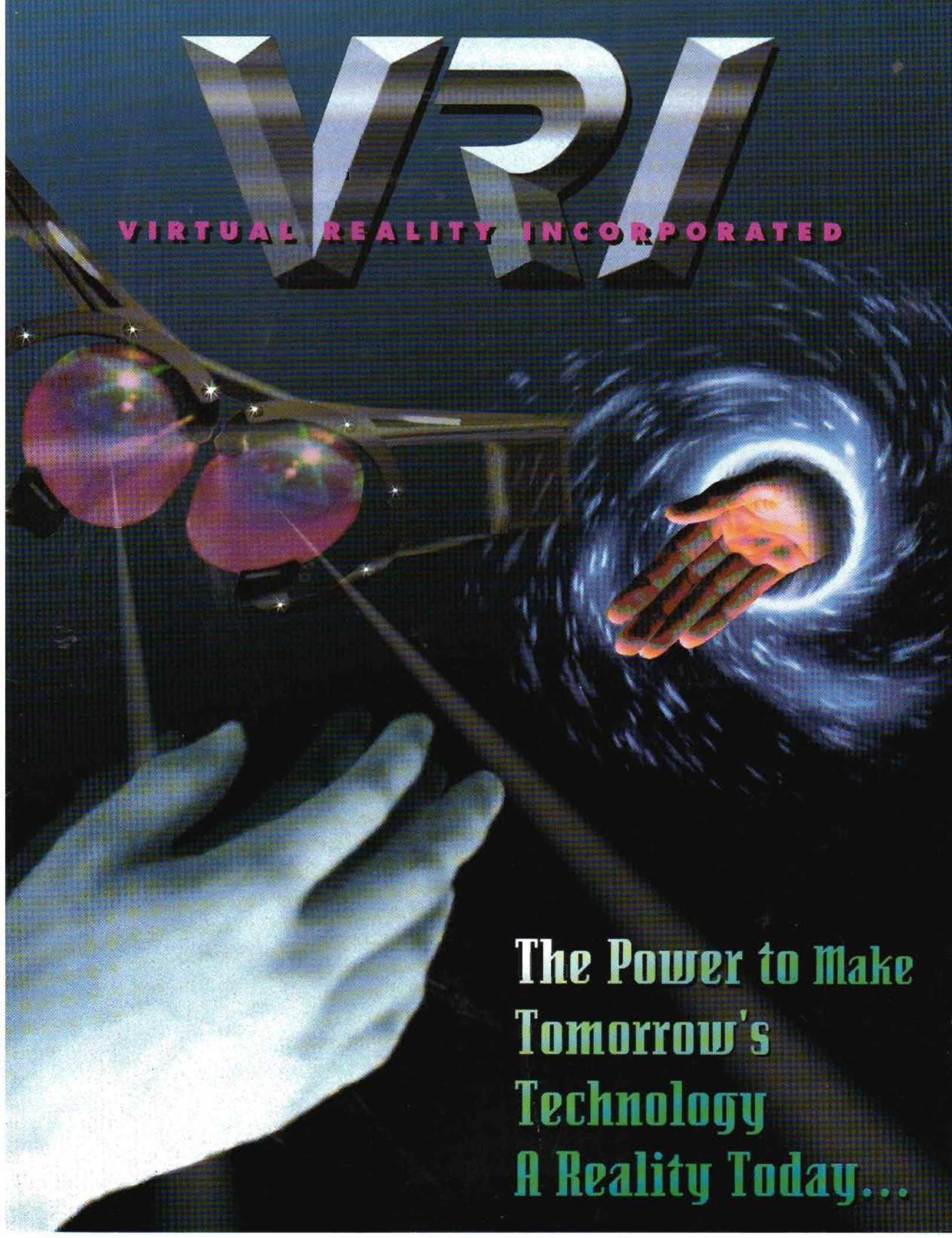
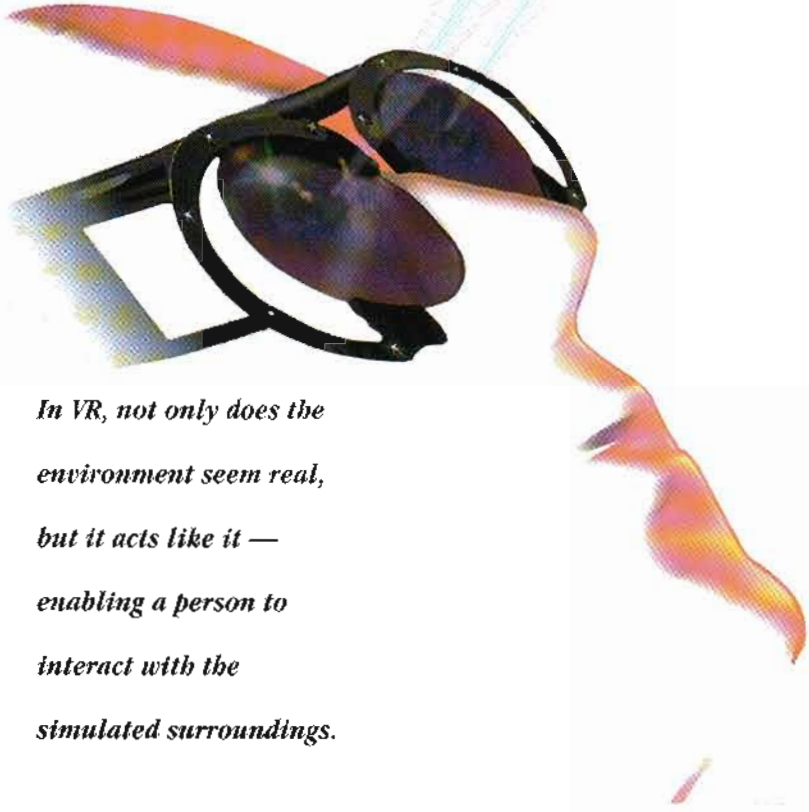

VRI
VIRTUAL REALITY INCORPORATED
The Power to Make
Tomorrow's
Technology
A Reality Today...

Experiencing Virtual Reality

VIRTUAL REALITY IS AN AVAILABLE REVOLUTIONARY TECHNOLOGY THAT is so advanced it almost qualifies as science fiction. VR technology allows users to experience a digital world that in the past could only be observed through the window of a computer screen. A world in which computers create a continuum of multiple dimensions in space that the mind and its senses believe are real. A simulated environment in 3-D perspective that is so realistic, people believe they are actually within the surroundings they see.

In VR, not only does the environment seem real, but it acts like it -- enabling a person to interact with the simulated surroundings. For instance, a user can move about, touch simulated objects and feel their shape, pick up objects and move them, or any of the other physical activities possible in a similar real environment. Basic laws such as gravity, time and the speed of light can be altered to suit the needs of different virtual worlds. If gravity is programmed into a virtual world, a person can drop a virtual object such as a vase and those within the simulated environment would hear it shatter when it hits the floor. In VR, even magical powers are real. Users can change their body image by taking on different faces, shapes, sizes or colors. In VR, users have the ability to become points of view and even go outside their own bodies to view themselves.

Today's widespread communications systems rely on symbols such as words, characters and numbers that people must translate to obtain knowledge. But people can comprehend images much faster than they can understand text or mathematical equations. In fact, scientists estimate that humans can absorb a billion bits of information per second. Therefore, the advantage of communicating through VR systems is that people use their most accurate perceptive abilities, the five senses, to absorb information as knowledge.



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How it Works

THE VR ENVIRONMENT IS CREATED WITH THE USE OF STEREOPTIC displays, enhanced audio systems, computers, computer graphics, sensors and actuators. The user looks into a head-mounted display that reproduces the 3-D effect of normal vision with computer graphics. Movement and manipulation of graphic objects within a virtual world is possible through corresponding or analogous movements of the user's hand.

Sensors note the user's reactions, while actuators adjust responses accordingly. Tracking sensors simultaneously tell the system the user's location and orientation within the virtual environment and transmit cues necessary to allow computer graphics to present the proper surrounding views.

Applications

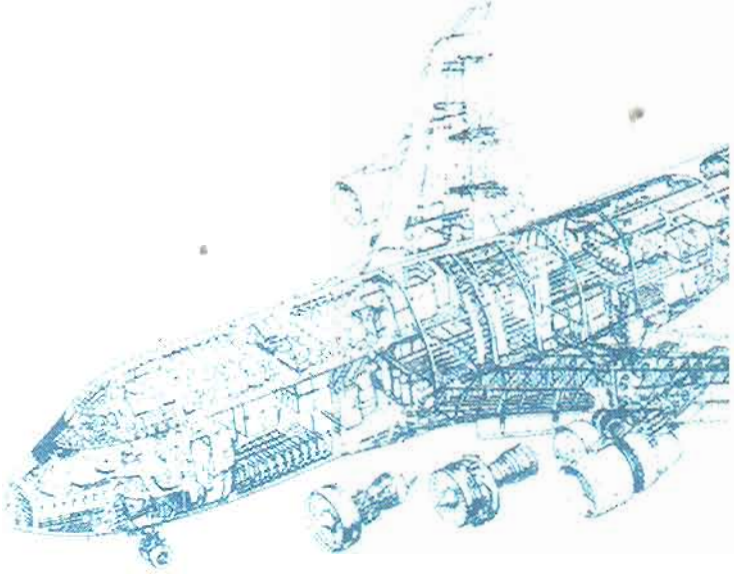
Applications for VR are almost limitless. Today, VR systems can be used to design, engineer, test, advertise and sell products, as well as to educate, train, entertain and communicate. VR and its spin-off technologies -- telepresence and televirtual reality -- can meet current needs within just about any field.

Manufacturing

Major manufacturers can use VR to design everything from household appliances to cars. In fact, VR is currently ideal for designing products for which pre-production engineering or fabricating full-scale mock-ups are cost and time prohibitive.

For example, clothing manufacturers can use the technology to build real-time, 3-D models of apparel-making operations to determine the most economical way to assemble their fashions. VR can also be used to train production workers in skills or real-time production techniques. Or, architects can use VR computer-generated imagery to guide clients through a building that has yet to be constructed. Manufacturers can even develop a virtual prototype to test elements of a product and to perform realistic analysis to determine the best design.

VR has the potential to become the marketing tool of the future. Rather than showing pictures and video, customers can virtually experience a new product before it is available at retail.



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Medicine/Science

Life-saving applications of VR technology involve using microscopic TV cameras or stereo fiber optics to perform microsurgery with minimum incisions. A full-color, high-resolution display enables the surgeon to view minute blood vessels and nerves in enlarged, 3-D detail. A headband mounted display provides full view of a patient's operation and examination sites.

Even entire operations can be performed on a "virtual patient" with VR -- especially for rehearsing intricate and rare operations, and developing specialized surgical skills. A surgeon can actually enter a human body "virtually" and view diseased areas from within. Also, VR can allow doctors to view magnetic resonance images (MRIs) in 3-D from any perspective at any depth -- significantly advancing diagnostic capabilities and accuracy.

VR even has molecular applications. Biochemists can test the pharmaceutical properties of specific molecules by merging them with other molecules in a virtual environment. This process could represent a new means of testing drugs.

VR also can help patients with physical and mental therapy by enabling a handicapped or disabled person to expand their capabilities and experience previously unknown freedom of movement. In a virtual world, a paralyzed person can feel what it is like to walk, run or jump, and even fly. Also, stroke victims can be retrained to master complex manual skills by learning to do them in a virtual world with reduced gravitational force.

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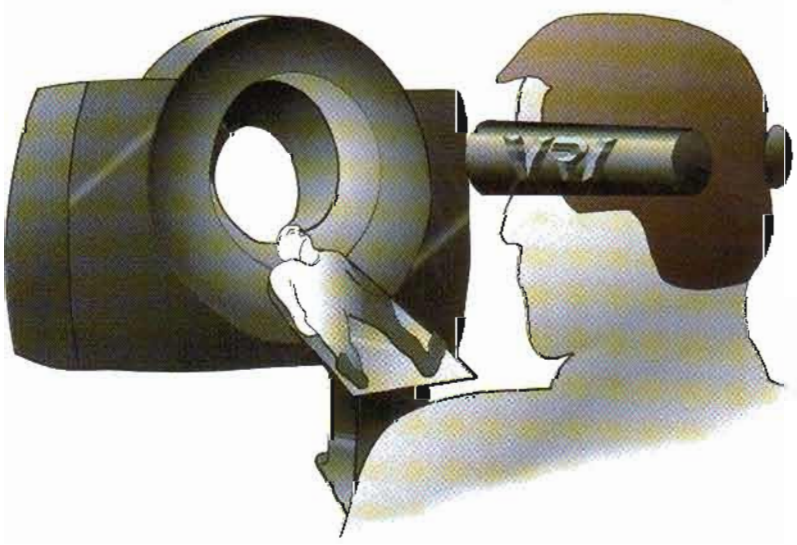
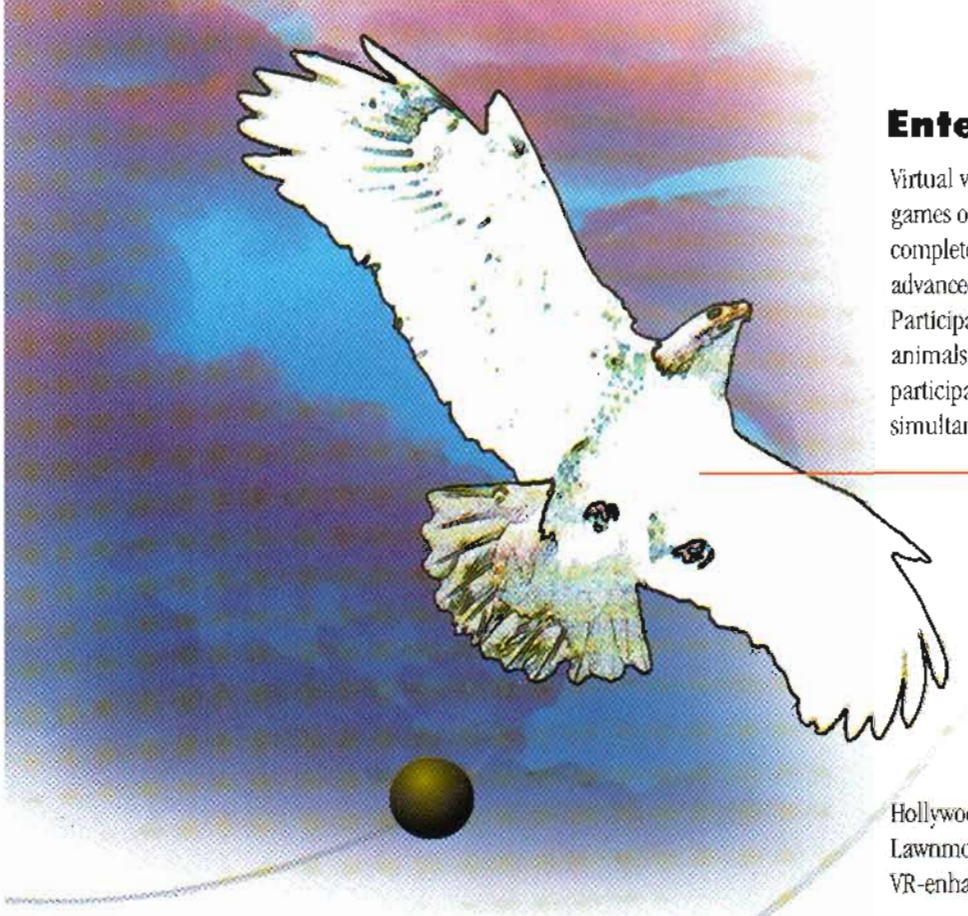




Entertainment

Virtual video games are the first popular application of virtual reality. VR games of skill and competition offer participants a place in the action, complete with high-resolution 3-D display, wide angle views and advanced computer graphics for exciting full-color scenarios. Participants can transform themselves into alien beings, objects or animals in exotic locations. With the addition of televirtual links, many participants separated by distance can share the same environment simultaneously or at different times.

VR game participants can experience the thrill of becoming another human, animal, object or even an alien being.

Hollywood has already dramatized VR technology in movies such as "The Lawnmower Man." Promising to be as popular as 3-D movies in the '50s, VR-enhanced productions are the latest trend in cinema today.

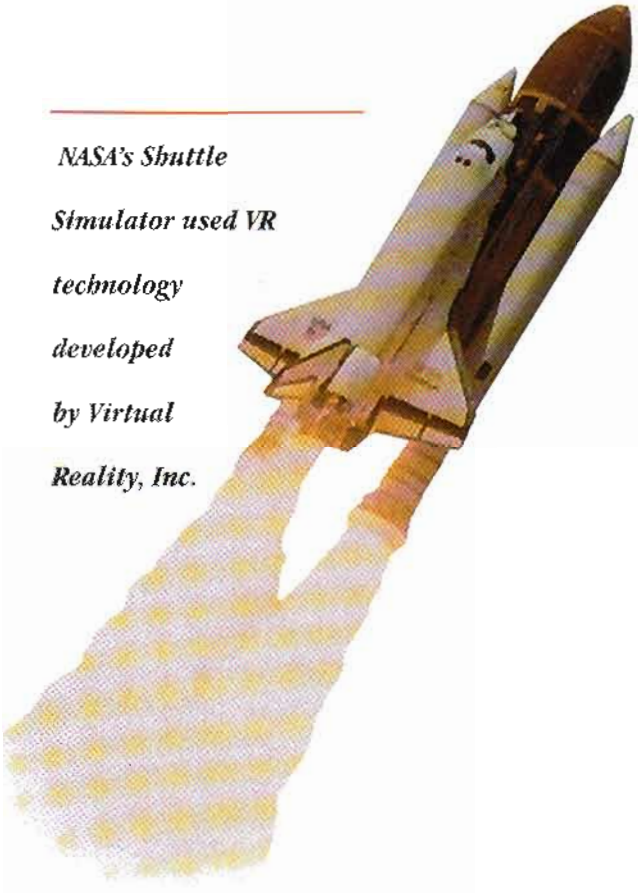
Amusement and theme parks will use VR systems to enable patrons to match their skills against imaginary opponents. Or, patrons can participate in VR fantasies such as virtual thrill rides or excursions to exotic lands, microscopic worlds or other galaxies outside of our own. The primary purpose of entertainment VR systems will be to experience dream-like environments that are absolutely unreal.

Education

With VR in a classroom, a child can learn abstract concepts that would otherwise be inaccessible or invisible through tangible experiences -- such as performing a science experiment with atoms or exploring other planets. Experts concur that the brain absorbs information fastest through interactive participation techniques that present video, audio, tactile and other related information. Through VR simulation, students can develop and retain cognitive skills much easier and quicker, thus removing barriers to learning for disadvantaged and gifted students alike.

Furthermore, VR allows each child independent control, instant feedback and repetition if necessary. Imagine a virtual ocean where students can "be" different species of fish and feel what it is like to swim and breathe through gills. When biology, ecology, history and literature can come to life via VR, kids will have more fun learning.

VR enables students to experience inaccessible opportunities like exploring other planets.

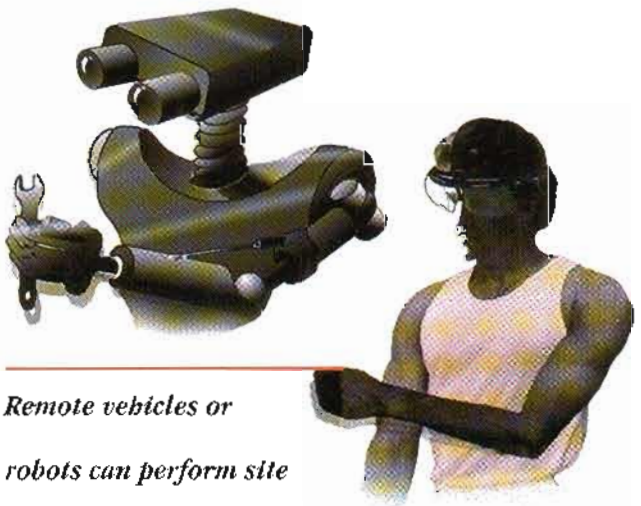


NASA's Shuttle Simulator used VR technology developed by Virtual Reality, Inc.

Telepresence

If a virtual environment is remotely located from the user, then VR becomes telepresence. For example, remote vehicles or robots can perform site inspections with video cameras, while human engineers -- wearing wide field-of-view, head mounted displays in an office far away -- can "walk through" an inspection site. Any movement made by the human inspector, the robot will imitate.

Telepresence is most useful in environments that are hostile or impractical for humans. Vehicles or robots employing telepresence can be programmed to work in the ocean and space, in nuclear, toxic or hazardous waste, or in war zones.



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Military/Aerospace

The aerospace industry, where VR originated, will continue to use VR for flight and mission training and situational analysis of battle scenarios. VR technology can also be used for prototyping military systems, evaluating human factors for maintainability, analyzing aerodynamics, visualizing 3-D data and adjusting satellite positions. Currently, NASA has VR projects in almost all of its divisions, including one for a pilotless plane.

Televirtual Reality

In the future, it will be possible to share virtual realities across computer networks and telephone systems. With fiber-optic telephone systems, everyone who has a telephone and access to a VR system will be able to reach out and touch someone thousands of miles away.

VR systems will allow people thousands of miles away to share the same environment, giving new meaning to the term teleconferencing.

VIRTUAL REALITY, INC.

Virtual Reality, Inc. (VRI) is a high technology company specializing in the development of VR systems for design, simulation and training. The company creates virtual environments with 3-D displays, computer graphics, spherical audio systems and interactive input and output devices.

While many other VR system suppliers are still having problems with poor clarity and narrow field-of-view head mounted displays, VRI has achieved a reputation for high clarity in graphic displays. As a leader in development of high-resolution and wide field-of-view head mounted displays, VRI is well-positioned to continue its role in developing and marketing these VR systems.

Consistent with its leadership, VRI has also maintained excellence in performance and quality in its VR subsystems available today. For example, with each of its systems, VRI provides affordable, high-quality workstations or a PC based graphics generator that is stand alone or interfaced with a systems computer.

VRI principals have already supplied VR systems to customers who expect top-of-the-line performance and quality, including NASA's Johnson Space Center and Langley Research Center, the U.S. Air Force (USAF) Visual Display Systems Branch of the Armstrong Aerospace Medical Research Laboratory at Wright Patterson Air Force Base, and the Naval Ocean System Center.

Practical, highly-beneficial and even life-saving applications of VRI technology include **Surgery and Image Enhancement Systems** for medical use and **Portable Mission and Network Simulators** for military and aerospace applications. Future applications are just around the corner. VRI plans to introduce VR to American classrooms, as well as develop the technology for theme park fantasy centers.

VRI's management team is committed to aggressive future growth and expansion of the company through the sale of proprietary VRI products. The team includes such VR pioneers as Dr. Thomas A. Furness III and Nelson Merritt, as well as high technology managers with proven track records such as Jerry Williamson. The company is in a position to produce true VR and all the benefits that come with it.

VRI Talent

VRI is a fully integrated VR company that believes it has the talent necessary to be today's and tomorrow's leader in the VR field. VRI also believes that it has the capability to cover the entire spectrum of VR technology.

The **VRI Scientific Advisory Board**, headed by VR pioneer Dr. Thomas A. Furness III and composed of other leading scientists and researchers in the VR field, shares the most sophisticated state-of-the-art technology, concepts and new applications for VR in different fields that will lead to further advancements in marketable VR systems. VRI will license these new VR technologies and also integrate them into specific products for the company.

The **VRI Management Team** includes a group of experts, all with successful management experience in high-technology areas directly in VR or related fields.

Nelson Merritt, the former technical director of the Apollo Mission Simulator Program and a pioneer in the virtual display field, is chief executive officer of VRI. Mr. Merritt has more than 35 years of experience in high-technology fields that has included the position of senior scientist for space satellite experiments, program management, and technical direction for complex electronic and computer systems, and corporate profit and loss management. He holds an M.S. in Computer Science from Pace University and graduated from the Industrial Management Program of the Industrial College of the Armed Services.

Jerry Williamson is president of VRI. Mr. Williamson, former president and chief executive officer of Applied Digital Corp., has more than 30 years of management experience in profitable high technology business areas with profit and loss responsibility. He managed the development of the first fast-response attitude control systems for communication satellites. Mr. Williamson also managed the preliminary design and/or development of many advanced aerospace and commercial products, such as the space suit system used by astronauts when exploring the moon and the blood conditioning unit used in most open heart and cardioplegia surgical procedures performed today. He received a B.S.A.E. from St. Louis University and an M.S.M.E. from Rensselaer Polytechnic Institute.

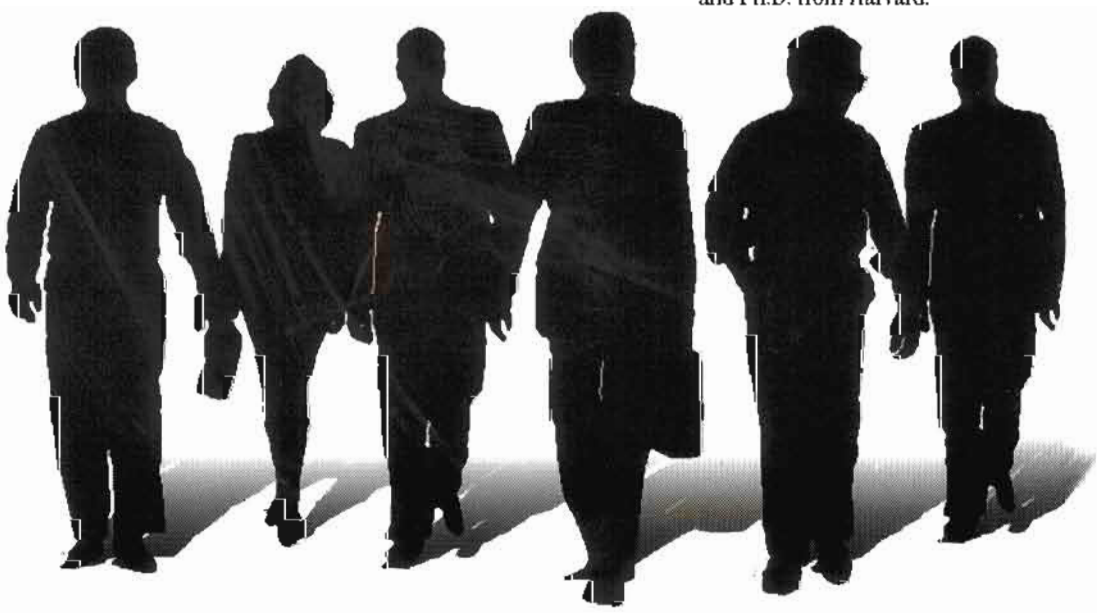
Dr. Thomas A. Furness III, recognized as a pioneer and current leader in the field of VR, is a consultant to VRI and head of the company's Scientific Advisory Board. As the former chief of the Visual Display Systems Branch within the Human Engineering Division of the USAF Armstrong Aerospace Medical Research Laboratory, Dr. Furness developed over a twenty year period advanced virtual interface concepts for fighter aircraft including the "Super Cockpit," a virtual cockpit flown by a pilot. This technology, which has become familiar to most Americans from TV programs such as NOVA and network news, creates a 3-D visual, aural and tactile world that enables the pilots to operate complex aircraft with natural hand and eye movements and voice control.

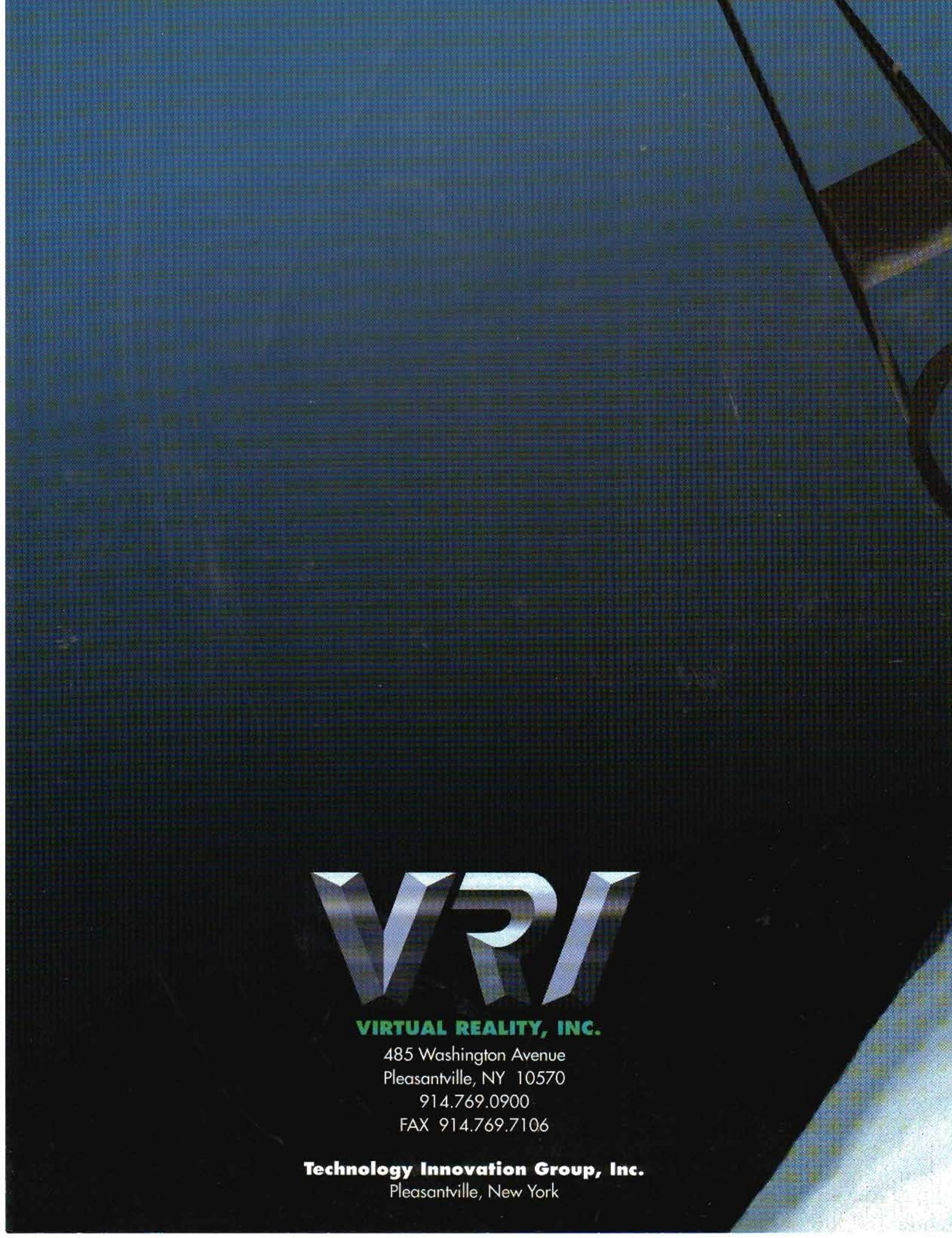
In 1989, the potential for use of virtual interface technology in other fields inspired Dr. Furness to found the Human Interface Technology Laboratory at the University of Washington. Here, he continues to develop advanced interface technologies for empowering humans in design, manufacturing, education, telecommunications, crew station and prosthetic applications. Dr. Furness is a professor in the Department of Industrial Engineering at the University of Washington, where he teaches courses in the design and application of virtual world technology. He received a B.S. in Electrical Engineering from Duke University and Ph.D. in Engineering and Applied Science from the University of Southampton, England.

Dr. Michael S. Nilan, a long time advocate of the use of VR technology for large-scale, multi-media information resource management, is a consultant to VRI and a member of the Scientific Advisory Board. He developed an advanced user-based methodological approach to information system development at the Center for Science and Technology at Syracuse University, and is widely known for his work in cognitive imaging. Dr. Nilan is a leader in the fields of information science and communications technology. He recieved his M.A. in International Communications Research and his Ph.D. in Communications Research from the University of Washington.

Dr. Susan Merritt, professor and dean of the School of Computer Science at Pace University, is a consultant to VRI and member of the Scientific Advisory Board. She has published papers in the fields of communications and network algorithm design, and has served as advisor to the National Science Foundation. Dr. Merritt is a member of the Association for Computing Machinery and its Education Board, the Computer Society of the Institute of Electrical and Electronic Engineers, the Computer Professionals for Social Responsibility, Phi Beta Kappa and Upsilon Pi Epsilon. She holds a B.A. (Summa Cum Laude) in Mathematics from Catholic University and an M.S. and Ph.D. from the Courant Institute of Mathematical Sciences of New York University.

Dr. Bernard Grossman, who has developed new VR concepts related to high resolution graphic visuals, is a consultant to VRI and member of the Scientific Advisory Board. Dr. Grossman has served as a teaching fellow at Harvard, a research associate and assistant professor at Rockefeller University, and a visiting professor at Lawrence Livermore National Laboratories and several other universities. He is also a member of the Institute for Advanced Study at Princeton, Phi Beta Kappa and Sigma Xi. Dr. Grossman obtained a B.A. (Summa Cum Laude) from Princeton, and a M.A. and Ph.D. from Harvard.





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