

THE DAWN OF A NEW DISNEY ERA





ACROSS THE SEINE -- In the shadow of a scale replica of the Eiffel Tower, Walt Disney World guests sample the beauty and charm of the French nation and its people in restaurants, shops and a motion picture tour. France is one of nine nations in the World Showcase at Epcot Center. Her neighbors are Canada, the United Kingdom, Japan, the American Adventure, Italy, Germany, China and Mexico.

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EXCITING NEW WORLD -- Walt Disney World guests begin a tour of the new Epcot Center Future World. Passing beneath a giant silver sphere called Spaceship Earth, they discover new dimensions in Disney entertainment -- a 260-acre permanent World's Fair of imagination, discovery, education and exploration.
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WITNESS PRIMEVAL DRAMA -- In the Universe of Energy in Epcot Center's Future World, dinosaurs and special effects such as projected smells raging storms, earthquakes, and an erupting volcano re-create the violence and beauty of prehistoric earth. Guests glide through the animated diorama in unique "theater cars" powered in part by the pavilion's rooftop photovoltaic cells. The pavilion is presented by Exxon.

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Walt Disney
World[®]



**EPCOT
CENTER**



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(4 col. standard/3 col. wide)

**INTRODUCING
EPCOT CENTER**

A letter from
Card Walker
Chairman of the Board
and
Ron Miller
President
Walt Disney Productions

Welcome to Epcot Center,

an entertainment showplace unlike anything ever created.

Epcot Center is unique not just because it represents the highest levels of Disney showmanship ever achieved, but because it is dedicated to entertainment with a purpose.

From the shining facades of Future World to the architectural landmarks of World Showcase, Epcot Center celebrates the realities of human achievements through imagination, the wonders of industrial enterprise and the concepts of a future that promises new and exciting benefits for all people.

The inspiration behind Epcot Center, of course, was Walt Disney, that creative genius who had the gift of dreaming marvelous dreams and the will to achieve them. Walt's greatest dream was a project he called EPCOT — an "Experimental Prototype Community of Tomorrow" that would encompass the 28,000 acres of Walt Disney World property in Central Florida. Walt envisioned EPCOT as a living, physical environment that would demonstrate the best examples of human ideals and creativity and serve as a constant focus on solutions that would meet the future needs of people.

"EPCOT," he said shortly before his death in 1966, "will take its cue from the new ideas and technologies that are now emerging from the creative centers of American industry. It will be a community of tomorrow that will never be completed, but will always be introducing and testing and demonstrating new materials and systems."

Over the past 16 years, Walt's EPCOT philosophy has remained the driving force behind the Disney organization's developments at Walt Disney World.

Initially, two inseparable requirements were essential to making EPCOT a reality. The first was special legislation enabling the development of a unique EPCOT building code. This was approved by the Florida Legislature in 1967. The second was the creation of facilities to establish Central Florida as a vacation site, achieved by the opening of our destination resort, Walt Disney World, in 1971.

The framework of Walt Disney World made possible by those developments has provided an environment for a continuing emphasis on EPCOT concepts in action. Beginning in October, 1971, EPCOT systems, services and technologies introduced have included monorail and linear induction power transportation systems... the first all-electronic, fiber optics telephone system... modular hotel construction techniques... a solar-powered office building... underground service corridors... automated trash disposal... a prototype solid waste energy conversion plant... and waste water treatment processes that yield beneficial by-products.

These "experimental prototype" realities, highly praised by environmental and urban planning authorities, have been important to the building of Walt Disney World not just as a community of technologists but as a community of people.

Since 1971 Walt Disney World has been host to nearly 140 million people from more than 100 nations. On any given day as many as 16,000 visitors stay overnight in the community's Contemporary Resort, Polynesian Village, Golf Resort, Fort Wilderness Campground, and the hotels and villas of Lake Buena Vista and the Walt Disney World Village. This is a true community that requires the same basic services and support as any urban setting of 16,000 people anywhere in the world.

Beyond the basic foundations, however, there has remained until now the challenge of bringing Walt's concepts of EPCOT into clear public focus. In 1975, we began to explore ideas for combining Disney entertainment and communications skills with the creative and futuristic processes being shaped in industry, science, government and academic centers.

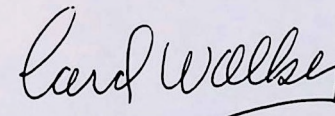
Walt knew that the future would not be dictated by a single authority, science or industry; that it will be determined only by the growth of the human spirit through a positive combination of imagination, commitment and dedication.

Epcot Center is an expression of that belief. It is our interpretation of Walt's dream, and we have built it on a grand scale to stand as a permanent World's Fair of imagination, discovery, education and exploration. And, because we believe the world is really one community and we are all one people, Epcot Center was built with the help of leading American and international industries and with the cooperation of a number of governments.

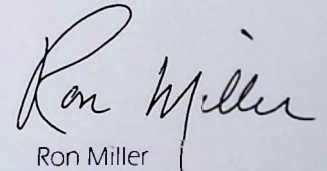
Our goals for Epcot Center are clear. We want to entertain, inform and inspire all who come here and, above all, to instill in our guests a new sense of belief and pride in man's ability to shape a world that offers hope to people everywhere.

We are very proud of Epcot Center, and we think Walt Disney would heartily approve of the evolution of his greatest dream.

We hope you will, too.



Card Walker
Chairman of the Board,
Chief Executive Officer



Ron Miller
President,
Chief Operating Officer

EPCOT CENTER BEGINS NEW ERA IN DISNEY ENTERTAINMENT

LAKE BUENA VISTA, Fla.--A new era in Walt Disney World entertainment begins this month with the opening of Epcot Center, a 260-acre showplace that spotlights futuristic ideas and technologies along with the arts, culture, craftsmanship and natural wonders of great nations.

Epcot Center theme areas of Future World and World Showcase introduce new dimensions in entertainment based largely on human achievements and the creative ideas shaping future possibilities. Included are thrilling ride-through attractions, adventure shows and visual experiences that demonstrate past, present and emerging wonders of the world.

Permanent World's Fair

Epcot Center is described by its designers at WED Enterprises, the Disney engineering and design unit, as a permanent World's Fair of imagination, discovery, education and exploration that will never be completed. Additional attractions now under construction will bring total costs of Epcot Center to more than \$1 billion by the end of the first year of operations.

Eventually, additions to Future World and World Showcase are expected to encompass more than 500 acres at the site. Epcot Center is located about three miles south of the world-famous Magic Kingdom, which has attracted nearly 140 million visitors from 100 countries since it opened exactly 11 years ago.

Walt Disney World officials estimate Epcot Center will attract some eight million visitors per year initially, bringing total annual attendance at the Central Florida resort and vacation property to around 20 million guests.

Future World

Future World, with six major pavilions and exhibit areas sponsored by leading U.S. companies, presents themes on communications, energy, transportation, agriculture, imagination and technology. Participating companies include the Bell System, Exxon, General Motors, Kraft, Kodak, Sperry, and American Express. In addition, American Express and Coca-Cola are sponsors of The American Adventure, an imposing Georgian-style structure in the community of nine nations represented by World Showcase.

The pavilions of Future World, each uniquely designed to complement a theme subject, are dominated by Spaceship Earth, the symbol of Epcot Center. Spaceship Earth is a shining geodesic sphere anchored on huge 15-foot-high legs and towering a total of 180 feet. A ride-through attraction spiraling through the 17-story interior of the geosphere introduces visitors to the story of man's progress through 40,000 years of communications advancements.

At the hub of Future World is CommuniCore, two crescent-shaped buildings where guests can use a variety of advanced-design electronic devices for entertainment and information purposes, including a touch-sensitive videodisc system that provides instant audio-visual information on specific attractions throughout Epcot Center.

Surrounding CommuniCore are four separate theme area pavilions, including World of Motion, shaped like a giant wheel six stories high; Universe of Energy, a pyramid-shaped building with rooftop solar cells that can generate up to 70,000 watts of DC power; The Land, with six acres under roof devoted to leading-edge agricultural methods and land use; and Journey into Imagination, with two truncated glass pyramids shaping the exterior and an interior where guests explore a fantasy world of creativity and participate in creative experiences using electronic devices.

All theme pavilions have ride-through attractions, some involving elaborately constructed scenes of historical events done with a whimsical touch and the use of life-like "Audio-Animatronics" figures constructed by WED "Imagineers." In World of Motion, for example, a used-chariot salesman in ancient Rome is busily slashing prices--in Roman numerals. Elsewhere, the first traffic jam involving the automobile is depicted.

In Universe of Energy, visitors will ride in 97-passenger "theater cars" powered by solar energy through a prehistoric diorama illustrating the billion-year formation of fossil fuels. In The Land, a boat ride journeys through the different food-growing regions of the world and through greenhouses where lush crops are being grown in imaginative new ways.

Future World pavilions also explore themes through demonstrations, participatory experiences, theatrical productions, unique motion pictures and hundreds of elaborate special effects created by WED Imagineers employing state-of-the-art technologies and projection techniques.

World Showcase

World Showcase, arranged around a 41-acre lagoon beyond Future World, presents the architectural, social and cultural heritages of nine nations. In addition to the centrally located The American Adventure, where a 29-minute theatrical production highlights American history, are "mini-nations" of Canada, the United Kingdom, France, Japan, Germany, Italy, China and Mexico.

Each country is represented by famous architectural landmarks and town scenes familiar to world travelers. Exactingly constructed replicas range from an ornate Chinese temple and delicate Japanese pagoda to Italy's Doges' Palace and the steep-roofed Hotel du Canada. There's even a 100-foot-high replica of the Eiffel Tower gracing scenes of Paris and the French provinces.

Commercial firms from the participating countries have stocked a broad variety of merchandise from their native lands in their respective shopping areas. World Showcase countries will also offer native cuisines and present artisans and performers dressed in traditional costumes. During a mile-long stroll of the World Showcase Promenade, visitors can be entertained by a mariachi band in Mexico, an Italian puppet show or a German oompah band.

Each country's facilities will be staffed with the aid of its own citizens, represented by a select group of international students participating in the World Showcase Fellowship Program, a unique work-study program directed by Walt Disney World.

Shows and Productions

Visual experiences at Epcot Center include more than four hours of motion pictures in 31 shows, prepared at a cost in excess of \$30 million. Disney film crews, shooting in 30 different countries, worked in 22 different formats, including 3-D, computer animation, laser graphics and Circle-Vision 360. Presentation of the motion pictures requires 150 different projection systems.

Motion pictures have been enhanced by enveloping screens, digital sound and, in some cases, projected odors of scenery. In a movie montage of basic energy sources in the Universe of Energy, even the 89-foot-wide projection screen becomes animated with 100 programmable triangles, creating textures, patterns and ripple effects of images.

Theme shows and productions throughout Epcot Center include a cast of some 450 "Audio-Animatronics" figures programmed to perform with life-like realism. The characters range from singing vegetables to 20-foot-high dinosaurs chewing artificial food to personalities right out of history books. In *The American Adventure*, a replica of Benjamin Franklin even climbs a set of stairs to visit Thomas Jefferson.

Epcot Center provides a major focal point for the "Experimental Prototype Community of Tomorrow" envisioned by Walt Disney before his death in 1966. EPCOT projects incorporating advanced environmental planning and urban design concepts are utilized throughout the 28,000 acres of Walt Disney World property near Orlando, Florida.

EPCOT CENTER ENTERTAINMENT BEGINS AT FUTURE WORLD

LAKE BUENA VISTA, Fla.--Whether Epcot Center visitors arrive by monorail or auto, their entertainment adventures will begin in Future World, a theme area where creative showmanship blends with dazzling new technologies to create the look of tomorrow.

Six uniquely designed pavilions and exhibit areas, each sponsored by a leading U.S. corporation, provide close-up explorations of Future World themes on communications, transportation, energy, agriculture, imagination and technology.

The towering gateway to Future World is Spaceship Earth, a 180-foot-high "geosphere" that is the symbol of Epcot Center and the largest structure of its kind in the world.

Inside Spaceship Earth, a ride-through adventure presented by the Bell System takes guests on a "time tunnel" journey that explains man's ability to progress and survive through communications.

Other structures in the ring-shaped theme area are World of Motion, built like a giant wheel, presented by General Motors; Universe of Energy, partially operated by solar power, presented by Exxon; The Land, where land use and revolutionary farming methods are demonstrated, presented by Kraft; and Journey into Imagination, housing fun-filled adventures in creativity, presented by Kodak.

At the hub of Future World is CommuniCore, two crescent-shaped buildings curving around a broad plaza. In CommuniCore's several exhibit areas, visitors can interact with various types of electronic devices that demonstrate high technology in entertaining, informative and thought-provoking ways.

CommuniCore includes Epcot Computer Central, where Sperry Systems that help run Epcot Center are displayed and demonstrated; Energy Exchange, an Exxon exhibit with participatory energy displays, games and devices; FutureCom, where guests can become familiar with new Bell System communications advances, and TravelPort, an American Express exhibit where touch-sensitive TV screens allow visitors to take an armchair journey, via videodisc, to world destinations.

Guests can enter CommuniCore from any direction, including an area adjacent to Spaceship Earth known as Earth Station--an electronic "city hall" where touch-sensitive videodisc systems provide instant audio-visual information on attractions in Epcot Center.

Overall, Future World is designed as a wedding of history, technology and entertainment, all displayed in a setting unlike any other. Excluding CommuniCore, each pavilion explores past, present and future possibilities of its complex subject matter through presentations that range from the dramatic to pure whimsy. Ride-through attractions, motion pictures, special effects, participatory experiences and other entertainment approaches are featured throughout Future World, including wide use of Disney "Audio-Animatronics" figures.

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Other Future World pavilions planned or under construction include Horizons, presented by General Electric, opening in 1983; with the Living Seas, Life and Health, and Space to follow.

For a closer look at Future World in its opening phase, here's a preview of attractions within individual theme areas:

SPACESHIP EARTH

A 15-minute ride-through attraction, spiraling through the 17-story interior of the geosphere, takes visitors past elaborate scenes that represent quantum leaps in 40,000 years of progressive communications--from Cro-Magnon cave dwellers to electronic computer networks that span the earth. Evolutionary developments depicted include roads, written languages, printing, telegraphy, telephone, wireless and cinema technologies. After entering a "speed tunnel" near the top of Spaceship Earth, visitors are projected into "space"--an effect created by the use of fiber optics lighting that makes the interior ceiling of the geosphere a 150-foot wide planetarium. Guests appear to soar among stars of a midnight sky, with a view of a distant earth, before descending to Earth Station.

EARTH STATION

Earth Station is the communications and information headquarters of Epcot Center, as well as an electronic city hall for guests. Animated scenes advertise attractions and special events. Visitors also can use the WorldKey Information Service, a touch-sensitive audio-visual system, for details on specific attractions. Information is now available in English and Spanish; French and German languages will be added later.

WORLD OF MOTION

The evolution of transportation is chronicled, beginning with a 14-minute ride-through attraction emphasizing the humor in man's struggle for mobility. Scenes utilizing sets, "Audio-Animatronics" characters, projected backdrops and motion pictures span developments from the aching barefoot traveler to the use of animals, wheels, ships, balloons, trains, automobiles and airplanes. Whimsical scenes include a toga-clad used-chariot salesman in ancient Rome.

Elsewhere, artist inventor Leonardo da Vinci works on his flying machine theory while an impatient Mona Lisa, her portrait unfinished, sits in the background.

Visitors ride through a speed tunnel, sensing the illusion of supersonic travel, and past CenterCore, an impressionistic version of a city of the future with unique transportation systems. The pavilion also presents TransCenter, a walk-through exhibit with demonstrations of aerodynamic principles, robotics, engine and vehicle design, and a display of GM's "Aero 2000," a computer-designed, four-passenger auto powered by a three-cylinder diesel engine.

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UNIVERSE OF ENERGY

Universe of Energy presents a unique ride-through attraction and spectacular motion pictures to chronicle the story of earth's energy resources, as well as man's attempts to search out and use energy in its various forms. Visitors travel between theaters and through a primeval diorama depicting the origin of fossil fuel formation. Unique 97-passenger "theater cars" glide silently on electrical energy provided in part by the pavilion's rooftop of photovoltaic solar cells, which generate up to 70 kilowatts of power. In the prehistoric diorama, the violence and beauty of an earlier earth are recreated almost within arm's length of guests, including use of "Audio-Animatronics" dinosaurs and winged reptiles, and special effects such as projected smells, raging storms, earthquakes and an erupting volcano.

Motion pictures include the largest Disney animation film ever created, plus a close-up look at the energy resources harnessed by man, presented on a semicircular 210-foot-long screen, and a movie montage of basic energy sources in which the projection screen itself is animated with 100 computer-controlled triangles that produce unusual textures, patterns and ripple effects of the projected images.

THE LAND

Spread over six acres, The Land explores earth's food-producing regions and development of agriculture methods. A boat-ride adventure begins with "Symphony of the Seed," an explanation of the miracle of plant growth. Guests then boat through various scenes illustrating different climates, cruise through a turn-of-the-century Midwestern farm, then move among lush growing areas for a live demonstration of revolutionary agriculture. Innovative growing techniques displayed include intercropping, hydroponics and aquaculture. For example, horticulturists show how lettuce, shaded by melons growing on A-frames above, flourishes on polystyrene boards floating in a foot of water occupied by fish. The fish eat the lettuce roots but do not stunt the vegetable's growth.

The Land presents a wacky musical comedy show, "Kitchen Kabaret," starring 29 "Audio-Animatronics" characters explaining nutrition. In addition, guests can view "Symbiosis," one of Epcot Center's most beautiful motion pictures, which reveals the fragility of the land and man's long struggle to coexist with it as a partner.

The land also features two dining areas: the Farmer's Market and the revolving Good Turn Restaurant.

JOURNEY INTO IMAGINATION

As the theme area that most closely resembles traditional Disney entertainment, Journey into Imagination is a fantasy land that explores the essence of creativity. A ride-through adventure filled with special effects allows visitors to travel through a wondrous universe with two new Disney characters: Dreamfinder, the pilot of the improbable-looking Dream-Catching Machine, and Figment, a little purple dragon. Scooping up ideas and inspirations-- sounds, shapes, colors, scientific formulas--Dreamfinder and Figment take their collections to the Dreamport, where materials are recombined into new inventions, songs, pictures, books and other contrivances of the imagination.

Also housed in the four-acre pavilion are the Magic-Eye Theater, where guests will see "Magic Journeys," a sophisticated 3-D motion picture of make-believe adventures of childhood imagination, and the Image Works, a series of electronic games where visitors can express their own artistic feelings. Image Works attractions include the Sensor Maze, where a tunnel of neon rings assigns each guest a color; the Lumia, a voice-activated light show; and Stepping Tones, where movement sets off color, light and sound effects.

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Walt Disney World.
EPCOT
CENTER **NEWS**

Walt Disney World EPCOT Center Publicity Department · P.O. Box 40 · Lake Buena Vista, Florida 32830 · (305) 824-4531

EPCOT CENTER WILL ALWAYS BE IN "A STATE OF BECOMING"

LAKE BUENA VISTA, Fla.--Even as Epcot Center's opening attractions become fully operational, exciting new theme areas and pavilions are being shaped for Future World and World Showcase.

Within a year, for example, Future World will be expanded by Horizons, a theme area that previews 21st century life-styles. Horizons will be followed by The Living Seas, an attraction that explores man's relationship with the oceans surrounding him. Beyond that, Future World plans include Life and Health, a pavilion that will present a simulated trip through the human body, and another pavilion tentatively called Space.

In World Showcase, where the United States and eight foreign countries are represented in 1982, planning for five additional countries is under way. Expected to join the international community within three years are Morocco, Spain, Israel, Venezuela and equatorial Africa.

In keeping with the late Walt Disney's vision of a "community of tomorrow that will never be completed," Epcot Center's continued growth also will include additions to existing attractions.

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Several new shopping areas and electronic exhibits within Future World's CommuniCore, for example, will open later in 1982. New participatory experiences for guests will include Future Choice Theater, where groups are invited to take part in an electronic opinion poll on current events and futuristic topics by pushing buttons on their theater seats. Responses to multiple choice questions will appear on the theater screen so guests will know how their opinions compare to those of other guests.

Under design for CommuniCore, the technology hub of Future World, is an electronic arcade, featuring games based on advanced technologies. Game formats will include such aspects as interactive videodiscs, 3-D video graphics, lasers and body-sensing devices.

Additional shows and ride attractions are also being planned for several World Showcase countries, including Germany, the United Kingdom, Italy and Japan.

Japan's added attraction, "Meet the World," is a carousel theater presentation featuring "Audio-Animatronics" characters in settings that depict the nation's history and spirit. The presentation, in which the audience seating area will revolve around the stage, premieres at Epcot Center in October 1983. The show will be similar to a Tokyo Disneyland presentation opening in the spring of 1983.

Horizons, now under construction, will become the seventh major theme and exhibit area in Future World. Presented by General Electric, the uniquely shaped, multilevel pavilion will combine elements of all other theme areas. Visitors will take a futuristic look back at yesterday's visions of the future, including Jules Verne's concept of a moon rocket and a 1930's preview of a neon city. Elsewhere, guests will visit FuturePort and ride through a family habitat of the next century. Three-dimensional scenes will depict apartment, farm, underwater and space communities.

The Living Seas, featuring a built-in coral reef 24 feet deep and 200 feet in diameter, and containing almost six million gallons of sea water, will present a narrated underwater journey. Guests will see a demonstration of the ocean's food chain and see applications of futuristic technologies at work in an undersea environment teeming with fish and plant life.

Preliminary plans for an equatorial Africa environment include a tree house overlooking a jungle watering hole. The simulated setting will include a diorama of trees, with rushing water, sounds and forest scents, blended with a rear-projection motion picture of African animals. A Heartbeat of Africa show will depict the histories and culture of various nations and regions along the equatorial belt. Other attractions will include a museum of African arts, a re-enactment of village life and a film narrated by "Roots" author Alex Haley.

Walt Disney World
EPCOT CENTER **NEWS**

Walt Disney World EPCOT Center Publicity Department · P.O. Box 40 · Lake Buena Vista, Florida 32830 · (305) 824-4531

EPCOT CENTER IS DISNEY'S NEW SPECIAL EFFECTS CAPITAL

LAKE BUENA VISTA, Fla.-- You're riding through a primeval land in Epcot Center's Universe of Energy, witnessing a re-enactment of the billion-year origin of fossil fuels, and you're not just seeing things.

That strange prehistoric forest back there had a smell all its own. So did that foggy swamp where dinosaurs were browsing. And you got a clammy feeling when that noisy thunderstorm rolled across an ancient sky and dumped a downpour almost within arm's reach.

Suddenly, past a rocky landscape where winged reptiles glare down from perches, comes a whiff of sulphur, a fiery explosion, and a volcano erupts almost overhead. Bright streams of red lava spill out and run hissing and bubbling down the slopes, threatening to engulf you and your fellow travelers. Is this the end?

Relax. You're being treated to a few of the hundreds of innovative special effects that help make Epcot Center a realistic entertainment experience. Throughout Future World and World Showcase theme areas, the wizards of WED (Walt E. Disney) Enterprises have employed special effects with such sophistication that the result is virtually a new art form.

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If you believe for a moment that the life and events occurring in the prehistoric diorama are real, you've made Disney "Imagineers" like Bill Novey and Mark Fuller very happy. What they and their 134 special effects colleagues do is try to make you see, hear, smell, feel and perhaps even taste a little of the drama being presented.

Novey, who is manager of the WED special effects team, explains that those prehistoric smells and that clammy sensation result from scents and damp air blasted from small howitzer-like devices across narrow spaces. The odors, carefully chosen from hundreds of chemical possibilities, are quickly absorbed by a special filtration system so they don't linger in the atmosphere. Elsewhere in Epcot Center, "smellitizer" effects heighten sensations of a burning Pompeii set in Spaceship Earth, and a hot desert scene in The Land.

That molten lava spewed from the volcano is actually a harmless and cool gelatinous material normally used in food additives. It's mixed with orange dye and black-light pigments to give the effect of a fiery glow. Before the stuff can flow onto guests, of course, it's diverted and recycled back into the volcano by a hidden pump.

"The challenge of special effects is that the viewer must believe," says Novey. "We're trying to involve guests in Epcot Center experiences, some of which are intense, and special effects can make a contribution through impressions as well as physical contacts."

And, Novey points out, because Epcot Center attractions focus on man's achievements and creativity, most of the new special effects dreamed up for the \$800 million showplace are based on advanced technologies as well as artistic concepts.

Special effects integrated into shows and attractions were developed with the aid of such tools as computers, laser graphics, holographic images, liquid neon and fiber optics cabling.

WED's special effects engineers also use some 350 advanced projection systems to meet unique demands of lighting, colors, intensities and sharpness of images over distances. They have also adapted all sorts of mechanical equipment to new purposes and discovered new ways to use fluids and chemicals.

Fiber optics, for example, are employed throughout Epcot Center. More than a thousand miles of cabling, with thousands of silicon fibers, transmit energy-efficient light signals representing everything from computer circuitry to distant twinkling stars. Fiber optics projections form a starry universe in the planetarium of Spaceship Earth, a spectacular fireworks display in the Mexico pavilion, and a colorful paint-spilling sequence in Journey to Imagination.

Liquid neon is a flexible high-speed light medium with future commercial potential in signage and interior decoration. For special effects purposes the fluid is lighted in segments to illustrate the flow of computer data, the lights of a distant suburb, and the movement of space vehicles in a city of tomorrow.

In a motion picture speed tunnel at the World of Motion, blobs of liquid neon whizzing past will help create the illusion of high-speed travel.

Laser effects also come into wide use, including laser light beams played out from images recorded in computer memory. In World of Motion's CenterCore, a miniaturized city of the future, laser beams intersecting layers of man-made clouds create an eerie impression of distance and scale.

"The idea is to integrate special effects into the shows as much as possible," says Novey. "We're attempting to heighten feelings for scale, distance and movement, and also to provide the imagery that helps guests interact with the entertainment.

"In The Land, for example, a boat ride takes guests from a hot, damp rain forest to a hot, dry desert. With hot-air cannons, we can help establish the sense of change. In the distance, visitors will see a sandstorm that appears to have just passed. To enhance this illusion, we provide the evidence of sand trickling off the nearby rocks."

Water, one of the most useful of special effects tools, combines with projected lightning and the noise of thunder to make a great torrential downpour. And, in the hands of Mark Fuller, it becomes the star performer in a fountain that will dazzle visitors to the CommuniCore area.

Water will be pumped through 350 computer-controlled nozzles to form liquid sculptures and, each hour, the fountain performs as a clock.

The piece de resistance of WED special effects, however, is Journey into Imagination, the Epcot Center attraction that comes closest to traditional Disney entertainment. Presented by Kodak, the pavilion will open before year-end 1982.

Outside the pavilion, visitors can see an 80-foot, upside-down waterfall, plus a leapfrogging, arching stream of water that looks as solid as a bent glass rod. This achievement, explains Fuller, is based on laminary flow principles and turbid-free water.

Inside Journey into Imagination, guests will take a ride-through adventure with Dreamfinder, an elfin character piloting a contraption called the Dream-Catching Machine. With Dreamfinder is a little purple dragon called Figment. The two roam a projected "universe," collecting colors, sounds, shapes, scientific formula--all the materials of ideas and imagination--which they then recombine into new inventions and creations.

Special effects in this sequence, which required more than a year to create, include colorful rainbows, exploding nebula, lightning in a jar and a bubble machine.

Afterwards, guests visit the pavilion's Image Works for personal experiences in creativity. WED's special effects people provide such magical devices as the Sensor Maze, where each guest is assigned a color by a tunnel of neon rings; the Lumia, a voice-activated light show, and Stepping Tones, where a visitor's step sets off color, light and sound effects. Through holographic effects, individuals can also play a role in a movie scene.

"We've never before put such realities into a theater," said Fuller. "To create the three-minute dream ride sequence around what is really a rotating room, we used 100 projectors in one place. Altogether, there are more than 200 projectors used in Journey to Imagination, which alone represents more special effects than the Magic Kingdom."

All of this, of course, is just the beginning. Spectacular new special effects are already being planned for future Epcot Center pavilions, including The Living Seas, Life and Health, and Space.

"People," says Novey, "just won't believe their eyes."

#

COMMUNICORE PUTS GUESTS IN TOUCH WITH "THE WORLD"

LAKE BUENA VISTA, Fla.-- Picture a 21st century village square where the town crier is an array of computer-fed, interactive video screens and high-technology electronics libraries.

Inquisitive visitors can call up electronic messages and pictures on hundreds of subjects just by touching the screen.

This is the essence of Epcot Center's CommuniCore -- a "community core" where guests can see and touch the future with the help of computers.

Housed in two crescent-shaped, glass-walled structures, CommuniCore serves as a Future World hub through which guests will pass several times during a visit to Epcot Center.

Within are industry-sponsored exhibits that ease bewilderment with emerging technologies. Computers become "allies" in games, information retrieval and the performance of everyday tasks at Epcot Center.

Major exhibit areas are Energy Exchange (presented by Exxon), Epcot Computer Central (Sperry), FutureCom (the Bell System), TravelPort (American Express), and the Electronic Forum. In addition, there are two restaurants - Sunrise Terrace and Stargate - and a gift shop, the Centorium. Earth Station, the "city hall" of Epcot Center, is located at the base of Spaceship Earth.

EARTH STATION

In Earth Station, the WorldKey Information Services provide access to information on Epcot Center and other areas of Walt Disney World via touch-sensitive video screens. Developed by Bell Laboratories for Epcot Center, WorldKey is bilingual (English and Spanish on opening day, with French and German to be added later).

There are 29 WorldKey terminals throughout Epcot Center, where a touch of the screen provides printed answers to common questions. Personal help is available from an on-screen information specialist via a network of two-way television cameras and Speakerphones (tm).

EPCOT COMPUTER CENTRAL

Epcot Computer Central reveals to guests the computer control room of Epcot Center. Earlie the Pearlie, a miniature Cockney character, hosts the "Astuter Computer Revue." Computers are the stars, showing how they control "Audio-Animatronics" figures, monitor shows, adjust lighting and sound effects, help with security, energy management, hotel and restaurant reservations, and many other activities throughout Walt Disney World.

The exhibit also features touch-screen games which display, in an entertaining way, the computer's role in increasing efficiency.

In the touch-screen, Get Set Jet Game, guests load passengers and baggage onto a plane, testing their skill against the computer. A winning refrain in the Manufactory is "The Stars and Stripes Forever," where the American flag is constructed stripe by stripe. With the Compute-A-Coaster, it's possible to design a personal roller coaster -- and the computer will provide a simulated ride on your creation.

A robot called SMRT-1 plays guessing games with guests by decoding yes and no answers through a voice recognition box. Other exhibits are the Great American Census Quiz and the Walt Disney World Reservations satellite.

ENERGY EXCHANGE

Energy Exchange provides an extensive array of energy-related demonstrations. Using touch-screen videodisc technology, guests have access to information on energy topics, from conservation to a graphic comparison of various energy sources. Exhibit areas are devoted to specific sources--solar, nuclear, coal, oil and gas, biomass and synthetics--as well as energy exploration.

In addition, guests can participate in entertaining activities -- pedaling a bicycle, turning a hand generator, simulated driving -- that demonstrate the generation and expenditure of energy.

FUTURECOM

FutureCom focuses on the information age and high-technology telecommunications. The Fountain of Information, centerpiece of the area, is a colorful collage-like sculpture depicting the conveyance of information -- from a DMA molecule to road signs, and from recording tape to motion pictures.

The Intelligent Network exhibit gives an overview of the Bell System. By touching an outline map of the United States on a video screen, information on any state and its current events may be obtained.

"Face-to-Face" demonstrates video teleconferencing, while "Life in the Information Age" is a theatrical presentation in which animated figures illustrate the benefits of communications to home and work.

A microchip, exploded in size from a half-inch square to 14 feet, forms a children's playland maze in the "A-Mazing Microchip" exhibit. FutureCom also includes a variety of electronic games demonstrating the complexities of telecommunications.

TRAVELPORT

The World Festival Sphere, 14 feet in diameter, attracts visitors to the exhibit area with an audio-visual presentation on vacation transportation. The area of the Sphere visible from within TravelPort features a series of audio-visual "great escapes" -- inviting locations for the vacation-bound.

There are also Vacations Stations, where guests journey via videodisc to destinations of their choice. These interactive video terminals display world maps and audio-visual information on vacation options around the world.

TravelPort also offers the services of an American Express Travel Office, including Travelers Cheque sales, reservations assistance, and tourist information.

ELECTRONIC FORUM

Electronic Forum, opening later in 1982, consists of two areas -- World News Center and Future Choice Theater.

In World News Center, kiosks with TV monitors carry live news and information broadcasts by satellite from around the world. On the same system, guests will be able to dial hometown news for local current events.

The Epcot Poll, an ongoing opinion survey covering current events and futuristic topics, is offered to guests in Future Choice Theater. Participants in the poll will use buttons built into the armrests of their seats to cast their opinions. Responses will appear on the theater screen, so guests will be able to see how their opinions compare to those of other guests.

Results of the poll, developed with the assistance of Yankelovich, Skelly & White, Inc. (which conducts the Time magazine opinion surveys), will be available to the news media.

EPCOT CENTER: AN INTERNATIONAL ENTERTAINMENT FESTIVAL

LAKE BUENA VISTA, Fla.--When Disneyland opened in 1955, it was Walt Disney himself who planned the first-day hoopla of marching bands and costumed characters made famous in his animated films.

The opening-day acts made such a hit that the master showman decided on the spot to incorporate live entertainment and pageantry into every day's activities at the theme park.

Twenty-seven years later, the tradition is still going strong. Everything from parades to fireworks to stage shows help add to the fun for millions of guests visiting Disneyland and the Magic Kingdom at Walt Disney World each year.

Now, at Epcot Center--the sparkling showplace that begins a new era in Disney entertainment--October's opening festivities will introduce a potpourri of some of the world's most innovative live acts and performances.

From an early morning musical greeting to a late-evening show of dazzling lights, fountains and fireworks, Epcot Center entertainment will literally be non-stop. And the repertoire of performers and performances waiting in the wings spans the globe. Among the dozens of shows planned for 1982 are spectacular stage performances by folk groups and African stilt-walkers, plus spontaneous acts by strolling bands, mimes, puppeteers, comedians and artisans.

Dennis Despie, vice president of entertainment for Walt Disney Productions, said every effort is being made to create an entertainment atmosphere more exciting than anything Walt Disney World visitors have experienced before.

"Epcot Center is so different from other theme parks, we decided a whole new entertainment focus was necessary," Despie said. "The result is a showplace that's still Disney, still exclusive, but also very different. And the entertainment is going to be a lot of fun for everyone who comes here."

Because guests will first enter Future World, the theme area devoted to technological advancements and man's creativity, musical greetings will be provided by the "Future World Brass," a 12-piece contemporary group. Performances will be near Spaceship Earth in the mornings and at other pavilions and exhibit areas during the afternoons.

Elsewhere in Future World, hungry guests stopping by the Odyssey Restaurant in October can enjoy the light-hearted routines of musician Michael Iceberg, familiar to Magic Kingdom visitors and many college audiences. Iceberg operates the unique Iceberg Machine, a glittering conglomeration of synthesizers, knobs, buttons, levers and other devices that create odd sounds and special effects.

Later in 1982, costumed robots will be scampering around the CommuniCore area of Future World, providing entertainment for children with interactions allowed by remote control.

Primary entertainment attention, however, has been devoted to World Showcase, Epcot Center's second major theme area. A community of nine "mini-nations" surrounding a 41-acre lagoon beyond Future World, World Showcase provides entertainment around the 1.2-mile lakefront promenade and within each national pavilion.

"We actually have so much show material in World Showcase that it's going to be a year-round international festival," said Despie. "The entire area will be alive with music and performers."

Two outdoor stage shows scheduled through December are, the renowned international folk troupe of 30 musicians and dancers, and Koumpo, a company of 20 colorfully costumed African dancers and drummers.

The Aman Folk Ensemble will perform five times daily on the America Gardens stage, centrally located near The American Adventure. Shows include music and dance traditions of 40 different nations. Performers wear hand-made costumes of the countries depicted and employ 75 authentic musical instruments.

Kuompo, performing directly across the lake at World Showcase Plaza, has exciting, fast-paced acts traditional of West African cultures, including fire-eating and dancing on 17-foot-high stilts to the beat of handcrafted drums.

Other promenade events, premiering during Epcot Center's Grand Opening Weekend of Oct. 22-24 and in November, are parades of bigger-than-life costumed "dolls" representing more than 60 nations and an international folk company, the World Showcase Dancers.

Composed of 16 dancers and seven musicians, the folk group will appear along different areas of the lakefront promenade and encourage guest participation in traditional folk dances of many lands.

In addition to outdoor stage productions, which will change frequently, each World Showcase pavilion offers entertainment representative of the country's cultures. Initial live performances planned by the nine World Showcase nations include:

- . Mexico--a five-piece marimba band on stage at the pavilion's Plaza de los Amigos, plus a strolling nine-piece mariachi group playing around the courtyard, cantina and dining areas.
- . China--artisans practicing woodcarving, clay seal and stamp making, basket weaving and calligraphy, plus street events with huge, colorful papier mache lions with silken bodies that move with dancers inside.
- . Germany--a continuous Bavarian Oktoberfest complete with dancers and a seven-piece baskapelle band, along with a one-man oompah band, a yodeler and alpenhorn player; guests are encouraged to join in the toasting, singing and dancing.

- . Italy--a street acting group, Teatro de Bologna, performing in the centuries-old Commedia dell 'Arte improvisatory style on the pavilion's piazza and elsewhere; singing waiters in Alfredo's restaurant with a repertoire of Italian opera songs; plus a group of three traveling puppeteers presenting classical folk tales and melodramas.
- . The American Adventure--an eight-member singing group, "Voices of Liberty," entertaining in the theater's pre-show area, plus an eight-member "Sons of Liberty" fife and drum corps doing music and routines of the American Revolutionary period on the promenade.
- . Japan--individual musical performers on traditional stringed instruments (the koto and the samisen); a five-piece group performing authentic Japanese songs and dances; a traveling candyman who fashions herons and dragons from rice toffee as gifts for children.
- . France--three white-faced mimes, each performing routines associated with classical French styles of mime, in and around the pavilion; a three-man strolling musical group playing Parisian songs; and a strolling accordion player whose songs are traditional of French restaurant and bistro numbers.

- . United Kingdom--a comical group of London street musicians, the "Pearly Kings and Queens," whose velvet and satin costumes are covered with pearl buttons; a versatile troubador, whose tradition of serenading on various instruments is centuries old; and a bagpipe band.
- . Canada--a kilted Scottish bagpipe trio representative of Nova Scotia (shared with the U.K.); and a versatile musical group, the "Maple Leaf Brass," whose members dress in various costumes for humorous performances and, with a costume change, become the more serious "Royal Canadian Brass."

"The flavor of entertainment in each country is going to be very different, and it's terrific," said Despie. "More significantly, the entertainment is not regimented, and many things will change over time. The only real constant is that the people who visit here are going to have a really good time."

Because most Epcot Center visitors are expected to concentrate dining and shopping experiences within World Showcase during the evening hours, nighttime represents a period of peak activity for entertainment of all kinds.

A finale to each day's events in Epcot Center will be the elaborate Carnaval de Lumiere, premiering on the lake Oct. 23, at 10 p.m.

The major portion of the spectacle is a 22-minute "Festival of Festivals" show employing nine floating barges--five with large screens that will display scenes of festivals from around the world, plus four fountain barges that will spray hundreds of fountains up to 70 feet high. Changing patterns of light, synchronized music and colorful fireworks will add to the spectacle.

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EPCOT CENTER RESTAURANTS: AN INTERNATIONAL ADVENTURE

LAKE BUENA VISTA, Fla.--Where to eat lunch or dinner are decisions every visitor to Epcot Center will enjoy making. Will it be ceviche in Mexico's San Angel Inn, bangers and mash at the bar in the United Kingdom's Rose and Crown Pub, or a stuffed potato in the Land's Farmers Market? With 27 restaurants presenting the foods of nine nations, the choice is an adventure in itself.

"Authenticity and tradition were the two key words in mind when we embarked on the research and planning for our restaurants," says Walt Disney World Executive Chef Walter Meyer. A veteran of European luxury hotel kitchens and restaurants such as the Four Seasons in New York City, he has been working on the menus for more than three years. Recipes were tested many times in the Quality Control Kitchen by Meyer and his staff chefs.

Authentic recipes call for unusual ingredients, and a large part of Meyer's time was spent searching for domestic food products to replace the exogenous ingredients called for in many World Showcase menus. Fresh herbs are difficult to locate year 'round, so the Walt Disney World Tree Farm furnishes basil for L'Originale Alfredo Roma Ristorante, tarragon for Les Chefs de France, and cilantro, or fresh coriander, for the San Angel Inn.

Fresh Mozzarella cheese is flown in from New York for Alfredo's Caprese salad (tomatoes and mozzarella with pesto), and the tamarinds for the San Angel Inn's aguas frescas (flavored water served in restaurants throughout Mexico) come from the Southwest.

"Authenticity isn't only a menu concern," says Randall Hiatt, manager of Food Research and Project Development. "Our goal is to staff each World Showcase restaurant with people from the participating countries, so when you're in Germany's Biergarten, your hostess will greet you and take your order as if you're in Hamburg or Munich."

AMERICA'S CHOICE

Future World restaurants feature the regional cooking of America. The "Stellar Scramble" is a breakfast pizza served in CommuniCore East's Stargate Restaurant. Sunrise Terrace in CommuniCore West offers fried seafood and chicken, with clam chowder and corn muffins representing the Eastern Seaboard and the South.

The Odyssey Restaurant, east of Showcase Plaza, has provisions for the Future World/World Showcase traveler. Entrees, named for the ever-hungry wanderer, include the Odyssey Hamburger, the Voyager Hotdog, Explorer Beef Stew, and other hearty dishes to satisfy pioneer appetites.

Prime rib from the cornbelt, salmon from the Pacific Northwest, Florida's red snapper and Long Island duck are just a few of the entrees served in The Land's revolving restaurant, The Good Turn. The "Orchard Favorite" (pancakes filled with fruit, sour cream and cottage cheese) is a good way for early birds to start off a day before journeying through the six-acre pavilion.

Below the enormous central skylight in The Land is the Farmers Market, where eight stalls provide "country-store fun, food and flavor." The Bakery motto, "We Knead to Please," is evident after sampling the stall's sticky buns, roman apple cake and cheese bread. Soup & Salad, Barbecue, Cheese Shoppe, Sandwiches and the Potato Store serve basically delicious main courses and snacks. And there are milkshakes and peach nectar at the Beverage House and black cherry frozen yogurt at the Ice Cream Stall.

Serving the only American food in World Showcase, the Liberty Inn's bill of fare represents cooking at its simplest - hamburgers, hotdogs, chili, french fries - and Coca-Cola with chocolate chip cookies for that all-American sweet-tooth.

AROUND THE WORLD

Ordinarily, it might take a lifetime of vacations to sample the representative cooking of Canada, France, the United Kingdom, Japan, Germany, Italy and Mexico. For the World Showcase traveler, it's a one-mile walk around the lagoon, where all roads lead to authentic restaurants of these countries.

CANADA

Le Cellier, located in Hotel du Canada, has stone walls typical of an old Quebec wine cellar. Tourtiere, the port and potato pie representative of Quebecois cuisine, and chicken and meatball stew, popular in the timber region of Saskatchewan, are on the menu. For dessert, Chef Meyer created a maple-syrup pie, "similar to pecan pie, only better!"

UNITED KINGDOM

It's "Otium Cum Dignitate" at the Rose and Crown Pub and Dining Room, and if "leisure with dignity" isn't your idea of a good time, the Bass ales and Guinness stout should bring you around. Most British pubs serve their ale at 50-55 degrees, which is lowered to 45 degrees for American tastes. However, the publican, or bartender, will be happy to warm your Bass India Pale Ale with a "warmer" - a small glass tube filled with hot water does the trick. The steak and kidney pie is made with veal kidneys, and fish and chips are served with malt vinegar. And, of course, there's always bangers and mash (sausage and mashed potatoes).

FRANCE

Paul Bocuse, Gaston Lenôtre, and Roger Vergé are the triumvirate behind Les Chefs de France and Au Petit Cafe, where flowered chintz banquettes, wrought-iron chairs, marble-topped tables and parquet floors reflect the Art Nouveau decor popular in fin-de-siecle French restaurants.

Menu items based on the three-star menus of Bocuse's restaurant in Lyons and Verge's in Mougins, near Cannes, are served, as well as the pastries and ice cream of Chef Lenôtre, France's foremost patissier. One table d'hote (complete) meal at Les Chefs de France commences with a goose liver pate in champagne aspic, followed by a salmon souffle with white butter sauce, chicken subtly flavored with herb vinegar, and for dessert, chocolate cake topped with Lenôtre's incomparable vanilla ice cream. Meyer, his staff, and the three chefs tasted some 44 wines to make the final selection of Lanson and Pommery champagnes, Barton and Guestier wines, and wines of the chefs on the menu.

ITALY

"I can make peace between nations, just with my fettuccine," insisted Alfredo DiLelio. L'Originale Alfredo Roma Ristorante at Epcot Center, under the supervision of his grandson, Alfredo III, and Guido Bellanca, serves the "Maestrosissime Fettuccine All'Alfredo" according to the family recipe. "We're using fresh pasta made on the premises and the same brand of Parmesan cheese imported from Reggio Emilia we've used for over 50 years," says Bellanca. The pasta-making process is on view behind large windows looking into the restaurant's Italian-tiled kitchen.

Decorated in the warm earth tones characteristic of Florence and Siena, Alfredo's red-brown walls and deeply upholstered armchairs create an inviting atmosphere in which to sample pasta specialties such as "Paglia e Fieno" (spinach and plain pasta served with a cream sauce), or "Fettuccine alla Carbonara" (tossed with egg, bacon, cream and pecorino cheese).

JAPAN

Overlooking tranquil gardens, the Yakitori House features yakitori, broiled skewers of chicken basted with soy sauce and sesame oil, and gyudon - paper-thin beef cooked in a spicy sauce and served with steamed rice. Modeled on a teahouse in the Katsura Summer Palace in Kyoto, the Yakitori House also serves such uniquely Japanese desserts as Yokan, a sweet pudding made with red bean paste.

The Matsunoma Lounge on the second floor of the Mitsukoshi department store and restaurant serves Japanese sake, plum wine and even saketinis (sake with vodka or gin). Tempura Kiku seats only 25 people, so the atmosphere is friendly around the central counter. Shrimp, scallops, beef, chicken, and fresh vegetables are dipped in batter and deep-fried by chefs trained in Mitsukoshi's Tokyo restaurant. In the restaurant's five teppan rooms, chefs prepare beef, seafood and chicken entrees on grills set into the dining tables.

GERMANY

"Prosit!" is the word in the Biergarten, where diners toast to good health with Beck's beer, light or dark, in 33-ounce steins. Chef Meyer's sauerbraten is marinated for several days, and the pork loin is smoked according to an old German recipe. Traditional soft pretzels are made on the premises every day. Over 80 different sausages were tasted before one was selected for the bratwurst plate, which should be ordered with white radishes, popular as a snack in Munich.

MEXICO

Unlike most Mexican restaurants in the United States, you'll not find nachos, "Mexican pizza" or hard-shell tacos at the San Angel Inn in Epcot Center, because, says manager Richard Debler, they are not authentic Mexican dishes. And Debler was trained in his family's restaurant in Mexico City.

Chocolate may sound like an unorthodox ingredient to use with chicken, but the Mole Poblano prepared according to a San Angel Inn recipe combines chile ancho, chile passilla, green tomatoes, ground tortillas, coriander seed and 11 other spices with cocoa for a rich sauce in which chicken is simmered until tender. Fresh tortillas are made every day in a conveyor tortilla machine, and served with pork, chicken, and cheese fillings, as well as fresh salsa verde. In the Cantina de San Angel, just outside the pyramid entrance to Mexico, quick entrees and snacks such as churros, donuts rolled in cinnamon and powdered sugar, are available as well as Mexican beer.

#

WORLD SHOWCASE PRESENTS SWEEPING SPECTACLE OF NATIONS

LAKE BUENA VISTA, Fla.--If Future World's look of tomorrow is the heart of Epcot Center, then World Showcase--with its kaleidoscope of international experiences--is surely the soul.

A community of nations in miniature, focusing on the cultures, traditions and accomplishments of people from around the globe, World Showcase is the only permanent exposition of its kind anywhere.

Awaiting visitors are exotic cuisine, entertainment, artisans and scenic wonders of eight foreign countries--Canada, the United Kingdom, France, Japan, Italy, Germany, China and Mexico--plus the centrally located host pavilion, The American Adventure.

Equally spaced around a 41-acre lagoon beyond Future World, the foreign countries of World Showcase are recreations of landmark architectures and historic scenes familiar to world travelers. Built with finite attention to detail, the mini-towns have buildings, streets, gardens and monuments designed to give Epcot Center guests an authentic visual experience of each land.

Even a casual afternoon's walk will allow guests time for viewing the natural and man-made wonders represented by the dramatic pavilions, from the rugged grandeur of Canada to a boat ride through three eras of Mexico, with visits along the way through Renaissance Italy, a delicate Japanese garden and teahouse, or a German Platz, where Oktoberfest is in session.

And every visitor will want to sample the heather-and-ale mood of an English town, with its shops and pubs spanning centuries of architecture, from quaint thatched-roof cottages to Victorian elegance.

A must stop is The American Adventure, a 108,000-square-foot, Georgian-style structure featuring perhaps the most impressive theatrical performance in all of Epcot Center. Sponsored by Coca-Cola and American Express, The American Adventure presents a 29-minute drama of the nation's 350 years of history, utilizing elaborate three-dimensional settings and a new generation of Disney "Audio-Animatronics" characters. Host figures Mark Twain, who carries a smoking cigar, and Benjamin Franklin, the first "Audio-Animatronics" character to walk, narrate America's progress from the era of Pilgrims to the present.

But to fully enjoy the sweeping spectacle that is World Showcase, most guests may find a single visit inadequate. Shoppers, for example, will discover that commercial firms from the participating nations have stocked a broad variety of shops with enough merchandise to satisfy every price and taste. Everything sold is made in the countries represented.

Cuisine? L'originale Alfredo Roma Ristorante, designed in rich Florentine style, and Les Chefs de France, offer world-famous dining experiences. There's also a version of Mexico City's San Angel Inn, and Tokyo's Mitsokoshi Restaurant plus authentic dining and cooking styles of Canada, Germany and the United Kingdom.

Architecture? There's the distinctive flavor of the Orient in a half-size replica of China's beautiful Temple of Heaven (Beijing), and in a delicate five-story pagoda and a massive Samurai castle from Japan. In Italy, re-creations of the Doges' Palace and campanile (bell tower) lead viewers to a version of St. Mark's Square. In Canada, the look of a famous hotel, Chateau Laurier, crowns a sculptured landscape with a Rocky Mountain vista.

Motion Pictures? Both China and Canada present spectacular versions of Circle-Vision 360 films. Disney filmmakers gave new mobility to cameras that captured such grandeurs as China's Forbidden City, seldom-seen Tibet and Mongolia, and views of the ancient silk route once followed by Marco Polo. The full-circle "O Canada" production even takes viewers on a rip-roaring buckboard ride in the famous Calgary Stampede.

Elsewhere, France visitors will see a 200-degree screening of "impressions de France," a spectacular airborne travelogue set to classical music, and shown in a replica of a famous Paris theater.

Live entertainment? Each country presents artisans, artists and performers dressed in traditional costumes. In France, white-faced mimes amuse street crowds, and in England troubadors will serenade on ancient instruments while Cockney buskers entertain with sidewalk comedy. Visitors can see a strolling mariachi band in Mexico or a puppet show in Italy.

In Japan, folk dancers will perform while a candyman vendor snips toffee into shapes of herons and a flower arranger creates works of art. In China, an animated silken dragon weaves with the flow of dancers underneath, while a calligrapher inscribes a souvenir scroll with your name written in Chinese. In Germany, an oompah band, a yodeling master woodcarver and the sounds of glockenspiels and alpenhorns enliven a festival spirit.

The World Showcase is designed to entertain and inform visitors as well as provide a two-way cultural exchange for nationals working in the foreign pavilions. Each pavilion will be staffed with young men and women from that country who are participating in a program called World Showcase Fellowship, directed by Walt Disney World. During a year's stay in Walt Disney World, each young person will take part in a work-study curriculum designed to broaden international outlooks and experiences.

Additional national entertainers and employees of Walt Disney World will enliven World Showcase activities. Festivals, ranging from a few days to an entire month, are planned throughout the year for the various countries. Once each day, a Festival of Nations parade will take place around the perimeter of the lagoon.

Nighttime, with brilliant lighting on international landmarks, and with the concentration of dining experiences, lake shows and fireworks displays, promises to be the most dramatic time for visiting World Showcase attractions.

An amphitheater in front of the American Adventure is the site of a nightly pageant in which dancers and musicians from all other countries participate in a finale to the day's adventures in Epcot Center.

Each World Showcase attraction is based on concepts chosen for their contributions to a country's social, cultural and architectural heritages. Following is a summary description of the patterns involved in each country's design:

THE AMERICAN ADVENTURE

From the late 1700's to around 1830, America's public architecture was designed from a mixture of styles, including English Georgian--developed during the reign of King George III--which captured the spirit of the American Revolution. The American Adventure combines Georgian-style classic buildings in what is intended as a people's mansion and includes examples from Williamsburg, Independence Hall in Philadelphia, the Old State House in Boston, and Thomas Jefferson's home, Monticello.

CANADA

The Canada pavilion includes examples of buildings and scenes found throughout the nation. The romantic 19th century French Chateau-style hotel is a prominent feature in many cities, usually convenient to a railroad station. A waterfront area is designed to reflect the look of the Eastern Seaboard, while Victoria's Butchart Gardens were the pattern of a West Coast look.

Near the hotel a rugged stone building, modeled after a famous landmark near Niagara Falls, is reflective of Canada's British influence. An Indian village with totems signifies the culture of the Northwest, while Canada's wilderness is presented in a setting complete with steep mountains, waterfalls, and a tall northern forest.

UNITED KINGDOM

Time, materials and styles were compressed into a single combination of city, town and rural atmosphere for the United Kingdom. Included is a pub in a building reflecting a cluster of periods and different facades. Viewers traveling an informal street will find a 1500's style thatched-roof cottage, a four-story timber and plaster building, a formal square with a Hyde Park bandstand, a pre-Georgian plaster building and a formal Palladian exterior of dressed stone. A formal city square with classic formal facade copies a look found in London and Edinburgh. On other streets are found a Regency multi-porched row building, a town gate and clock tower representative of York, a 1400's brick-style house and a plaster and stone great hall. A promenade shows an exterior facade similar to Hampton Court.

FRANCE

The pavilion reflects the ambience of France between 1870 and 1910, a period known as La Belle Epoque, or the beautiful time.

This was an energetic period of art and literature, grand exhibitions, inventions, science, and when a spectrum of styles formed the character of Paris boulevards and architecture. Within the pavilion are a bookshop, reflective of art nouveau; a perfume and designer accessories shop, styled after the chateau look of an older Paris; a pre-show facade copied from a classic portico, and a post-show interior modeled after Les Halles, the busy garden market of Paris. Elsewhere are a sidewalk cafe and restaurant that is a scaled-down version of a 19th century building with rolling mansard roofs and elegant ironwork. Also, a provincial street reflects the village atmosphere of France, complementing the formal tree-lined streets of Paris. The one-tenth replica of the Eiffel Tower was constructed using Gustaf Eiffel's original blueprints.

ITALY

Architectural elements of Venice stand at the pavilion's entrance, including the Doges' Palace, with elegant decoration, and a scaled-down version of the campanile (bell tower) of St. Mark's Square. Complementing these buildings are venetian bridges, gondolas, colorful barber poles and the sculpture of the Lion of St. Mark atop a column. Promenade paving is patterned after St. Mark's. Other buildings are composites of architecture found throughout Italy. Alfredo's Restaurant is reminiscent of the Florentine style; the stairway and portico adjoining the Doges' Palace is typical of Verona, and the town hall overlooking the promenade is reflective of northern Italy.

The garden wall enclosing the piazza is typical of Rome and Florence. Sculptures include a heroic version of Bernini's Neptune fountain, based on the original in Florence and the Fountain of Trevi.

GERMANY

Building styles represent different periods and locales, but rely heavily on Germany's romantic, fairy-tale architecture. The atmosphere of a Biergarten is derived from the 16th century town of Rothenburg. The platz (plaza) includes a special place for a dynamic sculpture of St. George and the Dragon. The facade of an art and book shop was inspired by the Kaufhaus, a 16th Century merchants hall in Freiburg in the Black Forest; statues on the building recall the rule of the Hapsburg Emperors. The tourism facade was copied from a 400-year-old town hall in Romerburg Square at Frankfurt. The high wall serving as a backdrop for the pavilion was inspired by the Eltz Castle on the Mosel River and Stahleck Castle on the Rhine.

CHINA

The gateway of the pavilion is based on the beautifully styled main gate at the summer palace in Beijing (Peking), which also provided the inspiration for the half-size Temple of Heaven, the most visually prominent feature. The Temple of Heaven, through which guests must pass into a Circle-Vision 360 attraction, symbolizes the Chinese universe. A public marketplace, designed to encourage socializing, includes facades borrowed from an elegant home, a school house, a city gate and shop fronts reflecting European overtones.

The Art Gallery features a "Lotus Blossom" gate and a formal saddle-ridge roof line. Gardens and reflecting ponds in the pavilion simulate those found in Suzhou (Soochow) and symbolize the order and discipline of nature.

MEXICO

Fronting the World Showcase Lagoon is a quaint colonial-style building, reflective of architecture in central and southern Mexico. A Mayan pyramid dominating the entranceway expresses the country's proud pre-Columbian heritage. Inside the pavilion is a museum gallery displaying ancient artifacts, including a replica of an Aztec calendar. Beyond the museum, visitors enter a formal portico, modeled after a mayor's mansion, and then a typical colonial plaza, where a market day and a festive atmosphere prevail. Beyond the plaza, visitors begin a boatripe journey past a smoking volcano for a close-up look at Mexico's colorful heritage and attractions.

WORLD SHOWCASE PARTICIPANTS

CANADA

Associated Biscuits of Canada, Ltd. (bakery products)

Labatt Brewing Company Limited (beer)

CHINA

China Pavilion Exhibition Corporation (food & merchandise)

FRANCE

Browne Vintners (Barton & Guestier Wines)

Les Chefs de France (Paul Bocuse, Roger Vergé, Gaston Lenôtre)
(French Restaurant)

Lanson Champagne (champagne)

Guy Laroche (perfumes & accessories)

GERMANY

H. Schmitt Söhne Inc. (wines)

H. Bahlsen (contract signed with Bahlsen of America)
(bakery products)

Brauerei Beck & Co. (beer)

Hutschenreuther (chinaware)

Goebel Art GmbH (porcelain)

ITALY

Alfredo's the Original of Rome (restaurant)

Browne Vintners (Brolio, Ricasoli & Bersano Wines)

I Santi (leather goods)

JAPAN

Mitsukoshi (U.S.A.), Inc. (department store/restaurant)

MEXICO

José Cuervo Tequila (tequila)

San Angel Inn (restaurant & cantina)

Cerveceria Moctezuma, S.A. (Dos Equis Beer)

UNITED KINGDOM

Bass Export Limited (beer & ale)

Pringle of Scotland (clothing)

Royal Dalton Tableware Limited (chinaware)

R. Twining & Company Limited (tea)

UNITED STATES

American Express

Coca-Cola

COMPLEX STAGING TECHNIQUES DRAMATIZE

AMERICAN HISTORY

LAKE BUENA VISTA, Fla.--In only 29 minutes, the American Adventure theatrical production at Epcot Center tells a great story of the nation's 350 years of history, but even more remarkable is how the story is told.

The cast of some three dozen characters who move and speak with such life-like realism is really a new generation of "Audio-Animatronics" figures created by the wizards at WED Enterprises, the Disney engineering and design firm. The performers include narrators Mark Twain, who carries a smoking cigar, and Benjamin Franklin, who even climbs a set of stairs to visit Thomas Jefferson.

Then there are elaborate sets that appear magically on a stage almost half the size of a football field. They're moved on electronic cue from beneath The American Adventure's 1,024-seat theater by a silent, 175-ton automated scene changer.

Added to this is a rear-projection screen 28 feet high and 155 feet long, the largest ever used, on which appropriate motion picture images are interwoven with action occurring on stage, creating in-depth dimensions.

WED "Imagineers" also drew on 50 years of Disney special effects knowhow to create more state-of-the-art magic in lighting, projection and sound, including digital sound recording and projection systems involving 319 speakers and 79 audio tracks.

The entire multimedia production, requiring the operational and monitoring control of more than two dozen computers, represents some of the most technically demanding staging techniques ever attempted. In fact, Disney engineers exhausted five years and six different show concepts before the method of presentation and demands of the story came together.

Said WED's Randy Bright, director of scripts and show development, "Staging for a show of this magnitude and complexity was one of the greatest challenges faced in all of Epcot Center."

But, adds Bright, "We never rejected a show concept just because someone said it was technically impossible. Walt Disney's dream for a new kind of showplace to dramatize the ideas and innovations of science and industry and the cultures of the world is a unique project. It demands equally unusual systems of presentation."

The techniques mastered for The American Adventure production, sponsored by Coca-Cola and American Express, result in perhaps the best story of America ever told.

Time demands are met by quickly shifting scenes that begin with the arrival of the Mayflower and the Pilgrims, then focus on events big and little that have contributed to the growth of the American spirit from the time of the country's Declaration of Independence.

Besides Twain and Franklin, the "Audio-Animatronics" hosts of the show, some of America's greater and lesser-known heroes are depicted: George Washington appears on a grey horse as two disheartened soldiers discuss the bleak situation at Valley Forge; Frederick Douglass, the former slave who became an influential abolitionist, is seen bobbing down the Mississippi on a raft; and Matthew Brady, the Civil War photographer, records the pictures of two uniformed brothers, one Union and the other Confederate, made enemies by their conflicting beliefs.

Elsewhere are focuses on events such as the American Centennial Exposition in Philadelphia in 1876, the movement West, the era of inventions, great wars and depressing times.

An "Audio-Animatronics" Susan B. Anthony carries on the fight for women's suffrage; Chief Joseph of the Nez Perce tribe describes the plight of the Indians; Will Rogers, spinning his lasso, makes his wry political comments; and "Rosie the Riveter" spotlights the emerging role of women in the nation's World War II defense effort.

In a particularly nostalgic scene from the 1930's a country store emerges from the dark with a cast of frontporch characters lamenting the Depression. Rolling thunder and lightning punctuate the scene, which includes a radio playing FDR's encouraging words: "We have nothing to fear but fear itself . . ." An "Audio-Animatronics" banjo player sings a plaintive song of that era, "Brother, Can You Spare a Dime?"

After World War II, America's challenges are highlighted by a contemporary song, "Golden Dream," and an animated collage ending with the present. In a final scene, Twain and Franklin speak of future hopes from the torch of the Statute of Liberty.

Adding to the realism of the production is a moving panorama of reproductions of period artwork, photography and documentary film footage. Disney artists also paid strict attention to such details as regional accents, garments and colors.

And, for the first time, "Audio-Animatronics" characters are equipped with individual voices and speakers. Previously, narrations were played over a theater speaker system.

"We're asking these figures to convey more emotion than in the past," said Rick Rothschild, director of the show. "We're trying things with them we've never tried before."

Another critical requirement was the technology to move scenes quickly, without impeding the production's narrative flow.

A key to the complex staging is the huge scene changer, an automated steel framework as long as a railroad box car and twice as wide. On the changer are 10 different sets. On either side are other sets hidden below stage on elevators until their cue.

Moving onto the 130 feet by 80 feet stage, the sets are operated by computer. They glide into place horizontally, then rise into audience view using hydraulic telescoping supports.

Special flexible channels in the sets contain electronic wiring, electrical connections, air, hydraulic fluid and water lines which give lifelike movement to the figures and special effects such as rain.

Exacting design demands allowed minimum clearances for the moving portions of the transporter and sets -- only three inches between carrier and walls as it moves into a room beneath the audience.

In addition to sets on the transporter, the show includes seven other lifts which bring sets from either side and above into view.

Behind the 13 three-dimensional settings and performers, the rear-projection motion picture screen adds dimension to the settings and a transition between decade-spanning scenes. Special lighting equipment was used to light the sets without "wiping out" the projected backgrounds.

Computers control the entire production. Once the button is pushed, "Audio-Animatronics" actors move and speak, music (by the Philadelphia Orchestra) plays, lights brighten and dim, curtains open, sets rise, and motion picture projectors roll.

The motion picture unit, incidentally, requires the longest single loop of film ever employed for a Disney show. Some 3,330 feet long, it snakes up and down, through rollers in seven specially made storage cabinets.



NEWS

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EPCOT CENTER FILMS ADVANCE STATE OF THE ART

LAKE BUENA VISTA, Fla.--Virtually a new technology in filmmaking was pioneered by Disney crews in the production of more than four hours of all-new motion pictures debuting with the opening of Epcot Center.

Produced at costs exceeding \$30 million, motion pictures for 31 different shows in Future World and World Showcase theme areas were filmed in 11 different formats, including 35mm, 65mm, 70mm, 3-D, Circle-Vision 360, computer animation and laser graphics.

Presentation of the motion pictures on some of the largest and most unique screens ever created involves some 150 different projection systems and an all-digital sound system that can play up to 13 different tracks simultaneously.

Viewers will see innovations in multiple projections, mixed formats, new special effects technology and some of the largest, sharpest images ever filmed of dizzying rides and natural wonders.

Randy Bright, director of show development for Epcot Center, said no show concepts were rejected by Disney artists and technicians simply because someone said they were technically impossible to achieve.

-More-

"Walt Disney's dream for a new kind of showplace to dramatize the ideas and innovations of science and industry and the cultures of the world is a unique project," Bright said. "It demands equally unusual systems of presentations."

To create the new productions, 16 Disney film crews trekked around the world for two years and shot more than 1.5 million feet of film in 30 countries. Locations ranged from the harsh cold of the North Sea, where cameras froze, to remote regions of China, including areas not visited by Western photographers in 50 years. The footage was edited to achieve about 73,000 feet of motion picture presentations for Epcot Center.

"I've never seen anything that comes close to the magnitude of this project," said Don Henderson, a 30-year veteran of Hollywood studios who is Epcot Center film production manager. "This project has got to represent the ultimate in filmmaking. We are literally stretching the medium as far as it will go."

An example is the 14-minute, 3-D motion picture "Magic Journeys," a Journey Into Imagination presentation produced by Murray Lerner, whose credits include the 1982 Oscar-winning documentary feature "From Mao to Mozart."

Not satisfied with existing 3-D equipment, Lerner and Disney technicians designed a new 65mm 3-D camera that shoots up to 75 frames per second, rather than the standard 24, and creates the largest and sharpest 3-D images ever achieved.

"Magic Journeys" viewers, using polarized glasses, will find themselves immersed in such close-up action as a swim in tropical waters and the derring-do of somersaulting trapeze artists.

Elsewhere, in Universe of Energy, guests can view a variety of motion pictures that demanded quantum advances in filmmaking. One film, for example is the largest animated film ever produced. It illustrates formation of the earth's fossil fuels on a screen measuring almost 5,000 square feet.

In another energy film, viewers will experience the sensation of plunging down Niagara Falls projected on a wrap-around screen 210 feet long. A third energy film will employ simultaneous front and rear projections, including laser graphics.

In an energy mosaic on basic energy sources, even the screen itself will become animated. This show, created for Disney by Czech artist Emil Radok, uses a projection surface of 100 triangular panels, each independently controlled by micro-processors to rotate in synchronization with five motion picture projectors, creating a rippling, changing set of patterns.

In World of Motion, visitors will experience realistic simulations of travel in Disney-developed "speedrooms" or motion picture tunnels.

Films shot in 70mm from speeding trains, racing bobsleds and space vehicles are projected on tunnel walls as guests ride through. With the addition of special effects and enveloping sound, viewers suddenly find themselves roaring through an Everglades swamp, soaring above clouds, or even plummeting into what appears to be a black hole in space.

One of the most difficult and demanding productions is The American Adventure, which combines a 155-foot long rear projection of film with a stage production starring life-like "Audio-Animatronics" characters. The 29-minute story of American history, involving computer-controlled projection techniques, required multiplane cinematography to create the illusion of depth, plus other special effects cameras.

For the World Showcase pavilions of China and Canada, Disney experts also created all-new Circle-Vision 360 motion pictures, using helicopters, autos and even a racing team of horses to provide mobility for a circular cluster of nine 35mm cameras.

In "Wonders of China," visitors will get a 20-minute 360-degree look at many of the remote and seldom-seen areas of the People's Republic of China, including a ride through the Forbidden City, a flight up the Yangtze River, and views of Tibet, Mongolia and the northern reaches of the Great Wall.

In "O Canada," a 17-minute production, the Circle-Vision 360 equipment even takes viewers on a wild and wooly buckboard race at the Calgary Stampede rodeo.

Scaled-down versions of Circle-Vision 360, featuring a five-pod camera cluster, created the wide, semicircular motion pictures of earth's energy sources for Universe of Energy and the 200-degree "Impressions de France," an 18-minute travelogue set to classical music, with airborne views of the Riviera, Paris, and the French Alps.

Like all Epcot Center films, "Impressions de France" was recorded with digital sound equipment especially developed by Disney experts.

And, for viewers anticipating an inspirational film message, the 20-minute documentary motion picture "Symbiosis" will be a highlight of The Land.

Filmed in more than 20 countries, "Symbiosis" explores the relationship between humans and their environment since primitive times and concludes that it is still possible to maintain a delicate balance between technological progress and environmental integrity.

Written, produced and directed by Paul Gerber, "Symbiosis" was created in large screen format with 70mm Panavision cameras, last used for the feature film "Lawrence of Arabia" in the mid-1960's. "Symbiosis," showing in the 550-seat Harvest Theater, is equipped with 13 digital soundtracks which play individual sounds ranging from the chirp of a cricket to the roar of a buzz saw.

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TRAVELING THEATER SEATS MOVE WITH AID OF SUNSHINE

LAKE BUENA VISTA, Fla.--A unique traveling theater is one of many technical innovations in the Universe of Energy, where Epcot Center visitors will literally ride on sunshine power.

Actually, there are two theaters in the Future World pavilion and they are separated by a primeval diorama that re-enacts the story of earth's fossil fuel origins. But audiences can visit every show without leaving their seats.

After viewing an animated film on fossil fuels, guests will find their theater seats dividing into six 97-passenger traveling theater cars, each 18 feet wide and 29 feet long, which glide silently into a shadowy primeval setting with strange forests and prehistoric creatures.

Following the ride-through adventure, the vehicles roll onto giant turntables and automatically reassemble in a compact setting for a theater film presentation on viable energy sources for the future.

The 6 1/2-ton theater cars are steered by neither driver nor track during their journey. Instead, a master computer that controls guidance and acceleration functions signals on-board computers through a thin wire embedded in the floor.

Positioning of the vehicles within theaters is accomplished by another technical innovation--theater floors that operate as computer-controlled turntables rotating on a cushion of air.

The turntable floors--one 92 feet in diameter--operate while supporting maximum loads of 170,000 pounds, about the weight of 50 mid-size automobiles. Yet, the lift for rotation is achieved with only 40 pounds of air pressure per square inch (psi).

"The key is volume," said Dave Harbaugh, an engineer for WED Enterprises, the Disney "Imagineering" subsidiary. The innertubes beneath the turntables are supplied with 459 cubic feet of air per minute.

Lifted less than an inch, the turntables are rotated by two friction wheel drive units that press on the side of the units.

"It's smooth beyond belief," said Harbaugh. "You close your eyes and you don't even know you're turning."

A network of 80,000 photovoltaic cells on the two-acre roof of Universe of Energy is a partial source of energy for the theater cars. Converting sunlight directly into electricity without a heat engine, noise or pollution, the solar system generates up to 70,000 watts of direct current electricity.

Power for the vehicles comes from on-board batteries that are recharged through inductive coupling, requiring no contact, when the cars are in the pavilion's two theaters. Recharging current passes through a magnetic field to the vehicles.

In addition to 94 passenger seats, each theater car contains special spaces for three wheelchairs.

Walt Disney World
EPCOT CENTER **NEWS**

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EPCOT CENTER INFORMATION AT YOUR FINGERTIPS

LAKE BUENA VISTA, Fla.--Epcot Center guests will see and touch the future on a prototype audio, video and text information system jointly developed by Walt Disney Productions and the Bell System.

The WorldKey Information Service is a network of video display terminals with touch-sensitive screens that provide instant information on Epcot Center attractions, restaurants, shops, entertainment, and guest services. When a guest approaches one of the 29 WorldKey terminals located throughout Epcot Center, the screen displays a choice of language, "English or Spanish," and with the touch of a finger, a friendly character host appears to guide guests through the system.

"We created a new character, Bit, especially for the service," says Pat Scanlon, director of research and future planning at WED Enterprises. "Bit is computer terminology for a character of information, and is always present at the bottom of the screen, ready to help guests if they need assistance."

In addition to Bit a WorldKey attendant may be contacted via a network of two-way television cameras and hands-free Speaker-phones (tm). The WorldKey attendant can answer any questions about the system, make hotel or restaurant reservations, and help find lost children - or parents.

On a filmed tour of Epcot Center, the exteriors of all attractions are shown, and it's possible to see the shows, restaurants, and shops inside simply by touching the attraction image. In the map tour, guests are given a choice of visiting Future World or World Showcase. A map of the selected area appears, and by touching any attraction on the map, the location of the show, restaurant, shopping and guest service areas within are highlighted. Furthermore, touching one of the highlighted areas will give a complete description of what may be found inside.

Another feature of WorldKey is an alphabetic index. A shop selling china may be found by using this video dictionary. Touch the letter "C," and the screen lists alphabetized topics such as "China." Touch the word, and the screen lists shops in Epcot Center where china is sold.

A separate program organizes information on attractions, dining, entertainment, shopping and guest services by their locations in Future World or World Showcase. Want to find out about "Impressions de France"? Touch "Attractions" under the topic listings, then "France," and a brief description of the show will appear.

Designed and engineered by the Bell System, the WorldKey Information Service integrates the technologies of microelectronics, computer software, laser videodisc, television, touch-sensitive screens, and fiber optics transmission systems. Disney and the Bell System designed the system's features and functions. Disney produced the WorldKey videodisc, and developed the computer script which controls it.

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The Bell System will monitor the performance of the WorldKey Information Service as part of its continuing research in interactive information retrieval system.

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WALT DISNEY WORLD IN BRIEF

STATISTICS:

Located at Lake Buena Vista, Fla., 20 miles southwest of Orlando off Interstate 4 and U.S. 192 on a 28,000-acre site planned as the Experimental Prototype Community of Tomorrow (EPCOT). Opened Oct. 1, 1971. All areas open daily year-round.

Attendance 13 million annually; 140 million Magic Kingdom guests since 1971. Record day, 92,969, Dec. 31, 1980. Employment, 17,000-20,000. Investment, \$1.775 billion, through first year of Epcot Center operations.

EPCOT CENTER:

A permanent international showplace covering 260 acres. Opened Oct. 1, 1982.

FUTURE WORLD-Theme areas focusing on discovery and scientific achievements. Major attractions: Spaceship Earth (Bell System), Universe of Energy (Exxon), World of Motion (General Motors), Journey into Imagination (Kodak), The Land (Kraft), and Computer Central (Sperry).

WORLD SHOWCASE-Nine nations surrounding the World Showcase Lagoon: Canada, the United Kingdom, France, Japan, American Adventure, Italy, Germany, China, and Mexico.

VACATION KINGDOM:

2,500 acres, lakes, resort hotels, entertainment areas.

MAGIC KINGDOM-45 major adventures in six lands: Adventureland, Liberty Square, Frontierland, Main Street, U.S.A., Fantasyland and Tomorrowland.

THEME RESORTS-Contemporary Resort Hotel, 1050 rooms; Polynesian Village, 644 rooms; Golf Resort, 151 rooms; Fort Wilderness Campground, 825 sites and Group Camping Area.

VACATION
KINGDOM:

FACILITIES-Major convention rooms, restaurants, shops, nightclubs, entertainment lounges, two championship golf courses, tennis courts, horseback riding, pools and lakes for swimming, boating, water skiing, River Country water thrills, Discovery Island tropical gardens and wildlife sanctuary.

LAKE BUENA VISTA
RESORT COMMUNITY:

WALT DISNEY WORLD VILLAGE-30 shops, 10 restaurants, Empress Lilly Riverboat, Village Jazz Lounge.
BUENA VISTA CLUB-Tennis, dining and golf.
VILLAS AND TREEHOUSE-400 family units.
HOTEL PLAZA-1,656 rooms in Howard Johnson's Motorlodge, TraveLodge Tower, Dutch Resort Hotel, Royal Plaza.
VILLAGE OFFICE PLAZA-100,000 square feet of office space fronting on I-4.
CONFERENCE CENTER-for groups of 1-250 persons.

TRANSPORTATION:

Monorail trains, ferryboats, launches and shuttle service between all areas.

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EPCOT CENTER

Transportation:

By car: Coming from Orlando, take the new interchange on Interstate 4, halfway between the exits for Route 535 and U.S. 192. Follow Epcot Center Drive through the Epcot Center Auto Plaza, where daily parking is \$1.

By Walt Disney World monorail and bus: From the Contemporary Resort or Polynesian Village, take the local hotel monorail to the Transportation and Ticket Center (TTC), and board the TTC-Epcot Center monorail. From the Magic Kingdom, take the express monorail to the TTC, and board the TTC-Epcot Center monorail. From the Golf Resort, take the green-flagged bus to the TTC, then change to the TTC-Epcot Center monorail. From Fort Wilderness, take the blue-flagged bus to the TTC, then change to the TTC-Epcot Center monorail. From the WDW Villas, take the green-and-gold flagged bus to Walt Disney World Shopping Village, then change to the red-flagged bus for Epcot Center. From WDW Village Hotel Plaza, take the red-and-silver flagged bus to Epcot Center.

Hours:

During the opening month of October, Future World's hours are 9 a.m. to 9 p.m., except for Oct. 22 and 23, when the hours are 9 a.m. to 6 p.m. World Showcase is open from 10 a.m. to 10 p.m., except on Oct. 22 and 23, when the hours are 10 a.m. to 6 p.m. and 10 a.m. to 3 p.m. respectively. This is a temporary schedule, and the hours are subject to change.

Prices for Magic Kingdom and Epcot Center Ticket Media:

	<u>ADULT</u>	<u>JUNIOR</u>	<u>CHILD</u>
1-Day Admission *	\$ 15.00	\$14.00	\$12.00
3-Day World Pass	35.00	33.00	28.00
4-Day World Pass	45.00	42.00	36.00
6-Day World Pass	60.00	56.00	48.00
Season Pass	100.00	93.00	80.00

*Magic Kingdom or Epcot Center

Special prices for Walt Disney World Village guests, participants, and Magic Kingdom Club guests are available upon request.

Epcot Center Show and Story Content

ADVISORS & CONSULTANTS

(The following people have assisted with content, perspective and authenticity)

SPACESHIP EARTH

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Ray Bradbury Science Fiction Writer

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Historical Specialists

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(Renaissance Books)

Primeval Specialists

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(Paleontologist, Primeval
Diorama)

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(Renaissance Musical
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University of Arizona
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UNIVERSE OF ENERGY

Advisory Board Members

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Electric Power Research
Institute

David Evans &
William Sharp

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Technology Corporation
New Jersey
(Urban & Desert Habitats)

Joseph Gavin President, Grumman
Corporation

Derek Gregory Building Service Research &
Information Association
Bracknell, Berkshire, England
(Former) Vice President,
Engineering Research
Institute of Gas Technology

Epcot Center

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Reid Bryson Director, Institute of Environmental Studies University of Wisconsin

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Talcott Edminster (Deceased) Administrator, Agricultural Research Service U.S. Department of Agriculture

John Gerber Professor, Agriculture University of Florida

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Frank Wadsworth Research Forester, Institute of Tropical Forestry University of Puerto Rico (Rain Forest Biome)

Steve Wachter Curator, Botanical Program Minnesota Zoological Garden (Prairie Biome)

Lloyd Hulbert Director, Division of Biology Kansas State University, KONZA Prairie Reserve (Prairie Biome)

Historical Specialists

Stephan Fox (Voice consultant for John Muir)

John Gable Teddy Roosevelt Association, NY (Provided information on TR's voice for Yosemite scene)

Janice Gwudz Mystic Seaport Museum, Connecticut (Photo research for "Immigration" sequence)

Paul Machlis & Bob Hirst Editors/Bancroft Library Mark Twain Papers Collection University of CA, Berkeley (Hirst provided consultation for Twain's voice)

Barbara Norfleet Carpenter Center for Visual Arts Harvard (Investigated immigrant photos for immigrant sequence)

Paul Sifton Library of Congress (Investigated rough draft of Declaration of Independence)

Richard T. Speer Ships Histories Branch Department of the Navy (Provided submarine research for WW II scene)

Jack Stephens Alexander Graham Bell Museum Nova Scotia (Voice consultant for Bell)

Richard Tyler Philadelphia Historical Commission (Investigated Philadelphia taverns for Revolutionary War paintings)

Bill Wagner Teledyne-Ryan Public Relations Consultant (Provided information on Lindbergh for Lindbergh scene)

P. B. Weiner State Historical Society of Missouri (Provided Missouri railroad research for Civil War scene)

THE AMERICAN ADVENTURE

American History Story Consultant

Alan Yarnell Professor, History, UCLA

COMMUNICORE

Design Consultants

Curt Brubaker Designer—Los Angeles, CA (Electronic Forum)

Carlos Ramirez & Albert Woods Ramirez & Woods Design Co., New York City (Energy Exchange)

Herb Rosenthal Herb Rosenthal & Assoc. Los Angeles, CA (Epcot Computer Central Exhibits) (FutureCom)

Paul Seiz Designer—Tenafly, New Jersey (Electronic Forum)

FILM PRODUCERS

Canada

Bill Bosche ("O Canada!" Circle-Vision 360)

China

Jeff Blyth ("Wonders of China" Circle-Vision 360)

Greg MacGillivray ("Wonders of China")

France

Rick Harper ("Impressions de France")

Horizons

Eddie Garrick (Omnisphere)

Edmund Penney (Omnisphere)

Journey Into Imagination

Murray Lerner (3-D Film "Magic Journeys")

The Land

Paul Gerber ("Symbiosis")

Edmund Penney (Barn Theater)

FILM PRODUCERS

Universe of Energy

Emil Radok & Georges Krivicky (Energy Pre-Show)

Jack Boyd (Theater-1 Energy Show)

Norman Gerard (Main Energy Show)

Jerry Sims (Main Energy Show)

David Moore (Energy Finale)

World of Motion

Edmund Penney (Speed Rooms)

David Moore (Finale Speed Room)

ANIMATION PRODUCERS

Brice Mack

David Michener

Jack Boyd

Epcot Center

FUTURE PAVILIONS & EXHIBITS

THE LIVING SEAS

Consultants

Gary Comp	Senior Research Biologist Mote Marine Laboratories	Donald Fredrickson, M.D.	Scholar-in-Residence National Academy of Sciences
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Ann Long	Scientist, Kerckhoff Marine Laboratory California Institute of Technology	Philip Lee, M.D.	Director Health Policy Center, Department of Social Medicine University of California Medical Center, San Francisco
Kenneth Norris	Director, Environmental Field Program University of California Santa Cruz	J. Alexander McMahon	President American Hospital Association
Wheeler North	Director, Kerckhoff Marine Laboratory California Institute of Technology	Mitchell Spellman, M.D.	Dean for Medical Services Harvard University Medical School
John Powell	Principal Engineer Scripps Institution of Oceanography		
John Ryther	Professor, University of Florida (Formerly) Senior Scientist Woods Hole Oceanographic Institution		
Donald Walsh	President International Maritime, Inc.		

EQUATORIAL AFRICA

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<i>Film Producer</i>	
Jack Couffer	("Heartbeat of Africa")

COMMUNICORE (Tron Arcade)

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Nicholas Negroponte	Professor, Computer Graphics, MIT (Videodisc technology)

LIFE/HEALTH

Show Content Consultant

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Charles Edwards, M.D.	President Scripps Clinic & Research Foundation