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SPACE ACADEMY participants in 1990 will try this new Space Station Mobility Trainer. Using movable Velcro-bottomed hand grips and shoes, a person can walk in a 360-degree route to demonstrate the type of

training which Space Station astronauts may experience. Some height restrictions will apply. Extra mobility will be required for Space Station maintenance and experimentation.

What's new and exciting in 1990!

The new decade also brings many new things to talk about in 1990 SPACE CAMP and SPACE ACADEMY programs.

All five Space Shuttle mockups have been reevaluated over the winter months to see where enhancements can be made. Many improvements are already in place and others are being added.

"Each year we sit down and come up with ideas that will make all our programs a more rewarding experience," said Edward O. Buckbee, director of The Space and Rocket Center and SPACE CAMP. "We think this year's efforts will add increased excitement and educational value for our trainees."

One thing trainees will notice in all the shuttle mockups is a new "blast-off" sound system. It will help create the "shake and rattle" experience of a real shuttle launch.

SPACE CAMP

Trainees, ages 10-12, will have a new experience during water activities. Space Shuttle emergency exit procedures are being added to simulate methods presently in place for NASA shuttle missions.



Later in the year, an overhead EVA system, similar to the one used with Enterprise will be added to SPACE CAMP's Columbia for more realistic "spacewalks" during simulated missions.

ACADEMY Level I In SPACE ACADEMY Level I

Endeavour shuttle missions are being upgraded to two hours and visuals are being integrated with motion to add even more realism to the experience. "This should create a more challenging atmos-



phere for students," said Buckbee, "because it will also allow them to become more involved in the software programs that control our space shuttle missions."

ACADEMY Level II

SPACE ACADEMY Level II's mission control is being divided into two sections. The renovation will provide Enterprise in Level II and Atlantis in Level I with separate ground control areas.

Level II students will experience new 24-hour and two-hour space shuttle simulations in the now completely functional Enterprise. Enterprise renovations include an upgrading of the cockpit computer and electronics, visuals, mid-deck experiments and new floor materials in the cargo bay to enhance EVA's. Level II trainees will also be able to use six new experiment racks in the Space Station Freedom including a commander's station, aquaculture and phototropism or plant growth sections.

LDEF SEEDS

An extra dimension is being added this year because all three programs may take part in experiments with tomato seeds that flew for six years aboard the LDEF experiment satellite. It was recently returned to Earth by the Space Shuttle Columbia.

"Details are still being worked out on how we will conduct those experiments," said Buckbee, "but we hope to use them in microscopic study, and in tests with ordinary tomato seeds to compare weight, vitamin structure and survival and growth after being planted in outside and indoor environments.

"The tomato seed experiments will add even more significance and educational value to what we think is going to be a very rewarding first year of the decade for trainees in all Space Camp programs," he added.

AVIATION CHALLENGE

Another first will come in June when the initial class of 40 students arrive to take part in Aviation Challenge, a new SPACE ACADEMY program. The program, which runs through early fall, is patterned after training for high performance jet pilots. It will be attended by high school freshmen, sophomores and juniors.

Students will train at a facility constructed around a lake on The Space and Rocket Center grounds. Aviation Challenge is an answer to requests received at SPACE ACADEMY for programs that involve groundwork needed to pursue aviation careers.



Lisette Clemons shares a moment with several of the 30 students she helped bring to SPACE CAMP. She also paid lodging expenses for their parents to attend graduation.

Florida trainees get new center

Doors open in March to the new U.S. SPACE CAMP Training Center and U.S. Astronaut Hall of Fame near the Kennedy Space Center. The long-awaited facilities are Florida's newest tourist attractions.

The two operations are housed side by side and bring together "the first and the future" of space exploration. They are a joint project of the astronauts' Mercury Seven Foundation and U.S. SPACE CAMP Foundation.

The Hall of Fame showcases each of the seven Mercury astronauts using videotape of training and actual missions. It also includes personal memorabilia of the astronauts' lives and time in space and moments shared with their friends and families. The SPACE CAMP Training Center substantially increases the Florida program's capacity of 5,000 trainees per year and is about twice as large as the temporary SPACE CAMP facility which opened in 1988.

"To share and inspire, those are our aims behind the combined Astronaut Hall of Fame and Space Camp facility," said Alan Shepard, the first American in space and now president of the Mercury Seven Foundation. "If we can capture some of the excitement and share it with today's aspiring engineers, technicians and scientists, we have a future promise of life in space. These facilities are excellent tools for fostering science education and high standards of American technology."

Teacher uses \$25,000 for SPACE CAMP trainees

When Lisette Clemons won \$25,000 for being selected as one of Illinois' most outstanding teachers, she could have bought a new car, but she decided to spend money on her students.

The fourth-grade teacher from Belleville immediately notified her principal she would send youngsters to SPACE CAMP in Huntsville.

"It was an easy decision," said Clemons. "I attended a teachers Space Camp program for a week and it really made an impression." Clemons, accompanied by seven parents and 30 excited students, drove to Huntsville in a 10-car caravan. Scrawled on the side of several of the vehicles were the words "Space Camp or Bust."

The next six days were anything but a bust. The fifth-and-sixthgraders donned their new, lightblue flight suits, donated by Belleville business people, and settled in to daily SPACE CAMP activities. The seventh-andeighth-graders attended SPACE ACADEMY Level I.

"It was great," said Phil Meister, a 12-year-old seventh-grader. "It would be nice to come back next year."

Ten-year-old Jill Hettenhausen was just as enthusiastic. "My favorite part was the shuttle mission," she said. "I can't wait to get back home and tell my friends about it."

Meanwhile, the teacher who made it all possible said, "It's been a week that will change the kids' lives. The professional environment and the high standards they were exposed to at Space Camp can only help them grow and mature."

Clemons believes she and 30 students left SPACE CAMP with a wealth of knowledge much more valuable than a \$25,000 award.

More SPACE CAMP sessions scheduled for adults

Summer sessions of the U.S. Space Academy for adults will be held this year for the first time, expanding on the popular program previously held only in the fall.

Programs will be held each Friday through Sunday from May through October to make the program available to more adults, program officials said.

Space Center Director Edward O. Buckbee said the additional sessions have been slated to better accommodate schedules of working adults who prefer to participate during the traditional vacation period in the summer months.

The decision to expand the program came a week prior to a major article on the program which appeared in The New York Times. The adult program was the subject of a Travel section cover story in which a writer said, "A visit to Space Academy will take you completely out of your everyday world, and it will make three days seem many times longer, in the best of ways. As a fringe benefit, it will turn you into a citizen fit for the 21st century."

Enrollment is open for the adult program to persons over 19 years of age. Persons interested in receiving a booklet may phone (205) 837-3400. Persons wishing to reserve space for a session should phone 1-800-63 SPACE.

Register now to get the week you want

Register now for the SPACE CAMP session you want in 1990.

All the programs have space available for Spring, Summer and Fall sessions, but how long can that last?

Call the U.S. SPACE CAMP Reservation Center toll- free at 1-800-63 SPACE.

Adult Dates: May 11-13 May 18-20 May 25-27 June 1-3 June 8-10 June15-17 June 22-24 June 29-July 1 July 6-8 July 13-15 July 20-22 July 27-29 Aug. 3-5 Aug. 10-12 Aug. 17-19 Aug. 24-26 Aug. 31-Sept. 2 Sept. 7-9 Sept. 14-16 Sept. 21-23 Sept. 28-30 Oct. 5-7 Oct. 12-14 Oct. 19-21 Oct. 26-28



The Adult Program is designed to cover a broad range of subjects and activities, from learning about America's future in space to taking a turn at the controls of a Space Shuttle mockup in a simulated mission.



Delta Air Lines, known as the official airline for kids, is now the official airline of U.S. SPACE CAMP.

Delta will work with SPACE CAMP and Four Seasons Travel/Ask Mr. Foster travel agents to offer affordable travel to SPACE CAMP participants from each of the 166 cities served by the airline. Delta serves Huntsville with six flights daily.

As the official airline for kids, Delta offers a Fantastic Flyer program for children ages two through 12. The free program features activities exclusively for young passengers.

Reserve your place in outer space

Attention, students! Tell your teachers how easy it is to arrange an overnight visit for you and your classmates to The Space and Rocket Center.

The \$34.25 package includes overnight accomodations, two meals, a visit to the Space Center, a bus tour of NASA's Marshall Space Flight Center, a film showing in the Spacedome Theater, and a special Space Center T-shirt. On a weekend visit, your group can be housed in a wing of the SPACE CAMP Habitat called Earth Station Complex. Reservations for the Outer Space Tour should be made 30 days in advance. Your teacher can call the Teachers Line tollfree 1-800-447-6874. There must be a minimum of 16 people in your group to qualify for the Outer Space Tour package.

Enjoy the fun of SPACE CAMP at home



The NASA Space Shuttle can become a natural part of your work and play activities with a calendar, notepad, model kit and U.S. SPACE ACADEMY endorsed Space Shuttle Adventure game. The younger set may prefer a SPACE CAMP astronaut bear or photo insert. History buffs can explore the book, Space Patches. Most of the patches shown are available through the gift shop.

Star in your own team video about U.S. SPACE CAMP

Why pop a cassette in the VCR about a fictional character in some mythical adventure when you can watch a tape starring YOU and your team members?!?

It's as easy as filling out your application form to order a 40-minute videotape of activities during your week at SPACE CAMP or SPACE ACADEMY Level I.

The VHS tape is \$40 and shows you and your team with team members each being shown about three minutes. It will be mailed to you about six weeks following graduation.

Reserve your tape when making phone reservations or complete the appropriate section of the application form and send it back by mail.

You and your video team will be taped several times during training activities making the memories and experiences of SPACE CAMP an adventure you can share in your own home with family and friends.

Video orders are accepted until one week prior to the start of the session. Videotapes are not available for Aviation Challenge, ACADEMY Level II or adult trainees.

Look the part in a flightsuit

One of the favorite memories of many SPACE CAMP trainees is the first time they put on their official flightsuit. But you don't have to be at SPACE CAMP to get one!

Flightsuits are duplicated from the ones NASA astronauts wear and come complete with emblems, the American flag and a place to Velcro-attach your name under SPACE CAMP wings.

Flightsuits are available either by pre-payment or purchase after arrival for \$70. If you want to pay in advance, complete the appropriate space on your SPACE CAMP application form and add \$70 to the total figure for your check or credit card payment. What if you don't plan to be at SPACE CAMP in

the near future?

Use the payment section of your application form to order or, if you don't have an application, call toll free 1-800-533-7281 and place your order with the gift shop.





Official SPACE CAMP and SPACE ACADEMY long-sleeve shirts and the new Astronaut Training Team zip-up shirt are all 100 percent cotton. They are available through the Space Gear Gift Shop by calling toll-free 1-800-533-7281.



Trainees attending SPACE CAMP programs in 1990 will witness and sometimes be a part of The Space and Rocket Center's 20th anniversary celebration. One area of special interest will be the unveiling in March of a full-size Hubble Space Telescope exhibit, the first of its kind in the world. Trainees and visitors to the Space Center can look inside the telescope (above) and use a mirror system to see how reflective surfaces are created in telescopes.

U.S. SPACE CAMP®

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