New Video Launches The Walk-Through Computer™ Nationwide

An educational videotape taking viewers on an adventure through "The Walk-Through Computer" (WTC) will be available in mid-November, 1990. The 25-minute video captures the magic of this dramatic exhibit and encapsulates its major message, explaining how computers work.

The video features David Heil, the host of the Emmy award-winning PBS science series, Newton's Apple, and four young people on a mission to discover "how a computer does what it does" by visiting the "only place where you literally can climb inside a computer."

The video is designed for use in introducing computer classes and presentations. It is appropriate for fifth grade through college, training courses, presentations to general interest groups, science centers and museums, as well as other interested groups and individuals.

Produced by the Museum in association with the renowned Chedd-Angier Production Company, The Walk-Through Computer Video is supported by a $115,000 grant from Intel Foundation.

The Computer Museum will premiere the film on both East and West Coasts: In Boston at the Boston Computer Society's general meeting October 24 at the Bayside Exposition Center and in California during the fall.

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Perhaps the greatest reward of working at The Computer Museum is watching the faces of happy visitors! With The Walk-Through Computer, we are seeing hundreds of excited faces every day. More than 50,000 people visited the Museum this summer since we opened the new exhibit, breaking all our past attendance records.

Everyone from a small child to a computer pioneer has fun rolling the huge trackball and seeing the cursor move on the giant screen. Boston social worker Kathryn McHugh confessed that "technophobia" brought her to the Museum. The Walk-Through Computer helped "put it all into perspective," she said. "I feel less fearful because I can walk through at my own pace. When I work at my keyboard, it goes too fast."

In addition to the thrill of walking inside a computer brought to life by flashing lights and video, visitors discover many aspects of how computers work. People who start with "The Information Machine" interactive panels can see how all kinds of information, such as words, pictures and sounds, are converted into a form handled by the computer. Those who read the panels will grasp the main points of "computer anatomy."

In the Software Theater visitors see how programmers write software. Finally, five learning stations provide a deeper understanding of specific areas—how a computer is built to what happens when a key is pressed. And for the first time, those who cannot visit the Museum can enjoy one of our exhibits from afar by watching a specially produced videotape of The Walk-Through Computer. This supports our mission to serve audiences across the nation and the world.

California airline pilot Stuart Oster visited after hearing about the exhibit on the radio in San Diego. "I use computers but don't know how they work. I wanted to find out," said Oster, who was "impressed with the way the exhibit connects what I see on the CPU's screen to what I did outside to operate the giant computer."

If you haven't already—come and see the new exhibit for yourself or order the videotape. Tell us what you think. Your ideas help us plan our future exhibits, programs and outreach.

Dr. Oliver Strimpel
Executive Director

New Walk-Through Video (Continued from P. 1)

"A video is the most effective way to extend the reach of this important exhibit nationwide," says Clif Purkiser, Corporate Development Manager of Intel Corporation.

"We saw how effective The Walk-Through Computer could be in helping inspire young people to become programmers and engineers and in demystifying computers for those who are intimidated by them."

The video shows Heil and the youngsters as they pore over the insides of a normal sized desktop computer and then try out the trackball and keyboard of the Museum's giant computer to find the shortest driving route between two cities. After using the World Traveler Program, they venture inside onto the motherboard to find out what makes this big computer work.

As they investigate each component, computer animated sequences are woven into the video from the viewports illustrating the mysteries of the video board controller, the Central Processing Unit, keyboard-trackball interface, memory chips, and hard disk drive.

Software is integrated into the story with a segment from the Software Theater video. This explains what a program is and how it (in the form of 0s and 1s) causes the hardware to work. An animated character tells the story using human programmers Edwin and Edwina as foils. The Software Theater video was produced by the BBC's John Palfreman, with technical help from the award-winning computer graphics animator Dean Winkler, Vice President of Post Perfect.

"The Museum has received many inquiries for teaching materials on how computers work, especially videos," says Education Coordinator Natalie Rusk. "Young people are genuinely excited when they walk inside this big computer," she says. "The video is the next best thing. We want students to think about what's inside that baffling little box."

"Instead of studying static computer parts in a text book," she says, "students can see through the viewports what actually goes on inside the components that would otherwise be invisible to the human eye."

The single largest project in the Museum's history, The Walk-Through Computer has captured the imagination of media around the world from TODAY, the ABC Evening News, CNN, TV networks in Germany, Japan, and Australia, as well as the AP,UPI, The London Times, Der Spiegel, The New York Times, and Newsweek.

"Intel is so pleased with the success of the exhibit and the video's educational potential," says Purkiser, that they plan to make the video a priority by offering it in their catalog and store and to user groups.

To order the video which costs $19.95, contact the Museum Store at (617)-426-2800x307. Ten percent discount for Museum Members.
A special sensor-equipped glove permits manipulation of simulated objects in a computer generated world of "virtual reality."

"Virtual Reality" Gets Wheels

The Computer Museum has received initial support from The Kapor Family Foundation for "Reality on Wheels," a vehicle that will tour the country providing access and information about the new phenomenon of "virtual reality."

The essence of virtual reality is stereo vision of an environment that an individual can explore in all dimensions. The ultimate systems require head-mounted "eyephones," surround-sound and gloves. Other systems use stereo glasses and flying mice.

Virtual reality technology allows people to explore an environment in a multidimensional computer-generated universe. Exploiting the latest advances in computer power, display technology, and force and motion sensing, the technology gives people new ways to climb into and interact with simulated and imaginary environments.

As with many new phenomena, conceptual thinking about this new technology's potential exceeds the present systems' actual capability. Yet this makes it even more challenging and exciting for exhibition—because it will give the public access to "work in progress."

Research and development are taking place to create better programming environments, human interfaces, and graphics processors. Many corporations, universities and institutes are putting major efforts into this arena. The Museum is working with VPL Research Inc. founder Jaron Lanier, Scott Fisher, Michael Naimark, and Howard Rheingold to present this technology.

According to Mitchell Kapor, Chairman of On Technology, Inc. and a member of the Museum's Board of Directors, "Virtual reality is a technology of profound importance for society. It creates an entirely new way to experience the digital domain by placing the user inside an interactive, computer-generated, three-dimensional environment. Beyond obvious applications to the entertainment field, it has extraordinary possibilities—from the training of surgeons to the hands-on assembly, one molecule at a time, of cancer-fighting drugs."

"Virtual Reality environments could also be used to design habitats, teach physics, history or geography, and create exciting new art and entertainment forms," says Museum Director Dr. Oliver Strimpel. "It is important that the general public understand what advanced technologies such as virtual reality are and how exciting and useful they can be. By offering such exhibits, the Museum remains a leader in presenting the cutting edge of technology."

Expected to begin touring in late 1991, the exhibit would bring the experience of virtual reality to schools, public agencies, and a wide variety of people across the country.

Reality on Wheels is the third in a series of traveling exhibits which the Museum has mounted since 1988. "Computers in Your Pocket: The History of Hand-held Calculators" and "Terra Firma in Focus" on digital satellite imaging continue to tour the country extending the Museum's reach. The Computer Museum also exports its most popular exhibits to other museums and technology centers around the world by means of an Exhibit Kits Program.
Seven new Directors were elected at the annual meeting in June. They represent an exciting, diverse group of leaders from industry, finance, publishing, and education. We would like to introduce them to you.

Charles House
General Manager, Software Engineering Systems Division
Hewlett-Packard Company

During his 27 years with Hewlett-Packard, House has been involved with that company’s first projects in digitizing oscilloscopes, computer graphic displays, Logic Analyzers, Protocol Analyzers, smart terminals, medical display systems, and microprocessor development systems. In 1990, he was named IEEE Fellow. Selected for the Computer Hall of Fame because of the Logic Analyzer creations, House also received Electronic Magazine’s 1977 Award of Achievement. Most recently, he directed the HP group responsible for the highly publicized “3D Look and Feel” adopted as part of OSF/Motif, a cornerstone of Microsoft’s MS Windows 3.0.

As an Adjunct Professor, House has also taught a course at Stanford University on communications and its impact on society, and founded ISYS Forum, a non-profit group developing a PBS television series based on his course. Co-author of Logic Circuits and Microcomputer Systems, he has edited or contributed to eight other books.

David Barry Kaplan
Partner
Price Waterhouse

Kaplan has been involved with several of Price Waterhouse’s major clients in high technology, banking, real estate, publishing, radio communications, education and various other service industries such as hospitals. He consults directly with top operating management, chief financial officers, and boards of directors regarding financial systems, internal control, budgeting and general business problems. He manages financial statement examinations and has had significant experience with multinational high tech manufacturing companies, mergers and acquisitions, and the improvement of financial reporting systems. He has also testified in court as an expert witness.

Joining Price Waterhouse in 1976 as a Staff Accountant, Kaplan became a partner in 1987. He earned his MSBA in 1976 and his BA in accounting cum laude in 1974 from the University of Massachusetts (Amherst). Active in his community and the father of two young children, Kaplan is interested in education, and believes that the Museum has an important role to play in educating young people to understand computers. Kaplan will serve on the Museum Board’s Finance Committee.

Fritz Landmann
President and Publisher
Computerworld

Since 1988, Landmann has been responsible for the growth of Computerworld, the flagship publication on information technology published by International Data Group. Before joining Computerworld, he was President and Publisher of Federal Computer Week, an IDG publication on information technology in the government. Prior to his career with IDG, Landmann held executive positions in business publishing with PennWell, ITT, SRDS and Chilton Company.


He is a graduate of the Wharton School, University of Pennsylvania.
Dr. Richard R. Ruopp  
*President Emeritus*  
Bank Street College of Education

From 1979 to 1988, as Bank Street College’s fourth president, Dr. Ruopp led the internationally known graduate institution in exploring the educational uses of new interactive technologies from microcomputers to videodiscs, including the creation of prototypical programs such as Bank Street Writer and Voyage of the Mimi.

As a 1988-89 Faxon Fellow and visiting scientist at Bolt, Beranek and Newman, he explored the potential of interactive videodisc-based educational programs. In 1989, he began educational consulting with the Technical Education Research Centers (TERC).

Before assuming the presidency of Bank Street, Ruopp for 10 years was a specialist in early childhood education and day care with Abt Associates, Inc. He was also principal author of several reports on day care. From 1965-68, he was Franconia College’s second president. He earned his Bachelor’s *summa cum laude* from Iowa Wesleyan College, a Master’s in Theology from Boston University, and a Doctorate from Harvard University Graduate School of Education, with postgraduate research in the philosophy and psychology of religion at Oxford University. Dr. Ruopp serves on the Museum Board’s Education Committee.

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F. Grant Saviers  
*Vice President*  
Digital Equipment Corporation

As Vice President and Group Manager of the Storage and Information Management Group, Saviers has worldwide responsibility for all Digital’s disk, tape, memory, optical and database software engineering and related manufacturing in the United States. He joined Digital in 1968 as an engineer in Computer Development. In 1973, he became Engineering Manager of Disk Development and in 1979 he was appointed Manager of the Storage Systems Development Group. He became Vice President in 1981, taking responsibility in 1983 for USA Storage Manufacturing Operations. Database software engineering was consolidated and the organization became Storage and Information Management in 1987.

Saviers earned his BS and MS in Engineering from the Case Institute of Technology and is a graduate of the Harvard University Advanced Management Program. He is a trustee of Hawthorne College and alternate Director of MicroElectronics and Computer Technology Corporation, and a member of University of California, Berkeley, College of Engineering Advisory Board.

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Michael Simmons  
*Executive Vice President of Technology and Operations*  
Bank of Boston

Simmons joined Bank of Boston in May 1990 from Bank of America. There, he was Executive Vice President of BankAmerica Systems Engineering responsible for designing and operating worldwide computer and telecommunications systems. He was also a member of Bank of America’s policy-making Managing Committee and Senior Management Council, and Chairman of the Technology Policy Committee.

At Bank of Boston, Simmons leads a staff of more than 2,000 providing advanced technology and operational support to the entire corporation. He is a member of Bank of Boston’s Management Committee, reporting directly to the Chief Executive Officer.

Before Bank of America, he was president of Fidelity Systems Company responsible for data processing operations for Boston’s Fidelity Investments. Earlier, he was with IBM in systems engineering, marketing, product development and education and served as Executive Vice President in the Information Systems Group for American Fletcher Bank in Indianapolis. A 1964 graduate of Indiana State University with a BS, he began his career as a high school biology teacher.

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James F. Sutter  
*Vice President & General Manager*  
Rockwell Information Systems  
Rockwell International Corporation

Sutter is Vice President of Information Systems and General Manager of the Information Systems Center of Rockwell International Corporation, a position he has held since 1983. The Information Systems Center is the corporate focus for computing, telecommunications, software development, office and factory automation. Before joining Rockwell, he was Director of Corporate Information Management at Xerox Corporation where he served in a variety of managerial positions for 17 years.

Sutter is a Vice President of the American Management Association and Chairman of its Information Technology Council. He is a member of the board of directors for INFOMART, the Systems Advisory Board for Chrysler Corporation, the Advisor Board for the Graduate School of the University of Pittsburgh, and Vice Chairman of the President’s Council of Loyola Marymount University. He is also a member of the Information Technology Council of the Conference Board, the Society of Information Management, and the Research Board.

A graduate of the University of Notre Dame, he holds an MBA from Marquette University. He served as a destroyer officer in the US Navy operating in the Second and Sixth Fleets.
Follow That Key!

When The Walk-Through Computer was being built, Education Coordinator Natalie Rusk polled junior high and high school students on the questions the exhibit should answer. Over and over they asked: "What happens when a key is pressed?"

The "Journey of a Keypress" exhibit invites visitors to press a key and take a "journey" from the keyboard interface chip which gets the first message through a long chain of events (lasting a split second!) to what finally appears on the screen.

They see how the keyboard's signal travels to the CPU which extracts a bit map of a Revolution, and ephemera that captured the feeling of computing in the 1950s and 1960s, as well as books, manuals, and papers.

Don't throw out those photos and other material in 'the bottom drawer.' The Museum needs them NOW for Milestones of a Revolution. Please make a list and send it to The Collections Department: help make history!

Team Member, will ask the questions. Venture capitalist John Doerr and IDG Chairman Pat McGovern, this year’s Team Captains, will judge the event.

The 1990 Bowl was a cliff-hanger up to the last minute, when Larry Tesler of Apple Computer, Inc. clinched it for the West by correctly guessing that Tennessee’s caves inspired the maze of passages in the computer game, Adventure. Gates and Bob Frankston, of Lotus Development Corporation, were Most Valuable Players, getting the most answers right.

Telecast live from Boston to four other cities, the Bowl was also later broadcast nationwide on the award-winning PBS TV series Computer Chronicles. The 1990 Bowl raised $275,000 in cash and $400,000 in products and services for the Museum.
**Upcoming Events**

**Seminars**

**Breakfast Seminar Series**

Dr. Edward Teller, nuclear physicist, Hoover Institute, Stanford University. Breakfast seminars are open to corporate members and their guests. For more information about becoming a corporate sponsor, call the Membership Coordinator at (617)426-2800x339.

**Exhibit Openings**


An exhibition of computer art from around the world. The show features two- and three-dimensional works, stereo art and animation. Artwork was juried by a panel of prestigious international artists and curators.

**Members Opening:**

Sunday, October 21, 1990:
3:00pm Artist’s Lecture
5:00pm Members’ Only Preview Party
**Public Opening:**

Tuesday, October 23, 1990-February 1, 1991.

**Events**

**Walk-Through Computer Video Premiere**

This 25-minute educational video features David Heil, host of *Newton’s Apple*.

**“An Open Letter to the PC Industry”**

PC Letter Editor-publisher Stewart Alsop II delivers the keynote address of the Northeast Computer Show.

**Wednesday, October 24, 1990, 7:00pm**

At the general meeting of The Boston Computer Society, Bayside Exposition Center, Rm E. Free for Museum Members.

**Computer Games Weekend**

Highlights include building your own city using SimCity, a city simulation game and exploring the universe with Cosmic Osmo, a game for younger children. Also 3-D Tetris and Carmen San Diego. Local students demonstrate the games they have developed. Join experts in a discussion of the value of computer games for young people.

**Saturday and Sunday, November 10 & 11, 1990,**

10am to 5pm.

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**Please Note Our Winter Hours**

Visit The Computer Museum Tuesday-Sunday, 10am-5pm (Fridays until 9 pm). Closed Monday except Boston school holidays and vacations. Closed Thanksgiving, Christmas and New Year’s Day.

**Admission:**

Adults $6.00, students and seniors $5.00. Half-price Friday evenings 3pm-9pm. Free to Museum Members and children under five. For more information on exhibits or special events, call our talking computer at (617)426-6738.

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**To Join:**

Members get free admission for one year; The Computer Museum NEWS, a quarterly newsletter of Museum activities; the Annual, a richly illustrated journal of computer history; invitations to exhibit previews and member-only events; advance notice of exhibitions and lectures; a 10% discount on purchases over $5 in The Computer Museum Store; and the opportunity to buy admission pass booklets at significant savings.

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**Yes, sign me up!**

My check, payable to The Computer Museum, is enclosed in the amount of $_________. Or, charge my □ MasterCard, □ Visa, □ American Express.

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□ Please contact me about volunteering at the Museum.

Will your company match your membership? □ Yes □ No.

If yes, please send appropriate matching membership form.

*Please enclose verification

The Computer Museum

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