THE LIVING SEAS

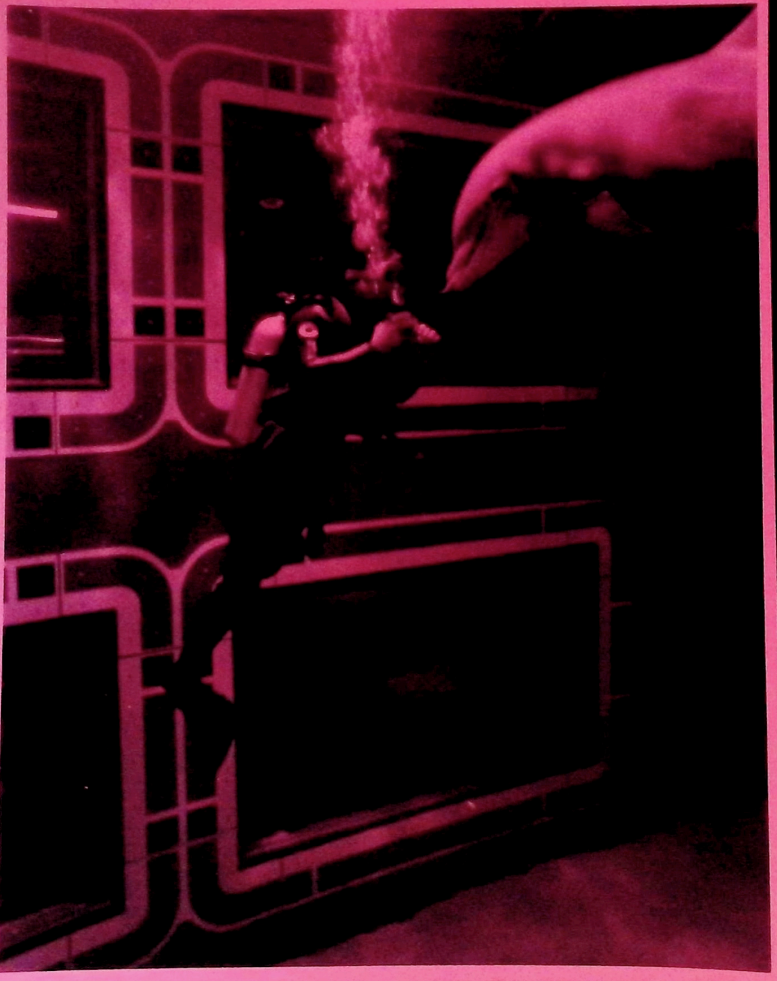
presented by

UNITED TECHNOLOGIES

Walt Disney World

EPCOT Center

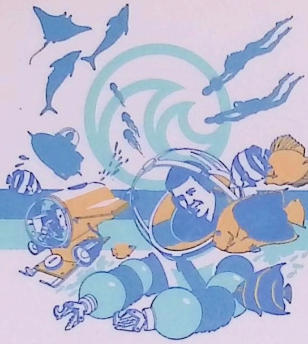
PRESS INFORMATION



SUPPERTIME -- Diver in The Living Seas, newest Walt Disney World Epcot Center attraction, feeds one of the dolphin making their home in the world's sixth "ocean." The divers are working with the dolphin to establish communication between man and mammal. The Living Seas is presented by United Technologies Corporation.

A REEF-SIDE VIEW of The Living Seas greets diners in the Coral Reef Restaurant at Epcot Center. A terraced table arrangement provides diners throughout the 264-seat seafood specialty restaurant with a stunning, ever-changing show of sea creatures and divers within the 5 1/2-million gallon marine environment.

NEWS FROM:
THE LIVING SEAS
Walt Disney World Co.
P.O. Box 40
Lake Buena Vista, FL 32830



presented by
United Technologies Corporation

"DISNEY'S LIVING SEAS" ON NBC JAN. 24 TAKES VIEWERS ON "OCEAN" VOYAGE

LAKE BUENA VISTA, Fla. -- Host John Ritter will take television viewers on a tour of The Living Seas, the "world's six-largest ocean," in an hour-long NBC-TV special Jan. 24 (8 p.m., EST) from the new Epcot Center attraction.

The special, which also looks at the past and present states of ocean exploration, features an appearance by former Mercury astronaut and Sealab participant Scott Carpenter, who explains how scientists are using robotic vehicles to explore ocean depths which are beyond human endurance limits.

Dr. Robert Ballard talks with Ritter from the deck of one of his ocean-research vessels. Ballard led the expedition that discovered the sunken "Titanic" ocean liner. He shares never-before-shown film of that wreckage with the television audience. Ritter also visits with Living Seas marine-mammal researchers about their efforts to establish communication links with dolphin. The program also features a segment which highlights man's previous misconceptions about the seas, as seen through motion pictures.

Guest appearances by Duran Duran's Simon Le Bon and singer Laura Branigan round out the special, which was produced Smith-Hemion Productions.

-30-

1362P

NEWS FROM:
THE LIVING SEAS
Walt Disney World Co.
P.O. Box 40
Lake Buena Vista, FL 32830

presented by
United Technologies Corporation

EPCOT CENTER'S NEW LIVING SEAS HEADLINES

MAJOR ADDITIONS AT WALT DISNEY WORLD FOR 1986

LAKE BUENA VISTA, Fla. -- Opening of the long-awaited Living Seas adventure at Epcot Center's Future World in January is the first of many new attractions for 1986 at the Walt Disney World vacation resort in Florida.

The Living Seas features a giant six-million-gallon "ocean" filled with colorful sea life of every kind.

Visitors will take exciting underwater journeys past a real-life Caribbean coral reef to Seabase Alpha, a high-tech 21st-century oceanic research base. State-of-the-art technologies for undersea exploration and demonstrations by human-dolphin research teams are among its features.

Presented by United Technologies Corporation, The Living Seas is the largest facility ever dedicated to man's relationship with the oceans.

Tabbed the world's sixth largest "ocean," the self-contained salt-water environment is 203-feet in diameter and 27-feet deep. Covered to provide light and temperature control, it is so large that scuba divers swimming away from the central observation module four fathoms deep will disappear in the distance of the "ocean."

--more--

Its initial population of more than 4,000 sea creatures -- sharks and barracuda, crokers and snappers, angel fish, diamond rays and parrot fish -- will grow larger in a few weeks.

The Living Seas' 185,000-square-foot building, includes the main "ocean," Seabase Alpha, two theaters, research laboratories and unique systems for transporting guests down and through the undersea world.

The new addition also features a spectacular underwater-view dining experience in the 264-seat Coral Reef Restaurant where guests sit beside crystal-clear windows -- eight feet high and eight inches thick -- with 50 feet of viewing area looking directly into the colorful reef teeming with tropical fish, sharks, dolphin and other sea life.

In presenting Future World's seventh major attraction, United Technologies demonstrates a commitment to research and development totaling more than $1 billion a year. The company ranks seventh among U.S. corporations in R&D.

Guests begin their Living Seas journey in one of two 185-seat theaters with a spectacular seven-minute motion picture probing the ocean as the plasma of life on earth. Visitors then descend in hydrolators and board a never-ending train of seacabs traveling through an ocean-floor tunnel past crystal-clear acrylic windows for close-up views of the busy tropical reef.

Arriving at Seabase Alpha, visitors enter a 21st-century research center where scientists demonstrate new technologies in ocean surveillance and management using state-of-the-art diving and communications systems. Hosts and communicate directly with researchers within the ocean and can manipulate remote-control underwater robots equipped with television "eyes."

Interactive computers provide entertaining ways to discover a wealth of ocean information at Seabase Challenge video monitors. Other water-filled ecosystems display a Pacific coral lagoon and kelp forest, bioluminesent creatures of the ocean depths and an acrylic tank showing water stratification in the "Anatomy of the Sea."

Undersea exploration devices and human divers, newsreel videos on current ocean events, mariculture, buried treasure and the mineral resources of the sea are displayed in dramatic fashion.

Also on display are rare artifacts from the humorous, dramatic and tragic attempts by man to probe the undersea world in ages past.

Other new attractions at Epcot Center for 1986 include the new Nine Dragons Restaurant and Lotus Blossom Cafe in the China Showcase, one of 10 charming international villages. They feature popular Chinese cuisine in an elegant and authentic setting overlooking World Showcase Lagoon. For the first time, Epcot Center entertainment now features appearances by famous Walt Disney characters in a whole new wardrobe of costumes themed to each of the nations and to Future World.

Another major Epcot Center attraction premieres later this year in Future World's "Magic Eye Theater." Singer Michael Jackson stars in a spectacular three-dimensional, musical motion picture, "Captain EO." The theater is part of "Journey into Imagination," presented by the Eastman Kodak Company.

With executive producer George Lucas, director Francis Ford Coppola and Disney Imagineers, plus world-renowned choreographers and designers, the new film combines some of Hollywood's most famous talents with a unique three-dimensional film system available at only two places in the world: Walt Disney World and Disneyland.

The musical-narrative space fantasy will feature songs written, produced and sung by Jackson and a cast which includes Angelica Huston and Dick Shawn. It opens in mid March at the Disney parks in Florida and California.

The innovative three-dimensional film process originally, engineered by Disney's WED Enterprises in cooperation with Kodak scientists, is being enhanced by WED and LucasFilm for the new presentation.

The Walt Disney World Magic Kingdom in Florida also is moving ahead this year with a new show depicting future life on a distant planet presented by RCA as a part of the Space Mountain adventure in Tomorrowland. Also in the Magic Kingdom, "Mickey's Street Party" continues its popular daily parade with Mickey Mouse and all the favorite Disney characters on Main Street U.S.A. Nightly fireworks and Tinker Bell's flight over Cinderella Castle are added during peak seasons.

Walt Disney World is a complete vacation destination with nine resort hotels, more than 600 vacation villas, a newly expanded Fort Wilderness campground plus championship golf courses, tennis, boating, beaches, lakes and pools, and complete meeting, shopping, dining and convention facilities. The Magic Kingdom and Epcot Center are open every day throughout the year. Colorful vacation guide books, detailed information and operating hours may be obtained from Guest Information, P.O. Box 40, Lake Buena Vista, FL, 32830. Phone (305) 824-4321.

--30--

0350P17/ihe/cr

NEWS FROM
Walt Disney World®

MAGIC KINGDOM
EPCOT CENTER
VACATION RESORTS
WALT DISNEY WORLD VILLAGE

PRESS AND PUBLICITY P.O. BOX 40 LAKE BUENA VISTA, FL 32830 PH (305) 824-4531 • FOR GENERAL INFORMATION PH (305) 824-4321

UNDERSEA JOURNEYS BRING VISITORS
CLOSE UP VIEWS OF TEEMING CORAL REEF

LAKE BUENA VISTA, Fla. -- Undersea journeys across the "ocean" floor will give Walt Disney World visitors a close-up view of a Caribbean coral reef teeming with colorful creatures four fathoms deep in "The Living Seas."

This newest Epcot Center pavilion, presented by United Technologies Corporation, will open January 15 in Future World. It will be the largest facility ever dedicated to exploring man's relationship with the ocean.

The Living Seas' main "ocean," 200 feet in diameter and 27 feet deep, will duplicate the chemistry and life-support systems of a Caribbean reef. Its nearly six million gallons of seawater will contain more than 2,000 crokers, snappers, dolphin, angel fish, sharks, barracudas and diamond rays -- all the creatures that inhabit a coral reef community.

The "world's sixth largest ocean" is only one of the pavilion's many features. At Seabase Alpha, visitors to the Living Seas will see underwater motion pictures and video shows where they can communicate directly with scientists and researchers working underwater.

There also will be hands-on activities, an opportunity to touch and see fish and mammals and displays of ocean technologies past, present and future.

-more-

Traveling in gondolas through an undersea tunnel, guest "explorers" will see the ocean world through large acrylic windows. At the end of their gondola ride they will enter the Seabase Alpha Visitors' Center where demonstrations, exhibits and video presentations will encourage guests to learn more about latest developments in ocean technology and exploration.

The Living Seas coral reef is contained in a giant aquarium within a 170,000-square foot structure under a single roof where climate, chemistry and lighting are completely controlled. It also includes a restaurant, theater, experimental laboratories and specialized salt-water environments.

An upper-level observation "bubble" in the center of the main ocean will give visitors a panoramic view of the Caribbean reef. It is reached by walking through a second underwater tunnel where guests can enjoy a longer look at the creatures of the reef through clear acrylic picture windows.

As visitors enter the pavilion, they will pass a rockwork structure which suggests a natural coastline with waves cascading into tidepools. A curved wall with a 125-foot-long mural will lead guests into historical displays of period photographs and artifacts which begin the story of man's quest to unlock the secrets of the deep.

Included are Leonardo da Vinci's sketches of underwater breathing devices and submersibles, John Lethbridge's diving barrel, Frederic de Drieberg's 1809 breathing device and a diving suit from Walt Disney's film, "Twenty Thousand Leagues Under the Sea." An 11-foot-long model of the "Nautilus" submarine used for key sequences of the movie also will be on display.

Guests will then enter a 185-seat theater for a film focusing on the vital link between the ocean and man's survival.

-more-

Following the film, theater doors will open and visitors will enter three "Hydrolators," elevator-like capsules which "descend" to the ocean floor. Each carries about 20 guests into Seabase Alpha, a prototype communications center for research where future scientists can live and work in an undersea environment.

The adventure continues as visitors board omni-mover gondolas for a three-minute voyage through a picture-window tunnel beneath the ocean. They will see the canyons and crevices of the vast reef, schools of rare tropical fish, giant sea bass, dolphin, sharks and barracudas.

Divers from Seabase Alpha will be seen demonstrating the newest diving gear and underwater monitoring equipment as they carry out training experiments with dolphin. Robotic submarines and tethered submersibles containing underwater TV cameras will relay views from the divers' perspective to guests in Seabase Alpha. Underwater wireless radios will enable divers to talk with visitors during their experiments.

One of the most useful new diving devices, a "JIM" suit, will be seen in use by divers while guests have an opportunity to stand in a cut-away model of the "JIM" suit to get a diver's perspective.

Also in the visitor center, a cold-water kelp tank and Pacific Coast tidepool will showcase plants, fish and invertebrates of eco-systems outside tropical waters.

--more--

Large-screen video shows will dramatize man's attempts to harness the ocean's resources for medical, mineral and energy uses. Other mini-shows explore manned and robotic undersea systems as examples of technological advances. One film, titled "An Animated Atlas of the World," shows recent studies of earth systems and their application to the seas in understanding weather forecasting and geological exploration.

The terraced Coral Reef Restaurant will provide guests with an underwater panoramic view of the living reef. Crystal-like viewing windows, eight feet high and more than eight inches thick, are among the largest acrylic castings ever made.

In presenting the pavilion, United Technologies demonstrates its commitment to research and development. The company ranks seventh among U.S. corporations in R & D spending -- more than $1-billion in 1984.

Show designer Tim Delaney points out that "unlike existing aquariums or sea parks, The Living Seas will focus on better understanding of the oceans as an incredible resource for man. This focus," he says, "will help make the pavilion an exciting adventure for people of all ages."

-30-

CR/ihe/0350P

NEWS FROM:
THE LIVING SEAS
Walt Disney World Co.
P.O. Box 40
Lake Buena Vista, FL 32830

presented by
United Technologies Corporation

EPCOT CENTER'S CORAL REEF RESTAURANT:

A FRESH APPROACH FOR SEAFOOD LOVERS

LAKE BUENA VISTA, Fla. -- A shimmering, ever-changing ocean floor show of colorful and exotic sea life glides past huge, picture-window viewports in the new Coral Reef Restaurant at Walt Disney World Epcot Center.

This dynamic visual theme sets the stage for Florida's 1985 Seafood Chef of the Year, Keith Keogh.

"The Coral Reef is a seafood specialty restaurant in the truest sense," says Keogh, Epcot Center's Executive Chef. "The varieties of fish we offer will vary according to availability. The constants are freshness and high quality!"

The 264-seat restaurant is part of The Living Seas adventure presented by United Technologies Corporation. The menu features more than a dozen items -- from Dover sole and Maine lobster to scallops, shark, swordfish and salmon trout.

-more-

But the menu is merely an outline, Keogh says. "It isn't the last word. We will have particular items available only when the catch meets our standards. And we'll have the flexibility of offering new and different fish. We're going to be pulling from everywhere in the world."

The predictable suppliers -- Boston for lobster, swordfish and shellfish; the Pacific Coast for high-grade tuna; Florida for red snapper and Atlantic grouper -- are joined on Keogh's list by phone contacts for New Zealand mussels, Australian warm-water lobster, and a host of other seafood treasures.

Savoring his words, Keogh says, "Our whole menu is specialty items -- the best you can get. A lot of people are going to leave our restaurant saying, 'I never had anything like that!' They might think it's the butter I put on it; in fact, it's going to be the quality of the fish itself that makes the dinner memorable."

Presentations at the Coral Reef will utilize butters, light sauces and spices as "background flavors that frame the flavor of the fish": walnut-orange butter to compliment shark steak and filet of tuna; basil-flavored butter for bay scallops; lime-flavored butter for salmon trout; a spicy Cajun Remoulade sauce to enhance swordfish steak.

"There is virtually unlimited creativity, whether you're the chef or the diner, because 'fish' is such a broad item," Keogh says. "There are so many variations of color, taste and texture."

Keogh describes the culinary style of Coral Reef Restaurant as "new American cuisine -- lighter, healthier, better-tasting variations on traditional regional dishes." Most are broiled, grilled, poached or sauteed.

The popularity of fish has grown as people have become more conscious of nutritional values, Keogh says, adding, "If I can convert you to be a health-food nut without you knowing it -- you just like what you've eaten -- then I've done my job as a chef."

Keogh did his job as a chef last February at the American Culinary Federation's National Headquarters. First he cooked up citrus baked snapper as the blue-ribbon dish in a competition to determine Florida's Seafood Chef of the Year. Then, representing the Sunshine State in the "Seafood Superbowl" against Virginia, his citrus seafood medley was judged champion by a panel comprised of International Culinary Olympics team members.

-30-

1380P:lhe:dh

NEWS FROM:
THE LIVING SEAS
Walt Disney World Co.
P.O. Box 40
Lake Buena Vista, FL 32830

presented by
United Technologies Corporation

VISIT TO LIVING SEAS' SEABASE ALPHA

IMMERSES GUESTS IN NEW APPRECIATION OF EARTH'S OCEANS

LAKE BUENA VISTA, Fla. -- For centuries, whenever people wanted to exercise their fascination with the seas by taking an imaginary voyage to its depths, they did so through the words and imagination of others.

Today, Walt Disney World visitors experience in The Living Seas what previously has only been seen on the printed page or movie screens when they "travel to the bottom of the ocean" in the newest Epcot Center attraction.

They begin their journey inside the massive, 185,000-square-foot Living Seas pavilion when they board 20-passenger Hydrolators at ground-level rock-grotto area. During their 30-second ride to the ocean floor, they look through windows at the chiseled stone walls which form the Hydrolator shafts and see the water rush by as electronic indicators on the Hydrolator walls measure the progress of their descent. The simulator in which they're "traveling" is buoyed by the water in the shaft, and it gently sways as it displaces that water on its quick trip to the ocean floor.

-more-

Soon the voices these guests hear over the communications-system speakers during trip announce they've arrived at their destination: Seabase Alpha. They exit the Hydrolator and are inside an ocean research and communication station on the floor of the ocean.

And their adventure has only begun.

They leave the Hydrolator area and board a continuously moving series of Seacabs which, in two-passenger cars, takes them on a stunning visual tour of the ocean floor. Seacabs wind around a 400-foot-long tunnel beneath the sea, and through 8-inch-thick acrylic windows the guests look out on the ocean's inhabitants: Sharks, rays, barracuda and countless multi-colored tropical fish which swim in and around the coral reef which was re-created inside The Living Seas, the world's sixth-largest ocean.

For the three minutes they're on the Seacab, they look out on a real underseas world previously seen in such close-up detail only by divers and ocean explorers. At the end of their ride they arrive in the Seabase Concourse, the visitors' center of Seabase Alpha. Its size is impressive, but the experiences it holds in store for the newly arrived visitors are even more so. This place is a preview of what the ocean-research station of the future will look like, and its many and varied science stations will build upon the excitement the visitors felt during their just-finished, up-close look at life on the ocean floor.

The Seabase Concourse is a free-flow area in which guests spend as much time as they like at each of its locations. But as they step off the Seacab and walk toward the Concourse, its centerpiece is sure to catch their attention. Reaching 22 1/2 feet from floor to ceiling in the middle of the room is the Scuba Tube, a large clear-acrylic cylinder filled with 4,000 gallons of bubbling water and lighted like a giant underseas beacon. This tube is the access route used by Seabase Alpha's scientists and divers to reach the waters which surround the underwater research station.

Two or three times every hour, scuba-equipped men and women use this route to enter or leave the outside waters. The clear surface of the tube allows visitors to watch as a diver enters it and its hatch is secured. During the 60 seconds it takes to fill the tube, they see the diver swim up through the top of the research center and into the ocean. Divers wear wireless radio equipment, and visitors listen to diver and technician as they prepare for the ascent. The process is reversed each time a diver returns to Seabase Concourse. With gravity as a partner, it takes only 42 seconds to drain the 4,000 gallons.

Many more exciting experiences await the visitor, ones which will explain the past and present of mankind's relationship with the oceans which surround him and afford one-of-a-kind looks into what the relationship holds for the future.

The seven modules that make up the rest of Seabase Concourse do this in innovative ways which actively engage the visitor into discovering more about the mysteries and treasures of the oceans. Four of these modules are on the Seabase Concourse's main floor, and three more are on its second level (accessible by stairs, escalators or elevators for the handicapped).

Module 1A -- Ocean Ecosystems: Facing the diver's tube, this module is the farthest to the left. It focuses on the life systems of the seas. The module centerpiece is a 24-foot-high by 8-foot-diameter tubular aquarium which houses a Pacific Coast Kelp Forest and examples of the sea life which inhabit these areas. The kelp forests provide the same environment in cold waters that coral reefs do in warmer Atlantic waters, providing places for small fish to breed, feed and find protection, while the plants themselves oxygenate the waters.

Three free-standing tanks flank the left side of the Kelp Forest. One shows how fish utilize biological camouflage for protection. Another shows examples of symbiotic relationships of the seas, how two unlike creatures rely on each other for existence. The third, two tanks in one display, demonstrates luminesence -- the light-producing elements some deep-water fish possess that provide illumination in the otherwise-totally dark waters.

Sea Watch, a rear-screen video display built into the wall of the module, presents newsreel-type updates on current ocean-related news. Several interactive electronic Seabase Challenge game stations are located here, as they are in several other modules. Visitors choose from several ocean-related categories and then test their knowledge of the subjects by choosing from multiple-choice answers. After making their selections, the games show video clips which explain the correct answer.

The Pacific Coral Lagoon fills the back wall of this module. Small fish, sea anemone, starfish, hermit crabs and other inhabitants of these shallow-water areas are on display in the 3,000-gallon environment, and a Seabase Alpha researcher in front of the tank points out the different species and gives visitors close-up views of them.

Four other tanks comprise the rest of the module's exhibits, and all tie in to the Web of Life visual display they surround. A 6,000-gallon predator area houses shark, grouper, barracuda and moray eel. The three cylindrical tanks show living examples of sea life described in the display: Phytoplankton, Zooplankton and a school of Filter-Feeding fish.

Module 2A -- Ocean Resources: This module lies directly above 1A, and its centerpiece is the continuation of the Kelp Forest display from below.

Other features include a visual wall display, Current Events, which highlights ocean exploration and another Sea Watch display of newsreel-type reports on ocean-related topics. The back-wall area of this module is devoted to the Mariculture Hatchery, a research station in which examples of sea-life and plant mariculture (harvestable resources grown in controlled environments) are displayed in four separate four-foot-square by one-foot-deep aquariums (each of which, when filled, weighs 1,000 pounds). Seabase Alpha researchers are stationed at the display to conduct and monitor experiments and to explain the program to visitors.

Nature's Buried Treasure, a wall-mounted visual display, explains underseas resources and methods of tapping them. It is supported by three free-standing cylindrical display tanks, the first of which houses modules of manganese, mineral-filled rocks found on the ocean bottom. The second cylinder is partially filled with salt, while the third is partially filled with trace elements -- each cylinder representing the ingredients which would be recovered if they were extracted from the large Kelp Forest display in the center of the module.

Module 1B -- Marine Mammals: This module is on the far-right side of the Seabase Concourse, directly opposite 1A. A research center for dolphin and sea lion studies, its main attraction is 15-foot-deep pool, the front of which is a large, acrylic convex viewing port. Visitors see researchers working with the mammals in various experiments, including those involving communications. A smaller concave, walk-in window allows visitors to "walk into" the tank, while a convex swim-in window allows the mammals "entry" into the visitor area. Television monitors show visitors what is happening inside the tank whenever a diver with a TV camera or a TV-equipped mini-sub is in the environment. At other times these monitors show visitors what is happening above the water level (in Module 2B).

Module 2B -- Marine Mammals: This module gives visitors an above-water perspective into this marine-mammal environment. Visitors see researchers working on the experiments -- some utilizing the computer station located near the pool -- and watch underwater action on television monitors.

Module 1C -- Earth Systems: This module is located between the Ocean Ecosystems module and the Scuba Tube on the Seabase Concourse floor. It explains the relationship between the planet's seas and its land masses, using displays, films and hands-on exhibits.

The centerpiece of the module is a 6 1/2-minute animated film, "An Animated Atlas of the World," in which Atlas, the picture's host, explains in understandable and entertaining language 4.5-billion years of Earth history, the formation of the continents and seas and tells how that formation process is still going on. Polarized animation screens flank either side of the screen on which the film is shown. One shows the patterns of ocean currents, while the other shows the patterns of continental drift and the shifting of earth plates.

Oceanography from Space, a photo display, shows ways satellite photos aid ocean exploration: Infrared photography reveals information hidden in conventional photo techniques; another type reveals water-current patterns; another reveals ocean-floor topography as reflected on the water's surface.

Across the room several displays also supplement the information contained in the "Atlas" film. Clues to an Age-Old Mystery, a Core Sample display, shows the different types of mineral deposits which exist at different levels beneath the ocean floor. A free-standing acrylic cube in front of this does the same sort of "cutaway" effect, showing the differences in the water columns at different depths. What on Earth is a large relief map of the world built into the module's wall. Panels in front of the map explain different geographic phenomena such as faults and underwater volcanoes. As visitors push buttons on these panels, corresponding lights are activated on the relief map at spots where these phenomena exist.

-more-

Module 1D -- Undersea Exploration: Jason, an Audio-Animatronics version of a deep-sea submersible robot, is host of this module's main attraction, a multi-media explanation of ocean exploration. Jason's show is supported by two television screens, and as he talks about the pressure and temperature extremes which limit humans' attempts to go under the seas, the videos illustrate his points -- as they also do when he explains how machines such as the Argo/Jason system (developed by Dr. Robert Ballard of the Woods Hole Oceanographic Institute) can endure limits humans can't.

Jason also shows how atmospheric-dive systems such as the JIM Suit have extended human efforts to reach the ocean depths. A JIM Suit is a diving suit worn by one person which allows descent to 1,500 feet. A Deep Rover (one hangs from the ceiling of the Seabase Concourse) is a one-person submarine vehicle which can dive to 3,500 feet; Alvin is a two-person submersible which was used recently in a U.S. Navy-sponsored exploration of deep-ocean vents.

A model of the JIM Suit and two JIM Suit cutaways are explained by an animated film, "Suited for the Sea," in which two fish (a father and son) explain obstacles to deep-water diving and the ways humans have met them. Visitors step inside the cutaways, activate a game by pushing a button and have a minute to complete four tasks using the JIM Suit's manipulator hands -- which are counter-balanced to simulate underwater weightlessness.

Observation Module: On the Seabase Concourse's second level, visitors view sea life in the Coral Reef community from inside the Observation Module, which is connected to the Concourse by a window-lined walk-through tunnel. The module is similarly window-lined, circular in design and all points in it offer spectacular views of the coral reef and of the many fish, rays, sharks and other sea life which live in The Living Seas' ocean.

Here, too, they watch scientists who dive in the tank, as well as robotic and manned submersibles, a diving bell, an archeological "dig" and a translucent work station for the base's scientific divers.

Departing Seabase Alpha is another exciting experience. The Living Seas is presented by United Technologies Corporation, and its exit display is as visually unique as it is stunning. UTC photographers traveled to points all over the world to capture 35mm-film images which dramatically demonstrate the company's many different products. The film was optically split by computer before it was transferred to videotape.

This process allowed UTC to break the larger picture into separate segments which are displayed in playback on 35 different video screens. The screens are arranged in five rows of seven across, covering an eight-foot-by-12-foot area, forming a one-screen effect. The resulting 2 1/2-minute film is an appropriately impressive parting image of The Living Seas.

Adjacent to the UTC presentation are the three ascent Hydrolators which take visitors back to the surface. Visitors leave, but take with them the impressions left by a truly unforgettable journey to the "bottom of the seas."

-30-

1362P/8-15:tab:lhe

THE LIVING SEAS FACT SHEET

LOCATION: Walt Disney World; Epcot Center's Future World

PARTICIPANT: United Technologies Corporation

THEME:
A better understanding of mankind's reliance on the seas, our past relationship with them and the role they will play in our future.

BUILDING FACTS:
Constructed over 22 months; contains 185,000 square feet of space under roof; 12,000 cubic yards of concrete and 900 tons of reinforcing steel used in construction of ocean environment with walls up to three feet thick; 8,000 cubic yards of concrete and 850 tons of structural steel in rest of building; "ocean" is 203 feet in diameter (Spaceship Earth is 160 feet in diameter) and 27 feet deep; liquid nitrogen used to cool poured concrete (first for a project this size); one inch of Living Seas' depth equals 17,000 gallons; six inches would fill the normal Olympic-sized swimming pool; support system processes water faster than the City of Orlando does -- 35,000 gallons a minute, with the entire tank content recycled every two hours and 40 minutes.

QUEUE AREA:
A 350-person lobby area in which guests wind through a wave-like path past models, pictures and artifacts which illustrate the history of ocean diving; oldest example is an illustration of a glass diving barrel used by Alexander the Great (332 B.C.); other models include Sir Edmund Halley's first diving bell (1697), the Klingert Diving Dress (1797), a 16th-century diving helmet designed by Flavius Vegetus Renatus, an 11-foot model of the "Nautilus" which was used in the filming of "20,000 Leagues under the Sea" and the diving suit used in that film.

PRE-SHOW:
Two minutes, 20 seconds; a film-and-slide United Technologies presentation showing how the tools of technology have aided previous research and how they will similarly assist in exploration and utilization of the seas.

MOTION-PICTURE INTRODUCTION:
"The Seas"; Seven minutes; written, produced and directed by Paul Gerber.

HYDROLATORS:
Twenty people per car; 30-second descent past rock walls and water, seen through water ports; ascent with rippling "waters" visible through overhead porthole simulating an approach to a sunlit ocean surface.

OMNIMOVER:
Three minute Seacab journey along ocean-floor corridor circling the observation module with view out into coral reef.

-more-

SEABASE ALPHA VISITOR CENTER

WAVE TANK:
Generates waves on a cycle; demonstrates how waves form and how wave actions affect the ocean floor, cause beach erosion, other wave dynamics; 24-feet long.

SCUBA TUBE:
Demonstrations 2-3 times an hour; host talks with diver; hosts can also talk with divers at in-tank module observation area and at Marine Mammal areas, and hosts can relay guest questions; acrylic tube is five feet in diameter and 22 1/2 feet high; takes 60 seconds to fill and 42 seconds to empty -- with 4,000 gallons of water.

MODULES: Employ graphics, video displays, electronic games (Seabase Challenge stations); free-standing living displays, hands-on exhibits;

1A -- Ocean Ecosystems: Seabase Challenge stations; Pacific Coast Kelp Forest -- 24 feet of water, 8 feet in diameter -- provides space for protection, breeding, feeding and oxygenation of water -- natural to the Pacific coast -- cold-water shelter for fin fish and sea urchins -- display of interreliance of each on other for survival; free-standing tanks -- 1) camouflage -- 2) symbiotic relationships -- 3) bioluminesence (two tanks; no natural lighting; concave windows for viewing; Sea Watch -- newsreel-type features; Pacific Coral Lagoon -- 3,000 gallons; displays of Pacific coral formations (brighter-colored coral in colder waters) -- biologist in front of display -- starfish, sea anemone, small fish, hermit crabs; Predator Tank -- grouper, barracuda, bonnet head sharks, green moray eels; Web of Life (visual display) -- three supporting tanks -- 1) Phytoplankton -- 2) Zooplankton -- 3) Filter feeders/ small schooling fish.

1B -- Marine Mammals: Research center; dolphin research area with large view acrylic window and smaller concave and convex acrylic windows; sea lions; TV monitors show action from above module and will show picture from inside the tank when diver with camera or mini-sub with camera is in water; pool is 15 feet deep; demonstrations of mammal/man interaction.

1C -- Earth Systems: Oceanography from Space (visual display) -- shows infrared photography, current patterns, ocean topography as reflected from bottom; 6.5 minute animated video presentation -- "An Animated Atlas of the World"; Atlas is host who explains 4.5 billion years of Earth sciences; collages on either side of screen demonstrate currents of the earth and continental drift and breakup (megacontinent theory); Clues to an Age-Old Mystery, a core-sample display -- shows different types of surfaces beneath the ocean; Anatomy of the Sea -- large acrylic cube -- "a piece of the ocean," showing the surface to the bottom of the ocean; What on Earth -- relief map -- guests push buttons for such phenomena as underseas volcanoes, faults, Ring of Fire, etc. and areas on map light up accordingly.

1D -- Undersea Exploration: "Jason," Audio-Animatronic robot, explains science of exploring underseas -- supported by two monitors and film (4 minutes long) -- actual Jason (created by Bob Ballard) part of the Argo/Jason system, of which the Argo is the larger underwater vehicle which is tethered to above ship and surveys the bottom with camera and sonar while Jason is the smaller which is kept inside the Argo and can be sent farther to the bottom for closer exploration (neither is manned); Deep Rover is a one-person submersible while Alvin is a multiple-person submersible;

-more-

JIM Suit -- one model on display and two cutaways for use in game in which guests attempt experiments with counterbalanced (for weightless effect) manipulator hands (turn arrow, push lever, turn wheel and shift gear) within a one-minute length of time -- guest activates when button inside suit is pushed --green light each time task accomplished -- if not finished in appointed time, the unit shuts down; JIM Suit (working unit can be seen in "ocean") allows person to go to 1,500 feet without decompression -- supported by animated presentation, "Suited for the Sea," and visual display, Human Physiology.

2A -- Ocean Resources: Upper half of Pacific Coast Kelp Forest; Current Events (visual display) of exploration of the oceans; Sea Watch (newsreel-type videos); Mariculture Hatchery -- four-foot square by one-foot deep tanks (each weighs 1,000 pounds) -- comprised of ocean fish and plant forms; Nature's Buried Treasure (visual display) of underseas resources that can be tapped -- supported by three tubes -- 1) Manganese modules -- 2) Salt (amount if extracted from the kelp forest tube) -- 3) Trace Elements (also amount if extracted from same).

2B -- Marine Mammals: Above view of tank, same visual as 1B, except above water line; view of researchers working with mammals; TV monitors; computer room used for communication experiments.

SECOND-LEVEL OBSERVATION DECK:
Deep Rover full-scale model of a one-person submersible which goes to depths of 3,500 feet;

POST-SHOW AREA:
Presentation by UTC; total of 35 TV screens (7 across and 5 high) covering a 12-foot by 8-foot area; 2.5 minutes long video presentation; shot on 35mm film and images were optically split before transferring to videotape. Film was shot around the world to show UTC products in use. Playback utilizes split images into one-screen effect.

CORAL REEF RESTAURANT:
A 264-seat fresh-seafood restaurant in which diners are seated at tables which look into coral reef through 8-foot-high acrylic windows. Seating is terraced for optimum viewing. Menu designed by Keith Keogh, Epcot Center executive chef.

CORAL:
Created from man-made materials to simulate conformation of a live reef.

WINDOWS:
Sixty-one acrylic windows look out on "ocean"; 8-foot-by-24-foot acrylic panels in observation module weigh 9,000 pounds each; largest single casting of acrylic ever attempted; acrylic also used in kelp forest, predator and marine-mammal pools and Scuba Tube; panels range in thickness from six to eight inches; use of acrylic insures crystal-clear optical characteristics.

ATTRACTION CAPACITY:
Estimated 2,200 person per hour.

1362P/5-7:ahf:tab

PRESS RELEASES AVAILABLE ON THE LIVING SEAS

1. Epcot Center's New Living Seas Headlines Major Additions at Walt Disney World For 1986 (in press kit)

2. Visit to Living Seas' Seabase Alpha Immerses Guests in New Appreciation of Earth's Oceans (complete overview of attraction, in press kit)

3. The Living Seas Fact Sheet (in press kit)

4. Epcot Center's Coral Reef Restaurant: A Fresh Approach for Seafood Lovers (in press kit)

5. "Disney's Living Seas" on NBC Jan. 24 Takes Viewers on "Ocean" Voyage (will be in press kit)

6. Epcot Center/The Living Seas "Coral Reef Restaurant" Menu (available in press center)

7. Molders of New Living Seas Pavilion Step Back and Look at Results of Their Labors (in press center, story about Kym Murphy, show designer Tim Delaney, project engineer and architect Allen Moyer and show set designer Brock Thoman)

8. High Technology Helps Probe Ocean Depths (in press center, story about high tech tools being used by divers in The Living Seas)

9. Kym Murphy Turns Life-Long Fascination with the Oceans Into Living Seas Reality (in press center, biography of Living Seas corporate manager of marine technology)

10. Lineup of Undersea-Exploration History Greets Guests to The Living Seas Pavilion (in press center, description of items on display in lobby)

11. Feeding Residents of The Living Seas a Big and Varied Job (in press center)

12. Guests to Epcot Center's Living Seas Will Watch As Researchers Probe Ocean's Secrets (in press center, research with dolphin, ultrasound diagnostic tests for fish, green sea turtles project)

13. Creating a Six-Million-Gallon "Ocean" No Drop-In-The-Bucket Job (in press center, process of making salt water)

14. From Minnesota Lakes to The Living Seas (press center, biography on marine mammal specialist Gretchen Jacobs)

15. Cocoa Beach Man Finds His Ocean Near Orlando (press center, biography on animal-behavior specialist Conrad Litz)

16. Columbus, Ohio Woman Finds Her "Sea Legs" At The Movies (press center, biography on animal-behavior specialist Dede Rector)

17. Mixing Work and Pleasure Stirs Up Career for Southern California Native (press center, bio on animal-behavior specialist Elaine Leslie)

18. Executive Chef Keith Keogh (press center, bio on Coral Reef Restaurant chef)

19. Aquarium Curator Gets Into His Job Deeply (press center, bio on Bruce Miller, Seas Curator, collector of creatures for aquarium)

20. Marine Mammal Curator Says Dolphin Lead Great Life at Living Seas (press center, bio on Tom Hopkins, supervises food preparation and animal care)

21. The Seas Film Captures Spirit of New Epcot Center Attraction (press center, producer/director Paul Gerber talks about making of Seas pre-show film)

22. Mixed-Up Mutt Thinks He's A Dolphin (press center, story of dog adopted by marine mammal team who swims with dolphin)

23. Living Seas Staff Fact Sheet (press center, thumbnail bios on Seas staff including hometown)

24. Living Seas Advisors and Consultants (press center, list of, also available are biographical sketches of each)

1424P:JD

FACT SHEET

THE LIVING SEAS ADVISORY BOARD

The Living Seas Advisory Board, which includes some of the world's best-known oceanographic experts, has played an important role guiding the design and focus of the pavilion. Working with WED Enterprises, the Disney design organization, and technological leaders from United Technologies, the independent board has contributed knowledge and opinion based on studies at oceanographic institutes and related businesses.

The board includes educators and communicators interested in the undersea world which covers three-fourths of the earth's surface. The Advisory Board will continue its involvement at least through the opening next January.

Serving on the board are:

Dr. Robert Ballard, senior scientist, Woods Hole Oceanographic Inst.;

Dr. Sylvia Earle, curator, California Academy of Sciences;

Gilbert Grosvenor, president, National Geographic Society;

Dr. Murray Newman, director, Vancouver Public Aquarium;

Prof. William Nierenberg, director, Scripps Institution of Oceanography;

Dr. David Potter, vice president of public affairs, General Motors;

Dr. John Ryther, Harbor Branch Institution, Ft. Pierce, Fla.;

Robert Wildman, deputy director, Office of Sea Grant - NOAA, U.S. Department of Commerce.

-30-

CR/lhd/0350P/5