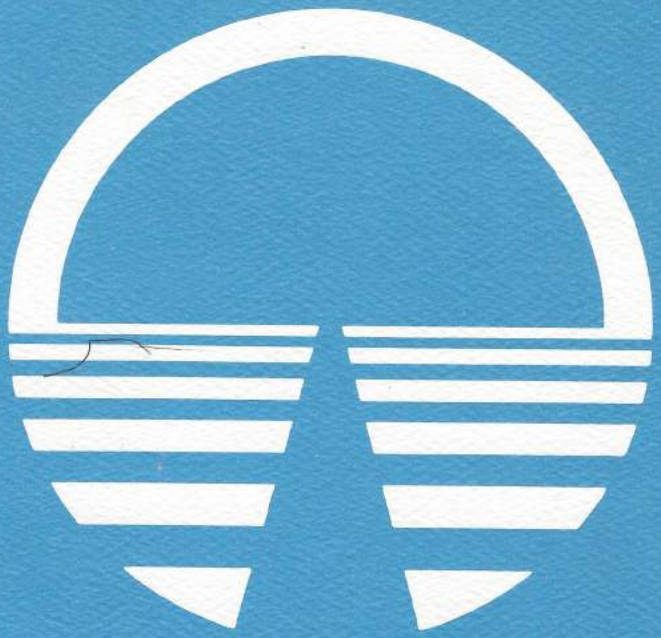
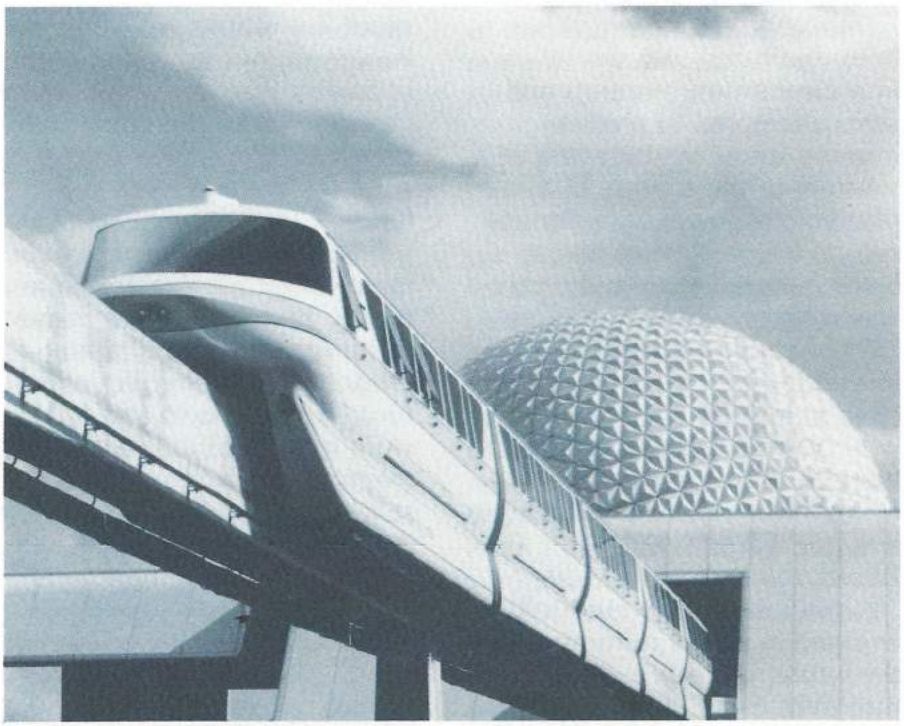


HORIZONS

Walt Disney World.
EPCOT CENTER

WALT DISNEY WORLD
EXPERIMENTAL PROTOTYPE COMMUNITY OF TOMORROW



For millions of years, people have searched for ways to improve their lives. Through creativity and hard work, innovations have emerged that have provided more effective ways of dealing with the challenges of life.

These innovations were the creations of dreamers and doers; of people who think in terms of the "possible" rather than "impossible."

Walt Disney was a dreamer and doer, a man who cared about the world and its problems. He believed that people could develop solutions to problems if equipped with information, technology, and opportunity.

The dream of EPCOT Center originated with Walt Disney nearly 20 years ago. Yet the "spirit of EPCOT" played a major role in the development of all of Walt Disney World. We have leading-edge transportation, communications and safety systems; solar and biomass energy experiments; and innovative master-planning and agricultural developments. In 1981, Walt Disney World was selected from among 200 projects nationwide to receive the Urban Land Institute "Award of Excellence" . . . the top national award for all projects in America.

With this foundation, EPCOT Center has been created as a demonstration and proving ground for prototype concepts and technologies. It showcases new ideas and systems that may someday serve people everywhere. And it provides an ongoing forum where the creative thoughts of many disciplines, including industries, governments and universities, are exchanged to help provide practical solutions to the needs of people.

EPCOT Center communicates this knowledge to the world. By showcasing innovations, EPCOT Center encourages the development of even better systems for the future.

The richness and diversity of the human family is highlighted in World Showcase. This unprecedented people-to-people exchange brings people from nations throughout the world together to share their cultural heritage, arts and entertainment. It offers a new look at what our world can be through understanding, cooperation and better knowledge of each other.

The efforts of thousands of people were required to bring this dream called EPCOT to reality. Years of research, testing, development, patience and determination are at its foundation. And yet, its real value lies in its human spirit: the people who inspired it; the people who created it; the people who experience it; and the people who host it.

This is the essence of EPCOT Center: a collective endeavor by people . . . for people, in the hope for a better world.

ON THE HORIZON OF TOMORROW

Throughout history, man has been fascinated with the future. In ancient times, sorcerers and seers attempted to predict events such as the outcome of a battle, or the success of a planted crop by examinations of natural forces. A superstitious belief in occult signs and omens was widespread.

These various efforts to foresee the future occurred in civilizations throughout the world. These civilizations shared the idea that a preordained future already existed and that it was possible to "see" that future.

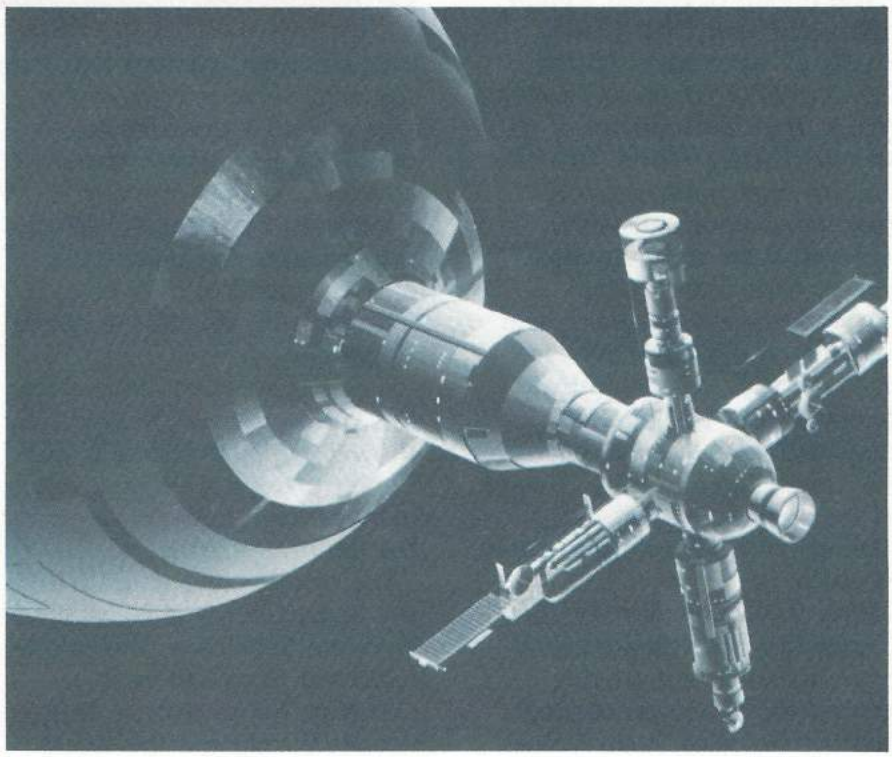
In modern times, we are still engaged in efforts to foresee the future, perhaps more so than ever. But there is a fundamental difference. Our methods are scientific rather than mystical or inspirational: we study data from weather satellites to plan crops and harvests; stock analysts construct computer models to plot future trends; election results are predicted based on statistical analysis of a small number of votes.

As dramatic as these changes in method are, the biggest change is in our outlook. We have come to realize that we have an ongoing relationship with the future; it is our efforts and our innovations that determine what the future will bring.

New scientific and technological breakthroughs in electronics, communications, genetic engineering, transportation, agriculture, manufacturing, energy and space exploration will affect our lives in various ways. But more important than any one of these changes will be the combined impact they will have on the ways we live and work in the future.

The same advances that will make desert farming, undersea mining, and outer space manufacturing possible, will also create the need and the opportunity for people to live and work in these unique environments. Entirely different lifestyles will emerge as we explore the potential of our new habitats and devise new ways to spend our leisure time.

The efforts of our ancestors brought man to live in remote islands, mountains, rain forests and the Arctic. Our quest has brought us to the undersea world and the brink of outer space. No one can be certain what the future will hold; the only thing we can be sure of is that mankind will continue to reach outward, overcoming new challenges, seeking new opportunities, finding new frontiers. Wherever the future will be, it is we who are creating it as we move toward the horizon of tomorrow.



THE HORIZONS EXPERIENCE

Horizons, like the other Future World pavilions, has been designed to make a striking architectural statement. This massive, yet graceful structure rises majestically from the landscape, its sharply faceted contours sloping gently up into a truncated pyramid.

The interior is divided into three levels and a mezzanine. The Horizons show is a 38-scene, ride-through attraction that takes us on a speculative journey into the future, through many wondrous worlds of tommorrow. The presentation includes *Audio-Animatronics* figures, Omnimax motion picture systems and a variety of special effects to show us some of the unusual living environments made possible by advanced technology.

THE FUTUREPORT

The queue and load concourse is styled as a transportation center of the future. Here, we are immersed in an environment of tomorrow. The public address system announces arriving transports and pages passengers bound for exotic locations. Three projected "travel posters" highlight our destinations in this future adventure: Sea Castle, a floating city; Mesa Verde, a desert farming community; and Brava Centauri, a space colony.

LOAD AREA

Stepping onto a moving conveyor, we begin our journey as we board suspended gondolas accomodating four passengers each.

EARLY INVENTIONS

As we move through a short tunnel, our narrator tells us that we are not the first to travel forward in time: "People have been dreaming about the future for centuries." Shifting clouds and floating images of early inventions trail his words.

"LOOKING BACK AT TOMORROW"

is the theme that unites the next five scenes. This whimsical, lighthearted recollection gives us a taste of what some dreamers of the past thought the future might look like:

JULES VERNE

A leading visionary of his time and one of the earliest writers of science fiction, Jules Verne predicted that space travel would one day be a regular occurrence. In this scene, Verne's bullet-rocket blasts off for the moon with Verne himself and two animals as passengers. Next, we pass by the "Man in the Moon" with the rocket ship lodged in his eye.

ROBIDA

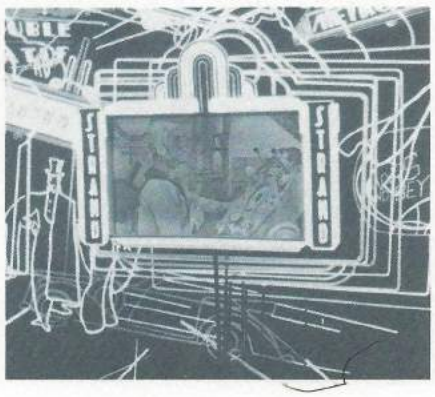
One concept of futuristic mass transportation systems was envisioned by the 19th-century artist, Robida. His stylized view of rush-hour rapid transit was created over a hundred years ago.

ART DECO

The dreamers of the 1930's put their own stamp on designs for the future. The work of visionary artists was most often published on the covers of cheap "pulp" science fiction magazines. In this setting of an art deco apartment, we see various hair-brained contraptions and mechanical wonders that were supposed to make housework obsolete, including a rather overburdened housework robot.

NEON CITY

In more recent times, dreamers' visions of the future have come to us through the media of television and film. Against a neon backdrop, three screens provide glimpses of the future world from classic science fiction films and television programs.



FUTURE CITY

This dimensional set reveals a 1950's conception of the future. City lights twinkle as a futuristic monorail glides along its guideway. The sky above is dominated by helicopters, jetpackers and rocket ships.

"OMNISPHERE" (Omnimax Theater)

After passing through another transition tunnel where the shifting lights and projected colors of the "lumia" set the mood, we begin a gradual ascent past the two giant concave screens of the "Omnisphere." Here, through spectacular projected imagery, we visit micro- and macro-worlds and the far reaches of inner and outer space. The startling imagery surrounds us above, below and on all sides with wonders both natural and manmade: the space shuttle rising skyward atop a fiery pillar; graceful floating colonies in space; the microscopic landscape of the revolutionary computer chip; the architecture of growing crystal structures engineered by man for the age of technology; the mystery of the DNA molecule and the minute diatoms that inhabit our aquatic frontier and the enormous power of the sun being harnessed to build the future. Today, "If we can dream it, we can do it!"

"TOMORROW'S WINDOWS"

is the theme of the next twenty scenes. In this section of the attraction we explore some possible habitats of the future, enlivened by the activities of an extended-family group.

URBAN HABITAT

We travel through a tunnel to a three-dimensional urban environment of the future, Nova Cite. It is dusk, and as we glide past, advanced transportation systems (mag-lev trains) and habitable megastructures are visable throughout the community. Our vehicles near an apartment decorated with unique plants that are the result of genetic engineering. Inside, a married couple are speaking and we recognize the man's voice as that of our narrator. The conversations and observations of this couple (the grandparents of an extended family) will be the narration for the rest of our trip. At the moment, the grandmother is conversing with a minature holographic image of her daughter at a desert-farm community. Here, we can see how science and technology will enhance future lifestyles.

DESERT FARM

A desert scene follows, representing one of our brightest potentials for feeding the growing population. Moving past desert mesas, we come upon Mesa Verde, the desert-farming community. In the distance, a field of genetically engineered citrus trees (we can even smell the blossoms) are being harvested by robotic fieldhands. This arid desert has been transformed into a garden paradise. Overhead, giant solar-powered airships silently carry a cargo of harvested produce across the skies. Standing by a large console in the glass-domed control room, a farmer supervises the various mechanical harvesters via a video screen, while keeping in touch with her husband on another screen. Leaving the control dome, we see a jet-powered hovercraft idling at its landing pad outside the farmer's home.

DESERT HABITAT-KITCHEN/ COMMUNICATIONS ROOM

We approach the home past a lush garden with a three-tiered waterfall and tropical flowers surrounded by a natural rock landscape. Inside, the house is designed to blend with the desert landscape. Dad fixes a cake in the kitchen while his son plays with the voice-activated pantry. In the communications center, a talking computer gives a chemistry lesson to the teen-age daughter who appears to be more interested in talking to her boyfriend on the teleview screen.

SUB-REPAIR ROOM

We leave the desert habitat, and arrive in the sub repair room of Sea Castle, the floating city (visable through a large rear window of the workshop). A young man continues his conversation, via teleview, with his girlfriend at the desert farm while he repairs a mini-sub with the aid of an interactive diagnostic computer and a laser welder.

DIVE CHAMBER

Traveling over the dive chamber, we can see a small submarine and various diving equipment laid out, awaiting the next expedition to be launched from this floating city.

FLOATING CITY CLASSROOM

Class is in session in this computerized school of tomorrow. The teacher emphasizes underwater safety as she instructs her young pupils in preparation for a dive along with their class mascot, Rover, a seal.

UNDERSEA RESORT

Passing through an airlock, we dive toward the ocean floor. Ahead, in an undersea restaurant, people are dining while watching a dolphin play just outside their windows. The children from the classroom swim by with their instructor.

UNDERSEA FARMING

The tall stalks of a kelp forest, a cultivated undersea farm, sway gently in the ocean currents while a submarine takes samples. The kelp grown here is harvested for biomass in energy production. Further on, an ocean mining operation is visible; manganese nodules are being vacuumed from the sea floor.

TRANSITION AREA

As our vehicles rise toward the ocean surface, the boy's submarine appears. Suddenly the entire environment shifts and changes; the deep ocean becomes a starfield in the void of outer space and the submarine transforms into a spaceship that disappears from sight behind a floating space colony.

OUTER SPACE

We drift past a construction site where an astronaut is maneuvering beams into position to build a solar-energy power station. A woman in a space vehicle lends him assistance. In the distance are three space colonies with space craft arriving and departing.

AIRLOCK

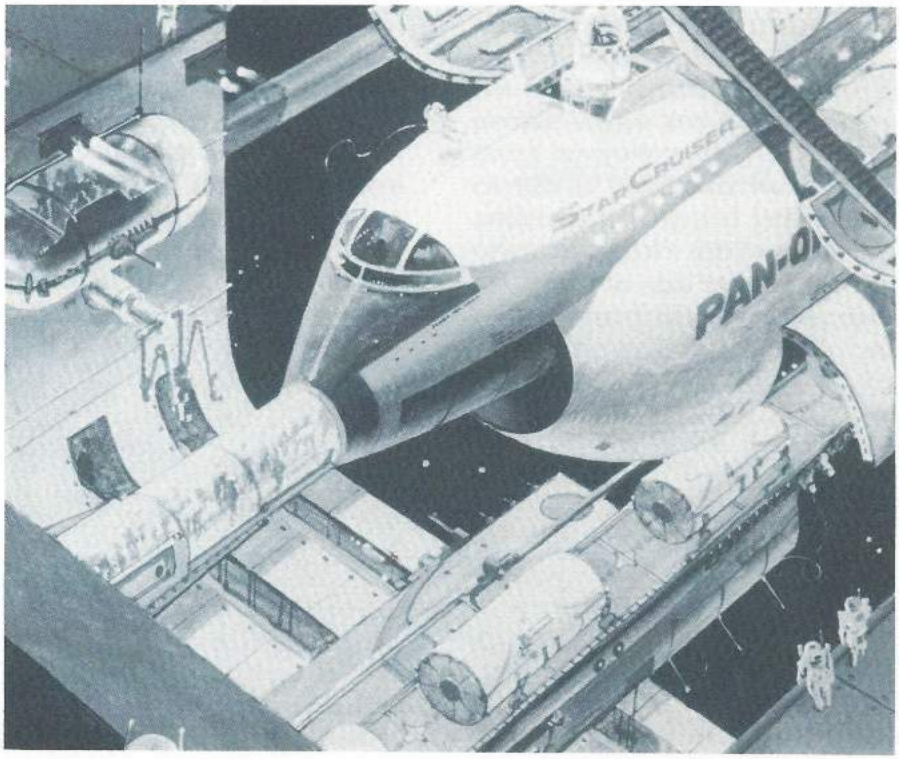
We enter an airlock chamber, which leads from outer space to the interior of space colony Brava Centauri. An intercolony transport is in the process of refueling.

SPACE COLONY

Leaving the airlock chamber, we enter an observation tube and are greeted with a breathtaking view – a space city spread out in all directions "below" us. This unique revolving city clings to the inside surface of a spherically shaped, free-floating environment.

HEALTH AND RECREATION

The zero-gravity recreation center is brimming with the latest in healthful recreational equipment. A woman is cycling down a bike path from her hometown on Earth, with the help of a simulation device. A body scanner monitors her condition and displays results nearby. In the background, the shadows of a group playing zero-gravity basketball are visible.



MAIN SHUTTLE PORT

In the colony's main shuttle docking bay, a family of new arrivals are getting their first exposure to zero-gravity. A boy and his dog are floating in the air, while his parents wait at a nearby elevator. In space, two astronauts control the movement of an asteroid being readied for transportation to Earth.

CRYSTAL MANUFACTURING LAB

On the other side of the technical lab is the manufacturing lab, tended by automated robot arms. Inside six illuminated globes, perfect crystals are being grown for 'high-tech' applications back on Earth.

HOLOGRAPHIC PARTY LINE

Passing through the lab, we enter the colony's community area. A space family is involved in a holographic party-line conversation, showing off their year-old child to friends and relatives. One screen features our narrators in Nova Cite, another shows their teenage granddaughter in Mesa Verde, while the boy from Sea Castle appears on the third screen.

LAUNCH TUBES/ AERIAL IMAGES

As our ride vehicles accelerate into space through the launch tube, we view three aerial images promoting tourism. The images recall the three habitats presented in the previous "Tomorrow's Windows" section of our journey to the future. Highlighted here are the transportation vehicles used in each of the different habitats.

"CHOOSE YOUR TOMORROW" SELECTIONS

Leaving the floating colony, we are surrounded by the void of outer space. Lighted panels appear on the doors of our vehicles, presenting our choices for a simulated ride through one of the three habitats we have visited. Once we have made our selections, majority rule in each vehicle determines which experience we will have.

SIMULATIONS

As we depart for the habitat of our choice, our point-of-view on the high speed "ride" is from either a desert hovercraft, a mini-sub, or a space craft.

TUNNEL TO UNLOAD

At the conclusion of our ride, we must return from the future to the present. But, as our narrator points out, the most exciting aspect of traveling into the future is that the journey never really ends . . . there's always a new horizon.

UNLOAD AREA/EXIT

Having completed our unique experience of traveling through the future, we return to the FuturePort concourse where we disembark from our ride vehicles. The extensive mural here and in the exit area illustrates man's journey from the past into the future.

THE HORIZONS STORY

HORIZONS is unique in that it represents a synthesis of all the other themes in Future World: communications, agriculture, transportation and energy. It is an exploration of the technical advances in all of these fields, advances which will profoundly affect the lifestyles of future generations.

To design and create an experience of this kind was no easy matter. For WED "Imagineers," the task required years of planning and painstaking research. Advances in virtually every field of technology had to be considered along with the impact they would have on our lives.

REMEMBERING THE FUTURE

For the "Looking Back at Tomorrow" portion of the show, it was necessary to re-examine the ideas of famous "futurists" of the past, whose areas of exploration included rapid transit, space travel and robots. "This was one of my favorite parts of the show," recalls show designer Tom Fitzgerald. "What made it so interesting for me was that the ideas these men had were right."

Many designs for the future that were done in the past have a curiously dated quality. The concepts themselves were often sound enough; although his contemporaries wouldn't take Jules Verne's idea of a journey to the moon seriously, history has made his vision a reality (even to the extent of his launch site, Florida). But even when the ideas were on target and a hundred years ahead of their time, even when they anticipated entire technologies that didn't yet exist, the outward designs of their machines remained rooted in their own time. This type of contradiction can have distinctly odd results: a spaceship studded with rivets and bolts outside and decorated inside with polished brass and overstuffed velvet cushions; a household robot ahead of our time in its capabilities, having the appearance of an art deco antique.

"The robots we have don't look humanoid and we didn't get to the moon in a giant bullet shot out of a cannon," says Tom. "But we do have robots and we have gotten to the moon. So the ideas were right – it was only the forms that were wrong."

THE FAMILY AND THE FUTURE

The relations of an extended family and their friends link together the different scenes and help move the story along. Any number of storylines could have been chosen for this purpose, so why the family?

"I wanted to emphasize it," Tom explains. "Some people feel the family unit may not exist in the future, but I feel that advances in transportation and communication may actually bring families closer together."

The three particular habitats where the family members live were chosen after careful consideration. Tom recalls, "We wanted to emphasize that these aren't just interesting places; they're practical places. There are economic reasons for people to live and work in these environments. The floating city could be the center of an undersea mining and farming operation; that's the practical

side. The fact that it might float off Hawaii one year, near Australia the next, offers a lot of unique educational and recreational opportunities."

AN ACHIEVABLE VISION

Another major emphasis in planning Horizons was on "achievability." The designers felt it was extremely important that the three fictitious habitats have a solid foundation in reality. "This is a vision of an achievable future. It's based on things we are already doing or are very close to doing." Tom stresses. "This is not Buck Rogers. We already have robot labor, drip irrigation and the beginnings of genetic engineering. Put these three developments together and we have the basis of the desert-farm habitat."

FUTURE PLANTS

For the landscaping and garden of the future, designer Alex Taylor saw the need to create new plants. It was not a simple job. "I spent some very frustrating months trying to design plants that didn't exist," Alex recalls. "I would work out a design and then take it over to our experts in horticulture and they would tell me they'd seen that one before. We would look it up in some books and there it was! I was trying to come up with something nature hadn't done and I found out how hard that was to do."

After a number of failed attempts to create a new plant, Alex tried a new approach. He turned to the animal kingdom for ideas that could be adapted to plants and finally found the material he needed in photo-

micrographs. "I used the structure of insect antennas or the feeding mandibles and food-filtering organs of some small crustaceans and adapted these into the design of a plant."

In the realm of decorative plants, his efforts resulted in some fascinating new creations that are included in the urban habitat scene of the show. "Circuit ivy" grows in a kinked and twisted pattern resembling an electronic circuit. Long, vertical "exfoliated trees" look like weathered granite, while "geometric hedges" grow horizontally out of the side of a wall, defying gravity. Beneath the hedge, "variegated grass" grows in two colors, showing a pretty pattern of leaf vains. "Not all of these plants grow in soil and some of them have bizarre colors or a metallic, sparkley look," Alex points out.

Perhaps the two most interesting plants in this area are the "Aeolean Harp" and the "Golden Glow." The Aeolean Harp takes its name from an ancient Greek musical instrument, which was set outside a window to catch the wind and produce music. This plant of the same name has an organ, shaped like a large grapefruit, which opens to expose filaments to the night breeze, creating musical sounds. The "Golden Glow" might be considered the electric eel of the plant world, using its own bioluminescence to produce a shimmering neon glow.

THE GARDEN

In addition to the decorative plants, the urban habitat includes a patio garden with vegetables of the future: the "spring bean" is a variation of the string bean, but grows in the shape of a coiled spring; the "per-cumber" combines the qualities of a red pepper and a cucumber; the "butterfinger pea" is a cross between a winged bean and pea.

One area of the garden features a series of vegetables growing in hydroponic planters. "I designed a whole bunch of different kinds of these vegetables and then invited people in to look at them and decide which ones looked good enough to eat," explains Alex. "The most popular ones were the ones I picked for this area. And even though the hydro-

ponic planters are just for show, they're designed so that they really could work."

For the desert-farm scene, special crop plants were created, including "flavor grapes," which grow in all different colors on the same bunch, and "pinanas," a combination of pineapple and banana. One of the most unique fruits here is the "lorange," a type of elongated orange that grows only on the outside of the tree, making it especially easy for the robot laborers to harvest the crop.

Any real desert farm of the future will undoubtedly take advantage of genetically engineered plants adapted to prosper in this specialized environment. The variety of these plants is nearly limitless, Alex feels. "In Horizons, we wanted to say that there's a whole realm of possibilities out there and that if we use our imagination and technical skills, we can do anything."

"OMNISPHERE"

The "Omnisphere" presentation immediately follows the "Looking Back at Tomorrow" section of the show. This presentation utilizes highly specialized Omnimax projection equipment and screens to create dramatic film effects. Show designer George McGinnis explains, "The Omnimax projection system is the largest in the world in terms of square feet of projection surface. We took two of these systems and put them together to create the "Omnisphere."

The "Omnisphere" presents startlingly dramatic images and effects as guests pass by the giant concave screens in their suspended gondolas.

Part of the reason the show has such a powerful effect is the sound system. Sound is transmitted in the form of infra-red light to the ride vehicle where it is received and converted back into sound. This sound system, when combined with digital recordings and the design of the vehicle itself, permits excellent sound quality as well as a high degree of sound isolation within each car.

The element that provides the finishing touch of realism to the sound is the "Body Sonic" system. With sonic transducers placed in the bottom of each seat near the base of the spine, guests feel the deep, sonic vibrations that would actually accompany a powerful concert-hall performance. These transducers were specially designed and manufactured by General Electric for use in the Horizons show.

The "Omnisphere" presentation was originally planned for the finale of the show and was to utilize three screens. The fact that one of the screens was eliminated from the plans is actually a tribute to the success of the system. "We changed our plans when we realized that the effects were so powerful," George explains. "We were afraid that too much of them might make some people feel ill."

THE FINALE

Moving the "Omnisphere" presentation from the finale of the show created the need for a new finale. For some years at WED, the idea of using a screen image that would move sideways to keep pace with a moving car had been considered. Using this technique, the image would always remain directly in front of the guests in this vehicle. The idea seemed practical, but the right situation had not arisen – until Horizons.

When this technique was combined with an electronic panel in the vehicle, allowing guests to select which of three films would be seen, an entirely new show experience was created.

The next step was to produce the film segments that would be projected on the traveling screens. To accomplish this, the Disney organization turned to one of the foremost experts in the field, David Jones.

With a background in indus-

trial design, David had considerable experience with prototypes and miniatures before he turned to a career in film. His expert credentials were well established by the futuristic models he built for "Star Wars," "Close Encounters," "China Syndrome" and numerous other feature films and major television shows.

THE MODELS

For nearly two years David worked on the design, construction and filming of the models for the three finale film segments. "These are three of the largest miniatures ever built for film," he explains. "They had to be so large because we're using them for three of the longest continuous sequences ever done with miniatures."

Since all of the designs were so futuristic, the models had to be built from scratch. Their large size made it necessary to build them in portable, lightweight sections that could be disassembled. "The largest single model piece is 32 feet wide and 82 feet long," says David. "We had to set up a special facility in an airplane hangar to get enough room to work."

The scale of the models varies from 1 inch to 1 foot (1/12th scale) all the way down to 1/100 scale, and the detailed work is quite impressive. The desert-farm scene alone includes over 5,000 model trees in addition to cacti, other plants, buildings and machinery. Some of these trees were made of acid-etched metal that was hand-folded into shape. Buildings were first mocked up in foam or wood and then cast in plastic.

FILM PRODUCTION

When the painstaking process of designing and building the models was completed, they were moved to a stage area where the equally difficult process of filming began. It was necessary for the camera to move through the model, passing buildings, trees, spaceships and submarines. Sometimes the clearance between the camera lens and these objects was only 1/16th of an inch. Yet the camera had to keep everything in focus while moving, avoid bumping into anything, and stop every fraction of an inch to take single exposures up to a full second long. The task seemed impossible, and it was – for a human.

Enter ACES and ELMER, two automatic camera control rigs. These programmable, computer controlled "robots" can move the camera with such patience and precision that they make even the impossible possible. When ACES's movements were combined with carefully calculated lens settings and lighting conditions, the resulting film created the illusion of a high speed, point-of-view ride through a scene from the future.

The entire process of designing, constructing and filming just one of these scenes may take 6 months and thousands of hours, but, as David says, "It's not successful until it looks smooth and easy to the viewer and he can't see all the difficulty that went into it."

DOING THE HOMEWORK

The efforts of the various departments that contributed to the success of the finished show reveal the same dedication to quality and realism. Tom Fitzgerald summed it up best: "I feel that we stuck so close to the facts and what is actually achievable either now or in the near future, that people who stay in touch with what is developing will realize we really have done our homework."

PRESENTED BY GENERAL ELECTRIC

EPCOT Center is a completely new concept in entertainment that required the contributions of many diverse disciplines. Major American and international companies recognized the challenge of this new entertainment experience and joined with the Disney organization to present these unique attractions.

In seeking a corporate participant for Horizons, the Disney organization was looking for a number of important qualities. The participant had to have extensive experience in high technology, a demonstrated ability and interest in thinking for the future, and had to share Disney's commitment to present this advanced technology in a way that would inspire and enlighten our millions of guests. A participant with all these qualities was found in the General Electric Company.

By 1878 (the year now looked upon as that of General Electric's founding), Thomas Edison had formed the Edison Electric Light Company for the express purpose of developing a new source of light. Fifteen years later, the Edison General Electric Company merged with the Thomson Houston Company to produce the General Electric Company we know today. Since that time, General Electric has been a pioneering force in the introduction and development of new products and technology for the consumer market, industry, outer space and national defense.

General Electric first teamed up with Walt Disney Productions to present "Progressland," one of the most exciting and successful exhibits at the 1964-65 New York World's Fair. After the fair, the show was brought to Disneyland, and later to the Magic Kingdom at Walt Disney World, as the "Carousel of Progress." Demonstrating their continuing dedication to progress, General Electric signed on as an EPCOT Center participant and has worked closely with Disney to present the Horizons pavilion.

It is an honor to have this world leader associated with us in presenting Horizons. Walt Disney Productions welcomes General Electric to our growing family of EPCOT Center participants.

THE EPCOT CENTER ADVENTURE

As a host or hostess at EPCOT Center, you are an ambassador of the Spirit of EPCOT. Your role in Horizons also makes you an ambassador of happiness, hope, optimism and goodwill.

Future World is designed to be an on-going forum of the future, a demonstration and proving ground for the most advanced ideas, materials and techniques emerging from the creative centers of American industry and education. It shows how we can apply the most advanced thinking and technology, and best utilize our planet's resources to improve the quality of life for everyone. Horizons is an important part of this demonstration.

By now, you're familiar with the Horizons show and the "story behind the story." You've had a chance to appreciate some of the advanced technology and future thinking presented in Horizons. The opportunities for you to share this experience with our guests will be nearly endless.

Our guests will have many questions about Horizons. Our roles require us to be as knowledgeable and prepared for these questions. And, above and beyond knowing our subject, we need to reflect the positive feeling we want our guests to have when they leave Horizons.

Our goal is to make our guests feel good about their Horizons experience, themselves and the future. As one of our ambassadors, you can help us meet this goal.

HORIZONS FACTS AND FIGURES

SHOW:

The entertainment portion of the attraction – what the guests see and hear, and all the "show elements" that constitute it.

Show Elements:

Figures	50
Props	770
Sets	24
Video monitors	4
Video playbacks	13
Video projectors	9
Film projectors	12
Special effects	50

RIDE:

The conveyance system for an attraction and all the "ride elements" that constitute it.

Ride Elements:

Ride time	14.57 mins.
Ride speed	1.5 fps
Track length	1,562 ft.
Hourly capacity	3,000
Total vehicles	184
Vehicle capacity	4
Load type	moving belt
Unload type	moving belt

FACILITY

The lower level contains wardrobe storage, ride and show control rooms, and a load/unload-belt maintenance area. The ground and second levels contain the ride, VIP lounge and all accessible public areas. Vehicle maintenance and backstage employee facilities are also included on the ground level. The second level contains mechanical and electronic equipment needed for overall operation of the pavilion. Special projection equipment for the operation of the "Omnisphere," and a VIP area are on the mezzanine level. The third level of the pavilion contains mechanical, electrical and equipment rooms.

Lower level	1,695 sq. ft.
Ground level	46,900 sq. ft.
Second level	52,730 sq. ft.