

# SPACE CAMP NEWS



The Official Newsletter of

Space Camp &

Special  
1991  
Preview

Vol. 6 No. 3

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## **A**dvanced programs offer many new activities in 1991

The U.S. SPACE CAMP® celebrates its 10th season in 1991 with many exciting new programs and activities to educate America's young people about aviation and the space program. Younger students can participate in Aviation Challenge and SPACE CAMP goes to Mars!

Three new exhibits will benefit everyone who participates in Huntsville:

- "Blue Planet," the new environmental Spacedome film prepared by five crews of astronauts, replaces "The Dream is Alive."
- An actual SR-71 "Blackbird" plane - America's fastest - will be integrated into many educational programs. SPACE CAMP and the Smithsonian in Washington are two of only a few locations in the world to be selected to display the SR-71.
- "Red Star in Orbit," a rare collection of Soviet spacecraft and actual official mockups used in training cosmonauts, is being shown in the U.S. exclusively in Huntsville. Edward O. Buckbee, director of SPACE CAMP, personally selected the artifacts during a tour of Soviet museums in 1988. The most important spacecraft flown by a cosmonaut is the Vostok, the one-man spacecraft which is comparable to America's Mercury spacecraft.

Director Buckbee urges graduates to contact SPACE CAMP Reservations today to schedule 1991 sessions so as not to be disappointed. He noted that tuitions have not increased from 1990, despite substantial investments in exhibits and programs. In the case of several advanced programs, the 1991 tuition is less than in 1990.

**SPECIAL NOTE:** Please pass this material on to a neighbor or local school if you receive duplicate copies.

*Enroll now before the 1991 application book is mailed to new prospects because the most desirable sessions (Easter and summer) fill up quickly. To reserve space in a particular session, have a major credit card handy and call. Enroll before Dec. 15. To ensure receipt of a Gift Certificate for holiday giving, request must be received by Dec. 10.*

**Phone  
Reservations  
Toll-free.**



**1-800-63 SPACE**



# NEW!

## for Huntsville '91 MARS MISSION

During the first manned mission to Mars, slated for the year 2019, astronauts will explore the Martian landscape, collect geological samples and set up geophysical instruments before returning to Earth. It is said that the person who will take the first step on Mars has been born and is age 15 or younger.

Is that person you?— Or someone you know? In case it is you, (and especially if it isn't!) U.S. SPACE CAMP (grades 4-6) has a new simulated mission that "takes you to the future" and beyond the year 2019. With imaginations and space gear intact, trainees will be transported to the Launch Center—that's the Training Center for you greenhorns—where you'll countdown to Mars. Mars travellers will be kept abreast of advances in the U.S. and international manned space program. Trainees will learn about the importance of Space Station and the opportunities made available through the Lunar Base as you approach the only "pit stop" on the way to your destination.

After refueling, an historical perspective of man's quest for Mars will unfold as trainees make their "long journey". (In reality, it will take astronauts approximately 1 1/2 years to reach Mars, while the simulated mission will last about 2 hours!) The flight of NASA's unmanned Mariner 9 and Viking missions, the Soviet Phobos missions; these and other endeavors will reveal much about our crew's landing site.

Then, with a slight jerk and thud, you have landed! Heartbeats quickening and tension mounting, you and fellow trainees prepare to lengthen man's "small step" into the cosmos. After disembarking you will conduct experiments that aim to discover the possibility of life forms, planet composition, the effects of the atmosphere and the potential for a Mars Base. With long-term monitoring equipment in place and priceless, scientific treasures stowed, board your spacecraft and head to the Blue Planet—Earth.

Upon landing and shouting hurrahs for home sweet home, your group will be hailed as heroes and taken to the De-briefing Center where you will report your findings.



# 1991

## Promises Action-Packed Fun at U.S. SPACE CAMP® and ACADEMY in HUNTSVILLE!

You came, you saw and you conquered—and since finishing your session of CAMP/ACADEMY have been taking your math and science courses more seriously than ever before. You know such studies are your ticket to enter the world of high technology.

But, trainees aren't the only ones who learned a lot this year. The 1990 participants helped the staff at U.S. SPACE CAMP learn too! By listening to questions, comments and suggestions, they're putting together a 1991 season that promises to be the best of all! Here's a sneak preview of what's coming.

CAMP and ACADEMY programs feature hands-on astronaut training with simulated shuttle cockpits, mission control, astronaut training devices for executing EVA's (Extra Vehicular Activities), as well as classroom activities and lectures by the SPACE CAMP staff, NASA representatives and aerospace industry professionals.

**U.S. SPACE CAMP** for youngsters in grades 4-6 offers a 5-day introduction to space sciences and exploration. The program focuses on astronaut training, rocketry and space shuttle simulations. Plus, new for 1991, the hands-on Discovery Lab developed by NASA and an exciting Mars Mission give young people even more insight to the goals and objectives of the space program.

**U.S. SPACE ACADEMY I** also gives young adults a 5-day introduction to space science and exploration. But, with participants in grades 7-9, the program increases the intensity of academic study, astronaut and mission training. To ensure maximum time for their two missions, ACADEMY I trainees will be using a new, recently acquired shuttle cockpit simulator.

**U.S. SPACE ACADEMY II** is an 8-day space science program which emphasizes the academic foundation for space-related careers. This program allows trainees to choose a track of study: aerospace, engineering or science. Training is patterned after NASA crew training manuals. More than 90 hours of instruction and training is covered in this advanced program. Additionally, trainees may elect the option of claiming one hour of college credit for their ACADEMY II experience for an additional fee. Credit is through The University of Alabama in Huntsville.

There are also some exciting changes in our TEACHING THE FUTURE and other ADULT programs including new Parent/Child sessions.

**For details call 1-800-63 SPACE.**





# A

## Aviation Challenge<sup>SM</sup> Sets New Horizons

Aviation Challenge. Two words that can only be followed by.....call now!

Last year, in its premiere season, the jet jockey program sold out in a hiccup. This year, it's bigger with even more sessions available.

In fact, the 1991 Aviation Challenge season features not one, but three programs, including a weekend adventure for adults. (Adults call for more information.) Determine the program that fits you, look at the Aviation Challenge calendar and call 1-800-63 SPACE to reserve the session you want in the 1991 season.

**BASIC AVIATION CHALLENGE** is new this year and available to students in grades 7, 8, and 9 who previously attended a session in Space Camp or Space Academy. No previous knowledge of aviation is necessary.

Basic will offer students the opportunity to develop their interests in the education, training and skills required to fly high performance aircraft. The five-day program will run from May through Labor Day.

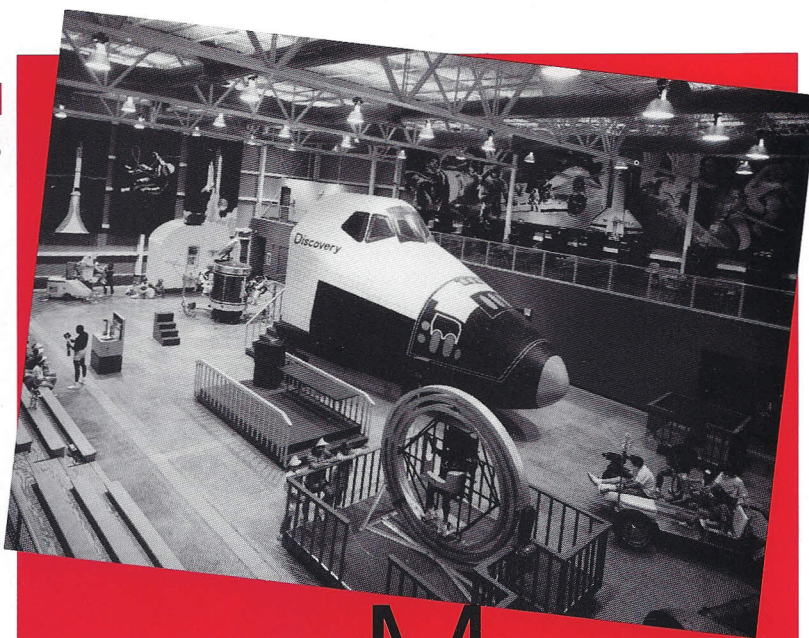
**INTERMEDIATE AVIATION CHALLENGE** is for student aviation enthusiasts in grades 10, 11 and 12. This advanced five-day program is a mixture of flight simulator training, water and survival procedures and classroom study. If the 1990 season is any indicator, Intermediate appeals to future aviators who are motivated, mature, self-starters who enjoy academics, extra-curricular activities, competitive sports and fun!

The young pilot will learn what it takes to be accepted for aviator training at a military academy and how to become a pilot in a high performance jet. The program runs May through October.

Intermediate Aviation Challenge is accredited through the University of Oklahoma. One hour of undergraduate college credit may be obtained for an additional \$70 fee if the participant successfully completes required studies.

So, to answer one of the most often asked questions in 1990 at U.S. SPACE CAMP.....yes, Aviation Challenge will be available to even more young people and adults.....and, right away!

Don't wait to reserve the week you want. Pick your dates and phone toll-free to the Reservation Center at 1-800-63 SPACE. Aviation Challenge is ready to put you in the pilot's seat.



## More Fun in '91 U.S. SPACE CAMP FLORIDA

Just as the SPACE CAMP trainees in Huntsville benefit from the technology at NASA's Marshall Space Flight Center, Florida trainees benefit from resources afforded by NASA's John F. Kennedy Space Center. In operation since 1988 and established in permanent facilities in 1990, the Florida CAMP adjoins the U.S. Astronaut Hall of Fame. The Hall of Fame is the nation's first collective tribute to our space pioneers—the men and women of Project Mercury. Teamed with the Mercury 7 Foundation, the U.S. SPACE CAMP Foundation continues to build its programs in this satellite facility. In addition, U.S. Space Camp Florida is only one hour from Walt Disney World.

Previously, only the U.S. SPACE CAMP program, for young people in grades 4-7, was available at the Titusville, Florida location. An addition to educational offerings, TEACHING THE FUTURE will be presented through cooperation with The University of Central Florida. Both of these programs aim to duplicate the Huntsville-based programs. Teachers for more information on TEACHING THE FUTURE in Florida call 1-800-63 SPACE. Other plans include bringing food and lodging on-site.





# 1991 SESSION DATES



# 1-800-63 SPACE

## U.S. SPACE CAMP® ALABAMA U.S. SPACE ACADEMY® I

## U.S. SPACE CAMP® FLORIDA

SESSION / DATE	SESSION / DATE	SESSION / DATE
6 FEB. 10-15	21 MAY 26-31	36 SEPT. 8-13
7 FEB. 17-22	22 JUNE 2-7	37 SEPT. 15-20
8 FEB. 24-MAR. 1	23 JUNE 9-14	38 SEPT. 22-27
9 MAR. 3-8	24 JUNE 16-21	39 SEPT. 29-OCT. 4
10 MAR. 10-15	25 JUNE 23-28	40 OCT. 6-11
11 MAR. 17-22	26 JUNE 30-JULY 5	41 OCT. 13-18
12 MAR. 24-29	27 JULY 7-12	42 OCT. 20-25
13 MAR. 31-APRIL 5	28 JULY 14-19	43 OCT. 27-NOV. 1
14 APRIL 7-12	29 JULY 21-26	44 NOV. 3-8
15 APRIL 14-19	30 JULY 28-AUG. 2	45 NOV. 10-15
16 APRIL 21-26	31 AUG. 4-9	46 NOV. 17-22
17 APRIL 28-MAY 3	32 AUG. 11-16	47 DEC. 15-20
18 MAY 5-10	33 AUG. 18-23	48 DEC. 29-JAN. 3
19 MAY 12-17	34 AUG. 25-30	
20 MAY 19-24	35 SEPT. 1-6	

SESSION / DATE	SESSION / DATE	SESSION / DATE
17 MAR. 3-8	39 MAY 19-24	61 AUG. 4-9
19 MAR. 10-15	41 MAY 26-31	63 AUG. 11-16
21 MAR. 17-22	43 JUNE 2-7	65 AUG. 18-23
23 MAR. 24-29	45 JUNE 9-14	67 AUG. 25-30
25 MAR. 31-APRIL 5	47 JUNE 16-21	69 SEPT. 1-6
27 APRIL 7-12	49 JUNE 23-28	71 SEPT. 8-13
29 APRIL 14-19	51 JUNE 30-JULY 5	73 SEPT. 15-20
31 APRIL 21-26	53 JULY 7-12	75 SEPT. 22-27
33 APRIL 28-MAY 3	55 JULY 14-19	77 SEPT. 29-OCT. 4
35 MAY 5-10	57 JULY 21-26	
37 MAY 12-17	59 JULY 28-AUG. 2	

Space Shuttle Launches: A number of launches are planned from Kennedy Space Center in 1991. For the latest information on dates, ask Space Camp Reservation agents.

**NEW!**

## AVIATION CHALLENGE<sup>SM</sup>

**BASIC**

**INTERMEDIATE**

**7<sup>TH</sup>, 8<sup>TH</sup>, 9<sup>TH</sup> GRADES**

**10<sup>TH</sup>, 11<sup>TH</sup>, 12<sup>TH</sup> GRADES**

SESSION / DATE	SESSION / DATE	SESSION / DATE
5 JUNE 2-7	1 MAY 5-10	14 AUG. 4-9
6 JUNE 9-14	2 MAY 12-17	15 AUG. 11-16
7 JUNE 16-21	3 MAY 19-24	16 AUG. 18-23
8 JUNE 23-28	4 MAY 26-31	17 AUG. 25-30
9 JUNE 30-JULY 5	5 JUNE 2-7	18 SEPT. 1-6
10 JULY 7-12	6 JUNE 9-14	19 SEPT. 8-13
11 JULY 14-19	7 JUNE 16-21	20 SEPT. 15-20
12 JULY 21-26	8 JUNE 23-28	21 SEPT. 22-27
13 JULY 28-AUG. 2	9 JUNE 30-JULY 5	22 SEPT. 29-OCT. 4
14 AUG. 4-9	10 JULY 7-12	23 OCT. 6-11
15 AUG. 11-16	11 JULY 14-19	24 OCT. 13-18
16 AUG. 18-23	12 JULY 21-26	25 OCT. 20-25
17 AUG. 25-30	13 JULY 28-AUG. 2	26 OCT. 27-NOV. 1
18 SEPT. 1-6		
19 SEPT. 8-13		
20 SEPT. 15-20		
21 SEPT. 22-27		

## U.S. SPACE ACADEMY® II

SESSION / DATE	SESSION / DATE	SESSION / DATE
5 FEB. 2-9	21 MAY 25-JUNE 1	38 SEPT. 14-21
6 FEB. 9-16	23 JUNE 1-8	39 SEPT. 21-28
7 FEB. 16-23	24 JUNE 8-15	40 SEPT. 28-OCT. 5
8 FEB. 23-MAR. 2	25 JUNE 15-22	41 OCT. 5-12
9 MAR. 2-9	26 JUNE 22-29	42 OCT. 12-19
10 MAR. 9-16	27 JUNE 29-JULY 6	43 OCT. 19-26
11 MAR. 16-23	28 JULY 6-13	44 OCT. 26-NOV. 2
12 MAR. 23-30	29 JULY 13-20	45 NOV. 2-9
13 MAR. 30-APRIL 6	30 JULY 20-27	46 NOV. 9-16
14 APRIL 6-13	31 JULY 27-AUG. 3	47 NOV. 16-23
15 APRIL 13-20	32 AUG. 3-10	48 DEC. 14-21
16 APRIL 20-27	33 AUG. 10-17	49 DEC. 28-JAN. 4
17 APRIL 27-MAY 4	34 AUG. 17-24	
18 MAY 4-11	35 AUG. 24-31	
19 MAY 11-18	36 AUG. 31-SEPT. 7	
20 MAY 18-25	37 SEPT. 7-14	

**No tuition  
increase  
in  
1991!**

# 1991 TUITION RATES

Youth Programs	Days	Grade	Feb-May*	June-Aug	Sept-Dec
Space Camp-Alabama	5	4-6	\$450	\$550	\$425
Space Camp-Florida	5	4-7	\$450	\$550	\$425
Space Academy Level I	5	7-9	\$500	\$600	\$475
Space Academy Level II	8	10-12	\$675	\$675	\$675
Basic Aviation Challenge	5	7-9	\$650	\$650	\$650
Intermediate Av. Chall.**	5	10-12	\$650	\$650	\$650

\*Tuition for Spring sessions from March 23 to April 13, 1991 are same as summer.

\*\*College credit fee optional.

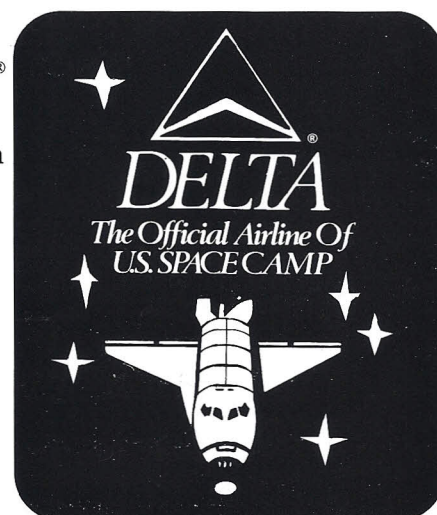
Prior attendance is not required for any program except Basic Aviation Challenge. Tuition includes overnight accommodations, meals, educational materials and airport surface transportation. Prices subject to change without notice. SPACE CAMP, U.S. SPACE CAMP, U.S. SPACE ACADEMY, SPACE ACADEMY, AVIATION CHALLENGE are registered U.S. trademarks.

# DELTA

Official Airline of  
U.S. SPACE CAMP®

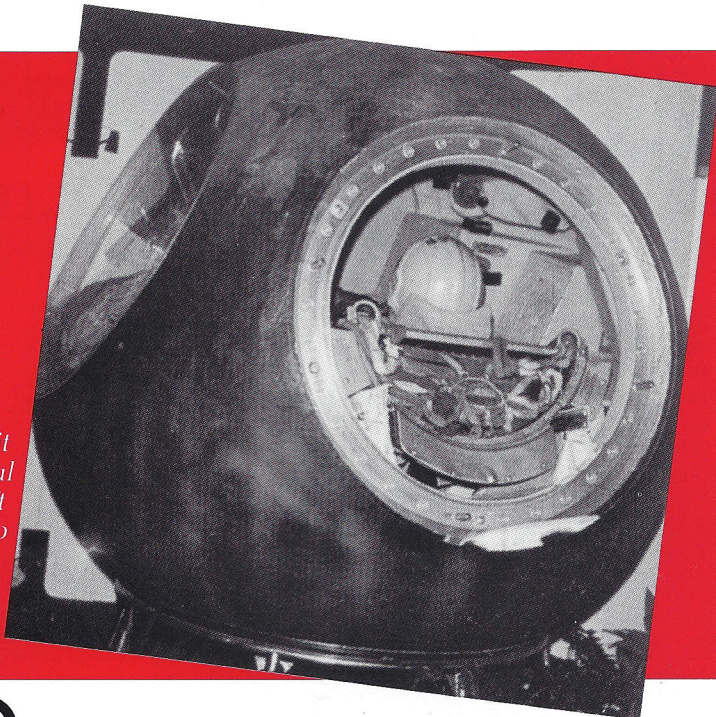
After you select your week to attend a program at SPACE CAMP® or SPACE ACADEMY®, call Delta Air Lines to schedule your flight to Huntsville or Orlando. Get all the details on low discount fares and special group rates. And, remember, Delta does not charge a Unaccompanied Minor Fee.

Call 1-800-241-6760 and ask for "File Space Camp."





*The Soviet exhibit includes an actual Vostok spacecraft (right), a mock-up of the MIR space station, and spacesuits worn by cosmonauts.*



## Soviet spacecraft land at U.S. SPACE CAMP®

Youth and adults who reserve space in U.S. SPACE CAMP programs in Huntsville from late November 1990 through early fall of 1991 will experience a rare treat....the opportunity to see a major exhibit of Soviet spacecraft and artwork.

The U.S. Space & Rocket Center is the first stop on an international tour of the collection and the only U.S. city currently on the schedule. This is the first time the artifacts have been seen outside the Soviet Union.

Space Center Director Edward O. Buckbee selected many of the items for display during a trip to Russia nearly two years ago.

"This is the most significant traveling exhibit that we have hosted during our 20 years of operation," he said. "We believe the public and trainees in all Space Camp programs will share our fascination at seeing actual Russian spacecraft up close. The fact that these items have never been seen outside the Soviet Union adds tremendously to their appeal and educational value."

The Soviet exhibits you will see at Space Camp include an actual Vostok capsule which flew in the early years of the Soviet manned space program. Vostok is best known for the flights of Yuri Gagarin, the first man in space in 1961, and Valentina Tereshkova, who in 1963 became the first woman in space.

Scale mock-ups include the Luna-24 Space Probe, used in moon expeditions, the MIR Orbiter and the descending module of a Soyuz spacecraft.

The MIR Orbiter represents an important aspect of the Soviet space program because MIR is considered the first modular space station. The Soyuz is best known in America for the famous 1975 space rendezvous between Soviet cosmonauts aboard Soyuz 19 and three American astronauts inside an Apollo spacecraft.

A modern aspect of the Soviet space program is represented by a mock-up of the Energiya-Buran space transporting system. Energiya is the world's largest rocket and Buran is the Soviet space shuttle orbiter.

Also included is the first appearance outside the Soviet Union for dozens of paintings, etchings and lithographs created by former Soviet cosmonauts.

The Russian exhibit is expected to draw thousands of people from around the country who have heard much but seen little about the Soviet space program. Your early reservation will insure that you don't miss it.

## The Blackbird is Here!

One of the new things you'll spot right away at SPACE CAMP® 1991 in Huntsville is a huge bird.....the SR-71 Blackbird. It will be hard to miss.

One of the sleek, speedburner jets came to the Space Center based in part on the popularity of Aviation Challenge, a SPACE CAMP program just entering its second season.

"There's no doubt the success of Aviation Challenge and other Space Camp programs played a role in the Air Force decision to send us an SR-71," said Edward O. Buckbee, director of the Space Center. "The bonus is that trainees attending all Space Camp programs and other visitors will be able to enjoy this historic plane."

The \$200 million jet measures 107 feet long, 55 feet wide and 18 feet high. It's capable of flying at greater than three times the speed of sound. In fact, the SR-71 holds the coast-to-coast speed record of just over 68 minutes at an average speed of 2,100 miles per hour.

Although the Air Force recently retired the Blackbird, three of them have been loaned to NASA for use in research and development of an aerospace plane.

*The sci-fi looking SR-71 Blackbird is one of the new attractions you can see at U.S. SPACE CAMP® in Huntsville.*







*A tracking and data relay satellite is deployed from Space Shuttle Discovery in this scene from the "Blue Planet." Crew members also filmed a circular storm system, visible at the upper right of the satellite. You will see this new space film about Earth in the Spacedome Theater.*

## **B**lue Planet in Spacedome

All trainees in the 1991 season will see "Blue Planet," the latest movie to be filmed in outer space by astronauts.

The 42-minute OMNIMAX® spectacular will be shown in the Spacedome Theater on a 67-foot domed screen. The effect is close to being in the middle of a living atlas.

"Blue Planet" is called a space film about earth and was photographed by crews from five space shuttle missions. You will see a space-eye view of forces that affect our planet from within and without such as volcanoes, earthquakes, typhoons and humankind.

The film offers a breathtaking look at the Straits of Gibraltar, the huge sand dunes of the Namib Desert and the snow-capped peaks of the Himalayas. Over Japan, you will see smoke steaming from a volcano. Over South America, smoke is visible from fires set to clear the rainforest.

Some of the "Blue Planet" footage was taken from 330 miles up, higher than has been filmed in OMNIMAX before.

You will also have the opportunity to see other OMNIMAX films during your SPACE CAMP session, such as "The Dream is Alive" and "Hail, Columbia."



**Phone Reservations Toll-Free 1-800-63 SPACE**



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