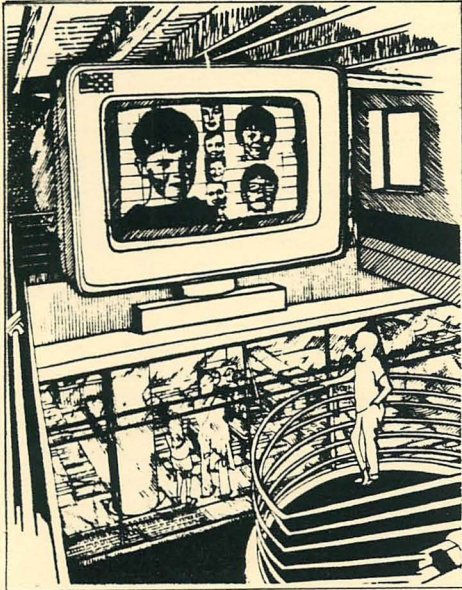# The Walk-Through Computer

A Landmark Exhibit at The Computer Museum, Boston, Massachusetts, USA
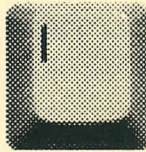
Sketches & plans by Exhibit Designer Richard Fowler show just a hint of the exciting scope of this project.

In May 1990, The Computer Museum plans to open a major new exhibit featuring the world's only two-story model of a working computer.

Visitors to the Walk-Through Computer will take an eye-opening excursion past a huge keyboard and mouse into the interior of the computer with shoulder-high interface boards, spinning disk drives, and room-sized microprocessor. The exhibit will combine highly realistic detail with special lighting effects and animation designed to illustrate how software and hardware work together to perform a typical computing task. It will also give visitors a look at some fascinating new technologies, including high-definition large-screen displays, an optical disk drive, and image-recognition software.

Designed by Richard Fowler, on loan from Britain's award-winning and highly popular new National Museum of Photography, Film and Television, the Walk-Through Computer will occupy a 3,500-square-foot gallery in the center of the Museum.

Plans call for the Walk-Through Computer to perform an image-matching task. As they enter the exhibit area, visitors will be invited to pose for a video snapshot. The Walk-Through Computer will then search its database of faces (including both previous visitors and celebrities) for apparent resemblances. The closest matches, along with the original, will be displayed on the giant monitor. Walking through the computer, visitors will be intrigued to learn how the different parts of the computer carry out the matching task using the video images as data.

Who the Walk-Through Computer Will Serve

As the only institution of its kind in the world, The Computer Museum already attracts 100,000 annually. Many are American and foreign tourists, and a significant number hold higher degrees.

As a one-of-a-kind international attraction, the Walk-Through Computer is expected to draw an even wider range of Museum visitors – families with young children as well as technically sophisticated adults. The Walk-Through Computer will also serve as a unique educational resource for schools and colleges, providing a new way of introducing basic computer concepts and new technologies in a stimulating, thought-provoking environment.

A Unique Sponsorship Opportunity

The Walk-Through Computer provides an opportunity for corporate and individual sponsors to be associated with the development of a highly visible international attraction.

The Museum is offering five levels of sponsorship for the new exhibit, ranging from Presenting Sponsor at $450,000 to Donor at $25,000. Each level carries appropriate benefits, including acknowledgement in all print materials related to the exhibit, exclusive use of The Museum for a function, and free or discounted admission to employees and family members. All sponsors and donors will be listed on credit panels placed prominently in the gallery, and will receive invitations to a special sponsor reception.

The
Computer
Museum
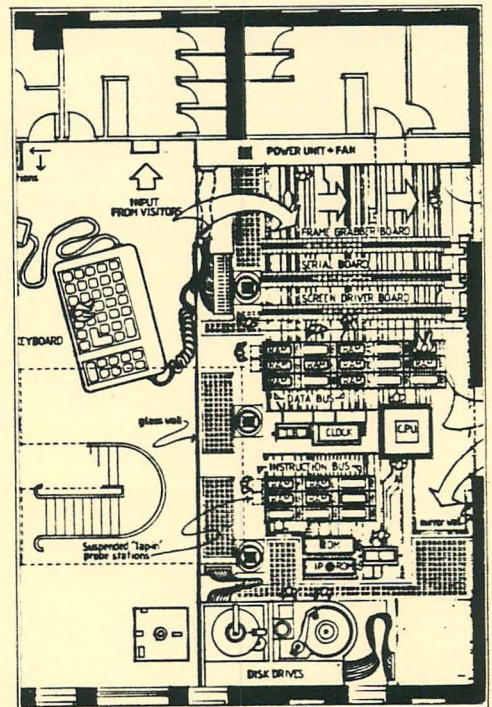
Museum Wharf
300 Congress Street
Boston, Massachusetts 02210

TEL 617. 426. 2800
FAX 617. 426. 2943

Equipment Donations

The Computer Museum is now working to identify a team of companies whose combined talents and resources will help make the Walk-Through Computer a reality. In return for their investment, these companies will have equipment and technology on display in what is expected to become a landmark exhibit.

Primary consideration for the opportunity to join the Museum in this venture will be given to companies that are willing to make a significant cash contribution toward the design and fabrication of the exhibit itself. Cash sponsors who also provide equipment and services will be credited separately for both types of gift.

Hardware Needs

Hardware components that will be required for the Walk-Through Computer include: a large-screen projection system; several smaller monitors placed at stations throughout the exhibit; controller hardware for the monitors; hardware for the video input stations, including video cameras, terminals, and keyboards; large-capacity storage devices; a system operator's terminal; one or more printers, and terminals for requesting output from the printers.

A powerful computer to drive the whole system will also be needed, as will special-effects devices for the giant frame grabber board, serial card, disk drives, clock, giant transistor, and giant logic circuit. A small number of personal computers will be required for the learning stations.

System Software

System software will include the pattern-matching routines, a visitor-level user interface, a system-level interface (including database manager), a time-sharing system capable of serving several terminals, and a driver for an attraction loop. The Museum will employ a Systems Engineer to coordinate systems development.
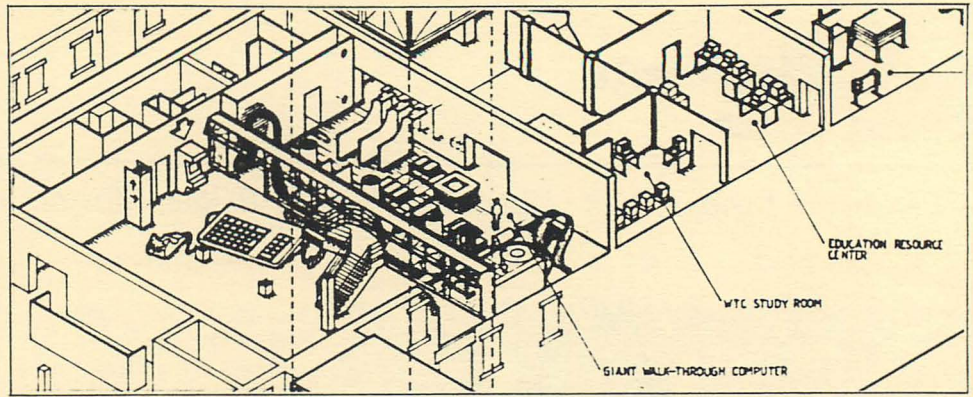
Walk-Through Advisory Group

The Computer Museum has convened an Advisory Group composed of some of the world's leading experts in educational psychology, educational software, exhibit design, computer science, and classroom teaching. This group will provide a range of input that will help the Museum implement the Walk-Through Computer concept accurately and effectively. The members of the committee include —

- **Art Bardige**, former classroom teacher, now director of Learningways, an educational software development firm

- **Daniel C. Dennett**, Professor of Cognitive Science at Tufts University and co-author of *The Mind's I*

- **Signe Hanson**, Director of Exhibit Design at the Children's Museum, Boston

- **Gardner Hendrie**, Sigma Partners, former computer architect, and designer of minicomputers and fault-tolerant computers

- **Danny Hillis**, Thinking Machines Corporation, computer architect, designer of the novel, massively parallel Connection Machine

- **David Macaulay**, author and illustrator of best-selling educational books, including *The Way Things Work*

- **Philip Morrison**, MIT, Institute Professor and co-creator of many popular films, articles, and programs on science, including the PBS series *The Ring of Truth*

- **Phylis Morrison**, former teacher, curriculum developer, and co-author and producer with Philip Morrison of science materials and programs

- **Jonathan Rotenberg**, founder and president of The Boston Computer Society, the world's largest society of computer users.

The project is being directed by The Computer Museum's Curator, Oliver Strimpel. Dr. Strimpel has directed exhibit development at The Computer Museum since 1984. He was responsible for "The Computer and the Image" and "Smart Machines," two 4,000-square-foot galleries with more than sixty interactive stations, which are the most successful exhibit areas in The Computer Museum. Prior to joining The Computer Museum, Dr. Strimpel was curator for Mathematics and Computing at The Science Museum, London.

The Exhibit Designer for the Walk-Through Computer, Richard Fowler, is on loan from Britain's National Museum of Photography, Film, and Television, where he is Head of Design. Fowler is particularly known for his work with three-dimensional exhibit environments, including a television studio and a nuclear power reactor.
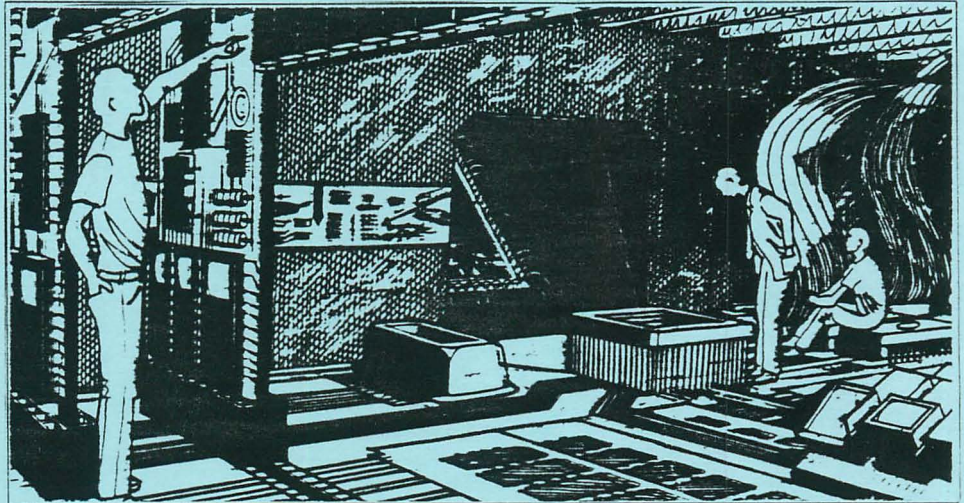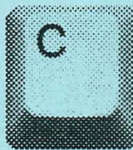
The Walk-Through Computer

A Landmark Exhibit at The Computer Museum, Boston, Massachusetts, USA

$750,000
$700,000
$650,000
$600,000
$550,000
$500,000
$450,000
$400,000
$350,000
$300,000
$250,000
$200,000
$150,000
$100,000
$50,000
$0

More Than Halfway to the Goal!

Committed cash donations for the Walk-Through Computer, the Museum's ambitious new exhibit based on a two-story model of a working computer, now total over $400,000.

This takes the Museum well beyond the halfway point in its $750,000 development effort for the exhibit, which is scheduled to open in May, 1990. Promises of in-kind donations of equipment and services are also coming in at an encouraging rate.

With the scheduled opening only eight months away, the search for the right mix of manufacturers, foundations, and interested individuals continues.

There is a particular interest in finding sponsors for the large-screen projection system, the video input stations, the laser printers, and several key interactives (including the frame-grabber board, the disk drives, and the CPU).

Kapor Family Foundation Donates $250,000

Mitchell Kapor, acting as treasurer of the Kapor Family Foundation, recently presented the Computer Museum with a check for $250,000, earmarked for the Walk-Through Computer and associated educational activities.

The original developer of Lotus 1-2-3, Kapor is currently the president of ON Technology, of Cambridge, Massachusetts. He is a founding member of The Computer Museum and has long been a supporter and key benefactor.

Kapor has expressed a special interest in the development of the Walk-Through Computer, and says he looks forward to its speedy completion. His gift takes us a long way toward making the exhibit possible.

DEC Grants $150,000 for Walk-Through Computer

Digital Equipment Corporation has recently announced a grant of $150,000 to The Computer Museum, to be used for the Walk-Through Computer. In addition, the company has donated equipment for the exhibit and operations.

The donation is part of a three-year sponsorship plan. Details of the plan will be announced shortly. The grant shows Digital's strong commitment to the success of The Computer Museum. It is and an enthusiastic endorsement of the Museum's exhibit development plans.

The Walk-Through Computer

Update on WTC "Face-Matching"

As previously announced, visitors who enter the Walk-Through Computer exhibit area will be invited to pose for a video snapshot. The Walk-Through Computer will then search its database of existing faces (including faces of both previous visitors and celebrities) for "resemblances." The closest matches, along with the original, will be displayed on the computer's giant monitor.
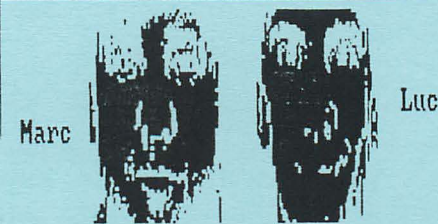
Digital's New Ventures Gets Involved

Digital Equipment Corporation's New Ventures organization, based in Stow, Massachusetts, has agreed to provide technical advice and software support for the image-matching task. Dr. Terry Potter, New Ventures Manager, and Matt Jaffe, Business Manager for Machine Learning and Artificial Intelligence Services, will oversee Digital's involvement.

The group's experience in high-speed pattern recognition and learning algorithms puts them in an excellent position to assist the Museum with this aspect of the exhibit.

Tufts University Team to Give Software Assistance

A team of graduate students headed by Dr. Robert Gonsalves, professor of Electrical Engineering and director of the school's Electro-Optics Technology Center, will assist the Digital engineers in developing the face-matching program. Dr. Gonsalves has considerable experience as a consultant to industry. His areas of interest include digital image processing, phase retrieval, robotics, and detection theory.

The Tufts team will have primary responsibility for conducting feasibility studies and prototyping the user interface. A prototype "face-matching" exhibit will be tested in The Computer Museum beginning in late October or early November.


```
Marc                    Luc

Correlation for Luc      =  997
Correlation for Floyd    =    5
Correlation for Greg     =   14
Correlation for Jay      =   51
Correlation for Mark     =   21
Correlation for Rene     =   10
Correlation for Yvette   =    5
Correlation for Hongzhi  =    7
Correlation for Maynard  =   29
Correlation for Bob      =   66
Correlation for Dr_Wu    =   32
Correlation for Terry    =   13
Correlation for Marylou  =    9
Correlation for Ken      =   27
Correlation for David    =    7
Correlation for Marc     =   70
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F.W. Dixon Selected as Exhibit Fabricator

F.W. Dixon, of Woburn, Massachusetts, has been awarded the main contract for the fabrication of the Walk-Through Computer. George Vanikiotis, Exhibits Division Manager, will lead a team of skilled craftsmen including model makers, cabinet makers, pattern makers, sculptors, auto-CAD designers, and lighting experts.

F.W. Dixon's Exhibits and Display Division has considerable experience in museum exhibit construction, having built and installed displays in Boston's historic Old South Meeting Hall, the Omni wing of Boston's Museum of Science, and the Digital Historical Collection, an in-house museum of computer technology. They also have extensive experience in industrial prototyping and architectural modeling.

Founded in 1899, the company has a reputation for quality craftsmanship and attention to detail. The Computer Museum is pleased to have F.W. Dixon on the team, and looks forward to working with them on the Walk-Through Computer.

David Macaulay Signs on as WTC Exhibits Illustrator

The Computer Museum is proud to announce that David Macaulay, the prize-winning author, illustrator, and television producer, has agreed to act as Exhibit Illustrator for the Walk-Through Computer.

Macaulay will create a series of panels for display around the inside of the Walk-Through Computer that will serve to tie the many facets of the exhibit together with a coherent set of graphical explanations.

Macaulay, who has been serving on the Walk-Through Computer Advisory Group, is the author of the popular series of highly imaginative books on architecture that includes *Cathedral*, *City*, *Pyramid*, *Castle*, and *Unbuilding* (the imaginary dismantling of the Empire State Building).

His most recent book, *The Way Things Work*, is an entertaining and informative guide to the workings of over 250 different machines, from the zipper to the photocopier, and includes a major section on computers.

With his special talent for making complex mechanisms understandable to the non-technical person, Macaulay is a welcome addition to the exhibit team.

The Walk-Through Computer

A Landmark Exhibit at The Computer Museum, Boston, Massachusetts, USA

WTC Construction Gets Under Way

A giant keyboard, monitor, and chassis front are now taking shape at F.W. Dixon Company, exhibit fabrication contractor, in the company's Woburn, Massachusetts, workshops. This marks a major milestone in the transition from concept to reality for the Walk-Through Computer, the next major permanent exhibit at The Computer Museum.

The huge components, built at twenty times scale, will fill a 55-foot-wide exhibit space and tower two full stories when the exhibit opens.

Construction began in mid-October, just four months after exhibit design was initiated in July. "Four months from concept to construction is phenomenally fast," acknowledges Richard Fowler, exhibit designer. "In my entire design career, I've never seen an exhibit project move forward so quickly."

The Walk-Through Computer is now scheduled to open to the public in June 1990. To meet this ambitious goal, museum staff arereleasing components for fabrication in stages, as parts of the exhibit are refined and finalized (see keyboard story, back page).

The keyboard, monitor, and chassis front will be completed in December, though a sponsor is still being sought for the large-screen projection system that will be housed inside the monitor shell.

In January, construction will begin on the disk drives, power supply, and motherboard. Once the separate components are completed in early spring, the entire Walk-Through Computer will be assembled at a Dixon warehouse in Wilmington, Massachusetts. Installation of electronics and special effects will take place at that facility.

After final testing, the exhibit will be disassembled, trucked to The Computer Museum, and reassembled in its permanent home, a 3,500-foot gallery in the center of the Museum.

Sloan Foundation Grants $250,000

In support of its mission to increase public understanding of technology, the Sloan Foundation has presented The Computer Museum with a $250,000 grant, earmarked for the Walk-Through Computer. Added to previous donations, this brings the project well along towards the $750,000 development goal.

The Walk-Through Computer
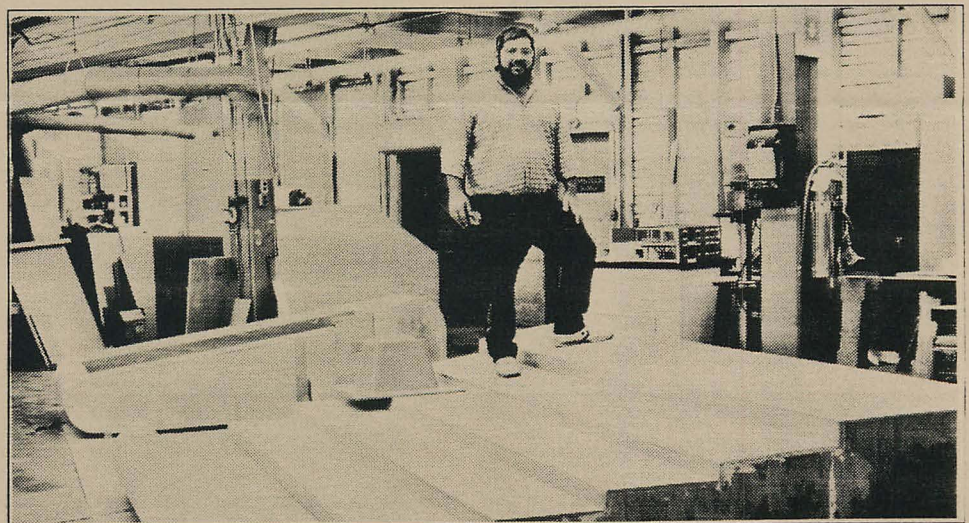
F.W. Dixon project manager George Vanikiotis stands atop partially-constructed WTC keyboard
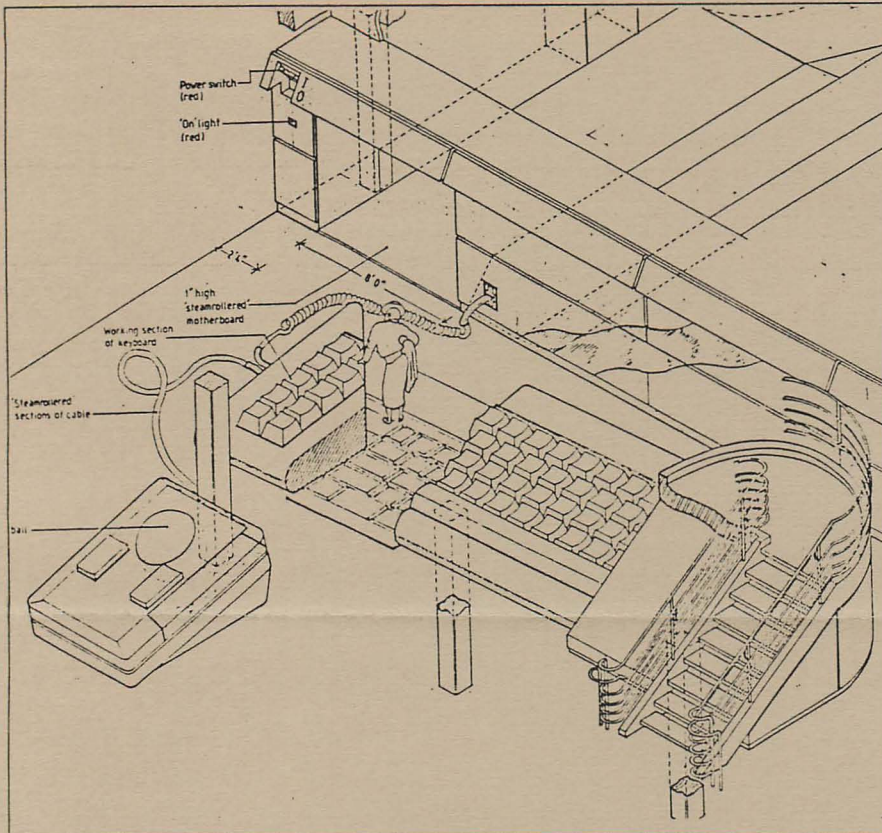
"Steamrollering" the Keyboard

Each component of the Walk-Through Computer poses specific design challenges that must be solved before manufacture can begin. The giant keyboard is a case in point.

As recently as October, plans called for a twenty-foot keyboard with more than fifty operational keys. The keys were to be non-mechanical, using a system of optical switches to detect keypresses.

Although this design promised to give good reliability while keeping costs down, it raised several problems. For one thing, most computer keyboards have mechnical keys. The optical keyboard thus violated one of the team's main design principles: realism. There were also concerns about traffic flow on the exhibit floor. The keyboard would block direct access from the stairs to the entrance into the computer's chassis. And functionality. How would a visitor, especially a small child, be able to reach all the keys?

One morning in late October, Richard Fowler, the Exhibit Designer, came up with an answer. His solution, shown in the sketch above, was to make a flattened section in the middle of the keyboard that would serve as a walkway to the chassis entrance.

To the left of the walkway, visitors will press fully operational function keys to make selections. These operational keys, one of which will be shown in full cutaway view, are to be controlled by sturdy gas pistons. The pistons will give the right tactile feel and ensure a high degree of reliability. Connectors will send input to the exhibit software. To the right of the walkway, keys will be cosmetically accurate but not operational.

The "walk-through" keyboard solved all the problems in one stroke. Cutting down on the number of functioning keys left more money for the remaining keys, thus making mechanical keys feasible. The walkway also makes it easy to reach the remaining keys and at the same time, improves traffic flow.

Finally, the device of flattening three-dimensional objects into two dimensions ("steamrollering," as it is called by members of the design team) will be repeated at various places in the exhibit to improve access without eliminating components essential to the modeling of a working computer. Having a steamrollered section at the entrance to the exhibit serves as a convenient introduction to this technique.

Alan Symonds Made Technical Director

Alan Symonds, an experienced electrical engineer and lighting designer, has recently been appointed Technical Director for the Walk-Through Computer.

On leave from Ripman Lighting of Lexington, Massachusetts, where he serves as Project Manager, Symonds will assume primary responsibility for special effects in the exhibit, including lighting for the Walk-Through Computer Theater and design and implementation of the "viewports," the interactive stations that visitors will manipulate to explore highly magnified views of the Walk-Through Computer's electronic circuitry.

One of his first jobs will be the design of an actual PC board that will serve as the basis for motherboard layout. He has also recently begun work on a prototype viewport that will simulate a magnified view of the computer's random access memory (RAM) chips.

Symonds has extensive experience in museum exhibit work, having worked on the Smart Machines Robot Theater, the Computer Museum's exhibit on artificial intelligence, for which he won an award from the Illuminating Engineering Society of North America. He also designed lighting for the forthcoming renovation of Faneuil Hall and the Old State House. He is an experienced theatrical lighting designer, with over 200 credits on professional, academic, and community productions, including the Hasty Pudding Theatricals, the Boston Ballet, and this year's James Taylor Small World Tour.
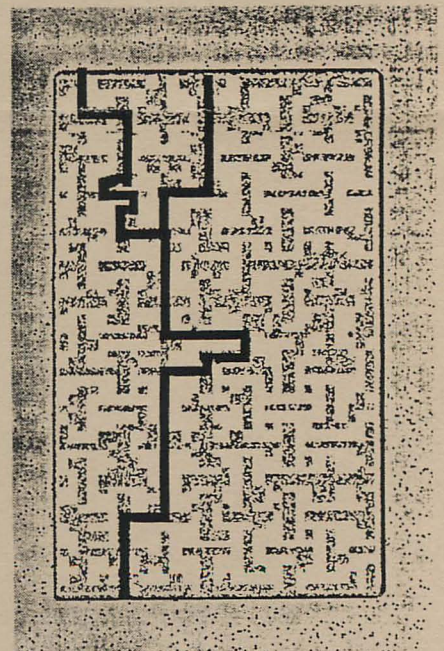
Early prototype of a WTC memory chip

The Walk-Through Computer

A Landmark Exhibit at The Computer Museum, Boston, Massachusetts, USA

An International Look for the WTC

A new demonstration program has been chosen for the Walk-Through Computer. Provisionally titled "World Traveler," the program will combine a simple route-finding application with a database of pictures and maps from around the world.

Using a giant trackball as a pointing device, visitors will first select a continent, then a starting city and a destination city. The program will find the shortest land route between the two points, then play an on-screen computer-based slide show of sights one might see along the way.
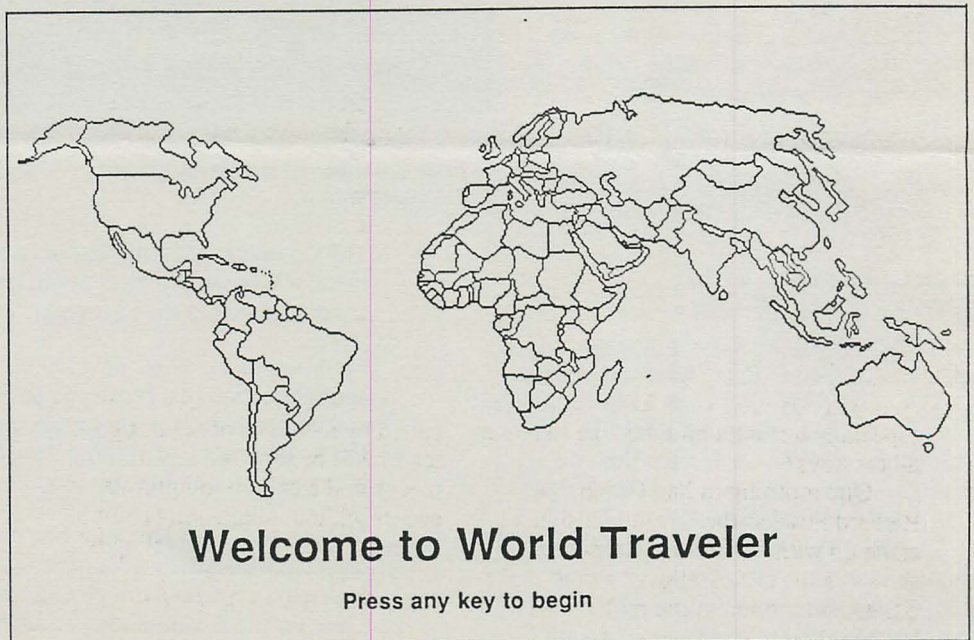
All major world cities will be represented, for a total of some seven hundred possible destinations. Photographs of famous landmarks in each city will be digitized and stored on a hard disk in the 200-megabyte class.

World Traveler replaces "Face Matcher," an idea that had received serious and active consideration as a demo program for several months. Although work on a prototype had been under way since September, by early November members of the development team had become increasingly concerned about the practicality of a face-matching application as a demonstration program for the Walk-Through Computer.

Concerns included the feasibility of developing a working program in time for the exhibit opening, and questions about how visitors would react to having their faces matched with members of a different race, gender, or age group. Another problem was the fact that video cameras are somewhat unusual input devices for personal computers. As a result of these growing concerns, face matching was finally removed from consideration.

The map application quickly moved into first place. It was found to have good graphics and a simple user interface, and to make appropriate use of all major components, including the disk drives and trackball. World Traveler will appeal to the large number of international tourists who visit the Museum each year, and may even help broaden horizons for local school children. The concept has been enthusiastically endorsed by all members of the design team and work on a prototype is well under way.

The Walk-Through Computer

Welcome to World Traveler

Press any key to begin

West Coast Companies Join WTC Sponsors

West Coast companies Apple Computer, Incorporated, and Intel Corporation have agreed to become corporate sponsors of the Walk-Through Computer, The Computer Museum's new permanent exhibit scheduled to open in June 1990. Combined with major contributions from the Kapor Family Foundation, the Sloan Foundation, and Digital Equipment Corporation, cash donations for the Walk-Through Computer now total more than $750,000.

"The Walk-Through Computer is the most ambitious single exhibit ever undertaken by The Computer Museum, so we tried to be modest in our initial funding requirements," says Oliver Strimpel, Curator and Acting Executive Director. "We have many ideas of how the exhibit could be even more effective. All indications are that we'll be able to achieve financial support for these goals."

Response to the exhibit has been so enthusiastic, in fact, that development of a national outreach program, based on the Walk-Through Computer, is now in the works.

Apple Computer Donates Equipment Plus $50,000

Apple Computer has donated eight Macintosh II systems to the Walk-Through Computer effort, plus a cash grant of $50,000. The contribution was made by Apple's Advanced Technology Group, headed by Vice President Larry Tesler.

The Macintosh systems will be used as "learning stations" within the exhibit and for developing software. The learning stations, to be located adjacent to the exhibit, will allow visitors to explore computer concepts at their own pace and at a greater level of detail than in the exhibit itself.

Intel Corporporation Contributes $50,000

Intel Corporation recently announced a grant of $50,000 to the exhibit through its 80386 and 80486 End-User Marketing Group, managed by Dennis Carter. In addition, the company agreed to provide technical support and advice on the design of the giant microprocessor.

The Computer Museum is proud to welcome Intel and Apple to the growing group of corporate, foundation, and individual sponsors of the Walk-Through Computer.
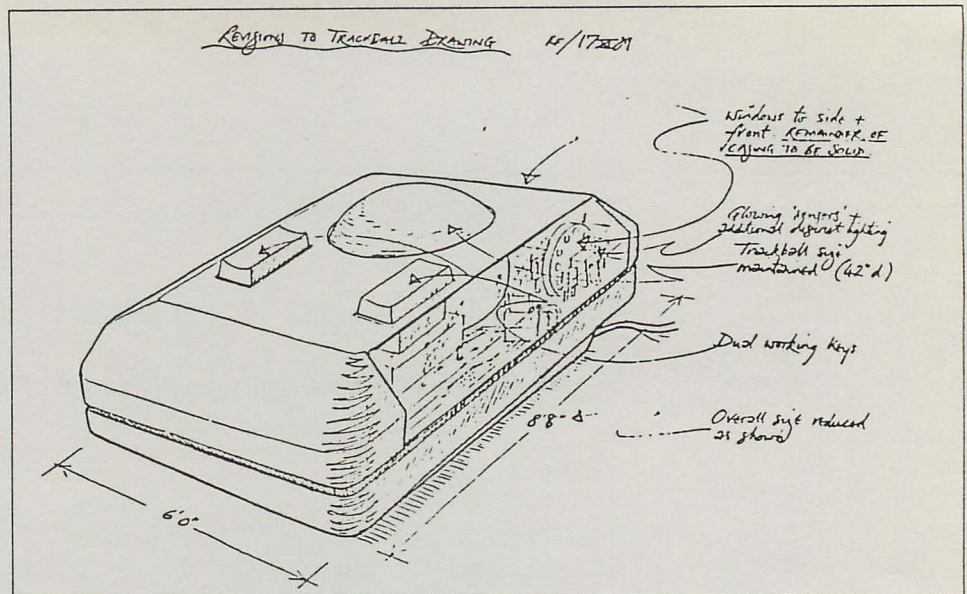
Walk-Through Gets a Trackball

Although early plans for the Walk-Through Computer called for a "bumper-car-sized" giant mouse, the mouse has recently been scrapped in favor of a trackball. Six feet wide and over eight feet long, the trackball will stand to the left of the giant keyboard. It will be fully functional—used to select starting and destination cities for the route-finding application (see front-page story). A cutaway view will reveal the rollers, the slotted wheels, photo diodes, and light sensors.

The trackball will have two buttons, one on either side, both with the same assigned function. This will make it easy for visitors to operate the device from either side.

The choice of a trackball over a mouse was purely a practical matter. An analysis of the sightlines from the exhibit floor showed that visitors would not be able to push a mouse around the floor and still maintain a view of the giant monitor overhead. A giant trackball was also judged to be simpler to construct and manipulate.

Insider's Grapevine

Here are some of the developments you should be hearing about in future *Insider's Reports*:

- The Computer Museum has been speaking with a well-known educational television producer about doing the theater show. Look for an announcement in the next issue.

- Members of the WTC development team are working on the design and fabrication of a prototype printed circuit board, populated with real components, for use in fabricating and interpreting the exhibit. DGA Associates, of Wilmington, Massachusetts, will be assisting with this portion of the project.

- Members of The Computer Museum's Education Committee met recently with Adeline Naimain, the Museum's Director of Education, to discuss a Walk-Through Computer National Outreach Program. Look for more information in a forthcoming issue.
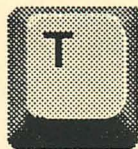
The Walk-Through Computer

A Landmark Exhibit at The Computer Museum, Boston, Massachusetts, USA

# World's First Walk-Through Computer to Open June 23rd!

The Walk-Through Computer, the world's only two-story working model of a desktop computer, will open at The Computer Museum on Saturday, June 23rd, at 10 am. The public opening will be preceded by a series of special events for sponsors, Museum members and supporters, and other VIPs.

Several of the major components are nearly complete, including the 25-foot-long keyboard, the power supply unit (complete with working fan and 60-cycle hum), the trackball, the giant floppy disk, and the monitor. Work has also started on the hard disk, and the "motherboard," the giant printed circuit board. According to Richard Fowler, the Exhibit Designer, the motherboard is proving to be the most difficult part of the exhibit to fabricate. "On the one hand, it's got to look right. That means it's got to be a nice translucent green. At the same time, it's got to stand ten years of wear and tear as a floor...and that's proving to be a very difficult combination."

Present plans call for a translucent plastic subfloor with embedded neon tubing (to show data flow), covered by a transparent capping layer made of a durable resin material. The search for just the right material continues. Researchers at F.W. Dixon, the exhibit fabricators, have tested samples from literally dozens of different manufacturers.

To ensure that the exhibit is completed on time, Dixon workers are already putting in twelve-hour days, and six-day weeks.

More than one 100 individuals, representing some 25 different corporations and institutions, are now involved in some way in the design and construction of The Walk-Through Computer. This includes a staff of thirteen full-time carpenters, model-makers and electricians at F.W.
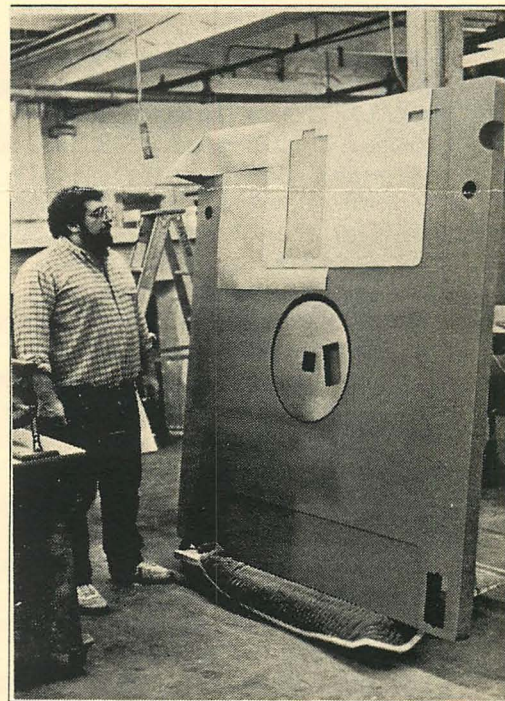
George Vanikiotis, Jr., Project Manager at F.W. Dixon, stands next to the completed floppy disk.

Dixon, ten Computer Museum employees working at least half-time on the project, a ten-member Advisory Committee, and numerous outside consultants, contractors, and volunteers. Technical contacts at companies sponsoring the exhibit are also giving important advice, including engineers at Digital Equipment Corporation, and Intel Corporation.

The Walk-Through Computer

WTC Donations Pass $1 Million!

The Computer Museum has now raised $867,500 in cash for construction of The Walk-Through Computer, plus more than $200,000 in equipment and services. This brings the total within $150,000 of the $1.2 million originally budgeted for the exhibit. "With several proposals and equipment requests outstanding, I am optimistic we will be able to meet our development goals," says Oliver Strimpel, the Museum's new Executive Director.

Maxell Sponsors Floppy Disk

Maxell Corporation of North America has donated $25,000 to The Walk-Through Computer. Combined with a $12,500 seed grant given in 1989, this brings Maxell's total involvement to $37,500. Part of the gift will go towards fabrication of the six-foot-high floppy disk, which will be shown standing near the front of the computer. The jacket has a sliding access door, revealing the disk itself, and a functional write-protect tab. The donation was arranged by Leesa Young, Computer Products manager.

Kensington Donates $25K

Kensington Microware Ltd., of New York City, a major manufacturer of computer peripherals, has donated $25,000 towards construction of The Walk-Through Computer. Part of the donation, which was arranged by Pam Miller, President of Kensington, will be used to cover the cost of fabricating a giant trackball, the WTC's pointing device (see *Insider's Report No. 4* "Walk-Through Computer Gets a Trackball"). "The Walk-Through Computer," she says, "shows users how our mouse actually works. And the scale of the model allows visitors to see aspects of the technology we employ far more readily than they ever could in a traditional exhibit. This kind of hands-on use does not exist anywhere else."

Cirrus Logic Gives $10K

Cirrus Logic, the California-based manufacturer of integrated circuits, has donated $10,000 towards construction of The Walk-Through Computer. The donation was arranged by Dr. Suhas Patil, Chairman of the Board and Vice President of Research and Development, and Mike Hackworth, President and CEO. Cirrus products include devices for mass storage control, display and print graphics, and data communications.
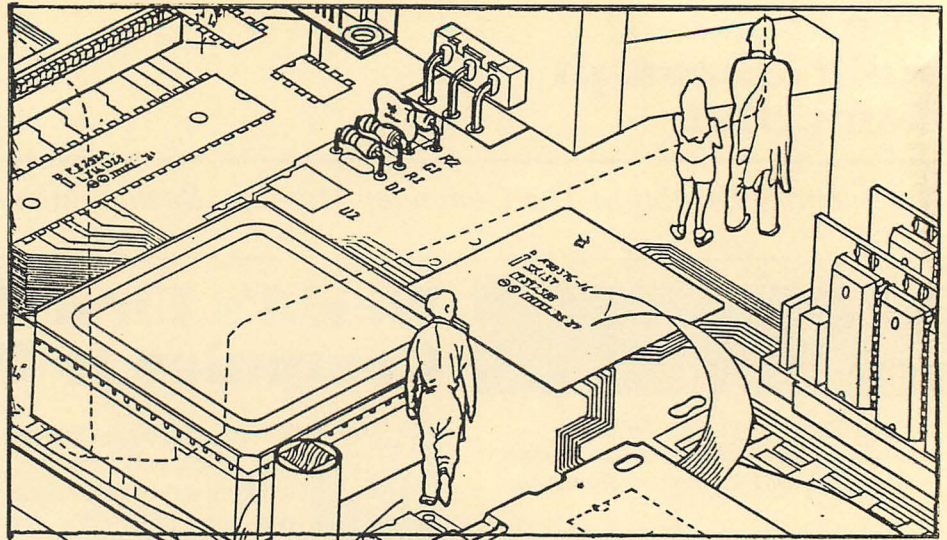
Drawing by Richard Fowler, Exhibit Designer, shows visitor standing next to CPU "viewport."

Paracomp to Help with WTC Computer Animation

Paracomp, Inc., of San Francisco, a developer and publisher of 3D software applications for the Macintosh, has agreed to provide assistance in developing computer animation for use in The Walk-Through Computer.

Sean McKenna, 3D Product Line Manager, has arranged for donation of the company's Swivel 3D software to the project. Paracomp has also agreed to donate 6 to 8 weeks of an animator's time to develop computer animation for showing in The Walk-Through Computer's "viewports." These are stations on the giant motherboard that will allow visitors to see highly magnified views of the inner workings of the computer. At the hard disk, the viewport will allow visitors to take a computer-animated "ride" on a read-write head as it flies over the surface of the disk, much like a fighter jet hurtling just a few feet above the surface of a hilly terrain. Other animations will include close-up views of RAM chips and the CPU.

Source and research material for the hard disk "flyover" is being provided by Len Daugherty, Principal Mechanical Engineer at Digital's Low End Disk Systems.

Drew Huffman, the Paracomp animator, is the creator of several successful demonstration programs, including 3D animation for the Macintosh IIcx introduction.

Insider's Grapevine

Here are some of the developments you'll be hearing about in future *Insider's Reports*:

- A prototype PCB (printed circuit baord) is now complete and in the hands of the exhibit contractor for use in modeling the giant motherboard. The board was designed and fabricated by a consortium of Massachusetts companies.

- John Palfreman and Nancy Linde, producers of the PBS series, *The Information Age*, have agreed to produce a film for showing in the WTC Software Theater. Dean Winkler, Vice President of Post-Perfect, a New York animation house, will create the computer animation and provide post-production facilities.

- David Macaulay, author of *The Way Things Work* and Exhibit Illustrator for The Walk-Through Computer, is working on a large introductory panel for the Walk-Through called "The Information Machine."

The Walk-Through Computer™

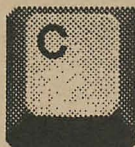*A Landmark Exhibit at The Computer Museum, Boston, Massachusetts, USA*

Walk -Through Computer™ Arrives

Riggers carefully ease the giant monitor into place in the new gallery. Photo by Richard Fowler.

Components of The Walk-Through Computer™, the world's only two-story model of a desktop computer, have now been moved to The Computer Museum from workshops at F.W. Dixon, the exhibit fabricator. It took a full day of work by a five-man rigging team to hoist the computer's giant monitor into place on the sixth floor of the Museum, overlooking the new Walk-Through Computer gallery. The giant keyboard, power supply, hard disk, and chassis front are also now on the exhibit floor, with the trackball soon to follow. A team of Dixon workers has set up shop in the gallery and is hard at work fabricating the remaining portions of the exhibit.

Originally, The Walk-Through Computer was to have been assembled in a warehouse in Wilmington, Massachusetts, then disassembled and brought to the Museum just a few weeks before the exhibit opening. The new plan saves precious time, and has the added advantage of giving visitors a sneak preview.

AT&T Donates $50K

AT&T recently pledged $10,000 toward construction of The Walk-Through Computer. Combined with a donation last year of $40,000, this brings AT&T's total sponsorship to $50,000, and makes the company an official exhibit Sponsor. "AT&T Computer Systems is proud to be a participant in The Walk-Through Computer," says Paul A. O'Brien, AT&T Data Area Manager-New England. "It's a wonderful resource for the Musem's mission of helping people understand these things called computers."

SuperMac Gives Hardware

SuperMac Technology, of Sunnyvale, California, has donated two Spectrum/8 Series III color monitors with 8-bit video boards and two DataFrame XP100 hard disks for use in Walk-Through Computer software development. The donation was arranged by company president Michael McConnell.

Other West Coast companies that have contributed to the development of the exhibit include Apple Computer Corporation, Macromind, Paracomp, Intel, Claris, Cirrus Logic, and Silicon Beach.

The Walk-Through Computer

Media Interest Grows

According to Gail Jennes, The Computer Museum's Public Relations Manager, more than 16 million people will have read about The Walk-Through Computer before formal promotional efforts even begin.

International Highlights

News of The Walk-Through Computer has already spanned the globe with a half-page piece in the March 26 *London Daily Telegraph* and a *Jerusalem Post* feature on the Museum last December.

The *Telegraph* story prompted a stream of inquiries from the British media including the *London Times*, *New Computer Express*, *Electronic Times*, the BBC prime-time science program *Tomorrow's World* and the BBC's *Search Out Science* show for children. In addition, the West German *Siemens Review* (read by 40,000 of the world's opinion leaders) will publish a feature on The Walk-Through in its May/June issue. Germany's *Der Spiegel* is also interested in doing a piece.

National Highlights

Columnist Alex Beam broke the story in *The Boston Globe* last December. In March, *The Sunday New York Times* highlighted the new exhibit in a piece on the Museum that has been reprinted across the country and in Canada. The April issue of *Compute!* featured a photograph and description of The Walk-Through Computer as part of an extensive feature about the Museum.

Look for stories on April 16th in *Business Week*, April 18th in the *North Shore Weekly* chain distributed to 110,000 people in Massachusetts, and in the May issue of *Popular Mechanics*. On May 20th, *The New York Times Sunday Magazine* will feature The Walk-Through Computer as its "Works in Progress" piece. And in June, *Family Circle*, *The Boston Sunday Globe*, *Personal Computing*, and *CHILDSPLAY Magazine* are highlighting the exhibit with features or other coverage. Also coming up this summer is a story in *Results Magazine* (read by 25,000 top management executives in the US).

To top it off: *Good Morning America* is interested in greeting the country one morning in June from inside The Walk-Through Computer!
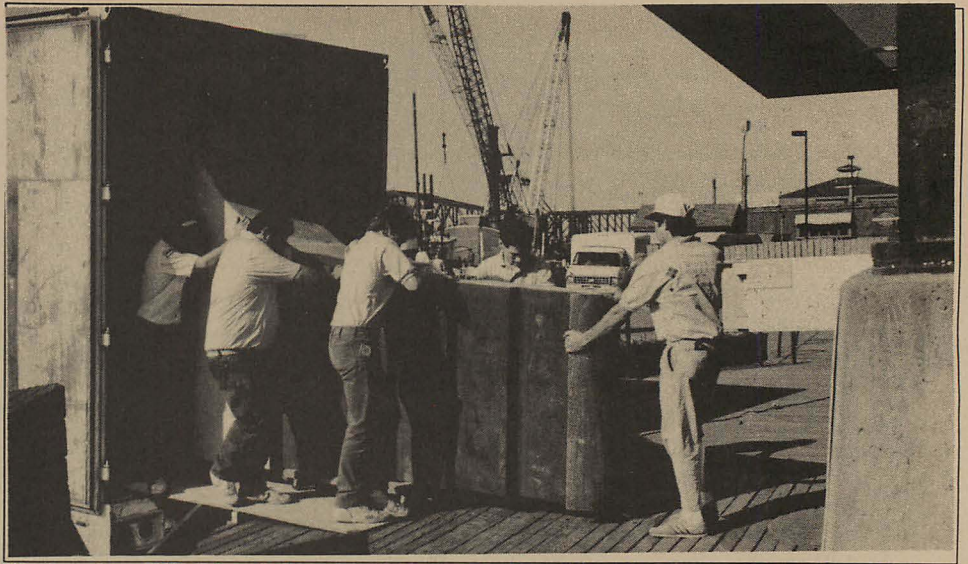
Workers from F.W. Dixon bring part of the giant keyboard into the Museum. Photo by R. Fowler.

Marketing The Walk-Through Computer™

Noel Ward, The Computer Museum's newly appointed Director of Marketing, is working with Commonwealth Creative Group of Natick, Massachusetts, to develop an advertising campaign designed to ensure that The Walk-Through Computer gets the audience it deserves when it opens on June 23rd.

High visibility advertising aimed at building public anticipation will begin three to five weeks before the opening. In the weeks following, advertising efforts will focus on maintaining awareness of The Walk-Through Computer and attracting visitors.

Media under consideration for the advertising campaign include: local and regional newspapers; billboards along major highways approaching Boston; transit cards on subway cars and buses; posters in train stations, airports, computer stores, tourism centers, public libraries, and community recreation centers.

"In the history of The Computer Museum," says Ward, "no other exhibit has had the potential to capture the imagination of as broad an audience as The Walk-Through Computer. A landmark exhibit, it presents us with a larger-than-life opportunity to promote the museum regionally, nationally and even world-wide." Ward feels The Walk-Through Computer has the potential to double the number of visitors to the Museum, currently running at about 100,000 annually.

Insider's Grapevine

Here are some of the developments you'll be reading about in future *Insider's Reports*.

- Intel Corporation has contributed $115,000 for use in the production of a video that will take viewers on a "walk" through The Walk-Through Computer.

- Testing and formative evaluation of the various Walk-Through Computer exhibit components is now underway. School children, visitors, and industry consultants are getting involved.

- Lotus Development Corporation has donated $25K towards construction of The Walk-Through Computer Software Theater.

- The Information Machine, the large introductory panel being created by David Macaulay, will incorporate six different interactive stations.