = 0) * .005))
      + "." + RIGHT$ (STR$ (INT
      ((ABS (DC) + 100) * 100 + .5)) ,2),
      255)
130   RETURN
```

To get each variable in the proper format the following algorithm is used:

```
800   FOR X = 1 TO 4: DC = N (X):
      GOSUB 100
810   N$ (X) = DC$: NEXT X
```

Now we're ready to present the column in an orderly fashion. That is, right justified. We have to use a little hokus pokus to get this done because Applesoft left justifies everything when it prints characters. We want all of the decimal points to line up one under the other. Because two decimal places have been added to each number we can select the column in which we want the last digit to be printed. Let's say it's column 20. Therefore, the first digit of the number should be printed in column 20 LESS the length of the number. In the case of N$ (1) this would be 20 - LEN (N$ (1)). So we could say that the TAB value should be 20 - LEN (N$ (1)). Here's how it's written:

```
850   FOR X = 1 TO 4: T = 20 - LEN (N$
      (X)): PRINT TAB(T); N$ (X):
      NEXT X: PRINT
```

The column now looks like this:

```
      4724.10
        13.87
       523.00
      5260.97
```

This is better but there should be an underline between the third number and the total. A double underline should. be shown under the total as well. A couple of things have to be added but the principles are the same. The length of the underline should be the same as the length of the total amount. The algorithm now looks like this:

```
850   FOR X = 1 TO 3 : T = 20 - LEN (N$
      (X)): PRINT TAB(T); N$ (X):
      NEXT X: PRINT
860   L = LEN (N$ (4)): T = 20 - LEN
      (N$ (4)): HTAB (T)
870   FOR X = 1 TO L: PRINT "-";:
      NEXT X: PRINT
880   PRINT TAB(T); N$ (4)
890   HTAB(T)
900   FOR X = 1 TO L: PRINT "=";:
      NEXT X: PRINT
```

Now the column looks like this:

```
      4724.10
        13.87
       523.00
      ———
      5260.97
      =======
```

We're cookin' now. You can shift into fourth and vault above the mundane by inserting commas in the numbers and adding dollar signs if you're showing monetary figures. Commas are inserted by adding two lines to the subroutine as shown above (100). These are:

```
110   IF LEN (DC$) > 6 THEN DC$ =
      LEFT$ (DC$, LEN (DC$) - 6) +
      "," + RIGHT$ (DC$,6)
120   IF LEN (DC$) > 10 THEN DC$ =
      LEFT$ (DC$, LEN (DC$) - 10) +
      "," + RIGHT$ (DC$,10)
```

Adding dollar signs to the numbers isn't really difficult. All the stuff I've seen in programs in magazines just prefix all numbers with a $. This is done as such: N$ (1) = "$" + N$ (1). This is fine if you like reading road maps.

I choose to follow the form of those that present dollar figures for review: Accountants. When presenting a column of dollar figures and the sum, accountants only prefix the first figure in the column and the ones below a single line with a $. In addition, the dollar signs are in the same column. Everything lines up.

This is accomplished by using the TAB value for the total amount as shown above then subtracting 2 (the dollar sign will precede the total figure by one space): T2 = T - 2. Line 880 will now read:

880 PRINT TAB(T2); "$"; TAB(T); N$ (4)

The length of the underlines (L) is going to have to have to be lengthened as well: L = L + 2. That takes care of the total. Now for the first figure (Remember - The dollar signs are in the same column):

840 T3 = 20 - LEN$ (1): PRINT TAB (T2); "$"; TAB (T3); N$ (1)

Line 850 will have to changed to print only N$ (2) and N$ (3). Therefore, FOR X = 2 TO 3.

Putting it all together:

800 FOR X = 1 TO 4: DC = N (X): GOSUB 100
810 N$ (X) = DC$: NEXT X
820 T = 20 - LEN (N$ (4)): T2 = T - 2
830 T3 = 20 - LEN (N$ (1))
840 PRINT TAB (T2); "$ "; TAB (T3); N$ (1)
850 FOR X = 2 TO 3: T = 20 - LEN (N$ (X)): PRINT TAB (T); N$ (X): NEXT X
860 L = LEN (N$ (4)): T = 20 - LEN (N$ (4)): L2 = L + 2: HTAB (T2)
870 FOR X = 1 TO L2: PRINT "-";: NEXT X: PRINT
880 PRINT TAB (T2); "$ "; TAB (T); N$ (4)
890 HTAB (T2)
900 FOR X = 1 TO L2: PRINT "=";: NEXT X: PRINT

The finished product:
```
$ 4,724.10
    13.87
   523.00
   _____
$ 5,260.97
===========
```

That looks a lot better. It's clean. It's crisp. You can read it. If you're going to the trouble of writing a fantastic program, go the extra yard and make your presentations presentable. It's worth a little more effort.

Author's Note Below - The subroutine given above will fill two decimal places. Sometimes more decimal places are called for. The same formula as used above can be altered to accommodate three and four decimal places. Those formulas are given below.

Also, you will notice that the subroutine uses the variable DC (X). Why not N (X) as in the rest of the program? Well, I used this subroutine from a program on a disk where I keep all subroutines. This is much easier than typing the subroutine over and over for different programs. It just saves time.

Subroutine for three decimal places:
100 DC$ = RIGHT$ (STR$ (INT (DC + (DC < 0) * 1 + (DC > = 0) * .0005)) + "." + RIGHT$ (STR$ (INT ((ABS (DC) + 1000) * 1000 + .5)) ,3), 255)
130 RETURN

Subroutine for four decimal places:
100 DC$ = RIGHT$ (STR$ (INT (DC + (DC < 0) * 1 + (DC > = 0) * .00005)) + "." + RIGHT$ (STR$ (INT ((ABS (DC) + 10000) * 10000 + .5)) ,4), 255)
130 RETURN

AWA concluded from 6

Existing TO Updates

After a long quiet spell, when not much was seen to be moving at Beagle Bros, they announce some new products and have released some updates (bug fixes, patches?) for DeskTools II, PowerPack, SpreadTools and Thesaurus.

If you are having problems with any of these TimeOut modules, contact a Beagle Buddy to get the update. You can get TimeOut updates from Beagle Bros directly, but because of overwhelming demand for which they feel are being requested simply to have the very latest version of each program, they have instituted a policy of charging for updates. So, use the Beagle Buddy who is close to you to get updates.

Improved SuperPatch

There is an improved version of SuperPatch (greater than 3.1) in circulation now. I have not had seen it yet but am looking forward getting it.

I was surprised when I counted how many of the 30 patches I use from the version of SuperPatch which I have. Between SuperPatch and CheckMate's Patch.Patch, I must be using nearly 30 patches in AppleWorks. It is amazing that they all work together without hanging AppleWorks, or crashing it.

SEG.PR EDITOR

This is an interesting utility to edit the printer drivers in AppleWorks. It works with both the built-in drivers and custom drivers. The utility will show what print codes the built-in drivers use, and allows changes to be made to the built-in drivers. This means that the standard drivers can be customized with codes for those overlooked printer features that were not implemented.

For the Custom driver, printer codes can be entered with a level of detail which is not possible in AppleWorks. For example, it is possible to enter the codes for proportional printing.

Just loading a printer driver can be interesting. With this editor, one can see what codes are used to implement printer features and how they were entered.

I encountered a problem in trying to use this utility. I had Tom try it and he had no problems. After talking to him, I retried the editor, saw essentially the same indications as I had before. I ran out of time to work with it. I'll get back to it later and write up the results here.

AppleWorks questions and tips from anyone are welcome. Send to: 7099 Hickory Drive N.E., Fridley, MN 55432. Include your address and phone number. Or call 612-572-9305, no collect calls. Dick

More Apples than IBM's sold in 1988
— but not a trend
San Jose, CA 1989 May 9
from AppleLink PE

For the first time since it entered the PC market in 1981, IBM has been surpassed by Apple Computer in PC unit sales. *Dataquest*, a market research firm, says Apple sold 1.27 million Macintosh and Apple II computers in 1988 while Big Blue sold 1.23 million personal computers.

Dataquest does not, however, think this is a trend. "IBM is finally getting its act together," says Steve Lair, an analyst with Dataquest. IBM PC sales fell 20 percent in 1988, but this year's new products and stronger marketing should allow IBM to regain its lead, he added.

Meanwhile, Dataquest also says IBM and Apple face an even greater threat than each other — overseas competition. They're losing market share to Taiwanese and Korean computer manufacturers, whose overall dollar sales surged 43 percent in the U.S. — that translates to 4.4 million machines sold here in 1988.

Portables, and specifically battery-powered portables will be the hottest growth area in the PC market through 1992, says Dataquest. (Ed. note; There has been a lot of speculation about such a product from Apple, but nothing has come onto the dealer's shelves. On the other hand, "the other computer manufacturer" has just announced two new additions into their product line... one of which is a laptop. I wonder if Dataquest had wind of this when they made the statement that the recent sales figures probably are *not a trend*.) Printers and optical storage devices will lead peripheral growth. Software firms will continue to earn well — last year revenues for the top 15 U.S. software companies grew 40 percent. And in telecommunications, fax machines, voice messaging, and cellular radio will sell well.

However, Dataquest's President Manny Fernandez says growth in the U.S. market will be nothing compared to that in Europe which will follow the integration of the European Community in 1992. Fernandez says the Japanese are already taking steps to grab the lead by committing $600 million to build a wafer fabrication plant in Britain. "Today's global market requires companies to set up manufacturing and research in overseas markets," Fernandez said. "The days when you could just manufacture in one country and sell everywhere else, those days are over."
(Wendy Woods/19890513/Press Contact: Lois Long, Dataquest, 408- 437-8309)

What's the new GS/OS?
Apple Announces Apple IIGS System Software 5.0
May 5, AppleFest, Boston

Apple announced new system software for the Apple IIGS. The new system meets the needs of both network and standalone users. It includes a network-aware Finder that provides access to AppleShare file servers and network printers, performance enhancements to the Toolbox, and a graphics-based Control Panel.

Customers using networked Apple IIGS systems [with AppleShare File Server and AppleShare Print Server software will find that Version 5.0 provides the following benefits: — Reduced floppy disk management and powerful print and file sharing services, with easy access to network resources; — AppleShare log-on using the new graphics-based Control Panel; — Networked printers available for selection from the Control Panel; — AppleShare server volumes visible and accessible from the desktop.

Apple IIGS System Software Version 5.0, available later this summer, will replace Version 4.0 and AppleShare IIGS Workstation Software when it becomes available. The product will be available as a system update, and will be packed in with all new Apple IIGS computers. The software requires at least 512K of RAM for an individual system, at least 768K of RAM for a networked system, and ROM version 01 or later.

Overview:
The Apple IIGS System Software Version 5.0 gives you all the advantages of the latest system software for the Apple IIGS personal computer. It features GS/OS, an operating system that improves the startup time and speeds up disk access, program launching, and file copy and transfer tasks.

GS/OS includes File System Translators (FSTs) that enable applications to directly access files created using other file systems. For example, the ISO/High Sierra FST allows you to run CD-ROM applications with the ISO/High Sierra standard, and AppleShare FST gives you access to files on AppleShare file servers.

The Apple IIGS System Software Version 5.0 also offers several features that significantly improve the computer's functionality and ease of use.

The Finder (a graphics-based interface that allows you to manipulate files on the desktop) is now easier to use, faster, and more informative than earlier versions. It has also been revised to allow access to the AppleTalk Network System, so you can share programs and data located on an AppleShare file server, and networked printers, with other AppleShare users.

Another important feature is the new graphics-based Control panel, access from the Finder via the Apple menu. You can use the Control Panel to set the time and date, raise or lower the sound volume, log on to network servers, configure slot assignments, and even change screen borders or background and text colors.

Version 5.0 includes the Advanced Disk Utility, which features an easy-to-use, graphics-based interface and allows you to initialize, erase, and partition hard disks, as well as both 5.25- and 3.5-inch floppy disks. You also get the Installer utility, which lets you update your startup disks and customize their configuration for your system and its attached peripherals.

$2 Million Donation
Apple Donates $2 Million in Computers to Schools
from AppleLink Personal Edition
CUPERTINO. California. June 9, 1989

With the help of Apple Computer, elementary and junior high students at a school in rural Louisiana, will be working together this fall using computers to transform oral histories from students families into an electronic audiovisual encyclopedia of their local culture. And, in Philadelphia, inner-city high schoolers will use computers for the first time to study botany in a renovated greenhouse.

These school projects, plus 21 others around the country, have received computer grants valued in excess of $2 million from Apple Computer, Inc. The awards were made through Apple's Eduction Grants program called Equal Time, now in its third consecutive year; 1989 marks the tenth anniversary of the Apple Education Grants program.

For the past several years our grants have specifically focused on innovative approaches to learning for students at risk of academic failure, said Andrea Gonzales, Education Grants program officer.

Gonzales cites some of the formidable barriers keeping students from experiencing academic success: economic hardship; limited English proficiency; teen pregnancy and parenting; incarceration or adjudication; physical, mental, and emotional disabilities; and bias and discrimination.

Any one of these factors can cause a student to fall behind academically, she notes. And once they start to lag, school often becomes a continuing exercise in failure that eventually leads them to dropping out. Technology can be a powerful tool for teachers trying to turn this situation around.

One school in Florida will use its computer grant to create a learning environment that will give seventh and eighth graders who have fallen a year behind their peers, a chance to make up two years of school in a single year. Along with their intensive academic coursework, students will use computers to design, produce, and market T-shirts. These interdisciplinary activities are designed to encourage teamwork, peer teaching and practical application of academic skills such as graphic arts, advertising, sales strategies, and accounting.

Selection criteria for the grants, included demonstrated need and a clear plan of how technology would be used to develop new learning environments for at-risk students. Grants consisted of Apple IIe, Apple IIGS and Macintosh personal computer systems, plus printers, disk drives, and additional Apple equipment as needed. Up to 20 systems were awarded to a single project. Depending on their hardware configurations, grantees received software from Apple and/or Claris Corporation, access to a telecommunications network, and technical support.

Included in the awards were $80,000 in computer systems made as seed grants to a number of schools that participated in this years competitive grant cycle. These smaller grants are intended to enable the schools to begin developing projects that range from software development for students learning English to improved technology access for the disabled.

Apple, the Apple logo, Apple IIGS and Macintosh are registered trademarks of Apple Computer, Inc.

(Summaries of school projects receiving Apple awards are available upon request.)

(Ed. note: Recently saw an article on a local bulletin board about (the other comuter). Seems that Apple may not be the only one to try this type of promotion to get their keyboards into the education market. Although it is a 3 year plan, (the other computer manufacturer) is beginning a $25 million grant program for teacher prep and for innovative classroom applications. Looks like Apple will have to eat a little dust on this one!)

Apple II Video Overlay Card?

The Apple II Video Overlay Card, for the Apple IIe and IIGS, allows you to superimpose Apple II screen images on top of video from an external source (VCR, videodisc, video camera, or live TV signal), and display the combined video and graphic images on a monitor (RGB or composite) or record them on a VCR.

—The Apple II Video Overlay Card integrates external video into the Apple II environment, bringing professional video capabilities to the desktop and opening a new world of possibilities for learning and creativity with the Apple II. You can annotate video materials to clarify or highlight information, create dazzling videos for education and home use, or create and view single-screen interactive applications. (Explore the applications of this product in the "Applications" area, then post your own ideas on the "Applications" and "Graphics" message boards, in The Video Room, in Apple Headquarters.)

—The Apple II Video Overlay Card is backward-compatible. It works with all Apple II software, so you can get started right away with software you probably already own. Paint, animation, presentation, authoring, and titling packages are most appropriate for use with the card.

—The Apple II Video Overlay Card is easy to use: Once it's installed it's invisible - you can use your Apple II as you normally would, or start creating overlays right away. The card also ships with VideoMix software (a IIGS desk accessory and a IIe application) that allows you to easily control features of the card and quickly test many combinations of video and graphics.

—The Apple II Video Overlay Card is versatile. It works in a number of video and display configurations, providing you with maximum flexibility for creative applications.

Trouble Shoot, concluded from Page 6

You have selected your AppleWorks disk as the location of your applications when you have 5.25 inch disk drives. (See above)

Your applications disk is not in the drive. When you get this message, just put the disk in the drive and select "Try again" from the menu.

You have not copied your applications to the location you specified during TimeOut installation. For example, if you entered the pathname "/Hard1/ AppleWorks" as the location of your applications, TimeOut will not be able to find your applications unless you have copied them to "/Hard1/AppleWorks". Selecting "Copy files to TimeOut applications disk" from the TimeOut installation menu will solve the problem.

You have more that one TimeOut program, and AppleWorks sometimes crashes when you enter or leave a TimeOut accessory.

If AppleWorks or one of the TimeOut programs crashes mysteriously, it could be that you have a version of TimeOut installed which is incompatible with the version of Utilities you are using. Every TimeOut program disk comes with a file called "TO.UTILITIES". This program and the version of TimeOut on each disk work together. If you have installed TimeOut from one disk and are using the Utilities program from a different disk, strange things can happen.

The fix is simple. Boot up all of your TimeOut program disks and find the one that has the most recent version of TimeOut on it. Then install TimeOut again with this disk and copy the file "TO.UTILITIES" from the SAME disk to your applications disk.

This article will continue in a future issue. Look for "New Beagle Bros," part 2.

New Macintosh System Software Previewed
San Jose, CA 1989 May 9
from AppleLink Personal Edition

Before an audience of an estimated 1,500 software and hardware developers, Apple Computer provided a preview of its newest operating system. The **System Version 7.0**, said to be fully compatible with earlier and "future" Macintosh operating systems, is designed to exploit more of the power inherent in Motorola's 68030 microprocessor, and allows the Macintosh to compete with features inherent in OS/2 and Unix on just two megabytes of memory.

System Version 7.0 provides the machines with virtual memory, or the ability to use a hard disk as if it were additional random access memory, and 32-bit addressing, which will expand the maximum memory addressable by applications. These two attributes are part of the new Interapplication Communications Architecture. This will allow applications to exchange data and instructions either on a single Macintosh or over a network, providing a "live copy/ paste" function between applications.

Apple's new System Version 7.0 will also allow the computer to better utilize the multitasking-like features of MultiFinder — performing several tasks at once. This operating system, however, will not provide for true multitasking, something observers don't expect to see until Version 8.0 comes out.

New imaging software, called **Outline** fonts and **Layout Manager**, give Macintoshes more what-you-see-is-what-you-get on screen; Outline fonts are mathematical descriptions of text that can be scaled to any point size at any resolution. The Layout Manager provides typographical quality text layout.

In addition, a new print architecture should allow Macs to work with more printers and output devices. And a new **Finder** will be more intuitive, extensible, and will allow more direct manipulation techniques, according to Apple.

Apple also announced a new **Communications Toolbox**, which is a set of common routines, functions, and features that provide software developers with standard programming interfaces to date connection, terminal emulation, and file transfer capabilities. It also provides end-users with consistent user interfaces across all applications.

The best Apple could say about further details and availability of all this was that it would come "later this year."

(Wendy Woods/19890513/Press Contact: Cindy McCaffrey, Apple, 408-974-1578)

### Current Apple System software available through Mini'app'les:

Software	Ver	Date	Format
II, II+, //c, //e			
DOS 3.3 Master	n/a	09/10/85	5.25"
ProDOS 8	1.7	06/13/88	5.25"
Apple IIGS			
GS/OS Syst. Disk	4.0	08/18/88	3.5"
GS/OS Syst. Tools	4.0	08/18/88	3.5"
Macintosh			
System Tools	6.0.3	12/9/88	3.5"
Print Tools	6.0.3	12/9/88	3.5"
Utilities 1	6.0.3	12/9/88	3.5"
Utilities 2	6.0.3	12/9/88	3.5"
HyperCard	1.2	04/25/88	3.5"
H. C. Update	1.2.2	05/25/88	3.5"
ImageWriter LQ Disk 1		2.0	7/18/88
ImageWriter II/LQ AppleTalk		2.0	7/18/88

Apple System Software disk prices are as follows:

3.5" Systems disks $3.00 each.
5.25" Systems disks $1.00 each.

Notes:
• The Macintosh System Tools and Utilities disks are available only as a set of 4 disks.
• ProDOS requires 64K of memory on the Apple II and II+
• GS/OS System Disk and System Tools are available only as a set of 2 disks.

MaceDOM #808
Stackware 6 (800K)
by Bob Fellows
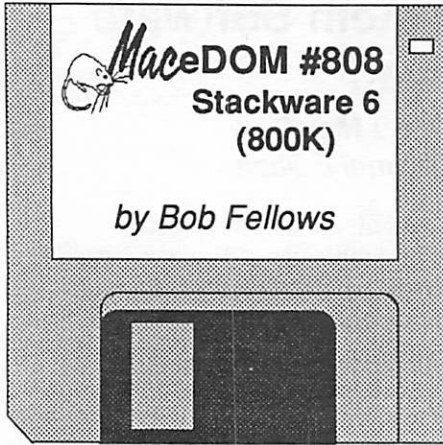
This 800K Macintosh Educational Disk of the Month was assembled by Bob Fellows for the Macintosh Special Interest Group of Mini'app'les, the Minnesota Apple Computer Users Group, Inc. Additional copies of this disk may be obtained at the MacSIG meetings: $5.00 for club members and $10.00 for non-members. They can also be mail-ordered by writing to:

Mini'app'les
Attention: MacEDOM sales
P.O. Box 796
Hopkins, MN 55343

Please add $1.00 for shipping.

The files contained on this EDOM #808 are briefly described below. Some contain their own more detailed documentation. Some are also shareware – if you like and use them, please pay the shareware fee. WARNING: These have not been fully tested on all machines and System/Finder versions. So be careful with them at first.

MacUser Tips 1.5

MacUser Tips Stack contains tips on all aspects of using the Macintosh that have been compiled from MacUser magazines from June 1986 to January 1988. The first stack is an icon-based stack listing the subjects. The second stack is an index of headers about the tips. The third stack contains the tips. First open the stack titled "MacUser Tips v1.5." There's a lot of great information here.

Power Tools
by Mark Spaulding and Jerry Daniels

Power Tools adds a script to your home card so that when you press the ENTER key, the tool moves from the Browse Tool to the Button Tool to the Field Tool. When you press SHIFT-ENTER, the tool moves from the Selection Tool to the Lasso, etc. To return to the Browse Tool, simply press ENTER. No more pulling down the Tools Menu when you don't want to!

Magic Stacks 1.1
by Bob Fellows

Magic Stacks (Version 1.1) is a system of six interactive HyperCard stacks that are designed especially for public speakers, entertainers, performers, and consultants. It is based on the experience of a professional magician, lecturer and consultant.

It is an organizing system that also fills a need for many other types of self-employed people who travel, and must sometimes be away from their computer. Notice that it is not one of the "every morning when you turn on your computer, you will see what you have to do that day" variety of programs. If you're experienced with HyperCard, you'll get some good ideas from this, and you'll be able to customize it for your needs. This is shareware.

MacGroceries
by Tom Cleland

MacGroceries can be used by anyone who buys groceries. It has three main features:
1) You check the meals you want to have, and it automatically takes everything you need to buy and puts it on the list.
2) For items that you buy periodically, it looks at your past shopping patterns and predicts what you'll need in the future.
3) It groups related items together on your list, and can even be sorted by aisle number! MacGroceries is a free, public domain stack.

News Flash
By Funnius Bonus
(Courtesy of ICON, Association of Apple 32 Users, June 1989)
Slightly edited by Dan Buchler
Apple Announces Floating Point Roman Numeral Coprocessor for Mac II

On April 1, Apple issued a significant new product announcement that has received very little attention in the press. With the New Floating Point Roman Numeral Coprocessor Card, Apple is attempting to augment the computing capability of many of their workstation users, The card has these basic features:
- XXIV Digit Precision
- No Divide-by-zero errors
- OldBus compatible
- Square roots converted to cubits
- Single VV Power Supply
- Built-in abacus to Roman conversions

The Floating Point Roman Numeral Coprocessor is based on a complex monolithic LSIV device designed to provide high performance floating point arithmetic functions in Roman Numeral formats. In typical applications this part replaces at least VL scribes working in III shifts VII days per week.

The card offers several interface options. The input accepts data from standard floppy discus. Standard output is to clay tablets, but an optional output port provides a direct interface to a heavy duty impact printer for enscribing marble documents. III-column outputs may be Doric, Ionic or Corinthian.

The exponent field of the floating point format takes advantage of a new compact structure called Quad Extended Decimal (Q.E.D). The mantissa uses the ad-hoc rounding standard (i.e. IEEE). Overflow errors caused by Vesuvius functions are automatically processed by the Pompeii algorithm. Allowed signal rise and fall times are quite long but never exceed MCMLXXXIX seconds.

Availability is reported to be soon after the Ides of March. The price will be $CXII each.

32 Bits, and Not a Quarter in the Bunch
June Mac User Meeting
by Tom Edwards

QuickDraw. Sounds like a title for a western. But the newest QuickDraw runs on 32 bits, not hay and oats. And you might see a scene from the west with it, but you can do it from the comfort of your easy chair instead of the sweaty leather of a saddle.

QuickDraw is the program that scurries around behind your Mac screen, letting you put boxes, text, patterns lines and circles into windows... the Mac kind. Apple recently (May, 1989) announced a revision to this software. Software that is as old as the Mac. Now it's called "32 Bit QuickDraw, vers. 1.0" and has learned about color, as well as levels of gray. Originally, QuickDraw only had to worry about whether a screen pixel was on or off (white or black). Now, it can show you any one of 16 million+ colors for that pixel, if you have enough pixels on your screen to do it.

"Quick" in the name...

didn't do much to speed up its arrival on the scene. The hardware to allow this has been languishing in the back rooms of developers for more than a year. That's part of what the Mac User Group learned at the June meeting. All this color graphic stuff was the focus of our presentation from **ProActive Marketing**, reps for a whole bunch of computer and graphic-related items. The presenters were intro-duced by Mac User Coordinator, *David Stovall*, who brought *Marty Probst* and *Joe Barnes* to the podium to demonstrate and describe what this "full color" addition to the Mac does, what you need to get it, and why you just can't live without it.

Now don't all rush down to your Apple dealer thinking that just a few thousand bytes of new System code will suddenly turn your Mac screen into a mini TV. Be prepared to show that you are the owner of a Mac II-type computer, have a private pipeline to the Fort Knox vaults and are just itching to open up the top of the old confuser, plug in a card and color monitor

and hook up a *mass*-storage. Once you've got all of these minor details out of the way, then you can sit back and be amazed by COLOR, screen videos, video titling, process color separations, video frame capture in 1/30th of a second, color scans and much more.

No question about it, this is heady stuff. Apple is banking on a bigger splash with this "missing link" added into the Mac graphics spec than DeskTop Publishing provided. The enabling that is coming from this is stuff that is being freed from the relm of mini's and mega-dollar dedicated systems. No longer do you need a Cray in the closet to conjure up all of these graphical knockouts. Now you can do it with your lil' ol' Mac

Apple set the stage when they embraced a technology that had been proven on (that other computer), a system pioneered by Truevision. The result is a board that plugs into the NuBus of the Mac II, aptly named NuVista (and there are coming

Color QuickDraw

Apple announces extension to Color QuickDraw and LaserWriter driver

Apple Computer, Inc. has introduced an extension to **Color QuickDraw™** that supports up to 32 bits per pixel, allowing Macintosh personal computers to process and display photo-quality documents, images and visualizations with exceptional color clarity. The announcement was made as part of Apple's participation in the National Computer Graphics Association show here.

Apple also introduced **LaserWriter 6.0**, a new version of Apple's PostScript printer driver that includes color extensions. The new driver enables most existing color Macintosh applications to print in color on color PostScript printers. It also significantly improves the quality of black-and-white output produced when color images are printed on Apple LaserWriter printers.

Color QuickDraw, Apple's graphic system software for its 68020- and 68030-based Macintosh personal computers, has been extended from an 8-bit-per-pixel mode to a 16- or 32-bit-per-pixel mode, allowing thousands or millions of colors to be displayed. Using a color or gray-scale monitor with a Macintosh II, IIcx, IIx or SE/30 personal computer, 32-Bit QuickDraw allows customers to manipulate 24-bit images with many color paint packages, scanners and printers that support 32-Bit QuickDraw. 32-Bit QuickDraw supports the use of up to 24 bits of color; the additional 8 bits of information are typically used by application developers for transparency in applications.

Major enhancements in 32-Bit QuickDraw include support for 16- and 24-bit color, allowing for thousands or millions of colors; approximation of color for 16- and 24-bit images at lower resolutions via dithering; compression in file formats; more gray levels in gray-scale mode; and a new version of the Monitors Control Panel.

"32-Bit QuickDraw changes the way customers look at the Macintosh," said Jim Davis, director of System Software Marketing. "It provides smooth shading and transitions in graphs and slides for truly lifelike images and textures. With 32-Bit QuickDraw on the Macintosh, Apple offers its customers a superior platform for working with image graphics."

32-Bit QuickDraw runs on all 68020- and 68030-based Macintosh computers (the Macintosh SE/30, Macintosh IIcx, Macintosh II and Macintosh IIx) with System Software Version 6.0.3. Because color-intensive applications often require large amounts of memory, Apple recommends using at least 2MB of RAM.

To see the broad range of colors that 32-Bit QuickDraw supports users will need a 16-, 24- or 32-bit video card from third-party manufacturers and applications that take advantage of 32-Bit QuickDraw. 32-Bit QuickDraw also makes it possible to manipulate high-quality color images without a video card.

The 32-Bit QuickDraw project was a direct result of Apple's close cooperative work with a number of third-party developers. Companies demonstrating products that support 32-Bit QuickDraw in Apple's booth at NCGA include BarneyScan, Visual Information, Electric Image, SuperMac Technology, Tektronix, Radius, and Intergraph Corp.

32 Bits, concluded from Page 13

boards from other companies as well). If 32 Bit QuickDraw can pull all of this together, you will have 8 bits of data assigned to each pixel for each of the three primary colors. That's enough to define a lot of information about that pixel.

"What about the other 8..."

you may ask? That extra slop is up to the developer to play around with. The first 24 bits are all that are needed for the 16 million+ colors. That's a screen about 4 feet by 4 feet, at today's resolution. The extra bits can be used to do tricks like text overlays and windows inside the main picture. Impressive? You bet. Watch for a 32 bit QuickDraw picture coming to a screen near you soon!

Other stuff...

from the MacUser meeting included a round of introductions of some new faces and a Q/A session. Here's a sample of some of the things of interest to members on this meeting night:

- Memory! Prices seem to be easing down even more. Recent buyers paid about $150-$160 per megabyte SIMM. Some ads (MacWeek) hint at prices in the $130 range. Dave Stovall claims that he's hanging on for the under-$100 push!
- Those who want to work with disks and data from (that other system), can look to the **DynaFile** drive, or the **Rapport** drive (from the folks who developed the Apple SuperDrive). These solutions come when you part with about $595 or $295, respectfully.
- Locally-based **Springboard** software is reported to be working on a PageMaker-killer upgrade for their Publisher program for the Mac. Version 1.x had a lot of capability for a most reasonable price. With the "power" features hinted at in this coming edition, it could become a fair alternative for a larger audience if the price is held in the range of reason.
- Export text from HyperCard? Yup. Hack up your own button for this, or

look for a PD or commercial program to make the exportin' easy.

- **SuperCard.** All of the Mac rags have hyped this HyperCard alternative to the hilt. Since this is a family newsletter, I am unable to bring you the one-word evaluation provided by one of the club's heavy users of HyperCard. To say the least, this program has a long way to go before it can approach the utility and elegance of the inspiration program. HyperCard may have faults or shortcomings, but they pale before the hackneyed excuse offered with the current version of SuperCard.

And in the wings...

are more programs scheduled by the Mac User Group that we hope will warm the chips of your motherboard. In July, ProActive will return to show more goodies for your Mac, including **Soft PC**, a way to turn your Mac zoomer into (that other computer). Perhaps they can also come up with a conclusion to the 32 Bit QuickDraw presentation, which seemed to be cut short by an early-release copy of this software. (Where's the RAID?)

August will see **Hewlett Packard** make a presentation of new printer additions that are intended to provide a laser-quality alternative to some of the Apple products. DeskJet+ and DeskWriter are two of the names bantered about for this meeting. Don't miss 'em!

More bytes later...
TWE

MacWrite II

A Review:

By Dan Gutman

Rambo II" and "Rocky II" may have gotten more press, but the recent release of "MacWrite II" (Claris, $249) is a milestone for the 750,000 users of this popular word processing program.

For the last four years, this column has been written with "MacWrite," the original Macintosh word processor. Sad but true, I have found it to be the ONLY completely easy-to-use computer program I've ever tried. I don't think I've looked at the instructions once.

Some computerists look down their noses at "MacWrite" users, because it isn't jam-packed with features like its bestselling competitor "Microsoft Word." That never bothered me. If a word processor is easy to use and gets the job done, I don't care if it doesn't have dozens of fancy features.

With "MacWrite II," many of those features are available. The program will now count the number of words in a document, a big help for a writer on deadline, I'll tell you. You can also open up to seven windows on the screen at once, which makes it easy to cut and paste between documents.

Putting more than one column of text on a page is a nice new feature, and it is also possible to preview a smaller version of the page so you know what it will look like before you print it out.

I found it useful to be able to save things in the formats of other Macintosh word processors. Sometimes I've had to swap disks with people who don't use "MacWrite," and this makes it easier to translate text.

All together, there are more than 50 new features in "MacWrite II," and many of them have a direct effect on the way I work.

Unfortunately, "MacWrite II" is not as intuitive as "MacWrite" was. The new version gives up some of its ease of use for the sake of power.

In old "MacWrite," for example, a click of your mouse would change a document from single spacing to double spacing and back again. Now you have to do a SELECT ALL command first.

In old "MacWrite," you always knew what page you were on, because the number was right in the "scroll box" at the right of the screen. Now it's at the bottom left, and not as easy to scan as you're writing.

A new feature in "MacWrite II" is horizontal scrolling. I have always found this to be annoying. If you haven't set your margins perfectly, you will sometimes come to the end of a line and the entire screen shifts over.

"MacWrite II" puts a header and footer at the top and bottom of each page automatically, but I don't LIKE headers and footers and resent having to remove them. Headers and footers mean less lines on the page, and more scrolling up and down. When I'm writing, I want to do as little scrolling as possible.

Many people, I'm sure, have requested all these added features and will be happy with them. For me, they get in the way of the simplicity of "MacWrite."

RIFF about TIFF
Mac DeskTop Publishing Meeting, May
by Tom Edwards

The Mac is a graphical machine. That's why you work with all of those icons, boxes and buttons. It's all pretty straight forward when you see it on the screen. And most of us could care less what goes on behind the face of the screen in order to make all of that happen for us.

But the shoe's on the other foot when you are the one who has to know all about those graphical comings and goings. That's the dilemma for the artist and DTP'er who must work with graphics on the Mac. Scanned in halftones, line art, PICT files from drawing programs, EPS from a passel of programs, scrapbooks and special file formats by programs such as Illustrator and FreeHand. Sure, they all have something in common... they are Mac files that show pictures of things... things that you may want to alter, then print out for a client.

And there's the rub. Somehow you've got to be able to gain access to that file, do your thing, then save it (perhaps in a different file format, even) to be accessed by yet another program and output device. This might be simple, if there was but one format to manage, as in the days of MacPaint. The bitmap format from MacPaint is a replication of the screen, dot for dot. Though it was astounding when Mac came out (is that just a bit more than five years ago?), progress' middle name is "Change." Now there are formats that exceed the screen's 72 dot-per-inch pace by several factors. Other formats don't even mess with which dot is on or off; they use formulas to define each part of the graphic as an object... a line, a circle, a curve, a box and so on.

Help is on the way...

but it will take more than one session to sort all of this out to where an average user has a handle on all of this. *Bob Grant* is a guy who works with this a lot, and continues to be amazed by the diversity of these formats. At the invitation of *Chuck Bjorgen*, S.I.G. Coordinator for the DTP group, Bob tried to pull some of this together for the folks gathered at First Tech for the May meeting.

TIFF (Tagged Image Format File) was to be a "standard" for this advancement in graphic detail. This format is used for high resolution bit maps of scanned images, ranging from simple high-density "dot on, dot off" needs to more complex "gray scale" or color files where the degree of brightness or hue of color also has to be tracked. Although those who agreed to the TIFF concept may indeed be keeping in the corral that they defined, some just build a cook shack, and others a rambling palace for what goes on inside of the fence.

Each program that uses these various file formats (PageMaker, Xpress, ReadySetGo!, CricketDraw and many more) may work with them in different ways, too. This adds to the confusion... the slickest thing since sliced bread in one program may do nothing more than create error messages or no reaction at all in another. Once you have a right track figured out, venture into other modes with a cautious step.

Don't despair...

for there is a hint of unification on the horizon. If your favorite graphics program won't open the file of choice, there may be a DA or utility program that will, and then let you save the file into another format for that favorite graphic program of yours. OpenIt! and The Curator are but two of the possibilities. Check about and you may well find just the secret key that you need to sneak you over the top of the hill for the easy coast down the other side of the slope.

Speaking of utilities...

there has been some press recently about a neat little DA called **SmartArt** lets you create some "special effects" EPS (Encapsulated PostScript) on the fly. With ease and finesse, this program enables some special manipulations that the "biggie" programs can't do, or do in awkward ways. Reports are that distributors sold out their stocks in as little as two days. If you need such an animal, it might pay to check this out for a future buy.

More bytes later...
TWE

Macintosh IIcx Internal Hard Disk Drives
Downloaded from AppleLink

Internal 3.5" 40MB and 80MB hard disk drives are available as system enhancements for Macintosh IIcx users. The drives come with the Macintosh IIcx carrier, owner's guide, setup disk and limited warranty card. These drives are the same as the Macintosh Internal 40SC and 80SC drives, except for the mounting bracket. Specifications for these drives are in the table below.

Description	40MB	80MB
Drive Diameter:	3.5"	3.5"
Capacity (mB):	40.0	80.0
Bytes per block:	512	512
Total disk blocks:	82,020	163,940
Ave seek time (ms):	30ms	20ms
Transfer rate (MB/s):	1.25MB	1.25MB
Interface:	SCSI	SCSI

Installation and service are provided through authorized Apple Service Providers.

Macintosh IIcx Internal 40SC Hard Disk Order Number: M0283 Macintosh IIcx Internal 80SC Hard Disk Order Number: M0284

AppleCare for these products is provided under the respective CPU configuration (SC00081 and SC00082) and under the internal 40SC Hard Disk (SC00062) and the 80SC Hard Disk (SC00063).

Apple Network Blitz

Apple announces a slew of networking products

Introduced and edited by Dan Buchler

On June 12, 1989, Apple announced a group of Networking and Communications products. Many of the products (below) are based on a new AppleTalk called AppleTalk Phase 2. This is a software change. No ROM changes needed in any Mac. To the average person with a single Mac or a Mac with a LaserWriter, this will probably not make any difference. But to users of medium and large networks, this is a significant change. AppleTalk Phase II removes many of the previous limitations and problems inherent in large AppleTalk networks. One thing it is not is a faster LocalTalk. LocalTalk still runs at 230Kbits/sec. Apples concept is to integrate EtherNet, TokenRing and LocalTalk into the same network in order effect performance improvements. If you want a fast network, hang all your Macs on EtherNet. You could do this before, but you were limited to 254 devices on the EtherTalk side. Now you can have 16,000,000. At the same time you can control the traffic on that network more effectively through the new products. Here are the products:

❑ AppleTalk (R) Internet Router (M0705): a networking software application for Macintosh Plus, SE, SE/30 and Macintosh II family computers that allows AppleTalk networks such as LocalTalk (TM), EtherTalk (TM), and TokenTalk (TM) to be interconnected to form an internet. (Available for ordering now; shipping later this summer.)

❑ AppleShare (R) PC, Version 2.0 (M0098LL/A): the newest AppleShare PC software which provides users of MS-DOS (R) personal computers with access to the full range of AppleTalk network system services including extended AppleTalk addressing and enhanced internet routing. (Available for ordering now; shipping later this summer.) *This allows a PC with a standard EtherNet board to talk to an AppleShare server that is connected directly or indirectly to that EtherNet system.*

❑ LocalTalk PC Card and AppleShare PC Bundle (B0040LL/B): bundle which combines the LocalTalk PC card with AppleShare PC, Version 2.0 (see above). (Available for ordering now; shipping later this summer.)

❑ EtherTalk, Version 2.0: an upgrade that brings AppleTalk Phase 2 benefits to EtherTalk Interface Card users, making possible larger IEEE 802.3 Ethernet networks as well as such support services as LaserWriters, file servers, and mail systems located on AppleTalk internets. (Upgrade available to current EtherTalk owners later this summer.)

❑ EtherTalk for A/UX, Version 2: an upgrade that provides A/UX users with EtherTalk printing support and an A/UX programming interface to AppleTalk protocols. (Upgrade available to current EtherTalk A/UX owners later this summer.)

❑ MacX (TM): a new X-Window display server which provides access to X-Window-based applications running on remote hosts (DEC VAXes, Sun or Apollo workstations, CRAYs (R), etc.) (Available for ordering from APDA later this year.)

❑ MacX25: software which, when used in conjunction with the new Apple Serial NB Card, enables Macintosh users to access information on distant host systems connected to packet-switched networks (PSN). It includes MacPAD software which provides packet assembler/disassembler connectivity to PSNs and a MacX25 Programming Library is available separately as a developer's tool. (All will be available for ordering through APDA later this year.)

❑ CL/1 (TM) Servers: servers which enable applications supporting CL/1 to access data residing on IBM's Database 2 (DB2) relational database management systems (DBMS) on MVS/TSO, and IBM's Structured Query Language/Data System (SQL/DS) on VM/CMS. (Available for ordering later this year.)

❑ The Apple Data Modem 2400: This product offers a basic networking component for wide area communications. To allow communication with the majority of data modems on the market, this product was designed to be compatible with industry standards.

The Apple Data Modem 2400 supports 2400 bps, 1200 bps and 300 bps transmission speed; Bell 103, Bell 212A, CCITT V.22A/B and CCITT V.22bis modulation techniques; and the Hayes AT command set with extensions. This standardization gives access to applications and information from a variety of remote hosts, databases, and on-line information services.

The Apple Data Modem 2400 has a built-in error correction feature called Microcom Networking Protocol (MNP), that controls errors during data transmission. With this higher speed modem, users will be able to decrease networking costs wihtout compromsiing the integrity of the information being transmitted and received.

System Requirements: Any Apple CPU and appropriate data connection cable. The Apple Data Modem 2400 is available for ordering now, and will ship later this summer.

New FONT Format

from AppleLink Personal Edition

SAN JOSE, California May 9, 1989

Apple Computer, Inc. today announced to developers a new technology for creating sharp text on any screen or printer at any size using the Macintosh personal computer. The announcement was made as part of Apple's preview of core system software technologies at the 1989 Worldwide Developers Conference here.

Outline fonts are mathematical descriptions of text characters that allow the Macintosh computer to accurately display text at any size on any screen or printer. Currently bit-map fonts, while providing a degree of WYSIWYG, are limited in their ability to display or print any point size at any resolution. The new technology will provide Macintosh customers with full functionality on existing and future Macintosh computers. Most software applications will take advantage of the new fonts with little or no revision.

"Apple has brought the type quality that was only available on expensive and custom publishing systems to the Macintosh," said Jean-Louis Gassee, president of Apple Products. "The addition of this important technology to Macintosh System Software brings the advantages and power of high-end font formats to the desktop, providing our customers with high-quality text at any size on any screen or printer."

Apple is developing the new font format to be integrated into current and future Macintosh architectures. Throughout the development process Apple has consulted with many leading font vendors, which have provided years of experience in font technology. Combined with the Layout Manager, another core technology announced to developers today, the new fonts will deliver sophisticated typographical control to any Macintosh application. The result is a font format that is fast, flexible and capable of superior quality at all resolutions—from high-end typesetting to screen displays.

The format includes the specifications for a powerful "instruction set" that controls characters at small sizes for printing or screen display, while preserving excellent quality at high resolutions.

"Until now, these techniques for achieving sharp text at small sizes were not available to all type vendors," said Jim Gable, Apple product manager for digital type. "Apple is now giving type vendors equal access to a major new software category on he Macintosh."

The new font format will be published in future editions of Inside Macintosh, Apple's technical reference guidelines. Type vendors will not be required to negotiate royalties or sign licenses from Apple to obtain the font format.

The new font format was announced as one of several core technologies being developed for the next major release of Macintosh System Software. Apple plans to announce the complete System 7.0 features and customer availability later this year.

Third-party support

In conjunction with Apple's announcement, several leading typography, software and hardware firms announced that they will implement Apple's new font format. Many of these vendors assisted Apple in the development of the new format.

The following vendors announced support for Apple's new font format:

Type vendors:
AGFA Compugraphic, Wilmington, Mass. Bigelow & Holmes, Menlo Park, Calif. Bitstream, Inc., Cambridge, Mass. The Font Bureau, New York, N.Y. Typeface Corp., New York, N.Y. Kingsley/ATF, Tucson, Ariz. Linotype AG, Eschborn, West Germany Monotype Corp., Salfords, England URW Unternehmensbertung, Hamburg, West Germany

Software developers:
Altsys Corp., Plano, Texas Broderbund Software, San Rafael, Calif. Casady & Greene, Carmel, Calif. Cricket Software, Malvern, Pa. Letraset USA, Paramus, N.J. Palomar Software, Oceanside, Calif.

Hardware developers:
GCC Technology, Waltham, Mass. Hewlett-Packard, San Diego, Calif. Mirus Corp., Santa Clara, Calif. Tektronix, Inc., Beaverton, Ore.

Adobe Systems, Inc. today announced that it will provide a utility that converts Apple fonts to the Adobe PostScript format. This announcement assures Macintosh customers that Apple's fonts can be printed on all Macintosh devices, including PostScript printers.

Apple also is currently discussing the new format with Tegra/Varityper, Inc. and many other companies. Apple anticipates that other companies will make announcements to implement the new font format in the next several months.

SE/30 Logic Board Upgrade

Downloaded from AppleLink

The Macintosh SE/30 Logic Board Upgrade(M0713) is now available for Macintosh SE owners who want to upgrade their computers.

The SE/30 logic board contains the Motorola 68030 microprocessor with the built in PMMU and the 68882 floating-point coprocessor. The board increases the speed of the SE up to four times, includes stereo sound capability, and provides support for the optional Apple FDHD 1.4MB internal drive. (Macintosh SE owners who choose to upgrade the logic board can still use the 800K drive in their systems.)

HyperCard Power Tips

(excerpted from Windoid #8)
by Phil Wyman, HyperCard Tester

1) If you are using Finder and not MultiFinder, there is a nice option you should know about. If you are in HyperCard, and you open an application, i.e., Microsoft Word, when you quit the open application, you return to HyperCard. However, if you want to go directly to the Finder and not back to HyperCard, hold down the Option key while quitting the application.

2) You can bring an object all the way to the top by using Shift-Command-Plus or send it all the way to the bottom with Shift-Command-Minus. Be very careful when using Command-Plus to bring a button or a field one object closer. If you hit Command Backspace (or Command Delete), which is right next to the Plus key, you will delete the card (if it's unprotected).

3) Scripts are not saved until you click OK in the script editor. Be sure to do this often, even if you're not finished working on your script. One problem I had was working for a long time fine-tuning a script and accidentally hitting Cancel instead of OK. You lose all your changes that way. Additionally, it's really smart to periodically save a copy of your stack as a backup.

4) Sometimes your "if then else's" don't indent properly and it's very difficult to understand why. Here's a couple of possible debug tips. 1) Look for an "exit <handlerName>", where handlerName is not the current handler. 2) Indent problems can also happen if you just say "if" and forget to say "then". For example, the following will not indent:

```
if x=0
put x into z
end if
```

5) If you click in the space beneath the last text entered in a field, you will get extra returns in the field down to the point where you clicked. If you don't want those extra returns, Shift-Clicking anywhere beneath the last of the text in a field puts the cursor directly after the last character of the field without putting in returns.

6) "Show all cards" shows each card once. However, "show cards" will keep showing all the cards in the stack forever—or until the mouse click, whichever comes first.

7) To clear a global variable, put empty into the variable.

8) If you were using 1.1 or 1.0.1 before you installed version 1.2, you may have kept your old Home stack. There are, however some nifty new handlers in the 1.2 Home stack script. You should add them to your home stack script. The new handlers do the following when typed into the message box:

"xy" puts the mouse location into the message box until the next mousedown.

"c" does a doMenu "Card Info..."

"b" does a doMenu "Bkgnd Info..."

"s" does a doMenu "Stack Info..."

Interestingly, if after typing "s" into the message box you press the Shift key when hitting the Enter key, you will get the script of the stack. This is the same as if you had chosen the menu item "Stack Info..." with the Shift key depressed.

9) To send a typed arrowKey in HyperTalk, use "arrowKey right", or "arrowKey left", etc.

10) From James Francis Redfern, HyperCard tester, comes a workaround for getting user Key Strokes: Show message window off-screen and have the user type into the message window. Then get what they typed.

11) You may already know that in the script editor, once you have done a "find", you can do a CMD-G to "Go" to the next occurrence of the found string. But an even neater way is to type CMD-H to find the next occurrence of the highlited string, without ever having done a find!

12) Sometimes, when you need to place a field or a button in the background, it's very difficult to tell where to place it since when you edit the background, the cards foreground information is not visible. A solution is to create the field or button on the card level in exactly the spot you would like it to appear, then select it and cut it. Then go into the Background and Paste it. It will be in exactly the right spot! Another workaround would be to just create it willy-nilly on the background, then go to the foreground (card level). You will then be able to manipulate your background buttons and fields from the foreground!

13) From Paul Foraker of HyperPro... If you want to paste into the message window, most people think that you first have to click in the empty message window with the mouse. Here's a shortcut which bypasses the mouse and keeps your fingers on the keyboard. Hit the Backspace (or Delete) key. This deletes any message you have in the message box. Even without a cursor in the message window, or any text in the message window, if you hit Backspace (or Delete) you will get a cursor in the empty message window. You can then paste without having to use the mouse to select the message window first.

14) To get to the end of a long script in a flash without scrolling, try CMD-A then right arrowKey!

15) You have to be careful when asking for the result. For instance, consider the following script:

```
find "findwhat"
put "test" into var
if the result is "not found" then answer "not found"
```

The above script won't answer "not found". The result has to be asked for on the next line of code:

```
find "findwhat"
if the result is "not found" then answer "not found"
put "test" into var
```

16) To test whether you have version 1.2.2, put the following handler in your stack script:

```
on openStack
if the long version < 01228000 then
(do whatever)
—you have an older version of
```

HyperCard Novice Corner #3

(excerpted from Windoid #8)
by Phil Wyman, HyperCard Tester

A message from Phil Russell of Waldport, Oregon, inspired me to write yet another Novice Corner. He writes, "WINDOID is great! Please give lots of 'rest of us' hints! I wouldn't know a global variable from a dead fish!"

Well, global variables are indeed too sticky a subject for the "rest of us" novices. So let's have some real fun painting with HyperCard!

To use the "paint" tools, we need to be sure that we're at a high enough user level to have access to those tools on our menubar. If that sounds confusing, bear with me. The fun will be worth the slight hassle. What we have to do to prepare is:

1) Be on the Home card. If you aren't, and are in another stack, choose "Home" from the "Go" Menu at the top of your screen. Otherwise, when you click on HyperCard in the Finder you will always be taken directly to the Home card. If your menubar is not visible, press both the Command key and the Spacebar to show it.

2) Click on the left arrow button at the bottom of your Home card to go to the User Preferences card. Here you can set your "userLevel".

3) Click on a user level of either Painting, Authoring, or Scripting.

4) Click on the right arrow at the bottom of your User Preferences card, and you should be back on your Home card.

5) From the Edit menu on top of your screen, choose "New Card".

OK. We now have a blank white card to paint on. Let's have some HyperCard paint fun.

6) Hold down the Option key while pressing the Tab key. This will put the tools palette in the middle of your card.

7) Click on the Rectangle tool, which is in the middle column right next to the Spray Can tool and below the Erasure tool.

8) From the Options menu on top of your screen, choose "Draw Multiple". Look at the Options menu again to be sure that the "Draw Multiple" choice is now checked with a checkmark.

Here comes the fun part. Click the mouse on a white portion of your blank card and hold the mouse button down. Move the mouse around. This is called dragging the mouse. You will get some nice effects. Try it with the Grid option checked both on and off.

You can erase what you draw by either double-clicking on the Erasure tool to erase everything you have drawn, or erase only the last thing you drew by pressing the Tilde key, located above the Tab key. A single click on the Erasure tool allows you use this tool to selectively erase parts of your painting.

For different effects, choose "Draw Centered" from the Options menu. Once again, click the mouse, hold the mouse button down, and move the mouse around. Try choosing the Oval tool from the tool palette and doing the same things we did with the Rectangle tool. The Oval tool is right below the Rectangle tool. The Shift key constrains the tools to perfect squares and circles.

You will find that the faster you move the mouse the greater distance the lines will be apart. With a little practice you can draw amazing graphic elements for your stacks in just a few seconds.

HyperCard Power Tips, concluded from Page 19

```
HyperCard
    else (do whatever)
    —you have at least version 1.2.2 or
higher of HyperCard
    end openStack
```

17) From Scott Bongiorno HyperCard tester... Here's a handler to display the current shipping version of HyperCard. This handler gets and converts the value of the long version and displays it in the message box as the shipping version number. (Editors Note: Remember that the Box Characters are Option-Return.)
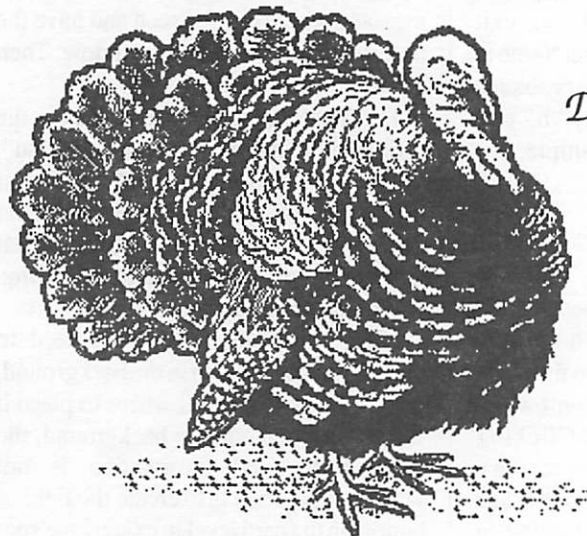
```
    on theVers
    put the long version into thisVers
    put char 2 of thisVers & "." & char 3
of thisVers & "." &¬
    char 4 of thisVers into thisLongVers
    put "Version" && thisLongVers
into the msg
    end theVers
```

Excerpts from Windoid #8
A Publication for the Informed HyperCard User
and the Newsletter for the Apple HyperCard User Group
Editor — David Leffler

Editor's Corner

Thank you all for your continued support of WINDOID and your many kind letters. Keep them coming. I'm sorry that it has been such a long time between WINDOID issues and I promise the next issue will be out on schedule. However, I hope that this issue will have been worth your extended wait. We're very pleased that you have enjoyed the efforts of our many friends and colleagues who contribute to these pages and actively encourage you to continue sending comments and suggestions to the HyperCard team. We love the mail, and you might just inspire us to include your most wanted feature in the next version.

Speaking of new versions, we would like to introduce you to HyperCard version 1.2.2. WINDOID #8 delineates HyperCard 1.2.2, the first world-wide release.

Stack Design Guidelines

Not all stack designers start out equal. Some have an advantage. Professional stackware design has gotten considerably easier with HyperCard Stack Design Guidelines from Addison-Wesley. Written here at Apple Cupertino by Rachel Rutherford and staff, this book is as MacWeek reviews it, "one of the most useful HyperCard books we've seen," and "This is a 'must have' book for serious HyperCard developers." I could not agree more. Great job Rachel et al!

Spreadsheet Tips

by the HyperTeam

Some users have asked for scripts that allow fields to work like spreadsheets. We looked at some of the new 1.2 features and would like to share these with you. Tab, Return, and Arrow keys will move the selection up, down, and from field to field much like a spreadsheet. We hope you enjoy them.

To begin: Create some non-scrolling fields and put the following into your card script:

```
on tabKey
  get the selectedLine
  if it is empty then put "line 1 of bkgnd field 0" into it
    add 1 to word 6 of it
    if word 6 of it > 3 then
    put 1 into word 6 of it
    add 1 to word 2 of it
  end if
  select it
end tabKey

on returnInField
  get the selectedLine
  if word 2 of it < 10 then add 1 to word 2 of it
    put 1 into word 6 of it
    select it
end returnInField

on arrowKey direction
  if the commandKey is down or the optionKey is down¬
  or the shiftKey is down then pass arrowKey
  get the selectedLine
  if "field" is not in it then pass arrowKey
    if direction = "up" and word 2 of it > 1
    then subtract 1 from word 2 of it
    if direction = "down" and word 2 of it < 10
    then add 1 to word 2 of it
    if direction = "left" and word 6 of it > 1
    then subtract 1 from word 6 of it
    if direction = "right" and word 6 of it < 3
    then add 1 to word 6 of it
    select it
end arrowKey
```

Edit Checking

by the HyperTeam

When you set up your four fields, make sure that Auto Tab is selected in Field Info. These techniques make data entry much more accurate and faster. You must have version 1.2 or newer to use these scripts:

—Age field:Check for integer in the range 1 to 99.

```
on closeField
  get me
  repeat with i = 1 to length(it)
    if char i of it is not in "0123456789" then
      beep
      select text of me
      exit closeField
    end if
  end repeat
  if it < 1 or it > 99 then
    beep
    select text of me
  end if
end closeField
```

—Gender field:Check for male or female.

```
on closeField
  get char 1 of me
  if it is "m" then put "Male" into me
  else if it is "f" then put "Female" into me
  else
    beep
    select text of me
  end if
end closeField
```

—Date Field:Check for a valid date.

```
on closeField
  get me
  convert it to date
  if it is not me then
    beep
    select text of me
  end if
end closeField
```

—Time Field:Check for a valid time

```
on closeField
  get me
  convert it to time
```

```
  if it is not me then
    beep
    select text of me
  end if
end closeField
```

Sharing AHUG

by Bryan K. Carter, AHUG President

Many people send us their forms from the back of WINDOID and ask me what is the "best" way to do something in HyperCard. Sorry, there really isn't one "best" way. HyperCard was designed to build on your ingenuity and individual strengths. Fortunately, there are some good basic techniques. After all, once the basics are mastered, the rest of the time can be spent on stack design, creativity, and functionality.

The one thing I dislike in a stack is a script that changes my Home stack User Preferences and doesn't set them back. When a person designs a stack and alters the user's pre-set preferences, they need to make certain to set them back. Yes, it could mean a few extra lines of HyperTalk, but it also means much happier users.

When the Home stack is opened from the Finder, the handler getHomeInfo (residing in the stack script of the Home stack) is called from the on startUp handler. When a stack other than the Home stack is opened from the Finder, it may or may not allow the getHomeInfo handler to be called (depending upon the handlers it traps and/or passes), thus limiting or nullifying the users' preferences. I find this script helpful in this situation:

```
on openStack
  global stacks
  if stacks is empty then getHomeInfo
  —your code
  —goes here
  pass openStack
end openStack
```

HyperCard uses the global variable "stacks" to keep a directory of all the places your stacks are located. This "directory" is also in a field on the "Stacks" card in your Home stack. The handler getHomeInfo stores this information. Thus, if the global "stacks" is empty, then either getHomeInfo has not been called

yet, or the field on the card "Stacks" in the Home stack is empty. Either way, by calling getHomeInfo if the global "stacks" is empty, you are getting all the user's preferences before you begin. You can then take advantage of those settings later in your script.

Other general script-tips are the following which Swami (a really dedicated and appreciated AHUG member) showed me:

```
on enterKey
  global myLastMsg
  if the optionKey is down then
    put myLastMsg
    exit enterKey
  else
    put the msg into myLastMsg
  end if
  pass enterKey
end enterKey


on returnKey
  global myLastMsg
  if the optionKey is down then
    put myLastMsg
    exit returnKey
  else
    put the msg into myLastMsg
  end if
  pass returnKey
end returnKey
```

These scripts can reside in your Home stack script to be available in all of your HyperCard stacks. They allow for a "recall" of a function (a function is used in HyperTalk to get information such as the current date or time or to compute a value within a script) you may have called. If you type something like "put the number of chars of fld 1" and press the Return or Enter key, you will get a response back in the message box such as "3521". Well, suppose you wanted to see the number of characters of field 2? Instead of retyping "put the number of chars of fld 2", just hold down the Option key and type the Return key or Enter key again. Voila! You can now backspace once, type in "2", and type Return to get the number of characters in field 2. Instead of retyping 32 keystrokes, you've only typed 4. Quite a savings!

Sticking Windoids

by Paul Foraker of HyperPro

As a Mac II user, I got tired of the menu bar disappearing as I browsed through other people's stacks, and decided to prevent it with this simple handler:

```
on hide what
  if what = "menubar" then
  — don't hide the menubar
  else pass hide
end hide
```

Put that script in your Home stack script and your menu bar will stick around.

The "hide" that you get, by the way, is not a HyperTalk command, but is rather a system message. It's sent to the current card. The fact that it is a system message means that whether you type "hide menubar" into the message box, or use Command-SpaceBar, the "hide" message gets sent to the current card.

Similarly, you can keep your message box, tool window, and pattern window visible. Try this:

```
on hide what
  if what = 3 then
  — don't hide the tool window
  else pass hide
end hide
```

Now make your tool windoid visible and type "hide tool window" into the message box. It doesn't hide. But if you click in the tool window's close box, It'll go away. That's because the "hide" that gets sent in the message box is a HyperTalk command, and the "hide" a close box executes (hope that makes sense) is a system message. When "hide is sent as a system message, the only value the parameter variable "what" can have is "menubar".

If the tool window is identified by a "3" what about the other windows.

```
    1 = card window
    2 = pattern window
    3 = tool window
    4 = message box
```

So to keep your message box showing, put this handler in your Home stack.

```
on hide what
```

```
if what = 4 then
    — keep my message box visible
else pass hide
end hide
```

Sometimes a good designer will hide everything except the card window in order to give you the maximum benefit of the graphic animation or slide show that is to follow. A polite designer, however, will have the script remember whether those objects were visible, and then re-show them at the end of the animation. A simple script for that might be:

```
on openCard
    put the visible of the msg into visiMsg
    put the visible of tool window into
visiTool — not "the" tool —window
    put the visible of pattern window into
visiPat
    hide the msg
    hide tool window
    hide pattern window
    — do your thing
    set the visible of the msg to visiMsg
    set the visible of tool window to
visiTool
    set the visible of pattern window to
visiPat
end openCard
```

HyperCard Version 1.2.2 Final Programmer's Notes

by Mike Holm, HyperCard Product Manager

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HyperCard version 1.2.2 is a maintenance release with a number of bug fixes, better support for foreign languages and a few small enhancements. These notes contain information of interest to stack designers and programmers that are not covered in the general HyperCard Version 1.2.2 Release Notes stack.

Briefly, HyperCard 1.2.2 includes the following:
- Improved support for display and printing of Japanese, Arabic and other non-Roman languages.
- Improvements in handling sound (in conjunction with Sound Manager fixes in System 6.0.2).
- Overall improved robustness in low-memory situations.

- Parameters returned by HyperCard's Find command have been enriched and are more accurate.
- A variety of bug fixes.

Script examples and detailed explanations of enhancements

- Pasting fields with the Shift key down
  If the Shift key is pressed while pasting a field, HyperCard 1.2.2 will paste the field AND put the text of the copied or cut field into it.
  Whether pasting a field into a card or background, text for the current card will be put into the pasted field. Copying and pasting a field with the Shift key can be done in a HyperTalk handler as follows:

```
on mouseUp
    select cd fld 1
    doMenu "Copy Field"
    go next card
    type "V" with commandKey,shiftKey
—paste it with the
    —shiftKey down
    choose browse tool
end mouseUp
```

NOTE: The doMenu command cannot be used to Shift-Paste a field as it takes only one argument.

- Placing a Paint graphic while drawing
  HyperCard 1.2.2 allows rectangles, ovals, and regular polygons to be placed (by sliding them around the screen) while they are being created.
  With the rectangle, round rectangle, oval, or regular polygon tool chosen the user drags the mouse to stretch out the shape. Without releasing the mouse button, pressing the Command key will stop stretching and allow sliding the graphic. Releasing the Command key resumes stretching.
  This capability is only available while the user is working with the painting tools, keyboard and mouse directly; it cannot be programmed in a HyperTalk handler.

- Faster navigation
  Going to the previous card for a specified background is faster. For example:

```
on mouseUp
    go to prev card of bkgnd "Foo"
end mouseUp
```

Support for foreign languages

- Right justified and right-to-left text
  HyperCard 1.2.2 correctly frames (draws the box around) text found by HyperCard's Find commands when text is left, center or right justified, and when operating in languages which read right-to-left.
  Reset Paint will use right justification for Paint text if right-to-left text has been set by the Script Manager. This restores the defaults to what would be expected on a Kanji, Arabic or Hebrew language system.

- Printing
  HyperCard 1.2.2 will print Kanji characters in high-quality mode on the ImageWriter II and ImageWriter LQ printers.
  HyperCard 1.2.2 uses the default font set by the Script Manager for printing reports.

Explanations of bug fixes

- Behavior in low-memory conditions
  HyperCard 1.2.2 has a fix for the operating system Scrap Manager to help it when memory is running low. When cutting or copying a HyperCard object or graphic under low memory conditions (i.e., as would be created by repeated copying and pasting on a 1 MB system), HyperCard could sometimes receive a corrupted copy of the object when it was pasted by a user or HyperTalk handler. This bad copy could cause the system to hang or corrupt the HyperCard stack being used. This fix, along with several smaller ones, make HyperCard 1.2.2 much more robust when running on a 1 MB Macintosh, or in a small partition under MultiFinder.

- Appending Scripts
  Sometimes when memory was running low the beginning of a stack script was lost when another handler attempted to append something to the end of the script. This has been fixed.

- Sound on 1 Megabyte systems, Mac Plus and SE
  System 6.0.2 fixed a number of small

problems with recent releases of the Macintosh Sound Manager. HyperCard 1.2.2 has a fix for gaining and releasing the sound channel which supports desk accessories, modal dialogs or other software that uses sounds. This eliminated known sound problems including system hangs and occasional clicks and pops on the Macintosh Plus and SE, and provides better handling of synthesized and digitized sounds in general.

• The "Find" command

Getting parameters for a Find command is now fully implemented, so HyperCard 1.2.2 returns more information when asked for "the params". These improvements allow stack designers to intercept a Find command, examine it in detail, then modify, terminate, execute or override it inside a handler.

HyperCard 1.2.2 returns the string to be found with quotes (which can be important for conditional HyperTalk statements to multi-word searches), and also returns a complete field expression, instead of just "<field>".

For example, if the command:

find whole "My Name" in bkgnd fld "Foo"

were intercepted by the handler:

on Find
  send the params to HyperCard
  if the result is empty then exit find
  lock screen
  push card
  go to stack "server:Address"
  send the params to HyperCard — search in this stack too
  if the result is empty then exit find
  pop card — return to original stack
end Find

Inquiring about "the params" would return the following literal results:

find whole My Name in <field> — for version 1.2.1 and 1.2
find whole "My Name" in bkgnd field 2 — for version 1.2.2

NOTE: If the Find command contains a field name (e.g., bkgnd fld "Foo"), HyperCard converts the name into the field number (e.g., bkgnd field 2).
A simpler command like:

find "My Name"
would return:
find 0 My Name — for version 1.2.1 and earlier
find normal "My Name" — for version 1.2.2

NOTE: In simple Find commands, version 1.2.2 returns "normal" in the second item (instead of "0"), indicating the Find command was not followed by modifiers like "whole" or "string".

• Closing open fields at the start of a Find command

HyperCard now closes the currently open field (one where there is a flashing cursor) when a search is initiated via the Find command. This should eliminate situations where Find would return an invalid result.

• Sending the Choose message

In earlier versions, when the user clicked on a tool in the tool windoid, HyperCard did not send the Choose message. Now it does. This is useful when a designer wants to figure out which tool the user has chosen from the palette. For example:

on choose what,whichTool
  if what is "tool" and whichTool is "7"
then beep
    — beep when the brush tool is chosen
  pass choose — do it
end choose

NOTE: The Choose message passes the word "tool" and a number, not a tool name.

• Scrolling fields

The scrollbar is now updated after cutting or deleting text from a scrolling field, so the field can now be scrolled back to the top with the mouse after cutting or deleting text from the bottom.

Text Arrows now update the scrollbar and scroll setting properly. Previous versions did not update the scrollbar when text arrows were used to scroll up and down the field.

• Painting tools with hidden pictures

If the picture is hidden you can no longer get "marching ants" by double-clicking the selection tool.

If the picture is hidden you can no

longer set an insertion point by choosing the text tool and clicking the mouse.

• Typing in locked stacks

A bug in HyperCard 1.2.1 allowed users to type carriage returns into fields in a locked stack, even though the userModify property was set to false. This has been fixed.

• Working with custom FOND resources

A bug allowed a custom FOND attached to a stack to be purged, but a Font Manager global still referred to it. This could corrupt HyperCard's heap; it has been fixed.

• Font substitution with the ImageWriter LQ

If the 3x fonts for the ImageWriter LQ are available, HyperCard will now use them.

• Going to other stacks while deleting a card

Earlier versions of HyperCard would result in an Unexpected Error #1250 or 1260 if a user (via a script) left the stack in a delete or openCard handler. This has been fixed.

• Copying the selection

Earlier versions of HyperCard accidentally copied the entire text of a source container when a handler requested that the selection (highlighted text) be put after the contents of a destination container. Version 1.2.2 fixes this.

• The diskSpace

The diskSpace property now returns the correct available diskspace when it's more than 32 MB.

• Visual effects on "E-Machines" type large monitors

Visual effects now work with monitors which change low-memory screen globals.

• Flush mouseUp event before sending the mouseUp message

When a button was clicked on and the message was sent prior to the event being removed from the queue, XCMDs were getting confused by the extra event. This is fixed.

• Suspend/Resume

In some sublaunch situations where the user had to find the application with Standard File, a bug resulted in weird looking screens on return to HyperCard. This has been fixed.

Apple HyperCard User Group

Bryan Carter, AHUG President, wants to make you a member of AHUG and actively encourages you to form your own AHUG SIG. AHUG will generously assist you in various ways to make your stacks much more shareable and will continue to participate in getting your WINDOID delivered to your home or business address. If you would like information about AHUG, write to:

Apple HyperCard User Group
MS/27-AHUG
20525 Mariani Ave.
Cupertino, CA 95014
Our phone number is: 408-974-1707.
Our AppleLink is: UG.AHUG

Editor's AfterWord

by David Leffler

We hope you have enjoyed reading this latest issue of WINDOID and have found it to be interesting and informative. Please remember that the purpose of this newsletter is to help you help us to make a quality difference in the world. We provide a unique opportunity for WINDOID readers to contribute to the ongoing growth and excellence of Apple's HyperCard™ and would like to make a request for a little of your time.

There is a form at the back of this, and every, issue of WINDOID that allows you to communicate directly with the HyperCard Team. Bill, Dan, and the entire team really want to know what you would like to see in HyperCard and are more than willing to give you what you want. What we need to make this happen is your input. We want to know what you like, and what you don't like, about HyperCard and what features or suggestions you would like to see implemented in future versions. If you have a problem we can address it in WINDOID or perhaps the next revision of HyperCard. You can make a difference in the world by communicating with us. Don't pass up the opportunity!

For those who wrote to us and participated in HyperCard 1.2.1 and 1.2.2, we thank you. I believe that you will be very pleased you took the time to make yourself heard.

For those of you who would like additional copies of this WINDOID, or back issues, you must send us a stamped-self-addressed-envelope for each one. We will be unable to send you anything without them. If you send us a very large manilla envelope for all of the issues, please put on enough postage for about sixty (60) pages.

If you have a bug, suggestion, comment, or just want to know the best way to do something in HyperCard, you can fill out the form below and send it to:

AHUG c/o David Leffler
Apple Computer, Inc.
MS/22-0
20525 Mariani Ave.
Cupertino, CA 95014

Or copy the format and AppleLink(TM) it to:
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You can use this form to notify the HyperCard team of problems, bugs, and enhancement requests.
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b. Associated software:
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Type of Macintosh:
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Description of problem, suggestions or comments:

If you have some information for us please fill this form out as completely as possible and send it to us. You will be glad you did!

Wanted: Graphic Artists to jazz up the newsletter. Your efforts will be immensely appreciated.

Classified Advertisements

Each Mini'app'les member may run one free non-commercial classified ad per month in the newsletter. Submit ads to Bob Lowe by phone (voice) at 933-0464. Ads normally must be received by 5 PM on the second Wednesday of the month to appear in the next month's newsletter (occasionally they must be in by the first Wednesday. Call to verify). Ads may be edited for length or to fit our usual format. There is a charge for commercial ads.

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