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Tomball

Williams Computer Center

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Eastex Frwy

Kuykendahl

Rayford Road

Hwy 290
Hempstead Hwy

FM-1960

A line of demo equip-
ment at bargain prices.

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North Frwy

Hwy 90 East
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Still too far? Ask for our
outside sales force to
call on your place of
business.

Come see the WCC Texas
Talker in action.
Now over 900 users.

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Now you know
where we're at.
We like it on top.
And know you can
also be on top with
Apple computers
and our support-
training.

Come see 16 Macs
talk to each other. Big
screens, scanners.

Loop 610

Quality sales, quality sup-
port. No hype, no jargon, we
talk your problems. Noncom-
mission sales experts.

Where else can you
get Apple people to answer
your Apple questions, without
someone telling you...

"You'll need to talk to.... he knows
that computer, I sell only..."

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Gulf Frtwy

Hwy 59
Southwest Frwy

288
South Frwy

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Center

25770 I-45 North, Spring, Texas 77386
367-1600, BBS   367-8206

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About the Cover

Tom Engle executed this month's cover using *PageMaker*. Cleland Early provided the concept.

Editors

Tom Engle
Chris Flick
Cleland Early

Contents

Special April Meeting Guest

John Otterstedt
Macintosh Factory
Manager

April 18 at the
Marriott Astrodome

Overview

The Houston Area Apple Users Group provides a forum for the exchange of ideas and information about Apple Computer products and their associated hardware and software. Meetings, newsletters, and special interest groups are just a few of the ways this forum is maintained. Below are listings of the club officials and descriptions of the groups' functions.

Club Officials

President
Robin Cox — 778-1635
First Vice President
Jeanne Boucher — 723-9519
Second Vice President
Mike Barnaba — 527-9953
Secretary
John Marek — 782-3898
Treasurer
Jack Cowart — 467-4215
Directors
Cleland Early — 941-7247
Chris Flick — 363-3153
Jim Huck — 496-9508
Mike Kramer — 358-6687
George Pierce — 526-5103
David Scheuer — 464-1228
Senior Advisor
Rudge Allen — 622-3979
Membership
Neal Scott — 890-0532
Apple Barrel **Editors**
Tom Engle — 774-9055
Chris Flick — 363-3153
Publicity Coordinator
Dennis Bilbe — HotLine
IAC Representative
Ina Levinson — 270-0137
Vendor Coordinator
Jeanne Boucher — 723-9519
Program Coordinators
Mike Kramer — 358-6687
Steve Bass — 847-4407
Whipping Boy
Tom Dillon — 376-6502

The club officials meet on the first Thursday of the month at the Marriott Astrodome Hotel at 6:30 pm. These meetings are open to the membership.

Membership Information

A one-year membership to HAAUG is available for thirty dollars and includes the Starter Kit, a subscription to the *Apple Barrel,* and a membership card giving access to all the club's services. Memberships are available at the Answer Desk during the meeting, through brochures located at local dealers, or by calling the HAAUG HotLine and having a brochure mailed to you. Renewals are twenty-five dollars per year.

Meeting Dates

The HAAUG monthly meetings take place at the Marriott-Astrodome Hotel, 2100 South Braeswood at Greenbriar. The meetings are scheduled for the third Saturday of the month and begin at 10 am. All new members should attend the New Member Orientation.

Meeting Schedule

10:00	New Member Orientation
11:00	Special Interest Groups
12:00	HAAUG Club Business
12:30	Main Presentations
1:30	Special Interest Groups
2:30	Special Interest Groups
3:30	Special Interest Groups

HAAUG Hot Line (713) 522-2179

The HAAUG Hot Line provides a means for **members** to learn of the meeting time and location. **Non-members** can leave their name, address and phone number if they want more information about the club. If you have a question about a particular commercial product, please check the list of volunteer specialists in this issue.

Special Interest Groups

SIGs focus on one topic of common interest during these meetings within a meeting. Meeting locations and times are contained in the meeting handout.

SIG Leaders

Apple II SIG Coordinator
Jeanne Boucher — 723-9519

AppleWorks
John Slack — 491-1747
Advanced Topics
Bill Hensley — 980-4993
Jim Record — 353-1119
Advanced BASIC Programming
Richard Lemay — 749-3135
Best of the Public Domain
Robin Cox — 778-1635
Education
Ann Petrillo — 489-7535
Games
Thomas Carson — 861-5425
John Newell — 531-9139
Green Apples
Richard Goss — 463-0640
Hardware
Dave Simek — 496-3304
Home Use
David Jaschke — 461-2450
Mike Stoops — 242-1312

Mac SIG Coordinator
Steve Bass — 847-4407

Communications
Mike Conway — 495-2292
Desktop Publishing
Cleland Early — 941-7247
Tom Engle — 774-9055
Developers
John Pence — TBA
Games
Bob Lewis — 242-0990
Helix
Larry Stage — 358-1105
Omnis
Buddy Jacks — 299-1555
Programming
Mike Martin — 333-6405
Tips & Techniques
Steve Bass — 847-4407

Public Domain Software Libraries

The Public Domain Libraries are divided into two sections: Macintosh and Apple II.

Macintosh Library

The Macintosh library contains over ninety disks of public domain software. Copies may be purchased at the meeting for five dollars apiece. In addition, there are two directory disks which may be copied for free. These disks contain the listings of what is on the other disks. Also, the latest disk submissions are available for copying.

Macintosh Librarian
Larry Saphier   496-0507

Apple II Library

The Apple II library may be copied at the meeting for one dollar per side. Books are available at the meeting describing what is available in the library.

Apple II Librarian
John Marek   782-3898

Hardcopy Library

The Hardcopy Library maintains an archive of back issues of the *Apple Barrel*, issues of other magazines, and other paper material. It is open to the membership and is available at the main meeting. At present, no provisions for loaning the material have been made.

Hardcopy Librarian
Les Brown   795-2741

"HAAUG Heaven" Bulletin Board System

HAAUG Heaven is HAAUG's computerized Bulletin Board System. The BBS's telephone number is (713) 664-9873 and operates 24 hours a day. The recommended protocal setting is 8-N-1-Full.

Writer's Guidelines

The HAAUG *Apple Barrel* exists to provide the membership with timely information about their Apple computers. We at the *Barrel* hope that readers will write articles on subjects such as reviews, computer techniques, and casual observations of computerdom. For those of you interested in writing for the *Barrel* (hopefully most of you), we have established helpful guidelines to follow when writing and submitting articles.

1. Try to include some form of graphic or table which helps to explain points made in the article. The saying that a picture is worth a thousand words certainly applies here.

2. For those including graphics and tables, please make references to them within your text. This will help both the reader understand what you are saying and assist us in the paste-up of the article.

3. Include references to other sources of information if possible. By doing so, the reader is directed to other useful material beyond that of the actual text.

4. For Apple II users, we will accept text created either in *AppleWriter* or in the *AppleWorks* word processor. We prefer ProDOS, but can handle DOS 3.3 as well.

5. For Macintosh users, we accept text created in either *MacWrite* or *Word*.

Please do not include graphics within the actual text. Graphics accompanying the articles should be saved as *MacPaint*, *MacDraw*, or *Chart* files.

6. Articles should be provided on disk as well as printed hardcopy. The hardcopy is primarily used to allow us to see where you as the author place emphasis. (A backup copy for yourself would be advisable)

7. Article submissions can be given to either of the editors or left at the Apple Answer Desk. Include both your name and phone number with the article to help us communicate with you if problems arise.

We hope that these guidelines will not only help you but also make it easier for us to provide a more consistent and classy newsletter.

Advertising

Rates

Inside Covers	$100
Full Page	$80
Half Page	$60
Third Page	$40
Business Card	$15
Other	Contact Editors

Ads are to be prepaid, camera-ready, and received at least one week before the first of the month in which the ad is to appear. Contact either of the Editors for further information.

INSIDE HAAUG

Random Thoughts

by Cleland Early

A High-Tech Houston?

Since the price of gasoline fell some fifty cents per gallon, and Houston's economy died, Mayor Whitmire and others have been making noises about diversifying the Houston economic base, reducing our community's dependence on oil-related industries. Most of Kathy and the boys' attention has been given to the so-called high-tech industries; the Chamber of Commerce wants to attract computer, aerospace, and similar companies. Now they're hot for the supercollider project. However, I wonder whether if, in the end, Texas (and Houston in particular), has what it takes to attract that kind of industry.

Image Problems

Houston certainly has a lousy image. If you doubt it, take a look at *Houston Knights*, the godawful temporary replacement for Edward Woodward's classy *Equalizer* television program. I'm sure the mayor and the Chamber of Commerce have, at least in passing, hoped for a television program set in Houston. Maybe the show would revitalize Houston, the way *Miami Vice* has turned Miami around. This season, Kathy and the boys got part of their wish. CBS scheduled two series set in Houston, *Outlaws* and *Houston Knights*.

Thanks but no thanks. If an improved image is what we want, Hollywood is the wrong place to turn.

In *Houston Knights*, we find Michael Beck, who plays a police detective, talking in a bogus Texas accent, wearing boots and a cowboy hat, riding around in a jeep, listening to country music, and taking his street-smart Chicago-native partner to Gilley's, where they promptly get in a brawl.

The creators of *Houston Knights* didn't pay much attention to reality in geography. There's one scene in which Beck and Michael Pare, who plays Beck's new partner, stop in a barbecue joint (where else) seeking information. The proprietor tells the two policemen to check at "that airport on I-10 near Sugarland." Huh? Then, while driving to this mythical airport, Beck and Pare pass by NASA and a bunch of oil refineries. Huh?

Outlaws, which tells the story of a group of old west cowboys transported to present-day Houston by a time-travel inducing fluke of nature, is even more blatantly silly in its portrayal of Houston-area geography. In the opening sequence of *Outlaws*, we see the cowboys standing on a mountainside, looking down into a valley at Houston. What mountains are these? What valley is this? California mountains, a Califor-

nia valley, but Houston stereotypes.

Outlaws contains another supposed law person, Christine Belford, speaking in another bogus accent, expressing herself in cute rural metaphors, wearing a cowboy hat and boots.

Dumb Hicks?

No wonder people think we're dumb hicks down here. It doesn't help that some public relations firm comes up with a dumb, grammatically incorrect slogan to express our community pride ("Houston Proud"). The fact that our city fathers run around trumpeting our pride so loudly just serves to confirm the city's deep-seated inferiority complex.

I, for one, don't particularly relish the urban cowboy image. I haven't owned a pair of pointy-toed boots since I was five, I can't abide country music, and I'd rather drive a BMW (if I could afford one) than a pickup. In addition, I've met maybe five people who speak with a recognizable accent in the fifteen or so years I've lived in Texas. All those accented people were from rural parts of Texas. I've spent significant chunks of time in Houston, Dallas, Austin, and San Antonio. People in urban areas don't speak with an accent, at least not with the kind of ridiculous exaggeration actors like to use when playing Texans.

If the cow-dung-on-boots part of Houston's image isn't bad enough, we have to put up with the manipulative oilman image. Texans, Houstonians, we are lead to believe, would cut your throat for an extra dollar; would lie to your face if it suited them. Watching television or film drama, you get the impression Texans have no integrity. And, unfortunately, our state leaders' actions don't help dispel this perception. They're free-traders when things are going well and then cry for import tariffs when the oil economy goes in the toilet.

What makes the image problem even worse is that many Texans/Houstonians seem to revel in the cowboy image. The Houston Livestock Show and Rodeo is a big deal even though very few people who live in Houston actually ride horses; I rode a tethered pony around a circle once when I was a child, but that's the extent of my equestrian experience. Business guys wear boots with their suits, which may have a western cut. Look at the guys we elect to public office; I'm convinced that candidates with some sort of twang have a better chance of getting elected.

I'm not saying that there's anything inherently wrong

with Texas accents or wearing boots or riding horses or eating barbecue, but I do think that most outsiders have an image of Texans as unsophisticated, simple folk. Accurate or not, the image is off-putting, and an extra barrier to convincing people to move their businesses or research institutions to Houston.

Cultural Problems

Economists like to talk of *infrastructure*, the underlying capital of society. When they refer to infrastructure, economists usually mean stuff like roads, bridges, railroads, ship channels, and power plants. The idea is that without investment in these basic items, economic activity is unlikely to be effective. Imagine a manufacturing plant or an oil refinery without roads on which to ship gasoline.

I like to define infrastructure a bit more broadly. An even more basic type of underlying capital is intellectual capital—investment in human brainpower. And while Texas has an extensive university system, the enrollments of most Texas colleges are padded with students who have questionable credentials. It's simply too easy to get in most of our institutions of higher learning.

When a state or region has universities where, say, a third of the students don't have any business being in college, the result is a diluted product. Even though college enrollment is higher, universities produce less qualified people than we might expect if the colleges were more selective.

A vital university system producing a large pool of highly-educated, technically-sophisticated workers is important to any high-tech firm which might be considering a move to Houston. While the University of Houston and Rice are fine schools, I suspect neither has the kind of reputation likely to attract many new employers to Houston. Even if you factor in UT and A&M, both excellent engineering schools, I doubt that the situation changes much.

Texas culture, I sincerely believe, does not value intellectual activity very much. Texans seem to have a deep suspicion about people who think for a living. Just look at the way we treat college professors. The average salary of a Texas prof is some $7,000 below the national average.

Whoo boy, he does what? Writes, teaches, and does research? Get that boy some honest employment. He teaches how many hours a week? Make him work 40, just like anyone else. Sabbatical? A year off without pay? Boy howdy, sign me up!

The intellectual climate here is pretty sad compared with the places like Boston or Silicon Valley or even Austin with which the Houston marketeers must compete. To prosper, people who do brain work—be they engineers, writers, artists, or physicists—must have a stimulating environment.

Like Sisyphis, You Know

All of this should be of more than passing interest to an organization like HAAUG, because our club is impacted by the same forces which hinder Houston's move beyond oil. As much as I like HAAUG, I think the level of discourse and the level of excitement in HAAUG activities could be higher.

HAAUG members are not stupid or lethargic. On the contrary, I've met many bright, energetic people at HAAUG meetings. I do think that our environment, Houston, makes life more difficult for us than life otherwise might be. This is all the more reason to work harder at the things we can control.

More Randomness...
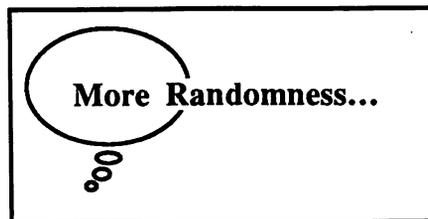
Power Board Blues

When I finally got my Mac 512 upgraded a few weeks ago, the technician told me something I didn't much want to hear—my Mac's analog board was shot again. I'd been hoping that the problems I'd been experiencing were due to a loose connection or misadjusted voltages. Nope.

In the two years or so that I've had my Mac, I've had three analog boards (commonly called the power supply board). The original board lasted about

a year. Then, literally, the thing went up in smoke. I had that one replaced, at a cost of $180. The replacement lasted all of 30 minutes before dying the exact same way.

Now, a year later, my third power board is acting erratically. Intermittently, horizontal white lines race up and down my screen. Less often, the whole image contracts and expands. "It could behave this way for a year," the technician told me.

The only good thing about this situation is that the price of power supplies has dropped to $120.

Apple should be ashamed. The analog board should have been redesigned when it became apparent that there were problems. Instead, they pushed ahead and used the same overloaded, overheated board in the Plus. The fact that the design of the SE apparently corrects the flawed design of earlier Macs is little comfort to beleaguered owners of older Macs.

Add a fan to your Mac.

New Boxes

It seems almost sacrilegious to call an object which inspires so much adoration "a box." Yet, that's exactly what computer industry insiders call computers. Glenn Gray of Apple Computer did at the March HAAUG meeting. He cautioned the audience at the main meeting not to disregard the new Macintosh SE. "It's a nice box," Glenn asserted. My boss at Barbour Computer Services does it, too. "The emphasis this year is on selling a lot of boxes," he told our staff at a meeting.

I suppose, at some level, the metaphor is apt. After all, the hardware isn't much more than an empty container which will just sit unless you put something in it. Still, "box" doesn't seem quite right.

Anyway, what about Apple's new boxes? After reading a whole lot about them, observing them in action, and playing with an SE a little, I'm happy to say that I think Apple did just about everything right.

The Mac SE corrects most of the Mac Plus' problems. Apple chucked

that unconscionably bad analog board design. Instead, the SE's designers have separated the power supply and video circuits. Apple has also considerably beefed up the power supply and has added a bus so that outsiders can easily expand the system. The SE has a fan, which the Mac should have had from the beginning. Loud, but necessary.

All in all, the SE is a fine incremental improvement over Apple's existing Macintoshes. Yes, it is a nice box.

The Macintosh II is more than just nice. It is the stuff of dreams. It's hard for me to evaluate the II's performance, but I'd guess that the computer is three or four times faster than a Plus. And the color is breathtaking. Frankly, I didn't expect to be so impressed by the Mac's color—most color displays are so fuzzy.

As spectacular as the color is, I think the most significant feature of the Mac II is the NuBus. Anyone who has struggled with installing a card in an IBM PC will appreciate the fact that NuBus cards are self-configuring, meaning you won't have to screw around with jumpers or switch blocks. The NuBus represents Macintosh-style open architecture, and should spawn all sorts of innovative add-ons.

Both of these computers should sell like crazy.

So what did Apple do wrong? As usual, the prices are too high. Apple has traditionally set the initial price for a product at a level that almost always drops significantly within six or eight months. The rule seems to be take advantage of short supply and soak the new adopters. Sigh.

I've heard all the arguments. The Mac II isn't intended as a home machine, we're told. I've also heard it said

that even at the present level, the price/performance ratio of the Mac II compares very favorably to Sun and Apollo Engineering Workstations. I don't buy either argument. The first wasn't intended to be a home machine either. And, I don't think the Mac II is aimed strictly at engineers.

Further, I think that by pricing the Mac at about the same level as a Compaq 386, Apple is losing an opportunity to be a real price/performance leader. Because the Mac operating system remains proprietary, Apple won't be plagued with cheaper, better performing clones.

Still, I fully expect Mac prices to fall, come September. I also expect the Mac 512e to be gone when the price cuts come. Of course, it's easier to cut prices than to raise them, so a high initial price is almost understandable.

As bad as the prices are, they aren't the worst thing about Apple's new product introductions. What's worse? How about those awful brochures filled with black-and-white photographs of grim, constipated-looking people making skeptical remarks about Macintoshes. Yes, we *are* serious.

Give me a break! Come on, fellows. Lighten up. Computers are fun.

Linotronic is Hot

The Apple Business Forum, which was held at the Westin Galleria Hotel a few weeks back, struck me as kind of a non-event. I popped over during my lunch hour and poked around in the product viewing room a little. I wasn't able to stay for any of the seminars, but I doubt I missed much.

Aside from the single Macintosh II, the most interesting hardware on display was the Linotronic 100, the 1200 dots-per-inch typesetting machine which uses a postscript engine and hooks up to AppleTalk.

I had a brief discussion with the Allied Linotype representative. He told me that Allied had recently raised the price of the Linotronic 100 by some $7,000, because demand was so great. According to the rep, Allied has a 120-day backlog of orders.

All is not perfect in Linotronic land, however. One Linotronic 100 owner told me the machine has not proved all that reliable. Looks like the high-end electronic typesetting market is ripe for some competition.

Who's Dumping on Whom?

Sometimes I wonder if politicians have brains in their heads. As I write this, the United States is in the process of declaring trade war on Japan. Supposedly, Japan has violated earlier anti-dumping agreements by continuing to sell microchips below cost through third-party countries. Now, our government has announced punitive tariffs on Japanese goods.

While the politicians have been grinding their teeth over the alleged unfair trade practices, they seem to have ignored who benefits from low chip prices. They seem so worried about protecting the health of the American computer chip industry, that they've forgotten about protecting the financial health of the American consumer. As usual, we'll be paying the bill for a matter of questionable principle.

THE MAC ACCORDING TO GASSÉE

by Mike Kramer

During Appleworld 1987, Jean-Louis Gassée, Apple Vice President of New Product Development, spoke to the User Group representatives. The following is a condensation of his comments along with the questions posed by the delegates and Gassée's answers.

Gassée started out by stating that he is Apple's official scapegoat for all Apple products and that he lives somewhere between Cupertino and reality...where the users groups are reality. He stated that indifference toward the customers' needs kills and that he welcomes hearing from us.

Gassée noted that Apple wanted a long-term stable product strategy and adopted two product strategies which are separate but with commonality of peripherals and data interchangeability. Both the new Macs and the GS use the Apple Desktop Bus, which permits use of the same mouse, keyboard, and other devices. The GS is being given the capability of printing on the LaserWriter.

Apple's philosophy is to improve a product and keep selling it if it has sold well. This has been true of both the Apple II and the Macintosh. They wanted the Mac to have the modularity and the expandability of the Apple II and the Macintosh II was the result. Apple is equally proud of the new Macintosh SE and the Mac II and expects the sales of the SE to be double the sales of the Mac Plus just as the sales of the Plus were double the sales of the 512.

Gassée said that Apple expected some criticism over having only one slot in the SE and a lot of criticism for not having an upgrade path from the Mac Plus to the SE. An upgrade to the SE was not practical, however, since the only common component is the CRT tube.

Gassée Questions & Answers

Q There have been a lot of complaints regarding the poor reliability of the Macintosh's analog (power supply) board. What is Apple doing about it?

A Apple recognizes there is a problem and apologizes. There seems to be problems both with and without the upgrade to the Mac Plus. Customer relations is trying to handle it to everyone's satisfaction. The SE power supply has been beefed up.

Q There is a need for a truly portable Apple II. What are Apple's plans?

A The current Apple //c power supply is like a brick on a leash. I am not the Vice President of preannouncements but I agree that the market needs a great portable. Steve Sackerman, currently working for Apple, worked on the HP110 portable at Hewlett-Packard.

Q There is a rumor that the latest *Finder* is buggy. Should we use it?

A Always use the latest *Finder*. Apple doesn't invent bugs on purpose, but they do have them.

Q In New York City the Apple dealers typically sell their own maintenance contract rather than AppleCare. This is a problem because other dealers won't honor it. What is Apple doing about this?

A Apple cannot legally tell the dealers they have to sell Apple-Care.

Q When my DuoDrive failed, several dealers refused to work on it and the one who would required that the whole system be left for service. Can't Apple do something about the dealers?

A Apple is trying to convince the dealers to do the right thing. In the mean time, support the good dealer when you find one.

Q When will UNIX for the Mac be out and will it have a Mac-like user interface?

A The product has emerged from fantasy to reality. It is a hardened UNIX that automatically configures to the card/slot combination and provides library-like access to the Tool Box. It should have a big impact on the use of UNIX. (Did not answer the when part of the question).

Q Will Mac Plus owners be able to take advantage of faster chips such as the 68020 and the 68030?

A Levco goes for the whole hog and the billfold too. How do they do it? Very expensively. Developers may want to enhance their Plus to speed up compilations, but most cannot justify it.

Q A lot of current Mac owners will understand why there is no upgrade from the Plus to the SE but others will not. What will Apple do about them?

A Products are not sold with the implicit promise of upgrades. The SE was the result of Apple's looking at what third parties were adding to the Plus. Maybe third parties will offer an SE upgrade.

Q When is the Mac II shipping?

A They will ship in May 1987. No CPU has ever been as ready 60 days before shipping as is the Mac II except for the SE. Apple is doing the surface component mounting in-house which has presented a challenge. The Mac II will be sold out until the end of 1987.

Q Tell us more about the NUBUS. I've used the IBM and have struggled with the DIP switches on the cards.

A The decision to use NUBUS came out of fear and ignorance. There were actually bus wars at Apple while trying to decide what to use. Texas Instruments developed NUBUS and made it processor independent, permitting any board, including the motherboard, to be the bus master. NUBUS is self configuring and there is no need for DIP switches. This makes the bus and boards a little more expensive. It is possible to have several intelligent cards on the bus and to have two cards exchange information and talk on the bus without disturbing the motherboard.

Q What has been the Cray's impact on development?

A The Cray was originally intended to be a better simulation tool for interaction between parts of a computer, providing a better view of how architectures can be implemented. It is also used for circuit design and a lot of other things that were not anticipated, such as how plastic flows into molds and how to prevent blush marks on plastic parts due to differential cooling.

Q I have been impressed by graphics on the GS but am curious when the color graphics problem will be fixed.

A Apple is shipping the current GS with a corrected ROM and will replace existing ROMs free.

Q What are you most impressed with in the Mac II?

A That is a hard question. The product is so much better than was originally anticipated in the summer of 1985. The video, the sound, and the NUBUS are all better than planned. Apple didn't really realize the potential of the NUBUS. I guess the way software developers love it impresses me the most.

Moving?

If you are moving, be sure to notify the membership chairman of your new address and telephone number. Send a letter addressed to HAAUG to the attention of Neal Scott or call him with that information.

Neal Scott — 890-0532

**HAAUG
P.O. Box 610150
Houston, TX 77208**

Share and Share Alike — AppleShare File Server

If you and your co-workers use Macintosh™ Plus computers on the job, you probably have information to share—from applications to office memos and reports. And you may have discovered that trading disks is not a very efficient way to gather and consolidate information on a project and keep it updated. The answer to this communications dilemma is a file server, such as Apple's new Apple-Share.™

The AppleShare File Server is a software program that works on an AppleTalk® Personal Network using a dedicated Macintosh Plus and one or more hard disks.

The file server allows you and up to 24 of your co-workers to view and have access to the same folders, documents, applications, and disk storage—all at the same time.

How It Works

You access the File Server by using the Chooser—the desk accessory currently used to select printers on the AppleTalk network—and entering your password.

AppleShare is fully integrated into the Macintosh Finder, so it's similar to using a local disk drive except that a number of users can access it at the same time. Everyone on the network receives updated information in their Finder windows each time a file or folder on the server is created, deleted, or moved between folders.
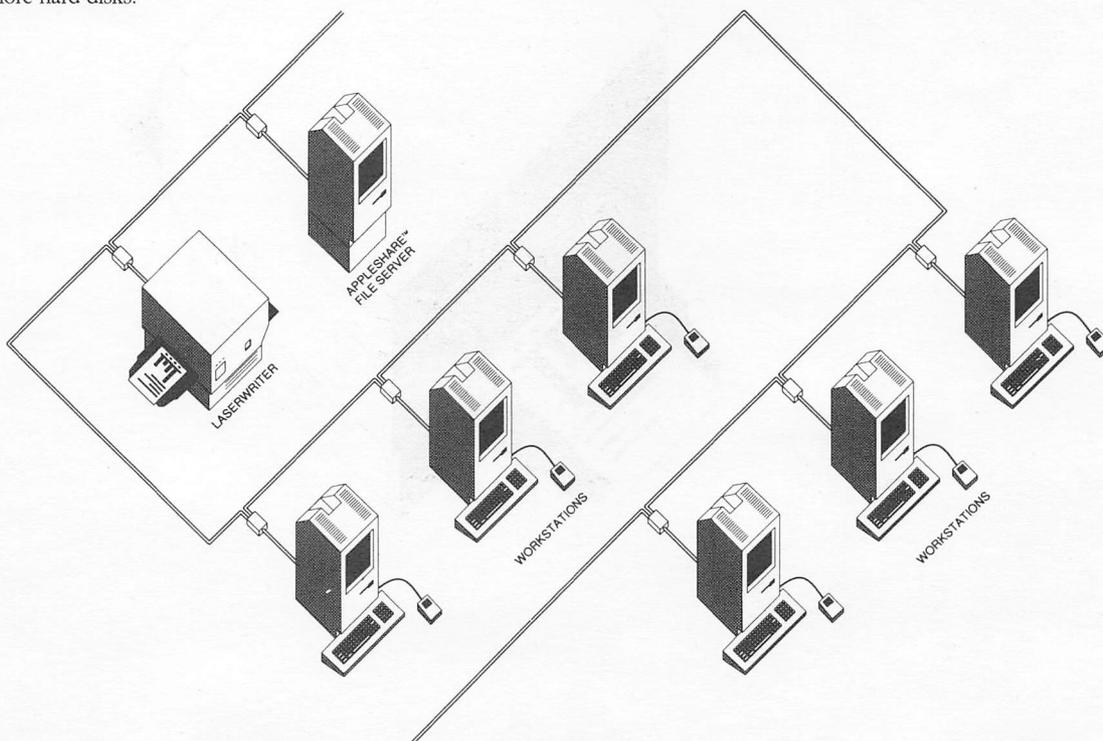
WHAT'S INSIDE

► **Take the Wait Out of Printing**

► **AppleTalk PC Card**

► **PostScript Publishing**

► **Educational Software How to Find It**

► **Apple Links Children Around the World**

LaserShare Takes the Wait Out of Printing

If you're like most LaserWriter® users, you probably can't wait to see your finished product slide into the paper tray. The problem is that you do wait—and so does your Macintosh. While there is no cure for impatient publishers, there is one for your very patient Macintosh—Apple's new LaserShare.™

The LaserShare Print Spooler is a software program that intercepts your print files, stores them on the disk of its server Macintosh on the AppleTalk network, and prints them when the printer becomes available. That means that your Macintosh is free to work on other files and your printing delays are cut by as much as 80%.

Printing is scheduled on a first-come, first-served basis.

How It Works

When you select the PRINT command, your document is spooled to LaserShare where it joins a print queue of other unprinted documents. There, its printing is scheduled on a first-come, first-served basis so you can prioritize your most important documents by spooling them first. The print queue can be viewed on the server Macintosh and includes the document's status, name, user name, date and time of spooling, and the number of pages spooled. You can also obtain a log of documents already printed.

Even if loss of power interrupts the printing process, the documents waiting to be printed are not lost. Your document will still be printed in the assigned order.

Compatibility

To run the LaserShare Print Spooler, you need an AppleTalk Personal Network, an Apple LaserWriter or LaserWriter Plus, and either a dedicated Macintosh Plus, a dedicated Macintosh 512K Enhanced, or a Macintosh Plus running AppleShare File Server software (see the article on the AppleShare File Server in this issue). And, its compatible with all existing Macintosh applications. (Any programs which do not support spooling will automatically bypass the spooler and print directly, just as they always have.)

So, while you may still be anxious to see your laser-printed documents, you won't be anxious waiting for your Macintosh. See your local authorized Apple dealer for more details.
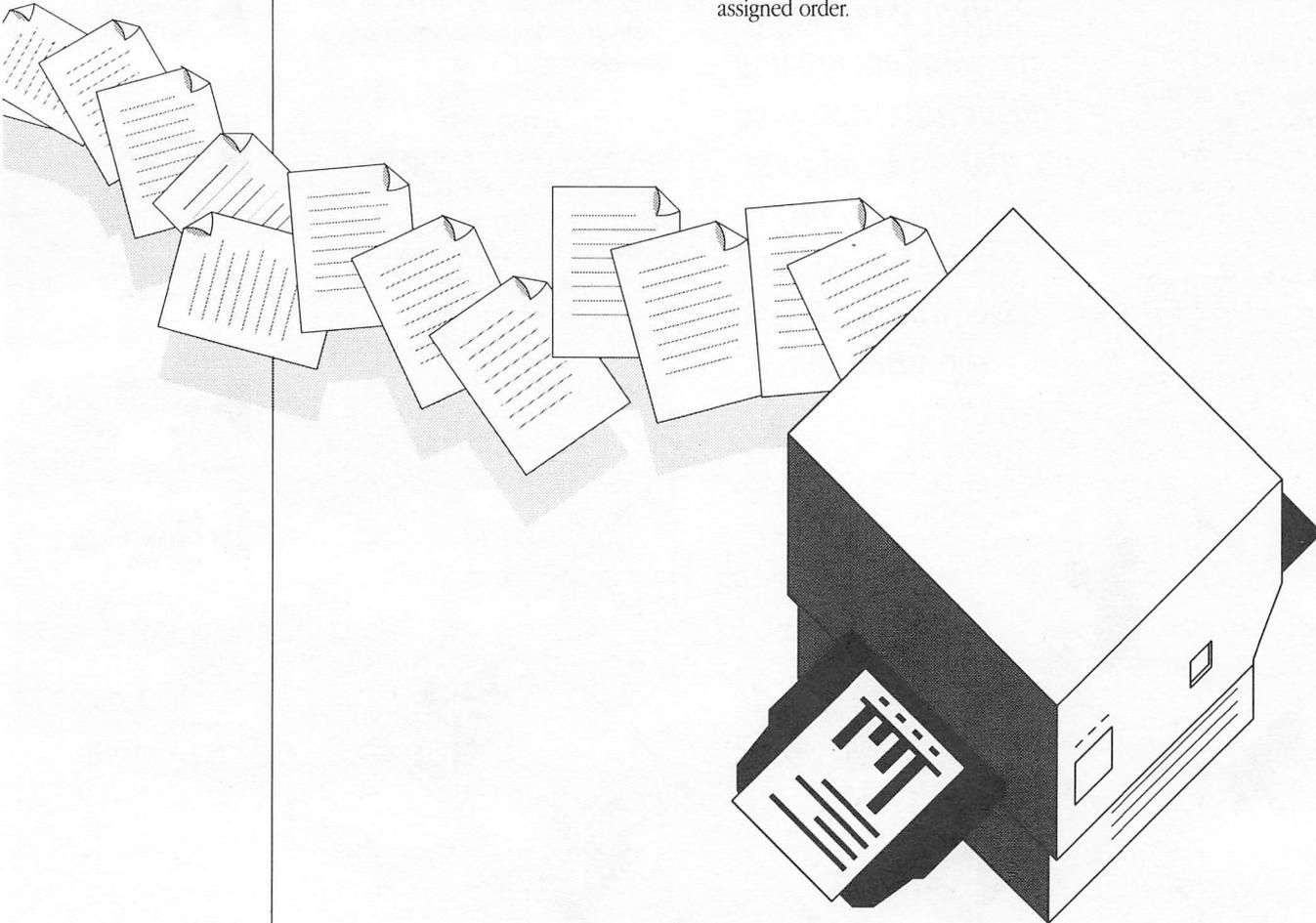
The AppleTalk PC Card Says Hello to PCs

Are you using an MS-DOS or MS-DOS-compatible computer at work? And lamenting the fact that your final documents—the ones you worked so hard on—can't hold a candle to those flashy documents your Macintosh-using colleagues printed? Don't despair. Say hello to the new AppleTalk PC Card.

So, it's time to say good-bye to lackluster MS-DOS documents and start printing them with the quality they deserve. See your local authorized Apple dealer for more details.

...the AppleTalk PC Card sets a standard for developing MS-DOS applications for AppleTalk.
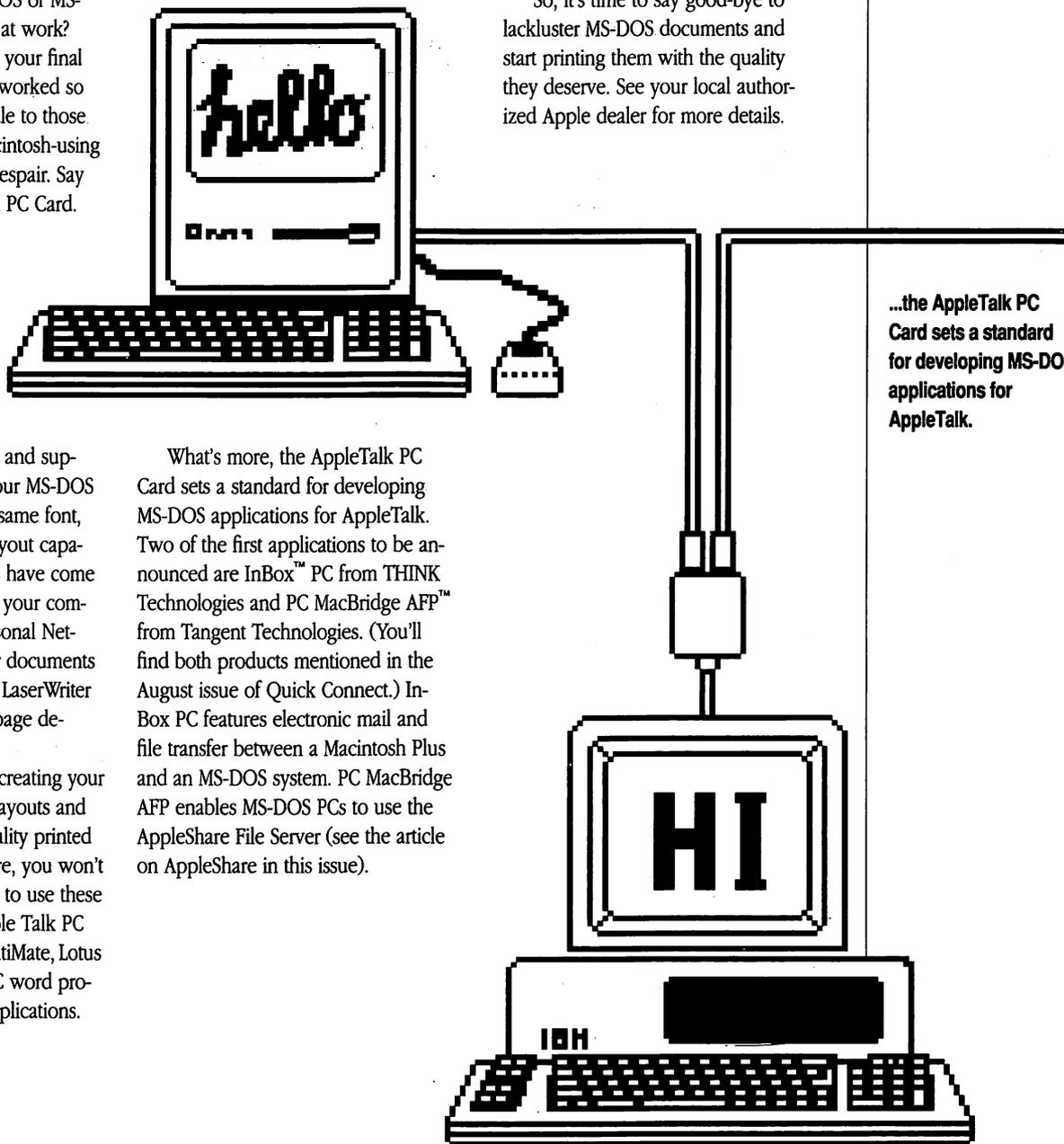
The AppleTalk PC Card and supporting software can put your MS-DOS machine in touch with the same font, style, graphics, and page layout capabilities that Macintosh users have come to expect. How? By linking your computer to the AppleTalk Personal Network so you can print your documents on an Apple LaserWriter or LaserWriter Plus using the PostScript™ page description language.

PostScript is the key to creating your own custom graphics and layouts and generating presentation-quality printed documents. And chances are, you won't need to switch applications to use these powerful features. The Apple Talk PC Card supports Wordstar, MultiMate, Lotus 1-2-3, and other popular PC word processing and spreadsheet applications.

What's more, the AppleTalk PC Card sets a standard for developing MS-DOS applications for AppleTalk. Two of the first applications to be announced are InBox™ PC from THINK Technologies and PC MacBridge AFP™ from Tangent Technologies. (You'll find both products mentioned in the August issue of Quick Connect.) InBox PC features electronic mail and file transfer between a Macintosh Plus and an MS-DOS system. PC MacBridge AFP enables MS-DOS PCs to use the AppleShare File Server (see the article on AppleShare in this issue).

Quick Connect
Using the PostScript Approach to Publishing

The offices of the design group Aplin & Uno hum with activity each month when the pieces for Quick Connect arrive. Most of that humming emanates from two Macintosh Plus computers, four Macintosh 512E's, and two (soon to be three) LaserWriter printers—the equipment at the heart of the production process.

How that equipment is used to design and assemble the newsletter you're holding represents a different approach to desktop publishing. "We're using a programmers' tool and a non-WYSIWYG (what-you-see-is-*not*-what-you-get) page layout program," explained Paul Aplin, who heads up the Quick Connect design team. According to Paul, "These tools allow us to achieve the speed and precision not possible with first-generation page layout programs."
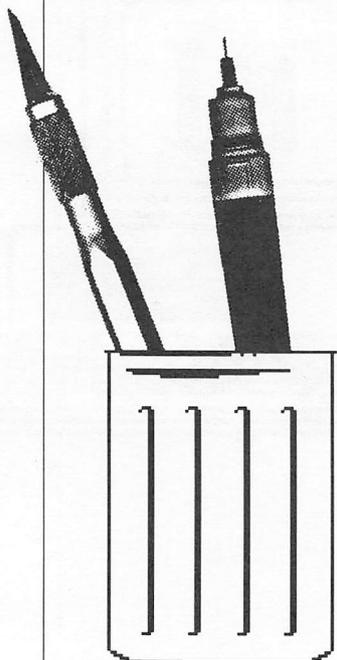
```
 File  Edit  Find  Fonts  PostScript

PS of JTP p4

103 755 moveto  0 -725 rl .28 setlinewidth stroke     %Draws the vertical rule between sidebar
/triangle  {currentpoint 15 0 rmoveto -15 12.5 rlineto  0 -25 rlineto closepath fill  translate
           0 0 moveto 18 0 translate 0 0 moveto}def
/lfpgno {95 50 moveto /Helvetica findfont 10 scalefont setfont gsave -1 1 scale triangle grestore
           -7 -3.5 rmoveto 1 setgray}def
/dot3ColRule {GS cptrans 0 sg  216{0 0 .5 0 359 arc  fill 2 0 newpt}repeat  GR  }def

gsave lfpgno (4)show grestore                         % this is the page number

/Garamond findfont 25 scalefont setfont               % this is the headline
122 740 moveto -.25 0(Quick Connect-)ashow
122 715 moveto -.25 0(Using the PostScript Approach to Publishing)ashow

122 706 moveto  dot3ColRule                           % this is the dotted rule

/Garamond-Light findfont 10 scalefont setfont         % the body copy starts here
122 685 moveto
12.4  0 rmoveto
-0.100 0(The offices of the design group)ashow
122 673 moveto
-0.100 0(Aplin & Uno hum with activity each)ashow
```

This is the screen of part of the PostScript code that describes this page.

The programmers' tool, QUED from Paragon Courseware, and the page layout program, JustText from Knowledge Engineering, allow the designers to work directly with the PostScript page description language for all their output. This gives them access to all of the PostScript features, such as type alteration and screen gradation, which are not always available in other page-layout programs. The use of PostScript also saves them time. Sending files formatted in Post-Script to the LaserWriter can speed up printing by several hundred percent—a real time-saver when you consider that each page of Quick Connect is typically printed about 50 times in the proofing phase.

"The ability to do even simple Post-Script formatting gives the designer more control and flexibility over the look and exact positions of all elements on a page" says designer Les Chibana. For example, the spacing between letters can be adjusted, or "kerned," for better readability, and graphics can be generated directly in PostScript—like the triangular bullets you see on the cover and on each page, marking the page numbers. Another advantage is that PostScript files from other programs like Adobe's Illustrator can easily be included into a page. Accuracy in positioning text and graphics can be obtained to within a fraction of a point (one point equals 1/72 of an inch).

While many of us may not need the precision possible with PostScript, it's good to know that the technology is there for all of us—amateurs and professionals alike.

Next month, we'll take you step by step through the production process and show you how the PostScript approach works in actual practice. In the meantime, we'll keep those Macintosh computers humming on this issue!

# Educational Software — How to Find It

Pretend for a moment you are a science teacher with 20 eager students and 10 idle computers. You have the next few days to choose a software program that meets your learning objectives, the skill and interest level of your class, your lesson time schedule, your budget, and runs on your equipment. And of course, you want the highest-quality software you can get. With over 10,000 programs available—most of them educational—for Apple® IIe computers alone, we'd say you need help.

For teachers without the time to sort through stacks of trade magazines, product reviews, brochures, and other publications, there's now one book to turn to: the Apple K-12 Curriculum Software Reference Guide for Science. The first in a series to include other subject areas, the guide contains comprehensive, easy-to-access information about 300 of the highest-rated software packages available in science.

The value of the guide lies in its organization—you can find software by name, publisher, or subject—and the quality of the programs included—each program listed received a favorable review from such sources as EPIE (Educational Software Evaluation Consortium), MicroSIFT (a program directed by Northwest Regional Educational Laboratory), and a team of science educators.

Teachers of other subjects can look forward to the Reading, Writing, and Language Arts edition available early this spring, and the Mathematics edition in late spring.

So even if you aren't a teacher in search of appropriate software, you can help someone who is. Suggest the Apple K-12 Curriculum Software Reference Guides. All three can be ordered through Apple sales reps and Apple education dealers.
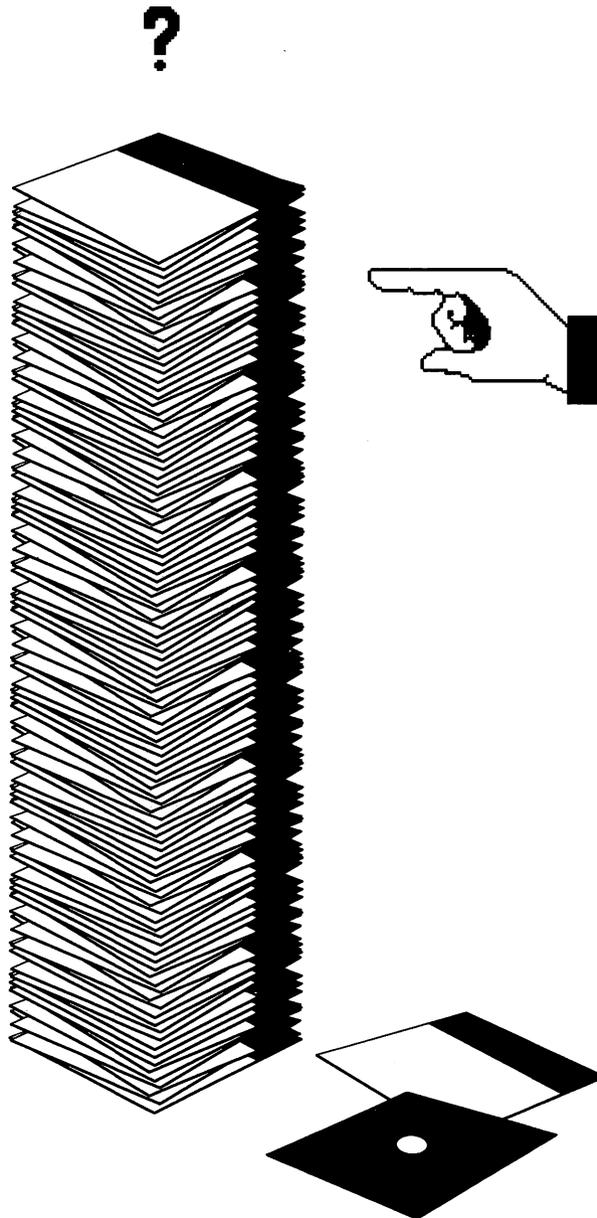
The value of guide lies in its organization — you can find software by name, publisher, or subject...

Apple Links Children Around the World

Imagine a museum where children learn about other countries and cultures by actually meeting children from around the world. How? By putting an Apple computer on-line. That's the idea behind the "Around the World Travel" exhibit planned for the Children's Discovery Museum in San Jose.

The exhibit, supported in part by a $250,000 donation from Apple Computer, is designed to give children direct experiences with the living environments, arts, habits, and institutions of foreign cultures using a variety of hands-on and explanatory media. Apple computers will provide the telecommunications link between museum visitors and children in other parts of the world. In addition to showing children what communications technology is all about, Apple hopes that they can actually use it to share ideas and information during their visit to the museum.

The design committee of "Around the World Travel" includes Apple co-founder Steve Wozniak, who is on the Board of Directors of the Children's Discovery Museum and is a major supporter of the project.

Described as "a place for children to learn by doing through participatory exhibits and programs," the Children's Discovery Museum is scheduled to open in late 1988 or early 1989. It may be a bit early to plan a trip, but in the meantime, we'll keep you posted on the museum's progress.

Apples computers will provide the telecommunications link between museum visitors and children in other parts of the world.
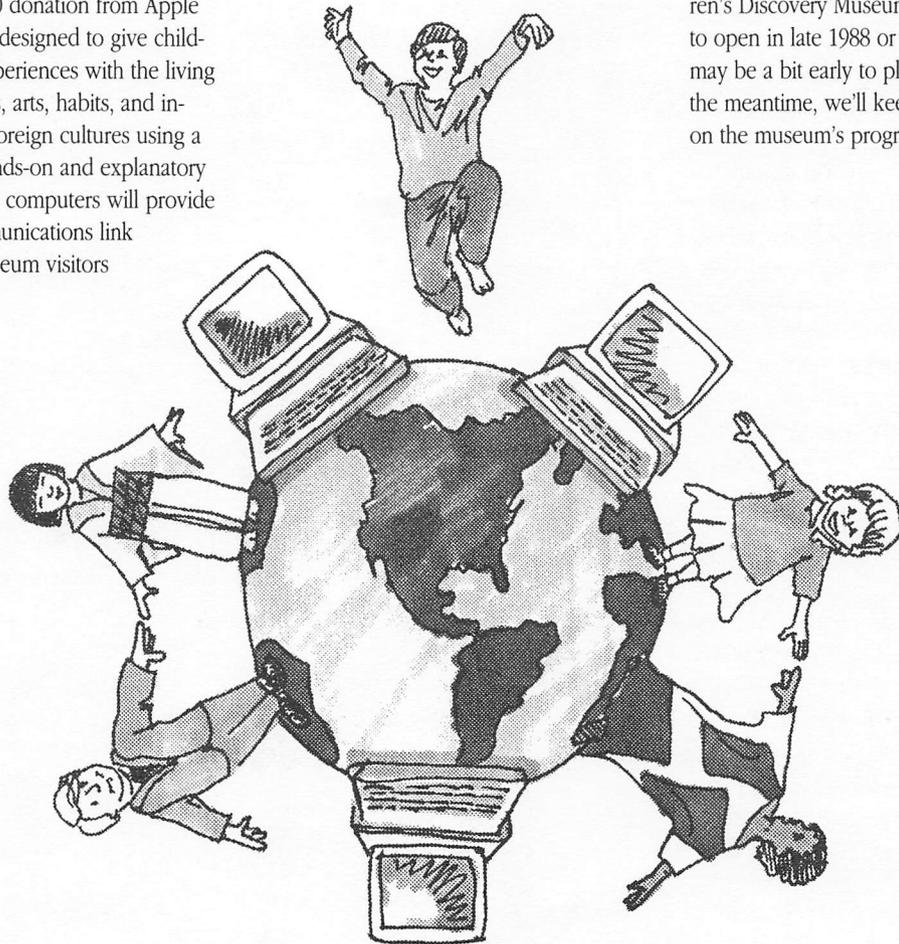
AppleShare File Server

That means that you'll always be working with the latest information, and you won't lose track of documents that have been changed or moved.

Sharing Information

AppleShare lets you control access to your own folders on the network, deciding what information you want to share and with whom—everyone on the network, a select work group, or no one at all. Individual access levels can also be controlled, with some users being able to modify information in a folder while others are only allowed to read the information. You can determine from the icons in the Finder what your restrictions are for each folder.

In addition to managing information and making it accessible to network users, a file server like Apple-Share offers other capabilities. For example, AppleShare can support "multilaunch" applications— programs that can be used by several people at once, eliminating the need for multiple
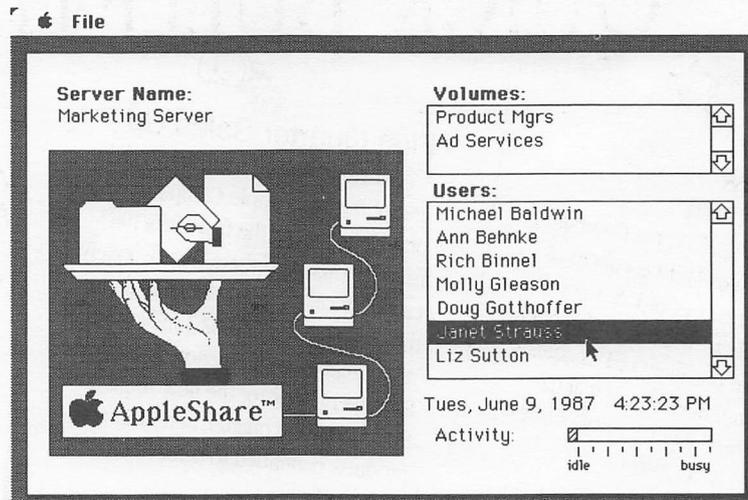
copies of the same program. Apple-Share can also support multiuser applications that allow several users to update the same data file simultaneously, which saves time and reduces the number of versions of the same file.

It's obvious that the AppleShare File Server can go a long way toward improving communications at work. It's just one of Apple's new Desktop Communications solutions for getting the most out of your Macintosh Plus. See your local authorized Apple dealer for more details.

AppleShare can also support multiuser applications that allow several users to update the same data file simultaneously...
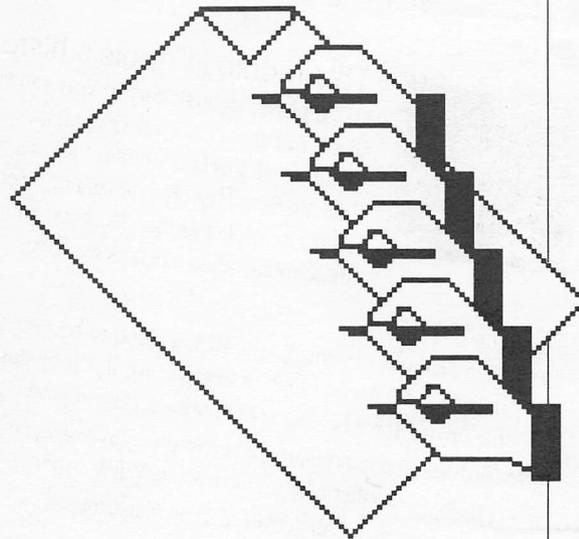
QUICK BULLETINS

Apple's New Vice President

On January 23rd, Apple Computer welcomed Charles M. Boesenberg as its new vice president of U.S. sales. Reporting directly to William V. Campbell, executive vice president of U.S. sales and marketing, Boesenberg will have overall responsibility for Apple's sales and channel development in the United States.

Boesenberg, 38, brings to Apple extensive experience in the sales of computer systems—particularly to the business market. That experience includes serving as Data General's vice president and general manager for operations abroad, and ten years at IBM in various sales and marketing management positions.

First Quarter Sales Up

While the rest of us celebrated the end of the year, Apple Computer celebrated the end of the first 1986/1987 fiscal quarter. And there was definitely cause for celebration. Net sales during the period reached $662.3 million—24% more than the same period a year ago. Sales were brisk for the new Apple IIGS™ throughout the quarter, and Macintosh products continued to achieve record sales levels.

What's ahead for the second quarter? More new products.

For the latest information on three of those new products, check out the articles in this issue on the AppleShare File Server, the LaserShare Print Spooler, and the AppleTalk PC Card. And stay tuned to Quick Connect!

Where to Buy Apple Logo II

Starting this month, Apple Logo II will be available from Logo Computer Systems, Inc., 121 Mount Vernon, Boston, MA 02108. Logo Computer Systems is the original developer of the product — a computer programming language that is a popular teaching tool among educators. Now, the complete set of Logo products, including the new LogoWriter, can be purchased from one manufacturer.

We've Moved...

Our new address is:
Apple Computer, Inc.
The Apple User Group
Connection
20525 Mariani Ave. MS 36J
Cupertino, CA 95014

This month in Apple's history...

Apple is celebrating its 10 year anniversary in 1987. To continue the celebration, Quick Connect, starting with this issue, brings to you a special Bulletin Board feature highlighting selected moments in Apple's history. We hope you enjoy these moments as much as we have.
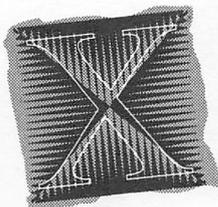
FEBRUARY

1977- Mike Markula, Chairman, asks Michael Scott to become Apple's first president. Michael declines at first, but eventually agrees and becomes the driving force behind Apple during its fastest growing years.

1981- Wozniak and fiancee are injured in (but survive) a crash in their private plane after take off from Scotts Valley airport.

1982- Steve Jobs makes the cover of Time magazine.

1983- Apple opens Paris France headquarters.

1984- Apple introduces two modems and the Imagewriter printer.

1985- Woz starts a new company that will develop products in the home video area.

1986- Apple purchases a Cray X-MP/48 supercomputer. The system is used to simulate future hardware and software architectures and accelerate new product development

The Apple IIGS Book

Reviewed by Max G. Heffler

While reading this book, a nostalgic rush hit me as I remembered the beginning of this decade when I purchased an Apple II+ with 16K of memory. At first I only had a cassette recorder and an old black-and-white TV. Of course, it didn't take me long to upgrade to 48K and a Disk II. I then got a 16K language card and a second floppy drive. Then the IIe came out and I had to upgrade again. I have been planning for some time now to upgrade to the IIGS, so I figured reviewing this book would be an excellent way to help myself make some important decisions, like whether to sell my IIe and buy the GS instead of upgrading the IIe motherboard.

Though the book begins with a description of experiences very similar to my own, right from the start they mention the Apple IIGS' advantages. Of course, we all know of the vast software base that comes with Apple II family compatibility and its conquering of the educational market. Then there are the new features: enhanced graphics modes with higher resolution, improved sound capabilities, more addressable memory and improved processor speed. Those that upgrade from the IIe can buy the new detached keyboard with the 10-key pad and the mouse as separate options. These are standard items with the IIGS.

The first chapter deals with the development of the IIGS and relates several anecdotes from the annals of Apple. Steve Wozniak originally called the GS the Apple IIx; however, the GS eventually had many code names, like "Brooklyn" and "Golden Gate." It was intended as a bridge between the Apple II family and the Macintosh. In 1981, Steve Wozniak took a break to to finish his bachelor's degree at Berkeley. When he returned to Apple two years later, it was a different company. His closest friends were all in the Macintosh group, but Wozniak returned to the Apple II division.

Wozniak was against the closed systems of the IIc and the Macintosh. After all, he was the one that gave the Apple II family its long life because he won an important argument with Steve Jobs. Jobs argued there should be only two slots, and we all know Wozniak got his eight. Unfortunately, with the Macintosh succeeding, Apple didn't need the IIx to fall back on, and it slid behind schedule. After six months, there was no more talk about a 16-bit Apple II.

New Codenames, New Features

Some time later, the IIx was resurrected. The new engineers employed many clever tricks to preserve compatibility wth existing Apple II software and yet enhance performance. There are fast and normal processing speeds, along with fast and normal speed RAM banks. The code name changed to Phoenix, rising from the ashes and then to "Rambo," when it was suggested that "if anyone tells you the product's canceled, kick 'em in the knee caps."

Then the designers called the GS "Gumby" because they kept an assortment of Gumby and Pokey toys hanging around. If Gumby was dressed for the disco, it was safe to enter the system software area. If he had a suicide note pinned to his chest, it was best to come back another time. The chapter ends with a summary of the new features.

The second chapter describes the mouse interface. The authors explain the concepts of pointing to an object on the screen, clicking or pressing the button on the mouse to direct attention to the object and dragging the object around the screen. The pointer can be an arrow, or any number of objects or icons, like a paintbrush. Pull-down menus, popularized on the Macintosh, are called that because they look like a window shade being pulled down.

You use the mouse to point to a title, hold the mouse button down, and roll the mouse and the window down. When you are pointing at your menu selection, you let go of the button and the
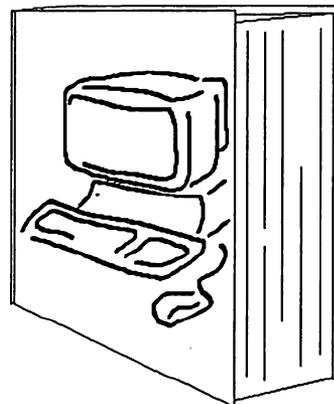
The book describes the philosophy of a visual interface and how it is a "more human interface." The cornerstones of the human interface gospel are consistency, control, immediate feedback, and forgiveness.

computer carries out the command.

The GS features desk accessories. Two desk accessories are built into the GS, a calculator and a puzzle. Many other accessories will be available, like a notepad, a scrapbook, or an alarm clock. Next windows are described. Just about everything that happens on a mouse-based system happens in a rectangular frame window, the visible window on a potentially larger document.

The book gives a brief history of the origins of the mouse at Stanford Research Institute and then at Xerox PARC (Palo Alto Research Center). The Xerox researchers first used icons on the Star, which became the motivation of the Lisa and Macintosh interface.

Visual Interface Philosophy
The book delves into the philosophy of a visual interface and how it is a "more human interface." The cornerstones of the human interface gospel according to Scot Kamins, Chris Espinoza, and Bruce Tognazzini are consistency, control, immediate feedback, and forgiveness.

You must be able to expect similar results in similar situations, where you make the decisions with a quick response. You're human. You want another chance. The mouse has been around Apple IIs since 1983, but there wasn't enough speed for graphics. Thus *MouseText* was invented. *MouseText* is a way to do pseudo-graphics in text mode, using the *MouseText* character set. The book describes how the mouse affects applications such as paint and draw programs, page layout programs, word processing programs, spreadsheet programs, data base programs, communications program, and music programs.

The third chapter is on the *Finder*, the mouse utilities. The *Finder* is a program that "finds" your disks in the disk drives, shows you what's on them in the form of icons on the screen, and lets you start up applications and do utilities-type work with disks and docu-

ments. You can use it with ProDOS applications, but not DOS 3.3 or Pascal, which require the System Utilities on the IIGS system disk. The *Finder* allows you to format disks, start a program, put documents (files) into folders (directories), throw things away into the trash can icon, make copies of documents and disks by dragging icons around, duplicate documents, move documents to another disk, and organize the desktop.

Du Prau and Tyson discuss differences in using a 5-1/4 inch drive and a 3-1/2 drive. The Finder can only be used with ProDOS 5-1/4 inch disks with a 3-1/2 inch disk to load the *Finder* first. The 5-1/4 inch disks are only recognizable after the **Check Drives** command is issued, not automatically, like 3-1/2 inch drives. You can eject a 3-1/2 inch disk from the drive via the *Finder*. Of course, the 5-1/4 inch disks are not ejected via software control.

The last topic of this chapter is on the differences between the IIGS *Finder* and the Macintosh *Finder*. The IIGS will not automatically recognize all disks. Notice the 5-1/4 inch disks above. The IIGS can't "see" unformatted 5-1/4 inch disks without being told to look for them. When you put a document into the IIGS Trash, it is erased from the disk instantly, where the Macintosh icon stays in the Trash temporarily, giving you a chance to recover it if you wish.

New Perspective
Since I wrote the previous half of this report, I have purchased a IIGS and am currently using my existing software and peripherals to prepare the rest of this article.

The fourth chapter describes classic applications. The majority of the established Apple II software base will run on the IIGS without the advantage of the mouse. This chapter is about Apple's bending over backwards for compatibility with the classic applications.

Older applications, like *AppleWorks*, have been upgraded to take advantage of the extra memory and the detached keyboard with the numeric keypad. Many old applications will be able to take advantage of the new 2.8 Mhz clock option. Some programs will have to be run at the "normal" 1MHz clock speed, like *Softerm II*, the communication software I use. Also, many games could be nearly impossible at 3 times the speed.

The operating systems DOS 3.3, ProDOS, and Pascal are discussed. Applications designed to take advantage of the GS's built-in mouse tools and greater memory size all use ProDOS. DOS 3.2 still works, but it needs a jump start from the DOS 3.3 Systems Master disk.

More Anecdotes
The authors relate many anecdotes about Apple's struggle for compatibility. Apple has a set of well-defined entry points for ROM calls. When upgrading ROMs things usually move around, but the well-defined entry points are guaranteed to stay the same. Many software developers used calls that were subject to change. Some programs were so popular that Apple redesigned the new ROMs to allow these violators to still function.

Many programs that communicate with a chip directly on a peripheral card instead of via ROM calls, like *Softerm II*, will not function at the higher speed. These same programs cannot use the built-in serial port because the hardware is different. However, these programs still work with the Super Serial Card at "normal" speed.

The fifth chapter is about peripherals. The hardware supports two types of monitors—NTSC (National Television Standards Committee) composite, and analog RGB (Red, Green, Blue). The RGB has sharper resolution and brighter colors, but is more expensive.

With an RGB monitor, you can display text in color even in 80-column

After reading this book, I decided I wanted some of the GS features that did not come with the IIe upgrade. I do not regret my decision. The IIGS is a wonderful computer.

mode. The composite switches to black and white mode to display text. I am currently using the GS standard of white characters on a blue background. It's a nice change from the black and white. If I get tired of this combination, I can change it at will. The composite monitor does not have the bandwidth to display the new higher resolution graphics clearly.

You may substitute a television for a monitor; however, you need a RF (radio frequency) modulator, and 80-column text is not clear. Three kinds of disk drives work with the GS: 5.25-inch drives, 3.5-inch drives, and hard disk drives. The 5.25-inch disk holds 143 kilobytes. The 3.5-inch disk holds 6 times as much data, 800 kilobytes. Some hard disks can hold upwards of 20 megabytes, or 25 times the storage of a 3.5-inch disk. The GS comes with 256K of memory. The slots and memory expansion port can be used to boost the memory to 4 meg.

With the correct cable, a serial printer can use the built-in serial printer port directly. A parallel printer can use an interface card, like the Grappler+ I am using, or a serial to parallel cable. The Apple LaserWriter can now be used by using the built-in AppleTalk port and the appropriate cable. Modems can use the built-in serial port, assuming the communications software supports the new chip, or an interface card, like the Super Serial Card. Joysticks and hand-controllers can use the DB-9 port or the 16-pin socket on the motherboard, just like the IIe.

Of course, many more peripherals are supported, like adaptive devices for the handicapped, sound amplifiers, co-processors, digitizers, drawing pads, hard disk backup units, home control devices, light pens, music keyboards, networks, plotters, to name a few. You can plug peripherals into the eight ports on the back (sound port, serial ports, game port, disk drive port, RGB monitor port, NTSC composite port, Apple

Desktop Bus port). Or you can use interface cards in slots on the motherboard. The 80-column firmware is built in so 80-column cards will not work, including those with the digital-RGB support.

Customizing the System
The sixth chapter is about the Control Panel program. The Control Panel is a program in ROM that lets you customize several aspects of your computer system, including the configuration of the built-in serial ports, the colors of the text, background, and border on the display, the responsiveness of the mouse, the time interval before a pressed key starts repeating, the speed of the processor, and lots more.

You can also use the Control Program to set the time and date of the built-in clock. You can enter the Control Panel by either starting up the computer with the option key pressed down, or by pressing Option-Control-Reset. If the power is already on you can press Apple-Control Esc in new applications. You can also choose the Control Panel option from the Apple menu in the *Finder*, which is mouse based. The bell pitch and volume can be set. The display language can be set for the country and the Dvorak keyboard layout is an option. The GS now has a type-ahead buffer that can be enabled or disabled. Many options that can now be customized are the key repeat speed and delay, the mouse double-click speed, and the rate of cursor flash.

Additionally, the GS has many ad-·vanced features that can be customized. They are: using shift to get lower case when CAPS LOC key is down, turbo delete and space which doubles the speed of deletes and space by using the control key with delete and space, dual speed keys doubles the speed of the arrows by using the control key with the arrow key, and high speed mouse to make it more responsive by moving twice as far for a given move. The slots or interface

cards are selected and customized via the Control Panel as well as the disk startup slot. It is from here that the built-in serial ports are configured. A RAM disk can be configured from the Control Panel. It allows you to configure a RAM disk with a minimum size of 0 that will allow applications to use any memory currently not allocated by the RAM disk, and the RAM disk to use any memory unallocated by the application, i.e. the best of both worlds.

The seventh chapter deals with basic computer concepts. Du Prau and Tyson define what an application program is and what it does, using word processing, spreadsheets, data base programs, graphics programs, communications programs, and games as prime examples. The authors cover programming, what it is, and why anyone would want to do it. They cover the definitions of ROM and RAM, as well as techniques to move information between computer and disk.

The appendices cover resources, like user's groups, reference manuals, software catalogs, magazines, a reading list about personal computers and programmers, and software publishers.

The Book Did Its Job
After reading this book, as well as all of the GS reviews in the literature, I got antsy. I decided I wanted some of the GS features that did not come with the IIe upgrade, like the mouse and the detached keyboard. I then went a little bit crazy.

After initially budgeting $500 and then $700 just in case, I managed to scrape together $855 for the upgrade/purchase. After spending $2200, I have a bit of a sales job ahead to recoup the difference. But most importantly, I do not regret my decision, no matter what my wife says or how she feels about it! Almost a mini-color-Macintosh, the Apple IIGS is a wonderful computer. And this book helped stoke the fire.

World Conquest

Bill Muhlhausen Examines

The idea behind *Colonial Conquest* is to conquer additional lands in order to add their national income to the conquering nation's treasury. The larger the treasury, the more money available to increase your military power.

The standard scenario is set in the last 50 years of the nineteenth century. Two alternate scenarios are also available. These scenarios reflect the actual historical holdings of the countries considered to be major countries at the times of 1880 and 1914.

Six Can Play

The program allows for up to six players to play each other. You may also play solitaire games against the computer with up to five computer opponents or as few as one computer opponent. You may play human versus human with up to four computer opponents or no computer opposition, head up.

The six player countries are Germany, England, USA, Japan, Russia, and France. Each country has a rating on its offensive and defensive ability for both armies and navies. England has the top rating, closely followed by Germany and

the USA. France, Japan, and Russia are rated much lower than the first three, with Russia having the worst military rating.

The Russian player also has the distinction of building armies at the cheapest cost and building navies at the highest cost of any other of the players. To offset the military disparity of some of the countries, SSI has included the ability to handicap any of the six player countries on a scale of zero to nine.

In addition to the player countries there are 130 independent countries, which include island countries, divided into eight regions, making a total number of countries available for conquest of 135. Player countries are included in the eight regional areas which are displayed in color on six screens.

SSI has made allowance for those of you with no color monitor. The first question asked after booting the disk is do you have a color display. If you do and mistakenly answer "no," I suggest you reboot because the maps will be much much harder to read. Each player country has a distinctive color and pattern, while the independent countries are colored white with no pattern at all.

Whenever you conquer a country, your color and pattern are substituted for the country's original color. Player countries and independent countries may be invaded and conquered more than once. The only basic requirement needed to reconquer any area is enough military power to overcome the current local home fleet and military garrison. Conquering a region such as north or south Africa gives the conquering country bonus points and money for as long as they can retain control of the region.

Let Play Begin

After you have determined the conditions of play using the set up menu, the game is played in rounds with each round divided into nine phases. The phases appear in the following order: army build, navy build, fortification, economic aid, espionage, subversion, army movement, navy movement, and combat resolution.

The build phases, in which you spend your money for more military forces, and the combat resolution phase will normally be used every round, while the espionage and movement of military forces phases are used slightly

on Your Apple II

SSI's Colonial Conquest

less frequently.

Players have four chances to move and attack other countries on the map each round. During the spring turn all nine options are available. This is not true of the summer, fall, and winter parts of the round in which you may only move military forces and resolve combats.

Your national income may also be spent on fortification, economic aid, espionage, and subversion of independent governments. Fortification allows you to make it about twice as hard to defeat your forces in a given area. Economic aid allows you to build up an independent country's military strength, bribe off the computer or a human player to keep him/it from making war on you. Espionage allows you to find out the troop strength of the country or area spied upon. You cannot find out the naval strength of any place with this option.

Subversion allows you to weaken the military power of any independent country. The more money you spend, the weaker the military garrison. If you spend enough money in a area during this phase, you may have the country join the countries you have conquered by force of arms. Should this happen, you receive no victory points but you are able to add the areas' national income to your own.

Victory Conditions
There are four victory conditions offered on the set up menu. Games of 500, 1000, 1500, and unlimited victory points are possible. At this time on the Apple II disk, there is a bug which declares the first player to reach 1000 points the winner of a 1500 point game. I requested a current version of the game from SSI which had this bug corrected. Although a replacement disk was promptly forthcoming, the bug had not been corrected. This problem appeared when I played the computer on a solitaire basis. I have not yet had a human opponent who wanted to take the time to play the long 1500 point game so I do not know if the problem occurs in human versus human play.

In playing this game I found that it is easier to use the keyboard than the joystick to move the cursor. It is necessary to place the cursor on a country's status block. When using my CH Prod-

ucts joystick, I found that this was hard to do because of the tendency to move the cursor too much or not enough to stop exactly on the necessary square.

In order to build more military forces, you must have a supply center in your own country. I suggest that you always have a strong force stationed at one of your supply centers or, in the case of Russia, at your only supply center, if you want to be able to build new forces at the beginning of each new spring round.

If you are a gambler, the time to gamble on not being attacked by the computer is during the first 3 rounds. If you want to deny an opponent a chance to build, attack and attempt to capture his supply centers on the winter combat turn.

Any country very near to or touching water is accessible by naval power. Remember to keep more than a token force in these areas if you want to keep control over them. Since you are not allowed to build in the first turn of the game, do not hesitate to use all the money you have in your treasury to spy on the other countries. It is usually good tactics to save enough money each

> **Colonial Conquest** should have almost universal appeal to those who enjoy computer gaming. The game is fairly easy to learn to play and, once learned, not easily forgotten.

round to spy on four or five areas.

Player Strategies

I played every country except Japan against the computer and was able to win the game. A friend of mine has played Japan and won against the computer. Each country has a different strategy of play to win.

England must build armies and land them in sufficient numbers so that they can continue to advance on land areas each phase during a round. The USA needs almost as many ships as armies. Germany needs a large army but cannot win without 100 to 300 ships.

France, like the USA, needs both armies and navies but more of both due to their poorer military rating. France must take Italy in the first or second round, or she will be forced to declare war on Germany, which will have conquered most of Europe, causing France to be landlocked.

The Russian player needs to build uncountable armies and be prepared to have them shot to pieces. He also needs a minimum of 100 ships and 200 up is more like it. Russia should fortify all gains as soon as he can especially if he wants to be sure to hang on to the conquest.

The Japanese player has the same problems as the English player, with the added problem that his forces do not fight as well as the English. This causes him to need more of everything to be able to compete evenly with any of the first rated countries. Check your current score and the war table at least once per round.

You will have the chance to do this at the end of each combat season. The war table allows you to see who has declared war on you as well as who the other players are at war with.

In my opinion this is a game for all ages. The short 500 point standard set-up game can be played in a hour or two at most. The 1880 and 1914 scenarios are better played human versus human, since I found that both of these scenarios could be won human versus computer in one round or less playing a 500 point game.

Those who wish to conquer the world are offered a game save feature that works very nicely. The combats are smoothly and quickly resolved without any aid from the players. The tendency of the program to shift away from the screen in which you last set up a combat may annoy some of you who want to see the resolution happen while you watch, but the screen in which you are interested be brought up with a few extra key strokes in a few seconds.

Conclusions

Those of you who enjoy the board game *Diplomacy*, should definitely buy this offering. You can make treaties in an area away from the computer while one player enters moves and even do backstabs on the same round by having the player entering moves change his move which may be done any time before he says he is finished moving.

For those of you who do not like *Diplomacy*, this game is one you also may have a lot of fun playing. In my opinion, this offering should have almost universal appeal to those who enjoy computer gaming. *Colonial Conquest* is fairly easy to learn to play and once learned not easily forgotten. WARNING!! This game is fun to play and may be addicting to those who add it to their library.

Volunteer Specialists

Apple II

Apple Access	Patrick Hennessey	342-0643
AppleWorks	Jack Cowart	467-4215
	John Slack	491-1747
AppleWriter II	Robin Cox	778-1635
AppleWriter III	Shorty Hirsekron	697-9797
BusinessWorks	Ron Burgess	270-8243
CAD-Apple	Dick Fairman	723-9619
CP/M	Kip Reiner	550-0568
dBase II	H. Helm	529-7405
Data Factory	Dick Fairman	723-9619
Dollars and Sense	Leon Cesazini	467-3650
DowJones Market		
Analyzer	Ed Hurley	497-8877
Family Roots	Clifton Taylor	462-1698
Home Accountant	Rick Oshlo	578-8530
IAC Calc	Chris Kravits	320-0381
Letter Perfect	Bill Muhlhausen	668-3963
List Handler	Rick Kravits	320-0381
MCI Mail	Patrick Hennessey	342-0643
Multiplan	Mackie Brown	688-8655
	Jack Bailie	440-5963
	Glen Ray	359-2103
MultiScribe	Henry Bernstein	728-0081
Palantir	Re Kramer	358-6687
Pie Writer	Ray Fielding	358-4217
Quickfile	Jack Cowart	467-4215
ScreenWriter II	Dick Fairman	723-9619
Space Eggs	T. Sloan Engle	774-9055
Time Is Money	Dick Fairman	723-9619
VersaForm III	Shorty Hirsekron	697-9797
VisiCalc(Advanced)	Gerald L. Penn	498-0079
Wordstar	Ed Haymes	522-1863
Word Handler	Rick Kravits	320-0381

Hardware

Abaton Optical		
Character Reader	H. Helm	529-7405
Applied Engineering		
Upgrade Cards	Bruce Sprague	360-1000
DataFrame Hard Disks	Mike Kramer	358-6687
Mac XL	Mike Conway	495-2292
Sider Hard Disk Drives	Robin Cox	778-1635
Mac XL	Mike Conway	495-2292

Macintosh

Aztec C	Mike Martin	486-9169
BeamMac	Ronnie Haws	444-6720
Cricket Graph	Rudge Allen	622-3979
	David Ullman-Dougherty	995-5795
DB Master	Mike Conway	495-2292
Dollars & Sense	Gerald L. Penn	498-0079
Filevision	Mike Martin	486-9169
FrameMac	Ronnie Haws	444-6720
FullPaint	David Ullman-Dougherty	995-5795
Helix	Steve Bass	847-4407
	H. Helm	529-7405
Mac-SIG	Steve Bass	847-4407
MacDraw	Billy Jacobs	480-4410
	Mike Kramer	358-6687
MacDraft	Jim Huck	496-9508
	Billy Jacobs	480-4410
MacLink	Mike Kramer	358-6687
MacPaint	Bill Hailey	937-8624
Mac Transfer	Mike Kramer	358-6687
MacWrite	Bill Hailey	937-8624
Mac 3-D	Larry Stage	358-1105
Megamax C	Chris Flick	363-3153
MGMS CAD	Steve Bass	847-4407
Microsoft BASIC	Tom Dillon	367-6502
Microsoft Chart	Mike Martin	486-9169
Microsoft Excel	Les Brown	795-2741
Microsoft File	Rudge Allen	622-3979
	Mike Martin	486-9169
	Gerald L. Penn	498-0079
Microsoft Multiplan	Mike Conway	495-2292
	Peter Lemettais	523-1390
Microsoft Word	Virginia Conway	495-2292
OverVue 2.0	H. Helm	529-7405
	Neal Scott	890-0532
PageMaker	Re Kramer	358-6687
Ready, Set, Go!	Cleland Early	941-7247
Reflex	Mike Kramer	358-6687
Red Ryder	David Ullman-Dougherty	995-5795
ResEdit	David Ullman-Dougherty	995-5795
Silicon Press	Re Kramer	358-6687
SuperPaint	Mike Kramer	358-6687
TML Pascal	Grady Beaird	529-8420
Tekalike	Mike Martin	486-9169
Thunderscan	David Ullman-Dougherty	995-5795
Turbo Maccountant	Jack Cowart	467-4215
XLisp	Mike Martin	486-9169
ZBasic	Tom Dillon	376-6502

Would you like to be a specialist? Leave your name and phone number at the Answer Desk during the meeting or mail it to the *Apple Barrel*. Please remember that the specialists are volunteers and be considerate when you call them. Don't call late at night unless you clear it with them beforehand.

MacInTax— The Tax Man Cometh

(screenshot of MacInTax application showing File, Edit, Options, Forms, Schedules, Worksheets menus with a 1040 form and a list of forms: 2106-1: Your Employee Expenses; 2106-2: Spouse's Emp. Expenses; 2210: Underpayment Penalty; 2441: Child Care Credit; 3903: Moving Expense; 4684: Casualties & Thefts; 4797: Other Gains & Losses; 6251: Alternative Minimum Tax; 6252's: Installment Sales)

Reviewed by Mike Kramer

One of the most unpleasant tasks in life, unless your name is H & R Block, is the annual chore of preparing income tax returns. Since I hate doing it so much, I always put it off as long as I can, even when I am due a refund. Last year I discovered that filling out the returns could actually be fun when using a tax program called *MacInTax*. Unfortunately it didn't help much when gathering and categorizing all the receipts, although *Reflex* and *Excel* did make that chore a little easier.

MacInTax is designed to run on the full Macintosh line, from the 128K "skinny" Mac to the Macintosh Plus, unenhanced or enhanced, and even the Lisa/Mac. It will print the various tax forms on either the LaserWriter or the ImageWriter in a quality that is acceptable to the Infernal Revenue Service.

MacInTax offers a number of unique features that make it extremely easy to use:

- All forms and worksheets commonly used for personal and small business use are provided on-screen. Information is entered into the forms on screen much as you would enter information by hand on the government forms. A major advantage is that, once entered or calculated, information is automatically posted on other forms as appropriate.

- Extensive error checking is provided to prevent erroneous and/or inconsistent input and to assure that all information has been entered on each form used. For example, if you enter your spouse's social security number in the appropriate place and then check the blank that says you are single, an alert window will tell you to blank out the spouse's social security number entry. Warning is also given if you try to print a document that has not been completed.

- All calculations are performed automatically whenever any value is entered or changed. All forms are updated automatically when a change is made on any of the forms.

- An itemization list can be called up for any value on the form. All amounts entered in the list are automatically totalled and the total is placed in the appropriate place on the form. Itemization lists can be printed.

- The IRS instructions can be called up for any line by double-clicking on the line. The instructions are contained in a sizable scrolling window.

- Any or all of the forms and worksheets can be printed on either a LaserWriter or an ImageWriter. The forms can be submitted to the IRS, so you don't have to rush down to the Federal Building at the last minute to get that obscure form you overlooked. If you are nervous about the acceptance of the forms, you can print on preprinted forms aligned to Nelco's pin-feed tax forms (whatever those are).

- Estimated values can be entered to permit you to play "what if." Any estimated values are flagged on the screen with an "est." A search option is provided for finding all the estimated values so you can change them.

- Data generated from other popular applications, including *Filemaker Plus, Reflex, Turbo Maccountant, Omnis 3+, Dollars and Sense,* and *Excel,* can be imported using the Import Window. The major requirement is that the data to be imported be in text files saved in Mail Merge format.

- All forms used for a given tax return are saved as a single file along with the entered data. Any number of tax returns may be prepared.

MacInTax follows the standard Mac user interface closely, is easy to use, and saves a lot of work. I consider it to be an outstanding product that deserves at least five hogs (*Apple Barrel* equivalents to *MacUser* mice).

MacInTax is shipped on three non-copy-protected disks containing the system, the forms, and the instructions. The suggested retail price is $99.00 with annual updates offered for $45. Free technical support is available, although you will have to pay for the call. Frankly, I don't think you would have any reason to call for help since the manual is adequate and online help is a double-click away.

MacInTax is available locally or can be ordered directly from Softview, 4820 Adohr Lane Suite F, Camarillo, CA, 93010. You can order from Softview toll-free by dialling 1-800-MACVIEW.

Macintosh Library Update

by Larry Saphier

The library currently consists of three types of public domain disks, and a series of demonstration disks. This article will briefly describe each of these to provide the HAAUG membership the latest information on the operation of the library.

The public domain disks are in three categories, these are:

New disks

These are disks received prior to or during a meeting. Their contents are usually the latest versions of existing programs or the newest in programs for the Macintosh user. They are 400K, MFS format. These disks are available for copying to member's disks during the meeting received or the first meeting following receipt. They are copied to member's disks "as received." We give each disk a brief review and look for commercial, copyrighted programs that are not intended for inclusion in our library. No attempt is made to review the programs for functionality, compatability with other programs, or just plain bombing. These disks are moved to the HMS category for the next meeting.

HMS disks

This category of disks is a temporary one. It is intended to make the programs on them available to the membership before conversion to the permanent library. The "new disks" contents are scrutinized to be sure their contents are only public domain, freeware, or shareware programs. An additional brief check is given the contents for workability. "Bombs" are eliminated. We create a list of the disks contents. A catalog of all the HMS disks is at the Library desk during the meetings for members to examine. An HMS Catalog disk, which duplicates the printed catalog in a *MacWrite* format, is available during the meeting for copying

to members disks. This allows you to scrutinize the library's contents at a more leisurely pace at home. All these disks are 400K, MFS format. These disks are offered for sale during the monthly meetings at $5 each.

Disks are kept in the HMS library for approximately six months. Twice a year, following the swap-and-shop meetings, the disks are moved to the Permanent HPD library. The HMS disks are available at these semiannual swap-and-shop meets for free copying to member-supplied disks.

HPD disks

These disks are the permanent library disks. They are on 400K, MFS format so they are accessible to all members, regardless of which ROM Mac they own.

Each disk is dedicated to a specific program or file type, such as games, fonts, desk accessories, utility programs, etc. All files are reviewed for functionality and given enough documentation to identify the file type and give some idea of the file or programs purpose. This is usually done in the "Get Info" box of the Apple Menu. Occasionally, a *MacWrite* document will be provided.

Two types of HPD disk catalogs are available during the meetings. One contains a listing of each disks contents. The other is an alphabetical listing of all the files in the HPD library to allow members to find the disk number of a specific file or program. An HPD catalog disk is also available for copying to members' disks during the meetings. This disk contains the individual disk contents as *MacWrite* documents. The alphabetical listing is a *Q & D Cataloger* program and only accessible to those owning this commercial program. The HPD disks are sold during the meetings for $5 each. A small library of demonstration disks

is kept for copying to members disks at some of the meetings, depending on the number of volunteers available to work at that meeting. These disks are varied in scope and include limited use programs, which allow you to operate the program as it exists within certain limits. These limits are number of files able to be created, or inability to save the results. The other type of program is the so called "canned" demo. You insert the disk and are led through a demo of the program, without the ability to perform the programs function even on a limited basis.

This library work is done by a large group of volunteers who copy at the meetings, provide us with the latest in software, rework the disks into other categories, and document the files in these disks. Without them, this library would only exist in only the most rudimentary fashion. Their work makes it all possible. There is always room for one more helper in this work. If you are interested in helping, call the number listed in the *Apple Barrel* or stop by the library desk during the meeting.

The Mac library will also be an integral part of the new "Random Room," which will occupy half of the large meeting room during the monthly meetings. The Mac library desk will be there with its copying and sales activities. We will also have several people available with their Macs to demonstrate any portion of the library you might have some question about. They will also try to answer any questions you might have about the library, your Mac, etc.

We welcome any suggestions about improving the library and its various functions. Stop by the library desk.

MultiUser HELIX
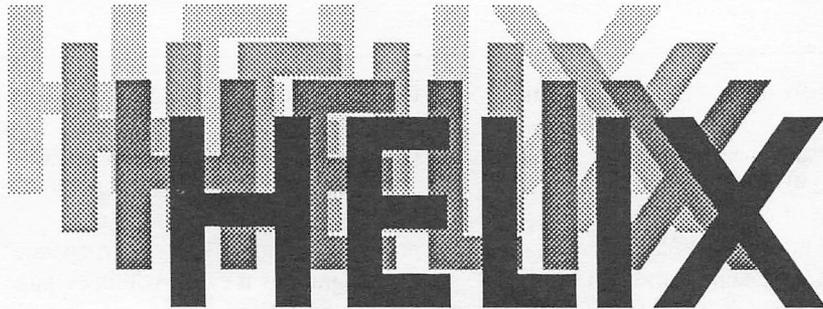
Innovative Graphical Database Comes of Age

by
Daryl
Tschoepe

Okay, think Macintosh. Certain software packages immediately leap to mind when thinking of a particular application; for instance, spreadsheet— *Excel*, need to do a newsletter— *PageMaker*, design a floor plan— *MacDraft*. What about a multi-user database for ten users running over Apple-Talk complete with pull-down menus customized for the needs of the individual user? Did you draw a blank? Maybe you thought about *Omnis3*? Chances are you didn't think about Odesta's *Multi-User Helix*, and maybe you should have.

Helix became known early on as an innovative approach to a relational database, with a graphical (is that really a word?) method of constructing calculations and relations. Several unusual features, like full access to Macintosh fonts and with Version 2.0 the ability to store pictures in a database made it stand out from the crowd of early Mac databases. While innovative, it also was widely held that *Helix* was an incredible slug, good for someone who liked long, frequent coffee breaks. This reputation was not entirely unjustified.

Then came *Double Helix*, and most of the complaints went away. Speed was dramatically increased, many new calculation tiles were added, the ability to place forms within forms and a slick menu creation module transformed *Helix* into an incredibly useful database, one well suited for use by novices after being built by someone else. The ability to create customized menus with the necessary entry screens and reports made *Double Helix* particularly attractive in that niche, but a multiuser version was still the ideal, and reportedly under development.

MultiUser Helix finally appeared, and once again Odesta offered some really unique solutions. The single most astounding feature is that a change made on any workstation (node) on the network instantly appears on every other station on the network, a feature totally unique to *Helix*, with nothing like it even in the mini world. *Helix* does all the work, no file servers or trickery required, in direct contrast to the *Omnis/ Corvus* connection. A plain AppleTalk network with a 1 meg Mac for a host and any kind of hard drive is ready for *MultiUser Helix*, since the software itself provides all of the networking and filesharing features to the users. This approach makes compatibility easy, almost any equipment you already own is usable under *Helix*. Up to 30 users can function on a single network, and everyone can have their own personalized menus, with password protection provided.

New features were added to the software also. Again, more calculation tiles were added as well as the ability to check entries for erroneous information. A log feature was added that keeps track of all entries on the network, and keeps them in a file that can be restored from in case of the a system crash or power-outage. This is particularly handy, and
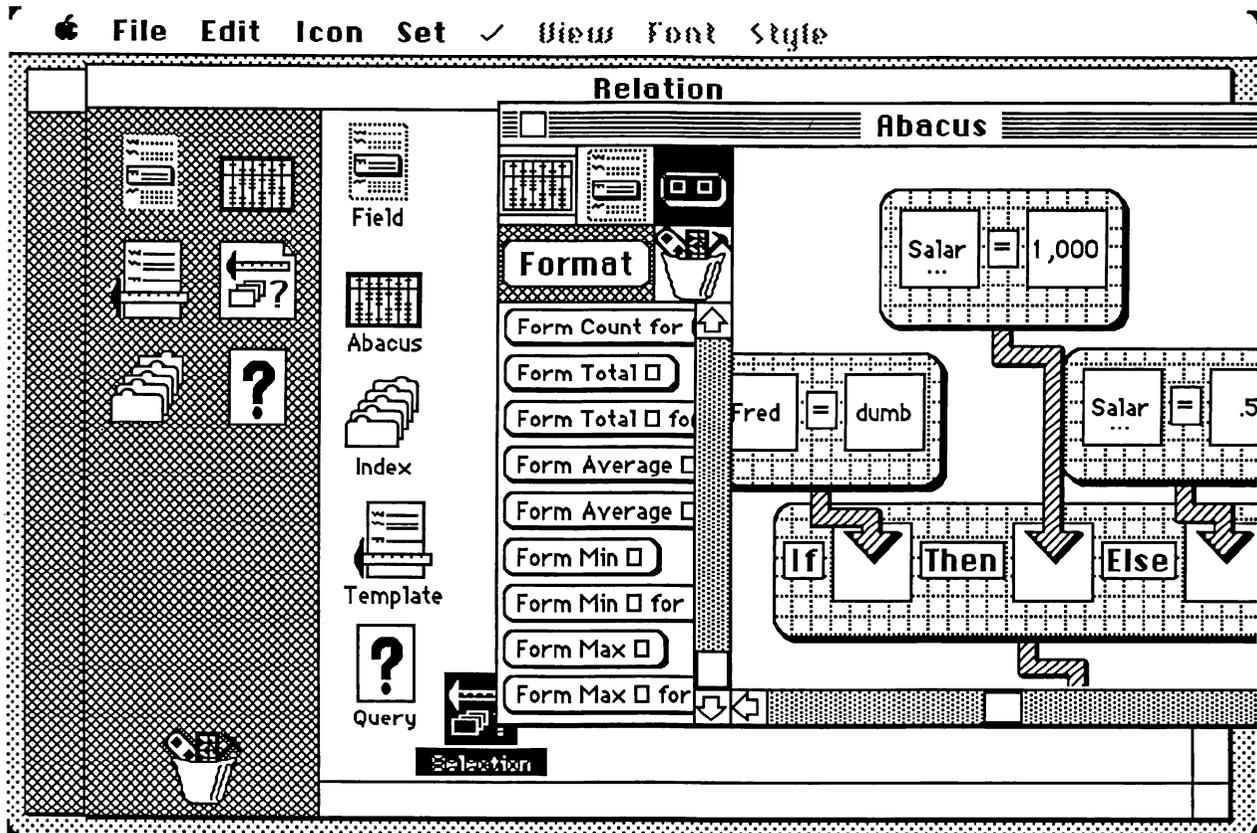
long overdue in light of *Helix's* extremely nasty habit of destroying your file if anything interrupts your work.

Odesta offers unlimited (but no longer toll-free) technical support, as well as an optional consulting and design service for those that don't wish to tackle the creation of the beast themselves.

The ease with which you can create menus for individual users is astonishing. *MultiUser Helix* is a viable workable solution for many people searching for a multi-user answer to their database needs. There are thorns to this rose, though. Lack of a true posting feature can lead to some incredibly obtuse calculations that simulate the effects of posting. The host in any kind of dedicated installation (such as ours) shouldn't be used, since when in use it affects performance throughout the network, and it's not a positive effect.

Helix is also extremely processor bound with the current generation of Macs, even a Mac Plus isn't good for more than two or three users. For optimum performance, cram as much memory as you can into the host (preferably at least two megabytes, and four would be even better), and as much memory as you can afford into the nodes also, up to about two meg. Any additional processors or accelerators you can afford will also help.

A Levco Prodigy for a host is ideal, since that gives you more processor than you know what to do with, though obviously a $7,000.00 host that nobody uses isn't for everyone, but for someone running ten full-time users it could be a necessity.

If you need to go beyond 10 users, say maybe a 100, the answer is *HelixVMX*. *HelixVMX* allows you to use

Multi-User Helix *is a solid package with a lot to offer, including some unique features.*

Macintoshes as the front end to a DEC MicroVAX, bypassing the limitations of AppleTalk. By using a Kinetics Fastpath Gateway into Ethernet, *HelixVMX* allows you to build an application in *MultiUser Helix* and then move it over to the VAX and run the VAX as the host of the network. You can add a tremendous amount of users to a *HelixVMX* before it will degrade performance noticeably.

Odesta has produced a winner with *MultiUser Helix;* it's a solid package with a lot to offer, including some unique features. If Odesta ever gets *Remote Helix* off the ground, which will allow a Mac to hook into a network via modem, they will be offering an even more unique solution for the Macintosh. Now the only question is will they be able to overcome the tremendous lead that Blythe has built up with *Omnis3*. They have the software, now it's just a question of whether they can reach their market. If you need a relational database, and don't like the *Omnis* approach, take a look at *Helix*, if nothing else it will be different from anything

Taking to the Air and Space on the Macintosh

By Bob Lewis

I'm sure at one time or another we have all marvelled at the thrill of flight. You watch a plane soar through the sky and try to imagine what it would be like to fly an airplane (let alone a shuttle). Unfortunately, that's all the majority of us will ever be able to do: imagine flight. It is true that we can hop on a jet and fly somewhere, but that is still not the same as controlling the craft. Thanks to the PC revolution, programs have been written that allow the average person to become an "armchair pilot." Two such programs are *Fokker Triplane* by Bullseye Software and *Orbiter* by Spectrum Holobyte.

Fokker Triplane

In *Fokker Triplane* you are in control of the same type of plane the Red Baron (not the pizza) flew in WWI. *Fokker Triplane* was created by Don A. Hill, Jr. In making the program some concessions had to be made. Since nothing has been written that can produce an interface with the Mac that would allow true "seat of the pants" flying, several instruments had to be added to the flight console that did not exist on the original triplane. I've noted some of these additions in figure 1. There are also four more digital gauges found directly below the altimeter. They are, going clockwise: Compass, Automatic Direction Finder (ADF), Low Altitude Warning, and Distance Measuring Equipment (DME). All this additional equipment makes the Fokker a great plane to fly.

The only other concession I could note dealt with the graphics. They tend to be on the sketchy side. This is probably due to the fact that Fokker was designed to run on a 128K Mac. The most detailed scene in Fokker is the primary homebase (figure 1) from which all your missions begin. On the other hand, the animation of flight is very smooth.

Learning to fly Fokker is very straight forward. The 46-page manual is well written and allows you to jump right into the seat of the plane. On line help is also available. For those of us with more patience, there is a section on the physics of flight and the history of the aircraft. One thing I discovered very quickly was how sensitive and maneuverable the plane really is. I was glad to discover a change sensitivity command in the game menu. This gave me a chance to learn how to maneuver the craft.

Taking off is the easiest of tasks. All you do is throttle your plane up to 60 mph, pull back on your stick and you're off on your first mission. Within your 20,000 square mile world are 7 airstrips (4 friendly and 3 enemy), observation balloons which you try to shoot down, a spy signal where you can refuel and get enemy information, and a bridge that you can fly under.

Friendly territory and enemy territory are separated by a set of double lines called trench lines. Once you fly over these lines, LOOK OUT! You will open yourself up to a fast and furious enemy attack. Until you learn

Untitled

HANGER

WIND VANE
&
TOWER

RUNWAYS

Performance

Flight Data

Score: 1.633
Elasped Time:00:04
Time of Day :15:19

169 008

LOW 000
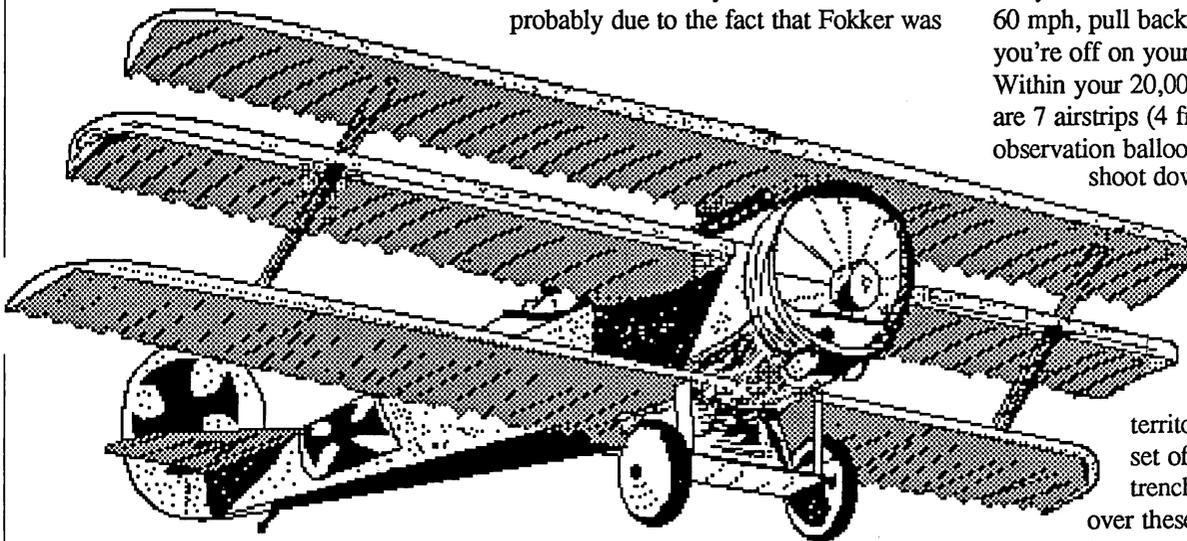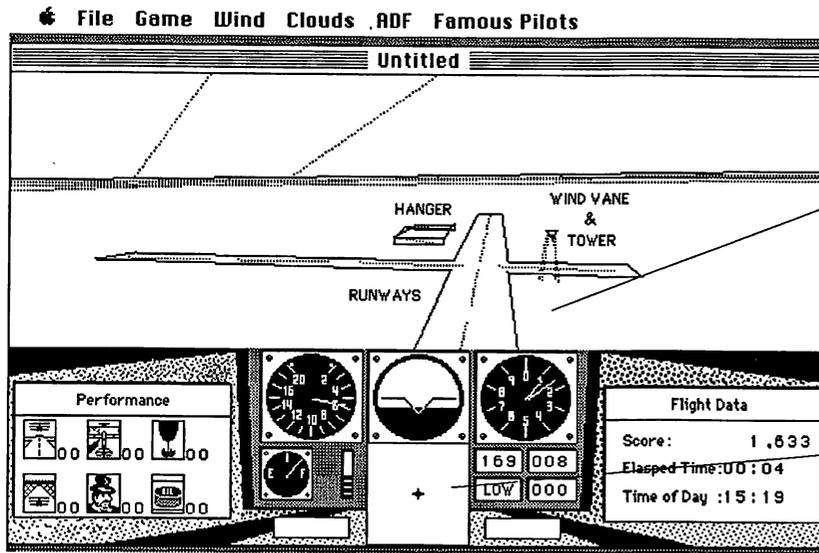
The *Fokker* homebase is the point from which all missions and fun begin

Although there are additional instruments on the flight console, this does not diminish the thrill of flying the triplane

Figure 1. *Fokker*'s screen

how to fully control your craft, I suggest that you set your game to "armed vs. unarmed." This will give you a chance to learn how to maneuver about your enemy. However, this will not stop your enemy from trying to ram you out of the skies. Also be careful with your ammunition. It is in finite supply (What do you think you're playing, *Defender*?). So make sure your shots count or you will be out of ammo in no time.

Besides controlling the functions and sensitivity of the keys, the game menu allows you to select the type of mission you want to go on. There are

three different types of missions: "Touch 'n Go," where you fly in formation with another Fokker, "Dogfight," which speaks for itself, and "Seek and Destroy," where you fly over enemy lines in order to destroy enemy fuel depots, patrols, observation balloons and more. Other variables you can control in *Fokker* are wind direction, speed, and cloud ceiling. With all these variables at your command, *Fokker* is one program that will entertain and educate you for a long time to come without becoming redundant.

Orbiter

If taking to the sky is not quite high enough for you, then *Orbiter* by Spectrum Holobyte may be right for you. *Orbiter* is a complete shuttle simulation from lift off to landing. It teaches and gives a real appreciation to what it takes to fly this bird. Much research was put into producing this program. It even talks to you in the voice of mission control, guiding you through your mission. *Orbiter* will take more than one short sitting to learn this program so make sure the manual is close at hand. A quick reference card is also supplied to help you once you are well versed in working *Orbiter*.

There are three phases to each mission—Launch, Orbit, and Landing. When you first boot up *Orbiter* you are presented with a massive set of instrumentation boards (figure 3). The purpose of this screen is to introduce you to all the major control panels you will encounter during a given mission.

To start a mission, select "NEW" from the game menu. You will then be presented with a set of dialog boxes to set the parameters of your mission. The first dialog box allows you to select which phase(s) of the mission you wish to go through and the amount of prompts you get from mission control. Then you select the type of mission you wish to do from a second dialog box. Once you decide on mission type, a third dialog box will then give you a

North

1.

4.

2.   3.

5.

6.

7.   8.   9.
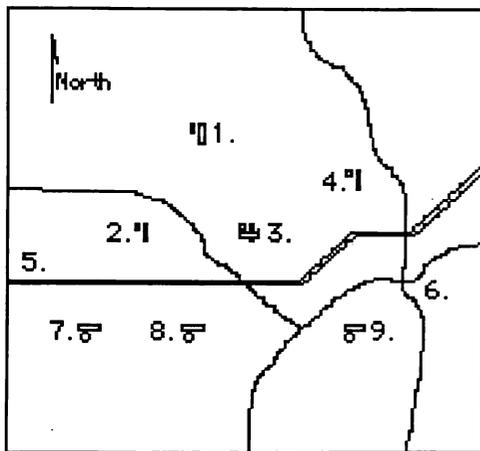
1. North Base.
2. West Base.
3. Home Base.
4. East Base.
5. Trench lines.
6. Bridge.
7. West Enemy Base.
8. South Enemy Base
9. East Enemy Base.

Figure 2. Your world as the *Fokker* pilot

Current Mission

The deployment of the Hubble Space Telescope will allow astronomers to see further into the universe than ever before. You will use the RMS to deploy the telescope in an orbit of 300 km. After deployment you should land at the White Sands landing site.
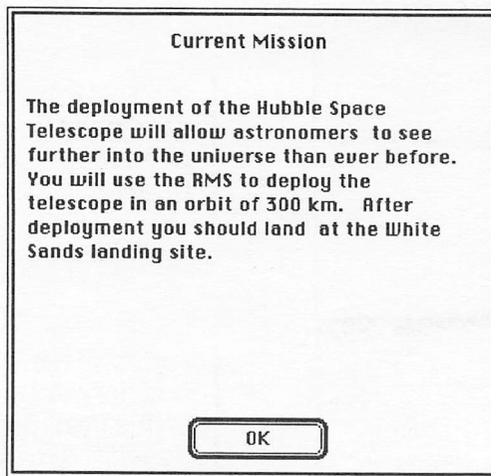
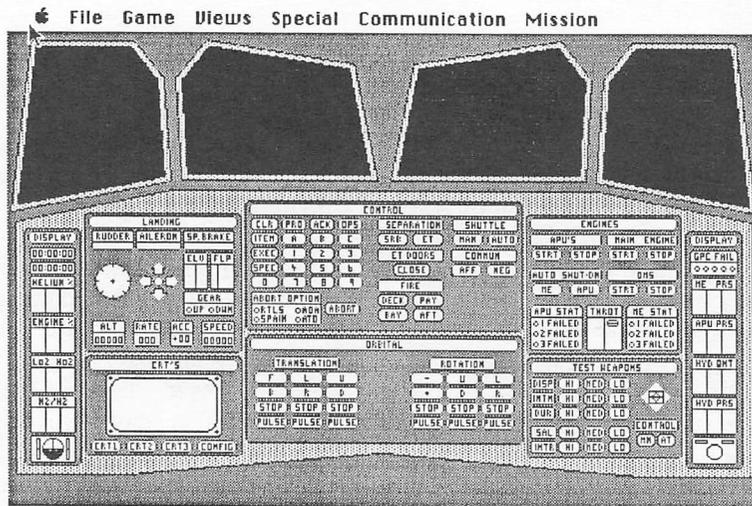OK

Figure 3. Each game brings a choice of a different mission.

Figure 4. On startup, you are presented with the control panels used in piloting the orbiter.
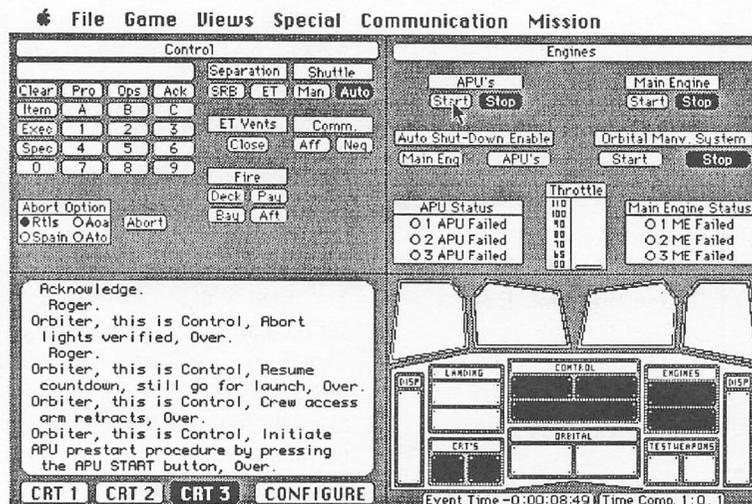

Figure 5. The bottom left screen show communication from Control.

brief description of your current mission. Information on orbital height and angle from equator is also presented here. This data will be very important later in the mission. Once all of this is done, you are "go" for launch.

The pre-countdown clock begins at T - 50:00 (50 minutes before launch). At this point you are in charge of keying all the necessary pre-flight computer codes, closing vents, A. P. U. prestart procedure, etc. (figure 3). Data entries can be done with either the keyboard or mouse. I found the Kraft Quickstick to be very useful for on screen entries. Before you know it you will hear your main engines kick on and you are clearing the launch tower. You're on your way to orbit and your first mission. You can get your first view out the front of the orbiter after SRB separation.

Once you achieve a stable orbit, you will next be directed to open the payload doors in order to radiate excess heat. This will also give you your first view of the cargo bay and payload (which in this case is a telescope). As you will discover, the graphics are excellent. The earth is very accurately drawn as you orbit around it. The only additional touch that I think would enhance this simulation is the ability to name your orbiter after one of the original four shuttles. It would add a little more realism to the program if "Mission Control" addressed you as Columbia instead of just orbiter.

Now it is time to release your payload into space. Once this is done your mission is completed except for landing. Now if it looks like I'm trying to abbreviate the rest of the mission, you're right, I am. I mean, lets face it folks, I do not want to spoil this simulation by giving the whole thing away.
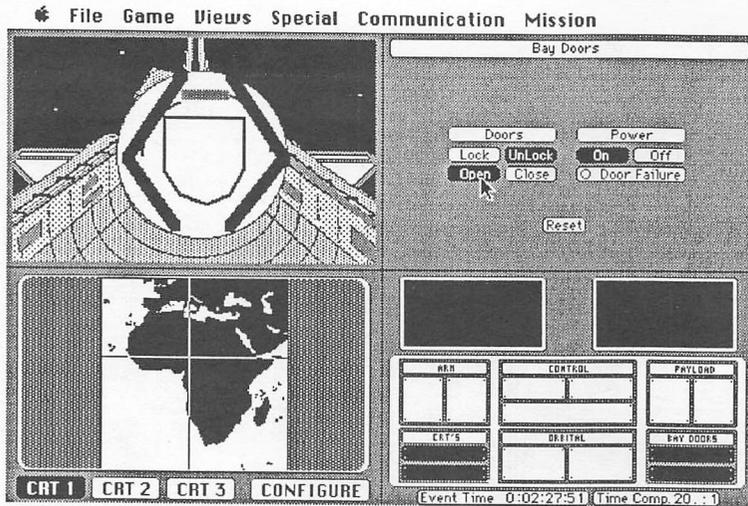
Figure 6.   The shuttle bay doors in the open position.
Notice that this also gives information about the shuttle's
location relative to earth.

I really have to take my hat off to Spectrum Holobyte. *Orbiter* is a real tribute to the shuttle program. As a Physical Science instructor, I used to have my students write reports on each shuttle mission. Not only did it educate my students about the shuttle but it also caused me to amass a great deal of knowledge about shuttle operations. The language and operations of this simulation is as close to real as the Macintosh will allow. I can't wait until the next shuttle goes up. I will use this simulation with my students in order to give them an appreciation as to what it takes to go through a mission in hopes that it will help produce better quality mission report papers. I would also like to thank Spectrum Holobyte for the dedication given to those brave Challenger Astronauts of mission 51L in their manual.

Late Breaking News-I have just received Bullseye's latest program: *Ferrari*. Early testing of this racing simulation is excellent. *Ferrari* gives a choice of several tracks and allows you to design your own racing course including the background. I have also seen some ads about a new program by Spectrum Holobyte called *Falcon*. This is a F-16 fighter simulation. It will include real sounds and digitized graphics. If this simulation is anything like Spectrum Holobyte's other releases, I'm sure it will be a winner.

PRODUCT INFORMATION

Fokker Triplane
Published by Bullseye Software
1111 Triton Drive Suite 201
Foster City CA. 94404
(415) 349-8765

List Price- $59.95
Copy protected
Runs on a 128K Mac and up.

Orbiter
Published by Spectrum Holobyte
1050 Walnut St. Suite 325
Boulder, CO. 80302
(303) 443-0191

List Price- $49.95
Not Copy Protected
Runs on 512K Mac and up. Two Disks (Version 1. 1 can be place on a single 800K disk)

All Aboard The Orient Express
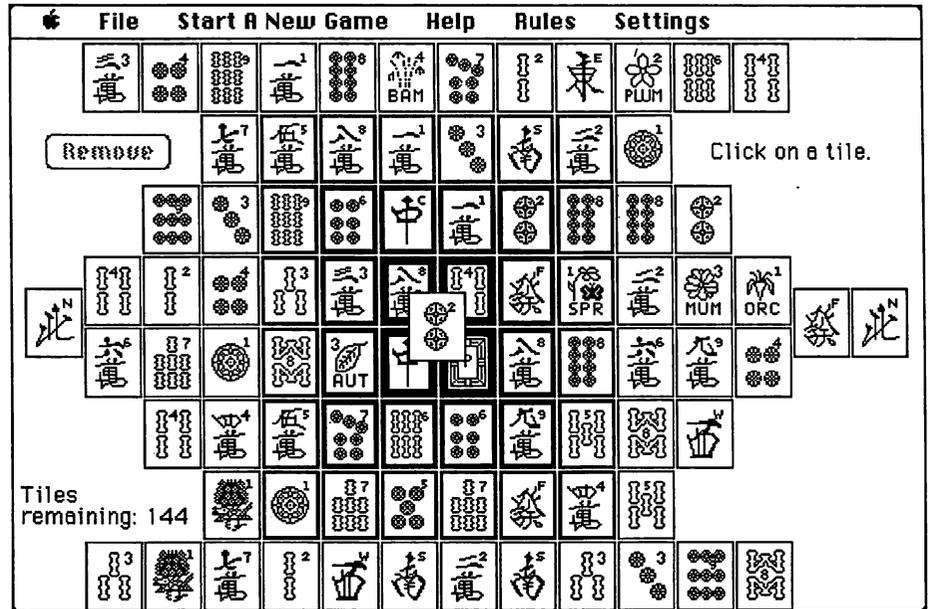
Reviewed by Sharyn Best

Imagine yourself in the midst of Oriental logic, struggling to retain your concentration despite a myriad of confusing Chinese symbols. This is the game of *Shanghai* by Activision Entertainment Software. It is a game that is a combination of concentration, strategy, and solitare, played by matching pairs of tiles decorated with symbols which resemble Mah-Jongg tiles.

The game table, called a Dragon formation, consists of 144 tiles. There are 16 Wind tiles, 12 Dragon tiles, 4 Flower tiles, 4 Season tiles and 108 suit tiles. The suits are broken down into 3 categories: Dots which represent money, Bamboo which represents power, and Characters which represent people or the characters that make up the Chinese alphabet.

There are 3 sets of Dragon tiles associated with each of the three suits. The Winds represent the Four Winds of the World. The Seasons represent the Four Seasons of the Year. The Flowers are represented by Mum, Bamboo, Orchid, and Plum to introduce the element of romance and beauty.

The Dragon is built randomly by mixing the tiles and placing them in stacks from one to five high, with the

highest point being at the center. The object is to remove free pairs of tiles, two at a time from the Dragon. You must remove identical pairs. The only exceptions to this are the Seasons and Flowers. Any two Seasons or Flowers may be removed as a pair. An example of this would be Autumn and Summer or Bamboo and Plum would match. You cannot intermix the Seasons with the Flowers.

A tile is considered free if there is nothing to one side of it so that it can be moved out from either the left or right and has nothing on top of it. If the tile has others on both sides that are of the same height, it is not considered free. The thickness of the border indicates which layer the tile represents. There are four ways to play Shanghai: Solitare, Team Effort, Challenge, and Tournament. In the solitare version, there is no time limit and games may be saved in order to replay them at a later time or pick up in the middle of the action. There is a selection of eighteen previously saved games from which to choose. In team effort, any number of players may take turns. In the challenge version, two players take turns removing tiles from the same Dragon, but there is a time limit. Under tournament play, any number of people

may join the game. The top five scores are automatically saved to disk. Each player plays by himself, but all players remove tiles from an identical Dragon. The player who removes the most tiles is declared the winner. Tournament play can be timed or untimed.

Helpful directions are found right on the disk itself. Under the Help menu, one can find that it is possible to back up a move, start the game over, peek under a tile, and show all the moves. It doesn't take a lot of time or effort to learn to play.

The game is contained on a single 400K disk which retails for $44.95 and requires a 128K machine. It is not copy protected.

There is a warning that is connected with this game. It is said that the game can become addicting. I firmly believe that this is possible because I find it harder and harder to tear myself away from the game, especially when I am on a winning streak. Best of all, I love to see that cute, animated, fire-breathing dragon which comes at the end of winning a game. He's a real hot little number!

Mem # 523   Expires: Courtesy
Robin A. Cox
5401 Rampart #662
Houston, TX 77081-1329

Meeting Dates 1987

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April 18, 1987
May 16, 1987
June 20, 1987
July 18, 1987
August 15, 1987
September 19, 1987

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