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Apple III Production Moves To Dallas, Cork

The first 210 Apple III systems assembled at the Carrollton, Texas, facility rolled off the line last month, and 500 units are scheduled for completion this month. Within 10 months, the new line is expected to be meeting the bulk of our domestic production requirements. "We want to start slowly, and increase production smoothly," explains manufacturing engineer Ron Koskan, who supervises the Texas Apple III production.

In Cork, Ireland, plans are underway to begin producing 220-volt Apple IIIs for the international market next month. The plant will begin with a schedule of five units a day, slowly ramping up production to meet the entire international demand by next fall.

"We have proven out the Apple III assembly procedures and stabilized the product just as demand has begun to accelerate. Now is the time to shift production to the Dallas and Cork facilities," explains Bill Deitsch, who oversees manufacturing operations for the Personal Computer Systems Division.

"The Montague facility in San Jose, California, will provide volume production through most of fiscal year 1982 and will phase down to 'critical mass' volumes by year end. This limited-rate line will allow for product enhancement and/or process change validation by production engineers should the need exist. At the same time, the space freedup by off-loading Apple III to the Ireland and Dallas facilities is being 'fitted up' to accomodate the next new product introduction during fiscal year 1982," Deitsch savs.

So far, the new line in Dallas consists of one 12,000-square-foot "production module," with



Assembler Marland Slaughter is part of the Dallas team that's moving Apple IIIs out the door.

gravity-feed conveyors to carry product from one station to another. The modular approach minimizes the wasteful movement of materials around the plant, and improves safety for both the workers and the product, Deitsch says. When demand for the Apple III surpasses the module's capacity of 200 systems per day, the manufacturing group will install additional modules

Time

Dealers Urge More Contact

Among a collection of specific suggestions on products, advertising, and sales programs, the report from the second meeting of Apple's Dealer Advisory Council contained a clear message: the dealers want more communication between themselves and Apple. "Such discourse," the report said, "may be critical to the continued dynamic growth of both Apple and the dealers."

Apple began the Dealer Advisory Council last summer as a vehicle for bringing the benefit of the dealers' "on the floor" experience to the company. It is now an ongoing program which gives the dealers a chance to express their concerns as well as an opportunity to share their expertise. The members of each dealer council are listed in Applesource, the dealer newsletter, so that all dealers can communicate questions and problems to council members.

The most recent advisory council report stressed an immediate need for more training: sales training, product training, software training, technical training, and business and management training, in that order. Since the council met, Apple's new Customer-Oriented Retailing (COR) program has emerged from a year of planning and testing. Sales managers are now offering three-day seminars convenient to dealerships across the United States. "I think the COR program will give the dealers what they're asking for and more," says Mike Howard, who manages our sales training efforts.

The council also said it was "delighted" with The Family System merchandising program



E

THE CANADIAN APPLE EXPO in Toronto drew almost 5000 people in two days. The hands-on demonstration rooms were particularly popular.

Employees Assume Ownership After One Year Of Loan-To-Own

This month, the Loan-To-Own program's first 95 borrowers will reach a happy milestone, as they assume ownership of their Apple II systems. During the program's first year, more than 1200 employees worldwide borrowed systems for home use, with the right to assume ownership at the end of one year.

The program, designed to give all Apple employees the chance to use and understand our products. has met with cooperation and enthusiasm at all locations. In Carrollton, Texas, volunteers have donated their time to teach training classes so their fellow employees could learn to use the software necessary for Loan-To-Own eligibility. The regional sales office in Boston reports that 75 percent of all employees in the northeastern United States have graduated from Apple Writer and VisiCalc[®] classes, and others have learned to use the software on their own.

European employees began participating in the program in force in October, when 26 individuals at the Cork, Ireland, facility received their Loan-To-Own systems. "Plans are well in hand to issue systems to all Ireland employees over the next couple of months," says Eileen O'Brien at the Cork facility. In early November, Catherine Chapman at the Slough, England, office became the first British employee to pass the qualifying test.

The Loan-To-Own program is open to any permanent, full-time employee who has worked for Apple for at least 60 days and has never bought a system at the onetime, 70 percent employee discount. To qualify, an employee must either:

Learn to use two of these programs: Apple Writer Apple Plot File Cabinet Controller Desktop PLAN® VisiCalc Pascal text editor Tax Planner

or

 Learn to use one of the above programs and write a second, original program.

Self-paced instruction packages and in-house training classes are available to help employees prepare for the qualifying tests. Many locations also offer loaner systems, so you can learn software and earn your Loan-To-Own system at home. Check with your Human Resources liaison for details

WisOlde is the registered trademurk of Personal Software Inc. *Desidop PLAN is the registered trademark of Personal Software Inc

Α

Who Are Those People Back There With The Big Computers?

P

You may not know what MIS stands for (Management Information Systems), but you undoubtedly benefit from its services.

Tim Good, who supervises MIS software development, could once say, "We're involved in nearly every aspect of the company: finance, materials, personnel. We're part of everything except payroll." But that's not true any more, because MIS is investigating a payroll program which will assume some of the work previously contracted to an outside vendor.

"Probably the only department we don't fully support is engineering," says Pat Peterson, who supervises the entire MIS operation. "Of course," she adds, "We will maintain their VAX once it's installed.'

Worldwide Network

Apple's MIS computer network reaches into every corner of the

company, both figuratively and literally. The Cupertino computers-nicknamed Junior, Max, Emily, and Gossip—can share what they know with Dillon or Kitty in Dallas, Scarlet in Charlotte, or Gandy (short for Gandalf) in Los Angeles. Domestic Apple sales offices have remote access to their regional computers, and within a year all systems outside the U.S. will have the same capability. Data processors at each location can log on to whichever computer they need, and the computers themselves can send weekly reports to each other automatically.

P

'We have it all computerized," says Jerry Fischer, who is in charge of maintaining the operating systems worldwide and the hardware in Cupertino. The different locations used to send their data tapes physically to Cupertino, where the data processing staff would feed the information through Max and Emily. Now the operators at each



THE SINGAPORE MIS STAFF reaved the fruits of months of labor the day Vanda, the Singapore node in Apple's world-wide computer network, came on line. Left to right: George Boh (computer operator), Long Boo Teck (MIS supervisor), Thomas Sim (field engineer-Digital), John Sanders (site managing director), Chuck Gibbs (installation specialist), and Jack Koh (MIS analyst).



Meadows Production Art

necessary. "Once we've provided them with the software, we support their efforts," says Good. "The Cupertino MIS staff also pulls together the information the executive staff needs, the accounting people need, and so on."

Each Apple facility around the world has an autonomous MIS

keeping track of product flow,

parts, accounts, and personnel as

Communication Network

The MIS communications team, headed by Dick Treat, is



THE DATA COMMUNICATIONS GROUP is now working on a global system to bring all Apple employees into a single telecommunications network. Marsha Levine, Gary Rucker, and Dick Treat have already established most of the procedures.

developing a single, comprehensive network for

pulling together all of this data, as well as for transmitting messages among people at various locations, dispersing vital information to all facilities, and even providing facsimile machines. All the VT 100 terminals throughout the company will be replaced by Apple IIIs, which will use our Access III software to access both local computers and an electronic mail system. Employees with Apple II systems will be able to join the same message network with Micro-Courier® software.

"One of the problems with our rapid growth over the past few years is that we have developed a number of different systems to meet various needs around the company," explains Rock Cary, who is coordinating the consolidation. "All of them are perfectly workable, but they're not compatible. We'd like to have one simple system that anyone can use to communicate with anyone else."

MIS at Apple

In many companies, the MIS staff has an adversary relationship with the people it serves. Apple's MIS staff agrees that the situation at Apple is better than most, but the higher level of computer literacy within the company is a mixed blessing.

E

"People here are acclimated to computers," explains Peterson. "In most companies, people balk when you ask them to use a terminal. But Apple employees are used to seeing computers as tools, not as enemies." On the other hand, she says, "Everybody who has manipulated a VisiCalc template thinks he's a programmer."

Peterson encourages anyone who does have a problem with MIS to get in touch with a user support representative. "We are here to help, not to hinder," she says. "We are a service group, and we need to know if we're doing our job."

[®]Micro-Courier is the registered trademark of Microcom, Inc.



MEMBERS OF THE MIS OPERATIONS TEAM Laura Kares and Cliff Baetge keep an eye on the hardware in Cupertino

Production

Roving Reporter

т



This month, the Roving Reporter reveals employees' answers to the question:

What is your favorite piece of software? Why?

VisiCalc, VisiPlot, Magic Window.® They help at home, not just at work.

Apple Writer, It is versatile. It is faster and easier than writing a letter or manuscript.

Although it is limited and slow, I have the warmest feeling for Apple Post. It is the friendliest program I have ever seen

VisiCalc, because it can add, subtract, and multiply and I can't.

It's probably a tie between Magic Window and VisiCalc. A great textediting system vs. a tremendous financial planner . . . what a choicel

No favorite. That's like asking what my favorite wrench in my tool box is

Tax Planner.® It's an excellent vehicle for checking alternatives in investment to see how they will affect income taxes.

Odyssey. It's a game that allows you to relax; get involved; and avoid violence, drugs, and sex on TV.

Mountain Computer MusicSystem[®] software. It's a ball.

Softporn.[®] 'Cause it's sexy.

Pascal. My true love and source of outside money.

Most used: Pascal editor with Script. Favorite: Games, especially high-res graphic adventures.

Ribbitt. It's such fun to play with novices.

Shoot-em-up games.

Apple Bowl. It has the most realistic control of the ball's action. The result is realistic and accurately displayed.

Apple Writer III. Features many unique capabilities, yet is most like using a typewriter.

M

I like them all. Asteroids is a great game for myself and the kids. Personal Finance Manager works well with checkbook balancing and record keeping.

News & Quotes Reporter.® Saves me time in checking on the news.

Apple Music Theory. It's terrific for review, and if I take on any piano students in the future, I'd use it for drill and practice for them

Super Disk Copy 3.6® by Sensible Software. An excellent tool for organizing diskettes.

Apple Plot. Quick and simple to make impressive graphs which would normally take hours.

Raster Blaster.[®] I have so little time for "free time," and I love pinball machines.

alphaSyntauri® Operating System. Lets me play.

World's Greatest Blackjack Program. Just like the real thing, plus training.

Apple Writer III. It's pulling me away from the Pascal editor.

Copts and Robbers.[®] I like it because it is a fast-paced action/adventure game

* VistCale and VistPict are the redatered trade

- Schlaiter Inc. Magic Window is the registered trademark of Schlape. Tax Parane is the registered trademark of Apple Computer. Inc. Musicilystem is the registered trademark of Mountain Computer
- am. Bottporn is the registered trademark of On-Line Systems. Dow Jonas News & Quoles Reporter is the registered tradem Apple Computer, Inc. Super Disk Orgy 3 d is the registered trademark of Sensible Reference Inc.
- Inconverse Inc. Bauteer Blauteer in the registered trademark of BudgieCo. alpha@priteri in the registered trademark of @pritairi Cor Copts and Robbers in the registered trademark of Birlin So

Apple Keeps The Hazards Away

By Kay Victor and Judi Elliott The Dallas production facility kicked off its first safety awareness campaign in December, featuring the winning slogan and poster from a first aid promotion contest held in the fall. Bobby Ruiz received a home smoke alarm for his slogan, "First Aid: Knowing what to do is better than asking 'What should I do?''' Jan McKay, Brenda Stephens, and Leon Pulliam collaborated on the winning poster, which won them a home fire extinguisher. All entrants in the contest received a deck of Apple playing cards

Technical Support Specialists Look Closely At The Apple III

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THE HANDS-ON TRAINING ROOM gave technical support specialists and sales support analysts a chance to get to the heart of the Apple III.

Sales support analysts and technical support specialists from all over the world came to the Sunnyvale Hilton Hotel this winter to receive intensive training on the Apple II and III, with emphasis on the new Apple III software and peripherals. This group returned to their offices ready to answer questions from dealers, sales people, and users. Jim Hoyt, manager of Technical Communications, describes the support staff as "our front line, sort of an interface between Apple field people, engineering, and marketing.

F

The week-long program, run in two sessions of about 30 people each, included presentations from members of the Cupertino Technical Communications staff as well as engineering and marketing personnel. The handson training room was available all day so that students could spend as much time as they needed working with the equipment. Some students even stayed until 2:00 a.m.

This most recent training program is a follow-up to the basic introductory training held last spring when the Technical Support Specialist program was introduced. "We're expecting these people to know all the basics by now, so we can teach them more of the details and introduce our new products," Hoyt says.

"Lots of these people are already technically proficient," agrees David Reed, a sales support analyst at the Central Area Support Center in Dallas, Texas. "This is our chance to become more familiar with Apple products, especially the III."



Many of us purchased our home systems before the shielding was added to limit the electro-magnetic interference from the Apple II. What can we do to keep our neighbors' TV sets free of Stellar Invaders?

There is an intermediate fix available at no cost. Contact your Level II Service Center and ask for the RFI Kit, part # 652-0152. You can install the equipment yourself. The regional service centers are:

Boston, MA (617) 366-5726 Carrollton, TX (214) 323-5400 Charlotte, NC (704) 525-8120 Don Mills, Ontario (416) 444-2531 Irvine, CA (714) 549-0119 Sunnyvale, CA (408) 734-3202 Zeist, Netherlands 844 70558

The intermediate kit, however, may not solve the problem entirely, especially for television sets with "rabbit ear" antennas. We will soon be releasing an EMI Suppression Kit, part #652-0360. The kit comes with complete installation instructions and can be installed by the user with common hand tools. It is available for \$66.00 through the Apple company stores 📽

- Charlie Miller, Service

Learning And Succeeding As A Team-Apple Magic



CORE MEMBERS of the Project Omni team presented their final product—The Family System—proudly to Apple President Mike Markkula. Left to right: Martha Steffan, Mike Markkula, Mike Connor, Pat Calderhead, Scott Love, Sue Jacoby.

By Scott Love

In my first article I commented on the Apple experience and Apple culture from my perspective as a new employee. I suggested a number of ways to get in touch with the pulse of the company; for me, it has been my involvement with Project Omni.

Project Omni was the internal name given to The Family System, Apple's first complete-system merchandising program. Family System shipments began in November, and will continue through January 18. Judging from initial consumer response, Omni will be one of Apple's most exciting and successful promotions ever.

Omni did not just happen. Its success is the direct result of teamwork: Apple Magic. This article is dedicated to the people who worked with the Apple II product marketing group to make The Family System a reality.

The Family System came at exactly the right time, just when other companies were announcing their first entries in the personal computer market. By launching a major merchandising program at this time, we made the most of and continued to strengthen our brand name recognition.

The Omni team came together last June. Throughout the summer they held a series of critical weekly meetings for communication among team members and cooperative problem-solving. For example, the project suffered from the dual demands of a tight production schedule and constantly changing bills of material. Instead of leaving one person to check on the bills of material, we all assumed responsibility for their accurate completion. This kind of teamwork was essential to the success of the project.

One of the most exciting aspects of working on the Omni project was the cooperation among different groups throughout the company: PCSD Engineering, PCSD Documentation, Material Control, Quality Assurance, Manufacturing, Distribution, Purchasing, Service, Sales, Marketing Services, Communications, Research, and PCSD Marketing. Omni taught everyone on the project, including Apple veterans, the power of teamwork and dedication. We all shared in the experience of learning, and we succeeded in the process



A RODENT IN HIS ROM caught Jim Alig at the Montague facility by surprise one morning when he opened up his Apple III. The mouse, who apparently crawled in through the peripheral slots and lay across the memory ROM 12-volt power supply, could add a new word to computer jargon, if hardware types can get used to looking for "rodents" in the system. (The word "bug" is rooted in the maintenance of early vacuum-tube computers, which would occasionally short out because of moths and flies which made organic bridges within the circuits.)

Up...Apple...And Away!

By JudyAnn Christensen

"The mysterious majesty of a giant, beautifully colored hot-air balloon is one of those sights people don't easily forget," says Captain Mick, the kindly, salty pilot of the Apple hot-air balloon. After seven years of navigating balloons, and after owning five of his own, Captain Mick speaks with authority when he calls Apple's "the Cadillac of balloons."

Holding 77,000 cubic feet of hot air, the Apple balloon is a real show-stopper. Its 75-foot by

55-foot profile, sporting five 25-foot Apple logos on a black background, can be seen for miles. Inside the basket are two of Captain Mick's favorite features: a padded leather seat and a champagne console designed to hold two bottles of the bubbly.



"Captain Mick" Farnham, corporate pilot (balloon).

Typically, Captain Mick flies the Apple balloon at two or three events a month. They may range from dealership openings to the annual International Balloon Fiesta in Albuquerque, New Mexico. The balloon is tethered during public showings, but not at the Albuquerque competition. There it joined 500 other balloons in a drifting dance across the city skyline.

"We also flew a dawn patrol flight across Albuquerque, and that was beautiful," says Captain Mick. "The flame lit the inside of the balloon every time I hit the propane. It made the balloon's Apple logo look like a stained glass window in the dark predawn sky."

A combination of the balloon's beauty and its pilot's roguish quotes landed us the "Media Favorite" award at the Albuquerque fiesta. But Captain Mick shrugged off the notoriety, likening himself to "a sex symbol—it's just as hard to maintain the image."



THE APPLE BALLOON shows up at trade shows, dealership openings, sporting events, and other gala outdoor occasions.

PunApple

These entries, from Peter Hopf in Facilities, received the loudest Apple-ahhs from the judges in the Apple Times PunApple competition. What, Hopf asks, is: A computer that falls off its stand?

(an Apple turnover)

An employee who wastes the company's time?

(an Apple fritter)

A person who locates new company buildings?

(an Apple siter)

Frustration when things aren't going right at the office?

(Apple-plexy. Not to be confused with Mike Markkula, who's the Apple prexy.) **d**



A TRIUMPHANT APPLE BALLOON drove proudly up and down Avenue Charles de Gaulle during the SICOB Trade Show this fall. When organizers barred the bulky bulb from the crowded trade show, our resourceful international sales force hired a truck to display the balloon outside. Volume 2 No. 4

Α

April 1982

Apples for the Teacher

P

It's been said before that Texas does everything in a big way. Apple's Dallas Area Key Account Manager Joe Ripkin is no exception to the rule, renegotiating two of Apple's Educational Sales group's major accounts in the last two months.



Not a bad way to do homework!

Thanks to Joe's persistence Houston schools are expected to purchase 1,000 Apple II systems, to be installed over the next twelve months.

Sime

And, proving once again that Apples are quality products, the recognized leader in computer education, the Minnesota Educational Computing Consortium (MECC), is expected to purchase up to 1,000 Apple II's in the next 12 months. MECC's new order adds to their current inventory of more than 3,500 Apples. Joe points out that even though MECC invested in several low-cost competitive systems last fall, Minnesota school districts are still demanding Apples for the fourth straight year.

MECC will also be working with Apple to develop and evaluate new and existing education-oriented Apple products

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Photo courtesy of Singapore Straits Times

THESE ARE THE FIRST TWELVE APPLE SINGAPORE EMPLOYEES to obtain their Loan-To-Own computers. They did it by taking software classes furing their lunch and tea breaks. Technician Johnson Cho, 28, says it is "...fantastic! I can calculate my income tax and type letters to my friends with it." The employees pictured here are, clockwise from top: Mavis Soh, Caroline Lim, Alice How, Sheen Kan, Agnes Lee, M.T. Chan, H.C. Chiam, Herbert Lim, Irene Lim, Mike Lee, Wendy Ng, and Johnson Cho.

Apples Bear Fruit in Developing Countries

by Ellen Petry

"Apple's Intercontinental dealers and distributors are more than just salespersons of Apple computer systems — they are the emissaries of a major new tool with staggering implications in their countries."

With this comment, Apple Chairman of the Board Steve Jobs sums up his aspirations for Apple's worldwide sales network and the impact its efforst will have on these countries' economies. (Intercontinental includes those countries outside of the U.S. and Europe.)

Steve Job's personality and creativity have made an unmistakable imprint on Apple as a corporation. The following interview with him was conducted for Apple World News, the Intercontinental Sales Group's newsletter for dealers and distributors. Steve's personal philosophy about microcomputers especially as they relate to developing nations and the company's outlook toward the Intercontinental market, are evident in his remarks.

Steve, who in his teens spent seven months traveling throughout India, has a particular sensitivity to the difficulties faced by third world nations. "In many instances, when you look at how technology has affected a developing country, it's dismal," he explains.

"Apple salespersons... are emissaries of a major new tool with staggering implications" Steve Jobs

"It's impossible to just roll in with technology without providing for the infrastructure to support it. For example, a tractor isn't an asset without the ability to provide mechanics, spare parts, and so on. The same is true with big computer systems. They need constant software attention and maintenance, which can't be easily found in most developing nations. That's why the whole prospect of using personal computers in developing countries is so exciting: they are infinitely more reliable than large computers and require a smaller infrastructure to use. The result is that they WILL be used, and there are many examples of where they're



already being used.

"One explanation for Apple's success is that it's very hard to be threatened by looking at an Apple computer — it's small, you can get your hands around it, and you can bash it with a brick if you really don't like it. There's nothing sinister about an Apple, such as there might be with large computer systems."

In regard to Apple's Intercontinental sales force, (continued on page 4)



Photo by Karen Huth

TO THE NAKED EYE, Apple Bulletins don't look different, even though they've been "electronic" since February 10. That's right, Apple Bulletins are now sent over the Electronic Mail System, which means you have faster access to this information. You'll also have a slightly bigger profit sharing check, since it used to cost hundreds of dollars to mail bulletins internationally.

"The neatest thing is that now all Apple employees get news flashes at the same time -FAST," says Sandy O'Quinn of Communications Programs. Sandy is pictured here at the electronic Apple Bulletin ribbon-cutting ceremony along with Information Network Manager Rock Cary, Sales Communications Manager John Hazelwood, and Communications Programs Manager Phil Roybal.

By the way, Eock estimates that as of 1983, every department — if not every desk — with an Apple III will be hooked up to the electronic mail system.

Apple Visits the PCS 'Pubbies'

P

by Joe Meyers

Have you ever finished typing a paper that had to be letter-perfect, only to find that you skipped a key sentence in the first paragraph? Think of this problem on the scale of two dozen professional writers, editors, and supervisors, and you will understand why the Personal Computer Systems (PCS) Division Publications department appreciates the text editing features of Apple computers.

We write manuals in four stages: document design, first or "alpha" draft, second or "beta" draft, and final draft. The document design briefly describes the product, intended audience, proposed writing schedule, and chapter-bychapter contents of the manual. The alpha draft is reviewed by project members and interested Apple employees. Their comments are incorporated into the product and beta manual drafts.

The beta draft is reviewed also, but this time by selected individuals and companies outside of Apple that PCS Marketing considers to be representative of the product's intended audience. Unless there are major changes to the product or manual at this point, the writer incorporates comments to produce a final draft. An editor within the department checks this draft at each stage to make sure it meets standards of grammar, style, clarity, and format.

We start a manual by creating several Pascal text files, each containing all or part of a chapter. Then we use Apple's text formatting



Editor JudyAnn Christensen Art Director Jim Locke Keith Cassell Contributors Bruce Hodges Christine Hoover Gayla Kohlmoos Joe Meyers Barbara Shamas Susan Taj Cynthia Tan Alexandra Taylor Sandy O'Quinn Mary Williams Photography Jay Engers Karen Huth Apple Type Center Typesetting Production Meadows Production Art

language, Script, to print all the files as one continuous draft with page numbers, spaces for illustrations, and correctlypositioned section titles. We currently print final drafts of Apple II manuals on Qume[®] printers and send them to the graphics group for paste-up. We send Apple III manuals to graphics for composition on a



PCS 'Pubbie' and Apple Times contributor Joe Meyers is referencing the ultimate micro manual.

Compugraphic typesetter and subsequent paste-up (see accompanying story). The pasted-up, camera-ready manual, with its photos and illustrations, is then shipped off to a local printer for printing and binding.

Manual preparation is not the only use our group has for Apples. Supervisors use them for planning and scheduling, and the manual update group uses them to track corrections and product changes. The update group also produces corrections (addenda and errata sheets) and revisions, and taps into the company's large computer system using an Apple III with a terminal emulator program (Access III).

The people in publications are always on the lookout for better writing and production tools: large disks like ProFile to store entire manuals or an online dictionary for automatic spelling correction; advanced word processors with all the features a writer could possibly use; or communications equipment for transmitting 'The Ultimate User Manual' from a hideaway in the Swiss Alps directly to Apple's typesetter. While we're working on those goals, we appreciate today's Apples every time we don't retype a draft.

Joe Meyers is a PCS Pubs Writer

* Qume is a registered trademark of Qume Corp. 🗯



Photo by Jay Engers

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Can you imagine how much time it takes to create some of the complicated graphs in your product manuals? Just ask Publication Graphics members Kathy King, Paul Gilman, and Gayla Kohlmoos. They do that and more for a living.

Compugraphic-Prints Charming?

Since last summer, Publications and Graphics' handy Compugraphic typesetting machine is generating error-free type from text on Apple diskettes and is reducing the human effort that goes into big projects such as producing manuals.

Here's how the Compugraphic works. Publication Graphics typesetter Gayla Kohlmoos uses her Apple II to imbed formatting commands into Pascal text files. When the files are transferred to the Apple II that interfaces with the Compugraphic machine, the imbedded characters control Compugraphic's typesetting activities.

"This automated typesetting process uses the author's diskette files rather than rekeyboarded copy, which reduces proofing time for both writers and graphics," says Art Director/Publications Keith Cassell. "Now we just check the layout and type size. We have fewer errors, and the quality of the type is more professional."

The Apple Times you're holding is an example of the Compugraphic machine's work **#**

Paperless Manuals?

Just as Apple's future products will enhance and expedite the work we do, future manuals will make getting started fast and painless.

"About 35 percent of our customers buy computers to learn about computers. We want to help them learn as they work on the computer itself," says PCS Publications Manager Carol Cook. "We're always looking for better ways to get them away from the books and onto the computer."

The innovative Family System and Apple III Product Training Pak manuals strive to introduce users to the products' general operation in less than one hour. In-depth manuals are included with the products for greater detail.

In the future, Apple documentation will be less paper-oriented and will include more computer-assisted instruction. "You won't have to look back and forth between the manual and the screen, a process that certainly makes me dizzy," says POS Training Manager Ellen Nold. "The products should be so easy to use that it takes only 30 to 45 minutes to learn basic operating functions."

2

Roving Reporter



What information network (real or fantasy) would you like to see available?

Electronic mail to each home with all financial stuff, wire service news, software distribution, extension classes at all levels, encyclopedias, library information searches, medical info, poison antidotes, consumer ordering, shopping.

Sexual How-To ...

An ARPA-net emulator, running our own brand of cybernetic fruit.

Meaningful human communication, without computers.

Info such as the "Roving Reporter" on a network. Just key up the "R.R." and plug in your ideas. We're getting more and more spread out - who needs all the paperwork!?

Software for the deaf. Young people learning a higher form of signing through a systematic home study course.

A worldwide dating system held together by Apples where you call up a person and a lifelike picture of them appears on your 6' x 9' color monitor screen.

One where you could send and receive information or data to or from any desk worldwide at Apple.

Stock market reporting without the 15-minute delay.

Two-way Satellite

communication with all the info services as well as any other Apple (or micro). That way, I don't have to be limited to either (1) phone company or (2) cable TV lines. All I need is a cheap satellite dish. I would like to have access to a network which would inform me of an impending acquisition of a small company by a much larger one. This information would have to be available to me one day prior to the information being public.

М

A sports information network making available: scores, upcoming games, statistics, etc.

I would like to see a computer education network established. For example, I would like to learn Pascal. I would breeze through the computer education catalog, find the pascal ed. program and dive into a tutorial. This eliminates the need to run out for a bunch of books and then to read them.

Anything that I can now order by phone, such as airline reservations, 49er's tickets, etc. It should be available through a network that's accessible by home computers and accoustic modems.

The ability to tap into systems without holding for a free line.

I would like to see the Microcourier concept expanded and standardized (i.e. made less expensive) to the extent that real Apple-to-Apple communcations would be available for the "average" Apple user.

Shopping - pictures of what is in the stores - prices, sizes in stock, colors, etc.

A broadband coax local network capable of carrying digital, video, and audio all at once. There is already a costcompetitive network which can serve up to 15,000 modems anywhere within a 25-mile radius.

Newsbytes

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YES VIRGINIA, IT'S TOO LATE FOR SANTA CLAUS. However Susan Taj wanted to prove that Newbury Park personnel not only know how to manufacture disk drive heads, but Manufacturing Manager Rick Wells (pictured above with Santa) and the rest of them know how to have a good time at a Christmas huncheon.

ROLLING MEADOWS WILL NEVER BE THE SAME! Apple has opened a new Support Center in Rolling Meadows, Illinois, outside of Chicago. Their address is; 5655 Meadowbrook Industrial Court, Rolling Meadows, IL 60008, (312) 577-3600. Don't forget to add Rolling Meadows to your distribution lists. They'll start shipping product April 1st.

HOW YOU GONNA KEEP 'EM DOWN ON THE GROUND AFTER THEY'VE SEEN ONE YEAR? On February 15th, the European Sales and Marketing headquarters in Paris turned one year old. As Paris' own Alex Taylor puts it, a year ago the office consisted of 15 people, 2 rented typewriters,

Photo courtesy of Susan Ta

500 packing cases, no chairs or tables, and a large coffee pot. A year's worth of coffee and many sales later, the Paris office has grown to a staff of 50 people of 11 nationalities. As she says, Apple Europe has come a long way in one year "in our completely renovated offices where we have Apples on all the desks and even chairs for everyone to sit on."

APPLE TEJAS IS ON THE SILVER SCREEN? Even better, they're on the green phosphor screen - they've got their own daily news show that plays continuously on Apples in the break areas. Credit goes to Mike Kaskowitz for its programming, to Joni Speegle for its graphics, and to Mary Williams for its script.

PROFILE OWNERS, TAKE NOTE. The ProFile Extended Warranty is now available at approximately 11 percent of a ProFile's cost, or less than one percent of the system price per month. This is the lowestpriced maintenance agreement for a Winchester-type disk drive around.



When we join the Stock Purchase Plan, the money is accumulated for six months. Where is this

money sitting and who collects the interest?

According to the May 27, 1981 Prospectus (page eight, second paragraph), all deductions are credited to the participant's account and are deposited with the company's general funds. These payroll deductions are received and (the deductions and any accumulated interest are) held by the company, and may be used for any corporate purpose. No interest is paid to employees, even if they cancel their purchase program and request a cash refund.

The Employee Stock Purchase Plan is a voluntary program available to all employees. Advance notification of the next registration period, ending June 26, 1982, will accompany your paycheck.

Barbara Shamas Employee Stock Purchase Program

The Critical Apple

Digital Harmony — On the Complementarity of Music and Visual Art by John Whitney; reviewed for the Apple Times by Bruce Hodge.

Digital Harmony contains the seeds of an artistic revolution. In this book, John Whitney passionately describes the beginnings of a new art form that unites music, visual art, mathematics, and computers.

Whitney is a well-known experimental film-maker who started making visionary films in the early forties and continues to be a primary force in both the development of new techniques and the examination of their relation to changing aesthetics. He is known to the general public for the famous star-gate sequence he developed in "2001: A Space Odyssey" and for his time-warp effects in "Star Wars."

Digital harmony is Whitney's description of what happens visually when he generates a series of patterns using the mathematical techniques of differential dynamics. In these sequences, the patterns begin to move and evolve into complex variations. As Whitney points out, the patterns ebb and flow through time in much the same way that music moves through time. The visual patterns also exhibit the same characteristics of consonance and dissonance upon which music depends.

Using the principles of differential geometry, John Whitney builds his movies a frame at a time. He uses his own microcomputer to construct and display each frame on a high-resolution black and white monitor. A movie camera mounted above the display monitor records the frame on film when signalled by the computer.

Whitney's technique uses the computer to construct and film the thousands of images in a particular sequence without human supervision. The aesthetic decisions remain firmly in the hands of the artist, who must write the computer programs and create the final film, which may consist of several images of different colors overlaying each other.

The book contains several Pascal programs to generate simple digital harmony patterns on an Apple II computer. With these programs, readers can develop a working knowledge of the concepts needed to explore this fascinating new art form. Clearly John Whitney's work marks the beginning of a long and rich association of computers with visual and aural aesthetics.

Whitney is a faculty member of the University of California at Los Angeles, and is working on a film tutorial, explaining the concepts of digital harmony.

Bruce Hodge is a PCS Software Engineer d

Nobody Does It Better

When we're caught in the perpetual deadline sprint, we tend to overlook or forget the positive aspects of working at Apple. Here's one Apple employee's unsolicited reminder. Hope it de-bugs your day.

As I drove home one night before Christmas, quite happy at having just received a bonus, I started formulating a thank you letter. To whom should the thanks be sent? The Board of Directors? My manager, for the recommendation, and for being such a great boss? How do I thank my staff which has done such a superb job?

Shouldn't I mention other significant motivators which not only mean a great deal to me personally, but which make my job as a supervisor easier and more pleasant: loan to own, profit sharing, and an extra week of vacation for helping Apple to reach the \$100 million sales mark? While I'm at it, I must thank those responsible for another pleasant surprise last quarter when the Board lowered our stock option purchase price.

My sincere thanks to you, Mike Markkula, and to "my" management at Apple for the bonus and for all the other programs which make Apple Culture not just a philosophy, but a practice

The Stories Behind a New Machine

Were you fascinated by Tracy Kidder's best-selling electronics-intrigue novel. **The Soul** of a New Machine? Then you'll be interested to know the rest of the story from an Apple employee.

Tom Morton, Sales Support Analyst at Apple Boston, worked in Data General's Advanced Software Group on the project on which the book was based, the 32-bit Eagle super minicomputer. According to Tom, the Eagle's greatest challenges were to meet rigorous deadlines for both its software and hardware simultaneously. Historically, the software

Historically, the software group had always started work on a project only after hardware was completed. Even though you'll never read this part of the story in Kidder's novel, Tom's group broke precedent and finished the Eagle's software before the hardware was ready.

"There are few parallels here between Apple and Data General," says Tom. "Data General appears to be an engineer-driven organization, where the engineering staff comes up with an idea and builds it for software staff to program and the marketing staff to sell. Apple's philosophy, on the other hand, is that the market is the ultimate consumer and, as such, should have greater input into the design of the product than engineers, who might not be as sensitive to what the user needs.

"I feel that because of this philosophy Apple's products are easier to use, and they have the competitive edge."

Australia Celebrates Apples

by Christine Hoover

A local Australian celebration, the Festival of Sydney, set the stage for Applefest, a tradeshow and dealer meeting. Electronic Concepts, one of Apple's most successful Intercontinental distributors, arranged the show.

And what a celebration it was! Three thousand Apple balloons were released into the Sydney sky to start the threeday public show which 12,000 people attended.

The January event included a COR (Customer Oriented Retailing) training program for dealers, a vendor fair with 60 participants, and a public exhibit. Dealers and the press were trained on the Apple III and ProFile, and they listened



One young Applefest attendee enjoys himself.

to talks by Australia's Minister of Communication and visiting members of the Apple Intercontinental sales team.

Christine Hoover is the International Advertising and Promotions Managers

Apples Bear Fruit (continued from page 1) Steve's message is clear. "It's very rare when you can mix needs, such as making a living and putting food on the table, with doing something that philosophically seems like a major contribution. I think selling Apples represents an opportunity to integrate both of these elements into one activity.

'Apples provide many countries with their first exposure to computers. Salespeople in these countries are not only bringing Apples to their countries - they're bringing personal computing. And, in a larger sense, they're bringing computing to these countries. They have a major task ahead of them, one which will result not only in tremendous financial success, but also in tremendous philosophical satisfaction. That's something we should all step back and think about."



Volume 2 No. 7

Α

P

The majority of Apple's energetic executive staff proved they could keep up with—and in some cases, beat—the competition in the 71st annual San Francisco Bay to Breakers run. The Apple contingent is pictured, above, before they undertook the grueling 7.63 mile race.

Sign of the Times

by Dan Gibbs

Last November, Apple Dallas put teeth into its commitment to hire handicapped persons by actively recruiting deaf candidates for manufacturing positions. To spur communication with the new employees, Tejas Human Resources offered a 12-week sign language course.

Besides learning fingerspelling and hand signs at the Wednesday and Thursday night classes, 42 Apple employees learned facial expressions, body language exercises, sign language songs, and job-related words.

"The Dallas Deaf Action Center helped us locate our instructor, Nancy Range, from Samuel High School," says Employment Specialist Deborah Hutchins, the course coordinator. "We may be offering a second class if• employees are interested, so the whole plant may soon be speaking sign language!"

Dan Gibbs, who works in Human Resources at Apple Tejas, attended the sign language class.



Photo by Zeima Newlin. Margaret Verhalen and Sheryl Brahaney are forming the words Apple Computer in sign language.



Stay tuned for Dallas' video news show, brought to you by, from left to right, Mary Williams, Joni Speegle, and Mike Kaskowitz.

Apple Dallas in Video Wonderland

By Kathy Turbenson

A place in video history is reserved for Apple Tejas. Last February, we started running an Apple-based news display in our lobbies and break rooms.

The show, which has decreased the amount of paperwork we use to stay informed, was programmed by engineer Mike Kaskowitz. Human Resources Liaison Mary Williams writes the text. and Joni Speegle, our resident artist, creates fascinating graphic displays that entertain as they inform viewers visually. This system is especially effective because Apple employees can see what's happening at our facility by using the product that we help manufacture.

The news presentation includes information of special interest to Apple Dallas, such as benefits, sports scores and events, payroll news, job postings in both Texas and California, and employees' special accomplishments. We also proudly announce additions to our Apple family when employees have new babies.

The program's text is changed three times weekly. That way, everyone has plenty of time to read it, yet the information doesn't grow stale. To guarantee that all employees are aware of news that is important to them and their jobs, we provide the managers with hard copies of vital information.

Editor's note: Someday you may learn news about your facility on Apple-based systems that are very similar to those at Apple Tejas. The Apple Times will keep you posted **6**

Kathy Turbenson works in Apple Tejas Human Resources. July 1982

Apple in the Big Tangerine

Apple Opens Japanese Sales Office

by Bill Schonfeld

F

Apple has announced plans to open a sales office in Tokyo this month. Apple intends to play an integral role in the rapidly-developing Japanese personal computer market.

With Sony Corporation's recent personal computer introduction, all top 10, multibillion-dollar, Japanese consumer electronics manufacturers have entered this highly-competitive market. Apple will not allow the Japanese to continue their early growth unchallenged. For this reason, we are competing with the Japanese in Japan, rather than waiting for them to come to the U.S.

It will be especially important for Apple to support Japan's emerging software industry and third-party peripheral vendors. Another of our objectives is to monitor new Japanese technology. Japan has become the world capital for consumer product. packaging, styling, and miniaturizing; we want to utilize developments in these areas to give us competitive advantages in the Japanese marketplace.

Additionally, the new sales office will provide important support to Apple's distribution channel and end-users, particularly for the Apple III. The present, 60-dealer channel was set up by Toray Industries (formerly Apple's authorized Japanese distributor) to distribute the Apple II J-Plus. Under the new arrangement, our sub-distributor, ESD Labs, will continue to handle distribution under the Tokyo office's guidance

Japanese Sales Specialist Bill Schonfeld will continue to keep Apple Times readers up-to-date from his new office in downtown Tokyo's business district

Apples Help Police Outwit Crafty Criminals

P

Sophisticated criminals used to criss-cross city boundaries within Silicon Valley to commit their crimes. They knew that the chances of being caught decreased if their trails of clues were scattered across the jurisdictions of several law enforcement agencies.

Α

Increasingly, the success rate of this mobile modus operandi is diminishing, thanks to an Apple-computerbased information network operating among Palo Alto, Atherton, San Mateo County,



Photos by Karen Huth

Atherton Police Department's Apple computer application is so easy to use that Cody the police dog is trying his paw at t-with Sergeant Mike Dickson's help, of course.



The Apple Times is published monthly for the employees of Apple Computer, Inc. Your input is not only welcome, it is an essential element of the paper. If you have ideas or suggestions, please call JudyAnn Christensen at (408) 973-2547, or send a note to the Apple Times, Mail Stop E-9-L

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The name Apple, Apple Computer, and the Apple symbol are registered trademarks of Apple Computer, Inc. and Menlo Park law enforcement agencies. Twenty other agencies are presently interested in joining the network to increase the protection they offer their communities.

P

Until recently, no lawenforcement computer could pinpoint a suspect without a name and date of birth. Despite nationwide computerized lists of criminals, detectives had to spend hours-and sometimes days-hand-sorting piles of file cards to compare evidence against suspects in their jurisdictions. Since detectives are often assigned 75 to 100 cases, researching clues from other jurisdictions compounded the effort to the point where it was no longer feasible.

Then, two years ago, Lieutenant Ken Frank of the San Mateo County Sheriff's Office wrote a program that automated the research process. With Frank's program, an Apple II can search 6,000 file cards in six seconds. The computer helps law-enforcement agencies churn out lists of suspects with only a suspect's description, the modus operandi, or even a partial license plate number. "When we do a search of the

computer's files, we're comparing the evidence we have with information obtained from contacts made in the field," says Palo Alto Lieutenant Bob Harvey. "The Apple computer can compile lists of matching suspects from four cities while the officer is doing something else. Before we started using the Apple-based program, officers probably wouldn't have researched these types of clues at all."

Since Lieutenant Frank's program was implemented. each city on the network has expanded and adapted its system to meet its specific law enforcement needs. For instance, Sergeant Kip Rolle of the Atherton Police Department wrote a program to assist officers patrolling the quaint neighborhoods of this affluent community. Kip has developed a residential file that includes fire hydrant locations, neighbor's phone numbers, and references to police reports that give officers background on neighborhood problems.

"We've got approximately



Atherton Police Community Service Officer Robert Grasty checks through his diskettes to fine the one he needs.

1200 records on our 2500 residents, and we purge these records every six months to keep them current," says Kip. "Our information turnover rate has to be frequent because we've found, for example, that crooks' cars are often painted, crashed, sold, and passed around. By the way, all the information in our files is legally accessible, and we can document where it was obtained."

Obtaining information from the residential file is only one way that microcomputers help small towns like Atherton catch big-city criminals. "Most small agencies don't have data processing centers and can't afford even a minicomputer," says Atherton Police Chief Richard Moore. "The Applebased detective program fills a void for smaller agencies." Besides fighting crime, the Apple computers serve as terminals, connected to the town government's large mainframe computer to do payroll, budgeting, general ledger accounting, statistical analysis, generation of police activity profiles, and more.

E

In the future, Atherton police plan to automate their inventories of lost and stolen property, supplies, and vehicles.

In addition to programs similar to those established in Atherton, Palo Alto Police's Fraud Division uses its Apple computer to store information that helps determine patterns of crime. "For example, fraud is hard to prosecute unless a pattern of malicious intent can be proven," says Lieutenant Harvey. "Computers are perfect for accumulating all the information it takes to prove that intent."

Competitive Bytes

DIGITAL EQUIPMENT CORP. (DEC) tossed its hat into the proverbial competitive ring with the May introduction of its 16-bit Rainbow 100, Professional 350 and 325, and 12-bit, DECmate II personal computers. Industry analysts say that even though DEC's new offerings are low-priced and backed by a powerful marketing organization, the computers "didn't break any technological frontiers," and were less powerful than had been expected." They will be available this fall.

BY NOW YOU'VE PROBABLY HEARD about Timex/Sinclair and Commodore International's plans to sell \$99 to \$300 personal computers through retail outlets. The small Timex and the more-powerful Commodore computers can be used for personal finance management, teaching, electronic filing, and other functions with additional accessories.

AND WHAT ABOUT SCM'S LETTER-QUALITY, \$895 TEXT PRINTER, with a price tag that's about half the list price of comparable units? According to Manager of Retail Sales Development John Zeisler, "SCM's offering has 1/3 the printer output rate of the Qumes we use throughout Apple, and limited graphics capability. Give me a good dot-matrix printer any day." **Roving Reporter**



т

What would you program a personal, user-friendly robot to do for you?

Manufacture the competitors' micros and do their QA.

I would program it using artificial intelligence and give it a sexy speech board.

I'll give you three guesses...

Clean, dust, cook, hit tennis balls, screen potential dates, and turn the TV off after I've fallen asleep in front of it.

I would like to program a perfect roommate. I want one which does his/her dishes; never talks on the phone when I need to make a call; never changes the radio station I choose; asks before borrowing clothes, the computer, or anything else; consistently takes phone messages that make sense; and wakes me up and drags me out of bed every morning.

Compute the winners of the Daily Double at Bay Meadows, then make and collect my bets.

Nothing. Man sits at the office, gets fat, and then jogs to justify exercise instead of laboring manually. The ideal job combines both mental and physical labor. I don't want a robot to get my exercise for me.

Drive my car on long trips.

Do my taxes and take the wrap when the IRS comes to get me!

Put on fully-synchronized "Disneyland" type video/slide presentations where the lights dim, the curtains draw, the sound tracks on the stereo and the slide projector begin, and the automatic popcorn maker makes a batch of popcorn for intermission.

Wash and set my hair, do my nails, iron my clothes, rub my back, and feed the cat! Feed the dog, pick her hairs off my clothes, and immediately pick up after her if she blows it in the house while I'm at work.

Μ

Have a built-in vacuum cleaner on its feet or base.

Work my job—but give me the check.

Control my home energy consumption—including shutting itself (the Apple) off if it is consuming too much power!

Do my financial management, games, daily astrological forecast, calendar of events, investment work, and educational reading for me.

Keep a nutritional information record of what I eat.

Bring me coffee in bed.

Do scum work of every variety, beginning with cleaning the bathroom, to tuning the car and my guitar.

Be witty company when I'm home alone.

Diagnose my symptoms—and my car's, too!

Iron my shirts, lightly starching the cuffs and collars.

Carry my backpack. Turn records over.

Rob banks (or preferably, rob one big Federal Reserve bank).

Answer "Roving Reporter" questionnaires.

Repack Apple systems after testing.

Make a huge breakfast and wake me up in the morning. No mechanical device is capable of getting me out of bed, but if I knew that food was waiting...

I take issue with the question. Computers are tools, not servants. And "robots" are a somewhat-scary, sciencefiction concept that I don't think the world is ready for. I don't want the personal computer industry to be remembered for foisting a schlocky, impractical, useless technology on an unsuspecting but gullible public.

Help move furniture.

Tell 'nerdy' callers that I'm not home when they phone...

Act as a security guard.

Newsbytes

THE U.S. TREASURY MUST WANT THE KIDS TO WAIT, seeing as how it's opposed to Apple's proposed legislation that would create tax advantages for companies donating computers to U.S. schools. Assistant Treasurer Secretary John Chapoton told a Senate finance subcommittee hearing that while Apple's goal was admirable, "it would force the treasury to fund a computer education program through the tax system."

E

THE DECISION IS IN— Former Apple employee Bill Budge's Raster Blaster won Softalk Magazine's award for The Most Popular Program of 1981 for Apple computers. Softalk readers chose the pinball program over a field of tough competitors including second-place Castle Wolfenstein, third-place Apple Panic, and even the hot-selling VisiCalcⁿ number cruncher.

"LET'S MAKE 'EM SQUEAL!" defies description. Last May, during SSA and Field Technical Support training sessions in California, Marc Shargel's Product Demonstration Group came up with a spin-off of the "Let's Make A Deal" TV show a quiz on Apple technical and historical information. The game was well-worth playing, as money and a bushel of Apple Validational resultared trademark of Validation products were awarded. Be sure to ask someone who attended what was behind curtain number two!

S

IT'S STILL A SECRET WHERE THE "US FESTIVAL." Unuson Corporation's threeday, Labor Day weekend event, will be held. Unuson, Apple cofounder Steve Wozniak's new venture, is planning the celebration to "underscore the need to shift away from the 'me' focus of the '70's, to the 'Us' decade of the 80's." The event will focus on developments in science and technology as they relate to education, communications, ecology, and the future.

"JUST A COUPLE OF YEARS AGO, WHEN STIFF COMPETI-TION WAS RELATIVELY NON-EXISTENT and products were much less complicated, our field sales personnel didn't have as great a need for product training," says Apple III Marketing Support Manager Jerry Bower. So far this year, the Personal Computer Systems Division has held three comprehensive Product Training Schools here in Cupertino. "The schools were scheduled quarterly, but there was so much demand for the classes that we are now holding them monthly," says Jerry

Recognize The Face?



You're right, it's an Apple III. That's Henry Winkler behind it. In his new movie (tentatively entitled Nightshift), Henry plays a quiet, unassuming genius. Henry's character works nightshift at a morgue until he decides to tap his potential and get a better job in financial investing. Henry proves that he really does have mental prowess when he chooses to do his financial planning on an Apple III.

One Micro Link for Man...

by Ellen Petry

The first computer link between Australia and China has just been forged—and the mastermind behind the operation is none other than a 48K Apple II. The system, along with an acoustic coupler, was donated by Australian Apple distributor Rudy Hoess of Electronic Concepts Pty. Ltd., to Mr. X. Y. Da of Wuhan University in China.

For the past three years, Da has worked in Australia under grants from the Chinese and Australian governments, performing laser (light scattering) studies on various



Mr. X. Y. Da and a colleague from the University of South Wales perform laser research using an Apple II.

materials. When Da returns to China, his Apple computer and an acoustic coupler will connect him to a laboratory at the University of New South Wales' School of Physics. Da will continue his doctoral research in materials used in advanced optic and electronic devices—such as liquid crystal digital displays. The light scattering

laboratory is the site of most of the university's laser and advanced optic technology research and teaching effort. The lab contains several gas and ion lasers, and advanced optical equipment which will be monitored by an Apple computer.

Dr. George Paul, senior lecturer at the university's School of Physics, will lead a team of 14 advanced technology students in the research project. Courses focusing on these studies will be used to train university technicians in the rapidly expanding field of laser technology.

Internationally, similar research is taking place at the Universities of New South Wales and Queensland in Australia, the Australian Atomic Energy Commission, the University of Edinburgh in Scotland, the CSIRO and the Ministry of Defense at Malvern in the United Kingdom, and Wuhan University in the People's Republic of China. The University of Malvern initiated and will continue collaborating on this project with Da.

Chinese Consul General, Mr. Chi Gengsheng, is grateful for Da's research opportunity: "It is very kind also of Mr. Hoess to present this sophisticated and clever computer with which Mr. Da will do wondrous work when he goes back to China."

Ellen Petry continues to keep us linked to Intercontinental Sales activities.



Photos courtesy of Elleen O'Brien

The chief fire officer at Apple's Cork facility is Noreen Deasy. Once a week she and the Apple volunteer fire squad train with Cork's fire-fighting equipment and practice evacuation procedures. Fire crew members are, left to right: Noel Donaty, Alan Fehily, Geraldine Christopher, Chief Noreen, Claire Kelleher, Helena Sproul, Martin Lyons, and John Ryan.

Webster's defines first aid as emergency treatment for injury or sudden illness when regular medical care is not available. Should you injure yourself at the Cork facility, any of these nine first-aid team members may be treating you. Pictured from left to right are: Eileen O'Brien (faithful Apple Times correspondent), Thereea Cunningham, Dolores Gould, Esther O'Neill, Stephanie Barrett, John O'Connor, Christine Malone, Eileen Hanley, and Catherine Murphy. Missing from the photo are Gerard McGibney, and Margaret Ahern.



Speakers' Bureau member Alberta Castro and Trace Elementary School children are hard at play on the Apple computer.

Apple Goes to School

by Florence Stromberg

"My dad has an Apple, but he won't let us kids use it. Wait until I tell him I used one at school!"

That's what Mary Ann Cole, Alberta Castro, Pat Cohen-Sharp, and I heard last April when we gave our first Speaker's Bureau presentations at Trace Elementary School in San Jose, California.

We showed the kids an assortment of programs from music to speed reading to math, and demonstrated the Graphics Tablet. Besides being educational for the students and speakers, the presentation was profitable for Apple: Trace purchased two Apple computers for classroom use.

If you would like to help Apple while gaining some good skills yourself, think about becoming a member of the Speaker's Bureau. Just contact Mary Ann Cole at M/S E-9-L

Florence is a receptionist in the Sunnyvale Support Center and an Apple Speaker's Bureau member

No More Apples on the Shelf

Last June, Apple Computer's legal department announced a new policy to put idle computer systems to work through the Community Affairs Program. This policy gives Apple the structure and resources to assist more nonprofit organizations according to the program's guidelines.

"Lack of controls in the past has led to misplacement and misappropriation of idle systems," says Al Eisenstat, Vice President and General Counsel. "Now, all surplus equipment will be handled through the Community Affairs Program, according to guidelines approved by the executive staff." The Community Affairs Program works exclusively with nonprofit organizations, and plans to emphasize the establishment of computer networks.

"Once we get these surplus systems back, Apple's contribution to the community will have more impact than in the past," says Mark Vermilion, who is responsible for formulating the Community Affairs Program's guidelines. For information on

For information on transferring idle systems, contact Mark Vermilion or Mary Ann Cole at m/s E-9-L in Cupertino



August 1982

E

Volume 2, No. 8

Herbie Hancock Jazzes Up NCC

Simp



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Photo by JudyAnn Christense Herbie Hancock tickles alphaSyntauri's ivories in front of a standing-room only NCC andience.

It has the enchanting effect of a snake charmer's melody. The music of jazz recording star Herbie Hancock wafts out over the NCC pavilion, and crowds march en masse to the Apple booth where Herbie is playing an alphaSyntauri® synthesizer connected to an Apple computer.

"I think this is great," says one vibrating listener. "I mean, where else but at the Apple booth would you see such a practical and wonderful use for a computer?"

For the last three years, Herbie has been using his Apple computer in the recording studio, as well as for numerous other functions. Herbie, who volunteered to perform at the convention, has used the computer on his "Monster" and "Mr. Hands" albums, and will be taking it on an upcoming concert tour.

"Before I had an Apple computer, I was playing from ten to twenty different keyboards per song to achieve the types of sounds I wanted," says Herbie, who graduated from Grinnell College with an engineering degree. "After I got the Apple computer, I hooked all my synthesizers to it, connected it to one keyboard (the E_{μ} 16 polyphonic keyboard), and created a device that switches between the synthesizers. Now, I can get the range of sound that I want from one keyboard."

Herbie's keyboard engineer, Bryan Bell, elaborates: "Most synthesizers are microprocessor-based. To communicate between them, we had to develop a micro-based terminal," says Bryan. "We took a Z8000 single-board computer and built interfaces for each keyboard. The Apple computer controls the selection of sounds on each keyboard. This way we can be much more flexible, using sound from many more instruments (one keyboard is capable of simulating 16 different instruments). Besides, Herbie can't extend his arms to reach all those keyboards."

According to Bryan, Herbie's most powerful use of the Apple computer is for composing. Herbie did a little spontaneous composing at NCC. He and alphaSyntauri's Steve Leonard simulated snare, strings, and xylophone sounds on the synthesizer, and stored the tracks on the Apple computer. Then Herbie began to jam. Under the NCC's bright lights, Herbie's fingernails glistened as they danced across the keyboard.

"Each time I use them, I get more of what I want from my synthesized keyboards," says Herbie, smiling as he rotates the alphaSyntauri's Pitchbend to sustain an especially funky note. "When I play a synthesizer, I'm able to create my own instruments. I have as large a range as my creative mind will allow."

With time, Herbie says that his system will continue to evolve. "I haven't even scratched the surface yet."

Close Encounters With Apple's 3rd Generation

Nowhere has the idea behind Apple's advertising slogan, "You've Seen Their First Generation—Now Look at our Third," been more evident than at the National Computer Conference, held last June in Houston, Texas.

The conference was the culmination of several weeks of almost-daily new product announcements by major computer companies—DEC, Wang, Zenith, Sony, Corvus, and others. Yet Apple was still the star of the show. Between the stellar reputation of our reliable, third-generation products, and our total-systemsolution product offerings, Apple's booth was continuously full of interested onlookers with serious applications in mind.

NCC is a very important trade show for Apple. It is the premier showplace for an industry that Apple almost single-handedly created only five years ago.

"Many of our booth's visitors were caught in the technological trade-off posed by the market's new entrants—they were impressed by the new machines, yet they talked business with Apple because our products have proven themselves," says Market Research Manager Alan Oppenheimer.

After announcing dot-matrix and letter-quality printers, Apple looked even more attractive to potential micro owners and large, national and international corporations. "NCC gave us the chance to demonstrate our total system solution to almost 100,000 potential customers, press representatives, and members of the investment community," says Vice President of Sales Gene Carter. "We made a lot of good connections that we'll be following up in the coming weeks."

The excitement generated at NCC was due as much to Apple's newly-announced products (see story on page 2), as to the Apple personnel demonstrating these products. "I think the energy and enthusiasm of our people were two of the reasons why Apple's NCC booth was so successful," says Alan.

3Q Sales and Earnings Up

Apple Computer, Inc. showed a 57 percent increase in net sales and a 28 percent increase in net income, for the third fiscal quarter, ended June 25, 1982, compared to the same period last year.

Worldwide net sales rose to \$142.7 million from \$90.7 million a year ago. Net income increased to \$15.2 million, or \$.26 per share, from \$11.9 million, or \$.21 per share, in the comparable period last year. *****

Apple Supports Outside Developers

P

Cultivating outside hardware and software developers is critical to Apple's continuing success in the highly competitive personal computer industry. To maintain our edge in the market, Apple is providing software vendors and other product developers with unprecendented market and technical support programs.

Α

"Apple is implementing programs that will supply vendors with expertise in product development, marketing, sales, and documentation," says Software Support Manager Norma Odenweller. "Apple has always wanted to give developers this kind of support—in addition to that which is purely technical in nature."

To strengthen communications and lines of support between developers and Apple, the vendor support groups have just completed a comprehensive market study of software developers' needs and desires. The study's results helped lay the foundation for Apple's first-ever software developers conference, to be held this month in Monterey, California. The conference will update developers on Apple's strategy, products, and support programs.

Programs in Search of an Author

The Authoring Kit is one

such support program. Available this fall, the kit is designed to assist software developers in every aspect of the development cycle, drawing upon the professional experience and expertise of people throughout Apple.

P

The kit is practical as well as informative. It describes the marketplace to vendors, lists available design tools and sources of technical information, provides a comprehensive guide to writing manuals, and addresses marketing issues. "We want to help developers make their software as marketable as possible, resulting in increased system and accessory sales for Apple," says Hazel Holby, Customer Marketing Engineer, who is putting together this kit.

E

To make independent developers' products as marketable as possible, Apple created user interface standards for both its in-house and independent product development. Prior to adoption of the standards, users were doomed to memorizing a different set of operating rules for each software package. Apple's standards assure that the same keys will do the same tasks on all software programs.

Have license, will program

The Authoring Kit will be distributed through Apple's Licensing Program, which has been going strong since July 1981. A software license,

Let Me Introduce You To Apple's NCC Offerings

Apple introduced several software packages and two printers at NCC. The following information will give you an idea of what the new products are, and when they'll be available.

Specially Packaged and Priced Apple II Available Through September

At the National Computer Conference, Apple announced a specially-packaged Apple II personal computer system



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selling for \$1995. "This unique Apple package is a complete starter system for the home, office or school, that will grow with the customer's future needs," says PCS Marketing Director Paul Dali.

The package will be available through September at all participating U.S. and Canadian authorized Apple dealers. It includes an Apple II Plus computer with 48K of internal memory, a Disk II with controller card, a 12" Monitor III with stand, Apple Writer 2.0 word processing software, Apple DOS 3.3, and the Applesoft BASIC programming language.

Accessory Products Announces New Printers

The Accessory Products Division announced two new printers, the Apple dot-matrix printer and the Apple letterquality printer, for the Apple II and Apple III.

"Availability of a full line of Apple-branded accessory products ensures that Apple users will receive the same level of support for all system components," said Mike Muller, vice-president and general manager of the new division. The printers will be available in September.

Quick File III Arrives for Apple III

Quick File III is an easy-touse filing program for handling small to medium-sized collections of information on Apple

Photos by JudyAnn Christenser "In my Tools that Work Together' talk, I show managers and professionals that Apple III software is an integrated box full of electronic tools," says Demo Development Manager Marc Shargell, pictured above.

III. This software program was originally designed by an Apple executive for his own use, and is considered by many to be "intuitive, friendly and fun to use."

"Quick File III is every person's information organizer, a real help to those who wish to be more organized, efficient and productive, whatever their line of work," says Kris Olson, product manager. The software is now available for individual purchase and as part of the professional solutions promotion.

New Analysis and Business Graphics Software are Here

Senior Analyst is a financial modeling program but acts as its own data base, and can therefore easily consolidate



Apple exhibitors demonstrating products to NCC attendees included Director of Markets Marketing Joe Roebuck, who played a couple of sets on the alphaSyntauri synthesizer.





III



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Apples are seen in the best places—here with movie and TV stars Rock Hudson and Henry Winkler, and jazz recording star Herbie Hancock. Other notables who use Apple computers in the business of entertainment are recording stars Todd Rundgren, Bobby Weir and Jerry Garcia of the Grateful Dead, and Bette Midler.

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SUNDAY		5 1ST APPLE II SYSTEM TO EUROPE FROM CANADA '77	12	19	26 APPLE BOSTON OPENS TURNPIKE ROAD
		UNITALIA. F.F			UFFICE BD
MONDAY		6 APPLE HOLIDRY 1982	13	20 1ST APPLE INTL SHOW PARIS 77	27
TUESDAY		7	14	21 COMPANY LIBRARY OPENS '81	28 APPLE CANADA BECOMES SOLE DISTRIB- UTOR FOR CANADA BI
WEDNESDAY	1 WORLD'S GREATEST BLACKJACK PLAYER SOFT WARE MAKES SOFTALK TOP 10 BI TEJAS COMPANY STORE OPENS/ CARROLLTON, TX'81	8	15 EUROPEAN SUPPORT CENTER OPENS BO Apples 1st Exhibit opens at Wescon Bi	22	29 IST DEALER EXECUTIVE BRIEFINGS HELD BI
THURSDAY	2	9 POS DIVISION FORMED '80	16	23	30 IST MILLION DOLLAR SOFTWARE MONTH BI
FRIDAY	3	10 APPLE FOUNDATION JOURNAL VI. #1 PUBLISHED '81	17 APPLE CANADA APPROVED BY FIRA FOREIGN INVESTMENT REVIEW AGENCY 81	, 24	in the second
SATURDAY	4	11 APPLE III SYSTEM OEMO SOFTWARE Released bi Apple III Business basic software Released bi	18	25	
осто	BER		经过任何 这个证书上		Saferia (Saferia)
SUNDAY		3	10	17	24/31
MONDAY		4	11	18	25
TUESDAY		5 IST EDITION OF PROFESSIONALLY Speaking (Bus & Accounting Firm Newsletter) bi	12	19 APPLE'S 1ST ACCOUNTING SOFTWARE. THE CONTROLLER, SHIPPEO 79	26 IST FAMILY SYSTEM (DMNI) SHIPPED
WEDNESDAY		6 IST COMPANY STORE OPENS, CUPERTINO, CA 80	13	20 CORK, IRELAND PLANT OPENS BO	27 INTL APPLE CORE IS FORMED-SAN FRANCISCO 79
THURSDAY		7	14	21	28
RIDAY	1 IST APPLE BULLETIN 'BO CHARLOTTE FACULTY MOVED TO ARROWRIDGE BLVD 'BO	8	15 SINGAPORE ADDED TO MIS NETWORK	22	29
ATURDAY	2	9	16	23	30



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Try as hard as we may, it's hard to resist visual puns on Apple's unusual name. Here's one of the latest, immortalized in a poster design developed by our advertising agency Chiat/Day.

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SUNDAY		7	14	21	28
MONDAY	1	8	15	22	29
TUESDAY	2	9	16	23	30
WEDNESDAY	3 IST CUSTOMER BHIPMENT SPECIAL DELIVERY SOFTWARE 80	10	17	24	
THURSDAY	4	11 IST PROFILE (PUPPIN) SHIPPED BI	18	25 APPLE HOLIDAY 1982	
FRIDAY 5		12	19 SPEAKER'S BUREAU IS FORMED 79	26 APPLE HOLIDAY 1982	
SATURDAY	6	13	20	27	

OLUME AND		-			The second states to the second
SUNDAY		5	12 APPLE DOES PUBLIC SELLING 4.0M SHARES '80	19 20	26 27 APPLE HOLIDAY 1982
MONDAY		6	13		
TUESDAY		7	14	21	28 APPLE HOLIDAY 1982
WEDNESDAY	1	8	15	22	29 APPLE HOLIDAY 1982
THURSDAY	2	9	16	23	30 APPLE HOLIDAY 1982
FRIDAY	3	10	17	24 APPLE HOLIDAY 1/2 DAY 1982	31 APPLE HOLIDAY 1962
SATURDAY	4	11	18	25	1.11

which is obtained for a nominal fee from Vendor Technical Support, allows developers to incorporate and distribute Apple software in their own products. It is also a means of legally protecting Apple's copyrights. By using the number assigned at the time of licensing, the licensee is privy to internal information and tools developed by Apple engineers.

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The Licensing Program was created to be flexible enough to accomodate unique licensing arrangements. The program's multi-use agreement enables multiple users, such as schools, to access protected software from a shared disk system—without having to buy a copy of the program for each student. Other ideas being explored include specialized agreements for businesses with unique needs.

Μ

"Developers are excited that we're helping them profit, schools are pleased that we're saving them money, and individuals feel more confident about the work they're doing because they have the assistance of a multi-million dollar company—just a phone call away," says Marketing Engineer Terri Hasbrouck.

Developers Go To School Rounding out the Technical Support Program is Apple's own academy of product development. Since November 1980, Apple has been holding technical classes around the world for hardware and software developers. Each class gives developers information about the internal workings of the Apple III, its peripheral interfaces, device drivers, and tools which are available through Licensing and Support.

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"These classes are not for end-users who want to know how to use utilities; they are for developers who will be working in the guts of the Apple III," says Product Marketing Technical Support Manager Bob Martin. "The classes have been so successful that we're even starting to see interest from big companies like those in the National Accounts Program."

For more information on the classes, ask a Sales Support Analyst in your region, or call



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The Vendor Support logo graphically represents how Apple is providing development tools to vendors.

Technical Support at (408) 973-3086.



To facilitate comparisons of Apple products and NGC's newly-announced micros, Manager of Marketing Research Alan Oppenheimer, above center, answered questions posed by conference attendees. Altogether, almost 180 Apple personnel visited and worked at the show.



Printer Product Manager Lauryn Jones, was always extremely busy answering questions because Apple announced two new printers at NCC.

many models into one for "bigpicture" analysis.

Business Graphics performs data analysis and transforms numerical data into simple illustrations. It enables the manager to convert rows of numbers into simple graphs that depict complex relationships.

Apple II Senior Analyst is available now, as are Business Graphics for both the Apple II and Apple III. Apple III Senior Analyst will be available in late summer.

Apple III Z80 Board Provides CP/M Capability

The Apple III personal computer will now run CP/Mbased application programs with the introduction of the Apple SoftCard[™] III System, developed by Microsoft Corporation.

"The range and variety of programs compatible with Apple III SOS, Microsoft's BASIC and the CP/M operating system make the Apple III an enormously flexible computer for business, science, industry, and education," says David Escoffery, Apple III product marketing manager. The Apple SoftCard III system is available now.

Apple III COBOL: The Power of a Mainframe, The Flexibility of a Personal Computer.

Apple III COBOL is the first personal-computer-based COBOL system capable of executing significant mainframe applications. Apple III COBOL features full sort/ merge, multi-key data base access, a source-code generator, and the Animator, a powerful screen-oriented, source-level debugger that brings your program to life.

"The power of this COBOL, especially the ability to use applications from large computers, makes the Apple III a very cost-effective solution," said Hugh Mackworth, product manager. Apple III COBOL will be available this fall.

File Access Program Aids Apple III Software Developers

Record Processing Services (RPS), designed for Apple III Pascal software developers, provides file management services for programs handling large quantities of data.

RPS is a powerful program, "providing the opportunity to establish compatibility at access level among Apple III Pascal programs," said Kris Olson, product manager. "It is currently being field-tested by software developers using it to build Apple III software."

In part a "family" project, the program was written by Apple employee Steve Marcek, whose father took the photo on the software package's cover. The programm's cover shot of a tree being struck by lightning is suggestive of the power of a B+ tree, which is the type of index structure on which RPS is based. The program will be available this fall.

SuperPILOT Advances Instructional Development Software

SuperPILOT, a versatile extension of the Apple PILOT software language, offers all the capabilities of Apple PILOT, plus added features for external video control, graphic enhancement and easy debugging. SuperPILOT is designed for interactive video and graphics applications, as well as text lessons.

"SuperPILOT's power, flexibility, and price make it the right choice for teachers in education, and trainers in business and industry who develop courseware or instructional materials," says Debra Janssen, product marketing manager.

Also announced at NCC were two support products in Apple's PILOT family, Co-PILOT and SuperPILOT Log.

SuperPILOT and Co-PILOT will be available by mid-August, and SuperPILOT Log will be available in September.

Apple And RCA At Your Service

By Joan Pearson

One thing that all Apple computer owners have in common, whether they're farmers, scientists, or small business owners, is that they can't afford computer downtime. On July 6, Apple took yet another step to alleviate downtime. That's when RCA became our service agent, providing on-site maintenance to Apple owners in the U.S. and Puerto Rico.

Service Support Manager Walt O'Dowd has been investigating and working on the RCA project for the past 18 months. "Until now, Apple has serviced its customers through its own network of Level I dealers and support centers. As Apple and its OEM customer list grew, it became apparent that existing service support would not sustain Apple's anticipated growth, nor provide the quality service on which Apple has built its



Illustration courtesy of Monty Teague at RCA

reputation," he says. RCA was chosen as our exclusive third-party service agent because of its reputation for 20 years of excellence in data communications maintenance, and for its large number of service locations—more than 180. Apple customers will get a quick response to their service requests, because RCA's service network covers more than 97% of the population of the U.S. and Puerto Rico.

Customers will still be able to receive service for their equipment through Apple dealers.



The Manufacturing Engineering's Smoke Mouth chili won a trophy of a donkey's posterior for being the worst-tasting chili at the cook-off.

Apple Tejas Defends Their Pots

By Vernon Baines

Like everything else in Texas, the Apple Tejas First Annual Chili Cook-Off went over BIG. Even "Crazy Ray" of the Dallas Cowboys and delightful "Big Bird" of Sesame Street came to sample our chili and entertain the crowd.

Taste-tempting themes for the twenty-two competing chilis ranged from Hawaiianstyle, armadillo, and snake pit (made with real rattlesnake meat), to smoke mouth and gunsmoke. The winning chili was gunsmoke chile, prepared by the MIS department.

Carrollton Plant Manager

Jim Bean has announced plans for the cook-off to become an annual event which means that this year's losers will have next year to try again, and that the MIS department will have to return to defend its pots. The Tejas winners will also represent Apple in a chili cook-off later this summer in Seguin, Texas, near San Antonio.

By the way, if anyone happens to run across a recipe for some good, down-home, pigeon-toe chili, please send me the recipe at Apple Dallas, c/o Pigeons, M/S 2-C, Carrollton, Texas, 75006.

Apple Values Applauded

By Donna Dubinsky

Apple's Distribution and Service Division had its first Field Managers' meeting last May in Cupertino. Attending were management teams from the North American Support Centers, as well as several representatives from the European distribution and service organization.

The meeting's highlight was an Awards Banquet where Roy Weaver, General Manager, presented awards to those managers and Support Centers that best demonstrated Apple Values.

An Achievement/Aggressiveness Award went to the Toronto Customer Support Department for its excellent performance in the Distributed Software contest; and to the new Chicago Support Center for an outstanding first month of operation. The Dallas Support Center received a Positive Social Contribution Award for providing varied community activities in the Dallas area. Individual Performance Awards were presented to Vinnie Fried. Boston Support Center Manager, for management guidance and education; and to Ray Warneck, Intercontinental Support Center Manager, for extra efforts to satisfy international support requirements.

Team Work Awards were given to Dallas Support Center staff for their dedicated efforts in helping to launch the Chicago Support Center; and to the Sunnyvale Support Center for satisfying corporate product needs. The Innovation Award was earned by the Los Angeles Support Center for making strides in MIS, customer support, and credit management.

The final award was for Good Management, presented to the Charlotte Support Center management team for overall strong management. The Good Management Award will be awarded annually to the Support Center whose managers best exemplify Apple Values.

Finally, awards were presented to all the Service Managers for their extraordinary efforts in converting each Regional Service Center to the DEC computer system.



Photo courtesy of Donna Dubinsky Boston Support Center Manager Vinnie Fried receives an Individual Performance Award for management guidance and education from Service and Distribution General Manager Boy Weaver at the Field Managers' Awards Banquet.

Apple's Whiz Quiz Kids

by Donna Dubinsky

Field Distribution and Service Managers let loose at a crazy evening of Apple Bowl an Apple-ized version of the old American television show, College Bowl—during the recent managers' meeting in Cupertino. Teams were selected by lottery, and each team spokesperson was given a noise-maker to signal that his or her team had an answer to a toss-up question.

Emcee Rob Campbell, PCS Software Product Marketing Manager, traipsed the floor with a fistful of dollar bills, firing out questions such as "What were Apple's sales in the first year of incorporation?"; "How many keys on an Apple II keyboard?"; and "In what town is Steve Jobs' infamous garage located?" (The answers, for the curious,

Altos, California.) Cupertino's Distribution and

Service staff served as judges. When the noise level grew to a roar, Rob was forced to remind the participants that the "decision of the judges is both final and arbitrary."

In the end, everybody was a winner. Contestants walked away with dollar bills and assorted booby prizes, such as an Apple II motherboard, Japanese keycaps, casette tapes and, of course, Apple Bowl diskettes (A2D0018)!