

# SPACE CAMP NEWS

Win A Free  
Trip To  
Space  
Camp!  
(See  
Inside)



Official Newsletter of

Space Camp & Space Academy

Vol. 8 No. 1

Winter 1992

## What's New for You in 1992!

With 1992 being the official "International Year of Space," it's only appropriate that this year will be better than ever for U.S. SPACE CAMP®, SPACE ACADEMY® and AVIATION CHALLENGE® in Huntsville. And without a doubt, it will be with many new additions and improvements to all programs.

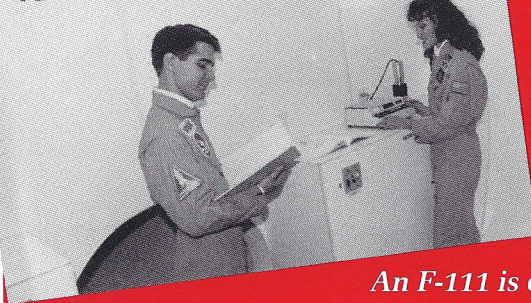
In SPACE ACADEMY Level II, trainees will work with the new Long Duration Exposure Facility (LDEF) Satellite mock-up. The "floating" LDEF will play an important role in training with new experiments during "space walks." The real LDEF Satellite was launched in 1984 on STS-41-C and remained in space for almost six years. It was used to study various materials exposure to different elements in space. Included were thermal systems, electronics and even tomato seeds!

Level II trainees will also receive a new, in-depth tour of the Marshall Space Flight Center. Included is a stop at the T.T.B. (Technology Test Bed). The T.T.B. is where NASA engineers test space shuttle main engines, and Level II trainees will tour the test stand with the engineers and have their questions answered. Also included on the Marshall tour will be the Spacelab Mission Control with a briefing by NASA employees, the Mission Operations room and the P.C.T.C. (Payload Crew Training Complex). If training permits, there will also be a tour of the training modules.

*Continued inside*



NASA SPACEHAB



*Level II trainees will also train inside the Enterprise Spacehab. An F-111 is on display at Aviation Challenge.*

## Win a Free Trip To U.S. SPACE CAMP

What an opportunity! You can help name America's next space transportation system and its family of launch vehicles and win an expense paid week, including airfare, to a U.S. SPACE CAMP program!

In the near future, this next generation of launch vehicles will become as familiar to you as the space shuttle. The purpose of the system is to place payloads into space in the 21st century when America needs them. In other words, the system will provide access to space on demand.

These vehicles can be assembled in various combinations to launch a variety of payloads, including astronauts, satellites and resupply packages to the Space Station Freedom.

The goals of the system are to improve launch capability, reduce cost and improve reliability, responsiveness and mission performance.

But, one thing is missing.....names for the three vehicles and a name for the overall system. That's where you come in. NASA, the U.S. Air Force and U.S. SPACE CAMP want you to provide the names. You probably already have some ideas, but you must act fast. Responses should be mailed back no later than February 29, 1992.

So, put on your thinking cap and turn to the fold-in page of this issue. You will find more details on the new system and an official entry form. Fill it out, put a stamp on it, and place it in the mail.

A government panel will determine the winners of the tuition paid week at U.S. SPACE CAMP, SPACE ACADEMY Level I, or AVIATION CHALLENGE. Airfare will be provided by Delta Air Lines®, the official airline of U.S. SPACE CAMP. Requested dates are subject to blackout periods. You do not have to be a graduate of a SPACE CAMP program to enter. Good luck!



## From the Director

Dear Parents,

America is on the verge of entering a new era in space exploration, one that will realize the enormous task of launching and maintaining a space station. We are excited about that prospect and what it means to the next generation of space explorers.

Young people who attend U.S. Space Camp programs are excited too because they will be the leaders in this and other space and scientific achievements in the years to come.

Unfortunately, there are political leaders who would prefer to see America's great space program scaled back, possibly even shut down. Perhaps they overlook the technological advancements achieved by space exploration, the contributions that will be gained by future endeavors and the roles that our young people plan to play in those achievements.

I urge you to talk with your youngster who has attended Space Camp or reflect on your own thoughts about the program you attended and put those thoughts about our need for future space exploration in writing to the political leaders who represent you in Washington. In this year of celebrating the 500th anniversary of the voyage of Christopher Columbus to a new world, it's time for us to let the decision makers know that the exploration of another new world is vital to America and its citizens.

Edward O. Buckbee, Director  
U.S. Space & Rocket Center  
U.S. SPACE CAMP



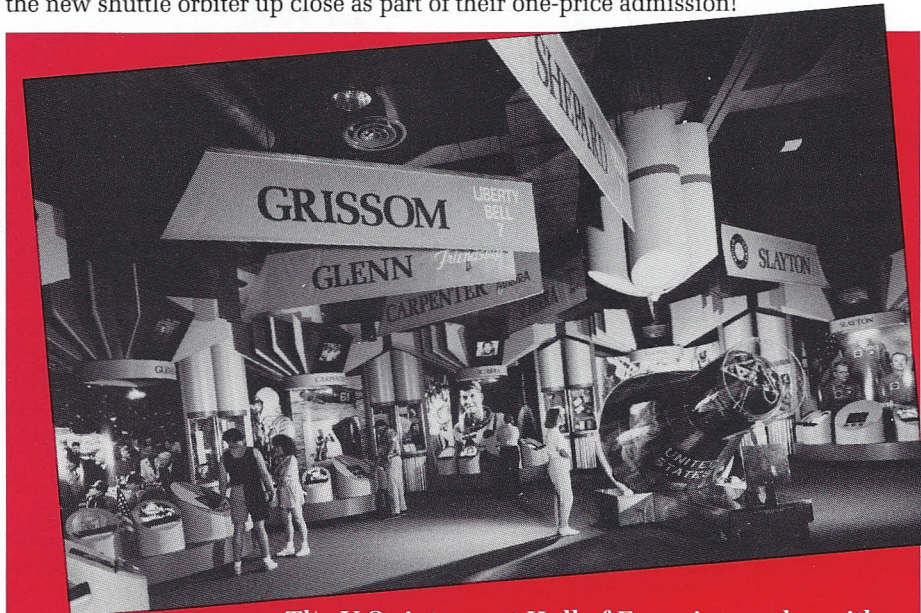
Edward O. Buckbee

## Space Camp Florida Bigger & Better for 1992

1992 will also be a banner year for SPACE CAMP Florida, with additional sessions available for the newer programs. There are more Parent/Child and SPACE ACADEMY for Educators dates scheduled this year.

And all trainees have the opportunity to work in the new, full-scale space shuttle orbiter scheduled to open in mid-spring at SPACE CAMP Florida and the U.S. Astronaut Hall of Fame. The orbiter will feature a multi-media theater in its cargo bay and will be used by trainees for space shuttle orientation.

Visitors touring the Hall of Fame and SPACE CAMP Florida will also get to see the new shuttle orbiter up close as part of their one-price admission!



The U.S. Astronaut Hall of Fame is popular with trainees, parents and other visitors.

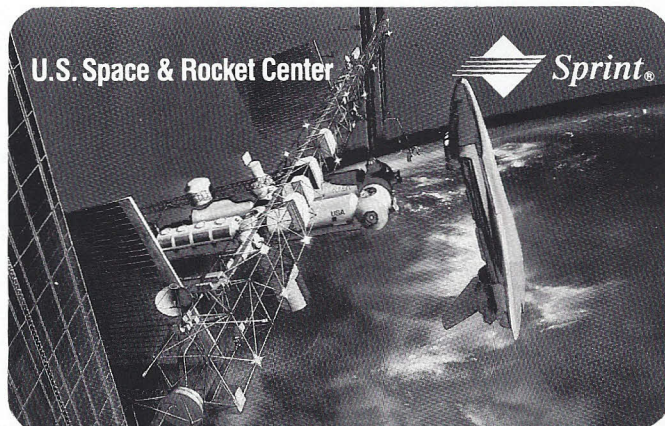
## Show Your Support & Save Money Too!

There are lots of ways to show your support for U.S. SPACE CAMP and the U.S. Space & Rocket Center. Now, you can do it just by picking up the phone when you travel. How? By using the Sprint FONCARD<sup>SM</sup>.

By using Sprint for your phone service, you are entitled to receive the Sprint FONCARD travel card to access Sprint's exclusive Fiber Optic Network. That means savings to you with lower rates on long distance service. And for every dollar spent on your long distance calls, the U.S. Space & Rocket Center will receive 5 cents toward building Earth's first full-scale Space Station exhibit, to be located at the Space Center in Huntsville, Alabama.

And you can get as many FONCARDS as you need. If you are not a Sprint customer already, it's easy to switch and it's free! Just call 1-800-669-8585. Or if you're already a Sprint customer and would like to receive a FONCARD, call 1-800-877-4040.

Show your support and save money too! Order your Sprint FONCARD today.



## Spring & Fall Sessions Mean Big Savings

SPACE CAMP AND SPACE ACADEMY Level I trainees can get a big savings on their tuition if they choose to take their trip in the spring or fall. How much of a savings? Would you believe up to \$125!

Here's how....Just reserve your session in February, March, April (except April 12-26) or May and you will save \$100 off the regular summer rates!

Or, if you reserve for a September, October, November or December session, you will save \$125!

And for SPACE CAMP trainees, there is another way to save an additional \$50 by having one or more of your friends enroll at the same time for the same session prior to May 31, 1992 (Easter sessions do not apply). We call it the "buddy discount" and both you and your friend will each receive the \$50 discount. But there are only a limited number available so don't wait.

Call 1-800-63-SPACE to cash in on the big savings!





*SPACE ACADEMY Level I students conduct a laser experiment.*

## What's New for You in 1992!

*(Continued from front page)*

There are also other new and exciting additions to Level II, including the Molecular Biology Mission. It will teach trainees about biotechnology, which is becoming increasingly important to space research as well as research here on Earth. Molecular biology research is necessary for the detection of life forms in space, the study of evolution on other planets, should life forms be detected, and for the study of disease-causing organisms in space. Genetics will likely play a big role in space agriculture.

There will also be DNA mapping. DNA is the molecule which carries the genetic code. Level II trainees will perform a laboratory mission in which they will work with plasmid DNA and actually perform some of the basic steps toward mapping the DNA.

And finally, also new for Level II, each trainee will receive a newly designed T-shirt, with a logo incorporating all three tracks coming together as one team!

In SPACE CAMP, missions will be much more exciting and realistic with the additions to mission control and the Columbia orbiter. At SPACE CAMP mission control, new TV monitors have been added for viewing "live" inside the flight deck, mid-deck and the payload bay during EVA's! And in Columbia, renovation includes new panels with flashing warning lights and realistic switches. In addition, a new mission script has been added that is more advanced and challenging for trainees.

SPACE CAMP has also added improvements to the Mars Mission, including a more realistic surface for our simulated red planet.

In SPACE ACADEMY Level I, improvements have also been made, including those to Space Station Freedom, where additional equipment and new experiments have been added. Level I trainees will also get to work with the new LDEF Satellite during EVA's.

In AVIATION CHALLENGE, there are also many new and exciting additions, with a quick look around revealing our squadron continuing to grow. An F-111 aircraft is set to "take-off" now at the AVIATION CHALLENGE area. The F-111 is an air superiority fighter and strategic bomber for the Air Force and is also a carrier based fleet defense fighter for the Navy.

There is also a new A-7 Corsair jet on display, which is a light attack jet flown by the Navy and Air Force. Then there is the new Hughes 300 Helicopter, used for special training by the Army.

These are just some of the new and exciting things coming up in 1992 and there's more to come. It promises to be the best year yet!



**Make your Basic or Intermediate  
AVIATION CHALLENGE reservations for  
May 24-29 and save \$100 on your tuition! ACT NOW!!  
Call 1-800-63 SPACE .**

## School Systems Support U.S. SPACE CAMP Programs

Some parents and members of the media are surprised when they learn that U.S. SPACE CAMP programs for students are conducted year-round. The usual question is along the lines of how do students get out of school to attend?

The educational importance of the SPACE CAMP programs are endorsed by school systems all over the United States which allow their students to attend sessions during the school year. Students may obtain approved absences and complete science or math projects for extra class credit.

U.S. SPACE CAMP curriculum is correlated with the national standards established by the National Council of The Teachers of Mathematics as well as science standards of selected states. The State Department of Education in Alabama endorses our curriculum as educationally sound.

Also, the U.S. SPACE CAMP Education Department works with school administrators and teachers who wish to enhance their science or math courses.

Another plus for parents is the considerable savings enjoyed by scheduling their child's U.S. SPACE CAMP session during the school year.

## Survey Results Show Education Impact

Readers of our Spring 1991 issue may recall a questionnaire we asked you to fill out and return to give us an indication of the effectiveness of our programs.

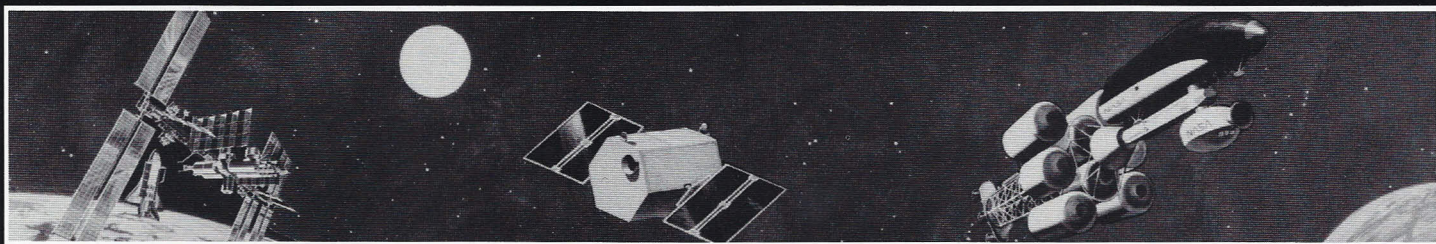
We're delighted to share some of the results:

- 30% of trainees return to SPACE CAMP for another program.
- More than 90% of trainees report a greater interest in science and technology after attending SPACE CAMP.
- More than 60% of trainees report taking additional math or science courses including calculus, algebra, biology, chemistry and trigonometry.
- After attending SPACE CAMP and ACADEMY, over 90% are interested in a space, science or technical career.
- 34% of attendees are female.

SPACE CAMP Education Director, Dr. Tommie Blackwell is encouraged by the survey results. "When we see such results," she said, "it sparks my staff to come up with even more creative learning tools and mission scenarios."

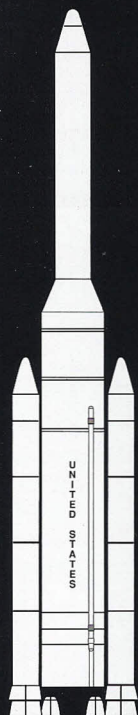


# THE FUTURE OF AMERICA'S SPACE EXPLORATION



## LAUNCH VEHICLES

### VEHICLE 1



Height: ~290 ft  
Weight: 4,810,000 lb  
Thrust: 9,300,000 lb  
Cargo: ~110,000 lb  
Liquid Hydrogen/  
Oxygen Propulsion  
with Solid Rocket  
Boosters

### VEHICLE 2



Height: ~270 ft  
Weight: 1,960,000 lb  
Thrust: 3,900,000 lb  
Cargo: ~50,000 lb  
Liquid Hydrogen/  
Oxygen Propulsion

### VEHICLE 3



Height: ~160 ft  
Weight: 520,000 lb  
Thrust: 650,000 lb  
Cargo: ~20,000 lb  
Liquid Hydrogen/  
Oxygen Propulsion

### Launching power for the 21st century

America has a growing need to supplement existing vehicles with a low-cost and reliable launch system to launch satellites, planetary probes, and future space vehicles into space. In addition, President Bush and Vice President Quayle have set goals to return astronauts to the moon and send them for the first time to Mars. A new launch system is needed to do this.

### The New Launch System

To meet these goals, NASA and the United States Air Force are working together to build a new family of launch vehicles. This program is currently called the New Launch System. The New Launch System includes three launch vehicles, which are shown in the pictures above. These vehicles will be used to send resupply packages to the Space Station, launch advanced satellites into orbit around earth, and even launch men into space.

## NAME AMERICA'S NEW LAUNCH SYSTEM & FAMILY OF VEHICLES

• • •

## WIN A TRIP TO SPACE CAMP, SPACE ACADEMY OR AVIATION CHALLENGE!

This new system, in addition to the Space Shuttle and our other launch systems, will meet the needs of America's space program into the 21st century.

### Name the launch system and its vehicles and win a prize

Just as each of the Shuttle orbiters and vehicles like Titan have names, these three new launch vehicles need names. We are asking for your help in choosing names for each vehicle as well as for the system (i.e., family of vehicles). Please use the attached coupon and write in the names you have chosen and tell us why you chose them. Your reasons for choosing the names are as important as the names themselves. Names should display relationship between the family and its members; be simple and easy to pronounce; and patriotic or related to U.S. history. Avoid names duplicating or similar to other NASA/Air Force names, acronyms, and names of living people. A government panel will select finalists for submission to the President's National Space Council for selection of the winner(s) based on the originality and suitability of the names. The winner(s) will receive free tuition and air travel to either SPACE CAMP, SPACE ACADEMY Level I, or AVIATION CHALLENGE.



# ENTRY FORM

The name I've chosen for the system and each vehicle:

**SYSTEM** \_\_\_\_\_

**VEHICLE 1** \_\_\_\_\_

**VEHICLE 2** \_\_\_\_\_

**VEHICLE 3** \_\_\_\_\_

**MY NAME** \_\_\_\_\_

**ADDRESS** \_\_\_\_\_

**CITY** \_\_\_\_\_

**STATE** \_\_\_\_\_

**ZIP** \_\_\_\_\_

My reasons for choosing names: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**CONTEST RULES:**

1. Only one (1) entry per contestant.
2. Responses must be postmarked no later than February 29, 1992.
3. Winners to be selected on the merit of name and reasons for choice.
4. Up to four (4) winners will be announced, and receive free tuition and air travel on Delta Air Lines to either SPACE CAMP, SPACE ACADEMY Level I or AVIATION CHALLENGE.
5. Tuition and air travel subject to blackout periods.

  
*The Official Airline Of U.S. Space Camp*

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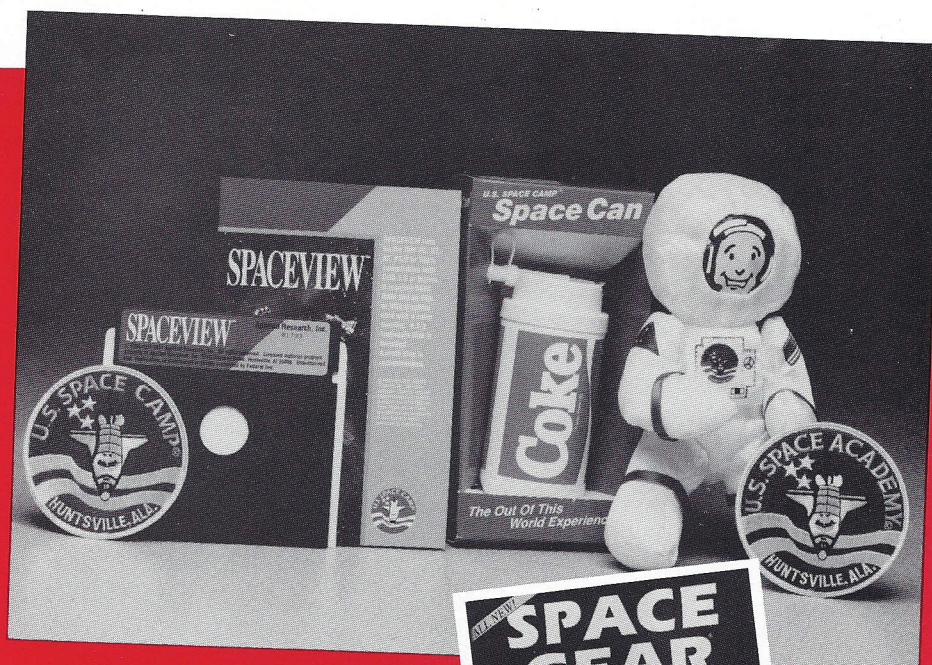
## Call SPACE GEAR

**1-800-533-7281**

and save on this merchandise!

	Regular	Sale Price
Space Can	\$4.99	\$2.49
CAMP Patches	\$4.00 ea	\$1.99 ea
Astronaut Doll	\$3.99	\$1.99
Spaceview Disc	\$59.95	\$39.95

Say you read about this offer in the SPACE CAMP NEWS and receive a FREE SPACE GEAR catalog!



## Special Discounts Offered on SPACE GEAR® Merchandise

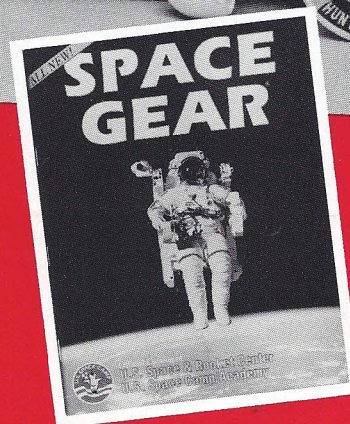
Here's an opportunity to order some great bargains from our SPACE GEAR gift shops

Specially designed by the Coca-Cola Company, the Space Can was invented for astronauts to consume carbonated drinks in space. Like the astronaut space cans, our Space Can has a drinking spout, safety cap, valve lock, liquid flow adjustment and cap retainer cord. You can receive our Space Can at half-price....only \$2.49.

One of the best ways to remember your training is with SPACE CAMP Patches. Order both if you like at \$1.99 each. They regularly sell for \$4 each.

You can ride in the space shuttle and view any point on Earth with the SPACEVIEW<sup>SM</sup> Disc. SPACEVIEW runs on the IBM-PC, XT, AT, PS/2 or 100 0/0 compatibles with DOS 3.0 or higher. It requires 640K RAM and an EGA or VGA Graphics Card with a color monitor. A 1.2 megabyte disk is included. This software is actually used at SPACE CAMP! Spaceview Disc regularly sells for \$59.95. During this special sale, you can receive it for only \$39.95!

The nine-inch Astronaut Doll with red-ribbon trim and the SPACE CAMP logo makes a great keepsake or gift at \$1.99. Regular price is \$3.99 each.



Say you read about these special sale items in the SPACE CAMP NEWS and receive a FREE SPACE GEAR catalog! Call 1-800-533-7281 between 9 a.m. and 5 p.m. weekdays to make your order. SPACE GEAR accepts MasterCard, VISA, American Express, Discover, personal checks and money orders.

**Make your Basic or Intermediate AVIATION CHALLENGE reservations for  
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**Call 1-800-63 SPACE .**

### U.S. Space & Rocket Center

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