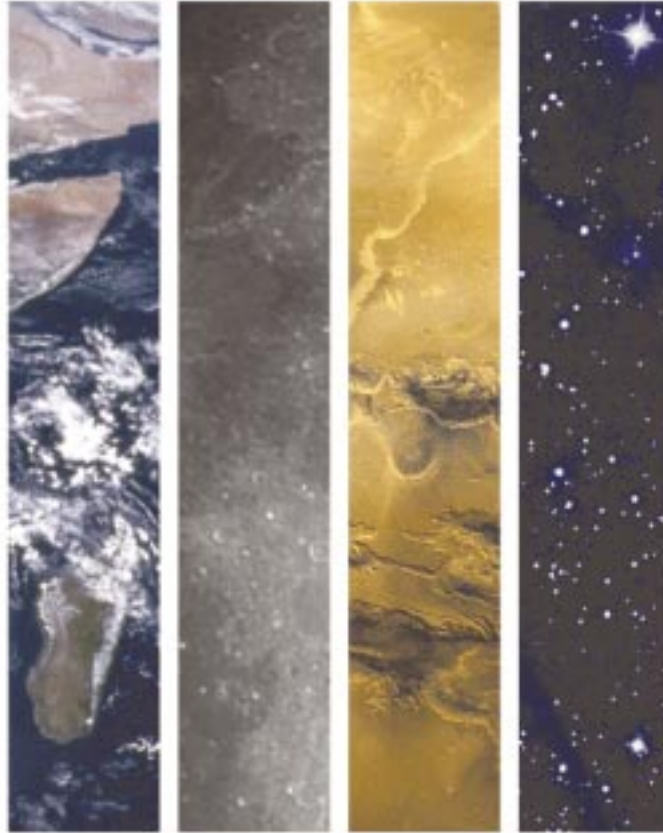
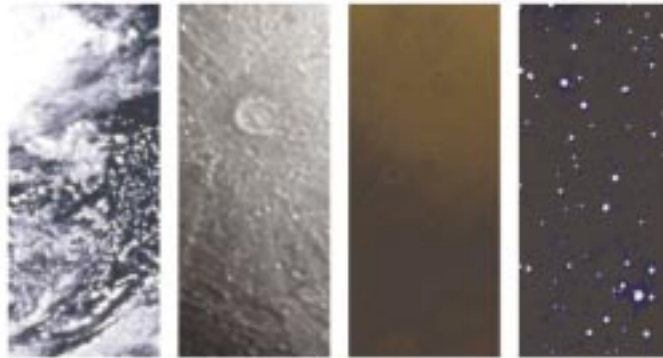


The MOON, MARS, and BEYOND



2 0 0 6



A N N U A L R E P O R T



SECTION 1 – *Vision*

Alabama Space Science Exhibit Commission	4
U.S. Space & Rocket Center Foundation	5
U.S. Space & Rocket Center	5
U.S. Space & Rocket Center Employee Association	5
Construction Begins for New Visitor Entrance	6
Museum Exhibits Bring Current Space Programs to the Public	7
Rocket Team Gathers for Reunion	7
Purple Heart Memorial Unveiled	8
USSRC Publishes von Braun Book	8
Test Capsule Gives Glimpse of Future Design	8
Discovery Backpacks Developed for Younger Visitors	9
Existing Exhibits Command Attention	9
Educator Numbers and Partnerships Increase in FY06	9
Corporations and Grants Support Summer Programs	10
Teachers Leave Gravity, Experience Scientific Principles	10
Students Thrive on Challenges	10
Astronauts and Celebrities Visit	12
Be Ready Day Focuses on Emergency Preparedness	12
SPACE CAMP to Celebrate Silver Anniversary	13
Flags Cleared for Shuttle Mission	13
Alumnus on Rover Team	14
IMAX® Focuses on the Moon and Mars	14

SECTION 2 – *Payload*

USSRC Shows Profit	15
Saturn V Tag Sales Exceed 4,000	15
Coffee Sales Benefit Saturn V	15
Financials	16
Foundation/Advancement Highlights	17
Center Accounts for 100% of Property	18
Aerospace Highlights	18
Support Services Highlights	18
Marketing Highlights	19
Human Resources Highlights	19
Museum Highlights	20
Licensing Highlights	21
GTAC Highlights	22
Outfitting the USSRC for the Moon, Mars, and Beyond	23

Message from the CEO



The Moon, Mars, and Beyond

As NASA unveiled plans this year for the Orion crew capsule and the Ares I and Ares V rockets, the students who will help forge the path into the universe took note. And, from their comments, it is evident that these future explorers are delighted that NASA is on board to help them realize their dreams of being part of the first crew that builds a habitat on the moon or lands on Mars. This year, the Apollo 16 capsule and the historic Saturn V became relevant reference points as students examined these artifacts and grappled with technology and engineering concepts—what will be adapted and what must be invented—for the new vehicles. When Storey Musgrave and Mike Mullane spoke, students knew the astronauts not only were talking history but also were pointing the way to the future.

Indeed, the invigorating energy of exploration and new beginnings permeated the Center during Fiscal Year 2006 (FY06). Marshall Space Flight Center (MSFC) installed a new exhibit on NASA's vision for space exploration,

Lockheed Martin donated a prototype of the crew exploration vehicle, and thousands came to see *Roving Mars*, an IMAX® movie featuring the two robots, *Spirit* and *Opportunity*, and *Magnificent Desolation*, a tribute to the Apollo program and the men who walked on the moon.

In July, the U.S. Space & Rocket Center (USSRC) joined NASA in the business of launches. While the shuttle *Discovery* was in space (after a picture-perfect July 4th send-off), the USSRC officially launched building construction on July 15, 2006, for the Saturn V Visitor Complex and Intermodal Center. This new entry point for the museum will house the new ticketing area and a 350-person auditorium, along with the Saturn V rocket and other artifacts from the Apollo era. Completion of this complex is the first stage in a Center plan to better showcase the NASA and MSFC contributions to historical, current, and future space exploration.

While NASA focused on the technology of getting us back to the moon and on to Mars during this year, the USSRC focused on the future workforce, serving over 34,000 who attended camp programs. New 8- and 13-day programs proved very popular with our campers, and we built a new high ropes course—the Leadership Reaction Course Complex—to allow our clients to test individual strengths while safely harnessed and supported by their teams. The students who attended the September session of SCI-VIS, the camp for the visually impaired, far surpassed other camp attendees (students and adults) on the high ropes course. Exhibiting courage and loyalty to each other, they relentlessly pushed themselves and

tested the limits of the ropes exercise, humbling and touching all who watched.

The Center also explored new ways of making real-world applications of technology more understandable and relevant to students. The USSRC partnered with the Alabama Department of Homeland Security, the Governor's Office of Faith-Based and Community Initiatives, and the Madison County Emergency Management Office in presenting a *Be Ready Camp* that focused on teaching elementary school students lessons in emergency preparedness.

In addition to implementing new programs, we also increased the number of students, adults, and teachers attending SPACE CAMP programs during FY06. Teachers attending professional development programs grew by 13 percent, and students participating in weeklong, weekend, and classroom programs increased by 6 percent.

However, numbers only partially tell the story. We welcomed new members to our governing board, the Alabama Space Science Exhibit Commission, and we hosted hundreds of thousands of visitors from throughout the world in our facility. It is our pleasure to share stories of some of the memorable events and interesting people who enriched our operation this year.

Sincerely,

Larry R. Capps
Chief Executive Officer
U.S. Space & Rocket Center



ASSEC members shown seated (from left) Margie Cumbie, Irma Tudor, and Anne Marie Lacy; standing (from left) Lana Ritch, Joe Collazo, Waymon Burke, Dorothy Davidson, Jim Haney, Sidney White, Jimmy Ray Smith, Daniel Wilson, Glenda Reitzell, Art Stephenson, Jim Flinn, and Todd Slyman. Not pictured are Winton Blount, Roosevelt Lewis, and Albert Patterson.

ASSEC Welcomes New Members

The Alabama Space Science Exhibit Commission, the governing board for the USSRC, is composed of 18 members appointed by the Alabama Governor for eight-year terms. Seven new members were appointed to the Commission during FY06: Winton Blount III, Dorothy Davidson, Anne Marie Lacy, Arthur G. Stephenson, Daniel Wilson, Glenda Reitzell, and Lana Ritch.

Officers

Irma Tudor, Chair

Chief Executive Officer, Analytical Services, Inc., Huntsville, AL

James L. Flinn III, Vice Chair and Vision and Plans Committee Chair
Executive-In Residence, College of Administrative Science, University of Alabama in Huntsville and former Deputy to the Commander of the U.S. Army Aviation and Missile Command, Huntsville, AL

Waymon E. Burke,

Museum Committee Chair
History & Political Science Academic Division Chair, Calhoun Community College, Huntsville, AL

Roosevelt J. Lewis, Jr.,

Aerospace Programs Committee Chair
President/Chief Executive Officer, Air Tuskegee, Inc., Tuskegee, AL

Todd J. Slyman,

Marketing Committee Chair
General Partner, Slyman Investment Group LTD, Huntsville, AL

Sidney R. White,

Finance Committee Chair
Certified Public Accountant/President, White & Fleming CPA, Huntsville, AL

Members

Winton Blount III,

Executive Officer of Blount Pittman & Associates, Montgomery, AL

Joe Collazo,

Vice President of Management Support, Collazo Enterprises, Inc., Huntsville, AL

Margie Cumbie, Huntsville, AL

Jim Haney, Huntsville, AL

Albert L. Patterson III, President, Navigator Development Group, Inc., Enterprise, AL

Dorothy Davidson,

Operation and Finance Manager, Davidson Properties & Management, Huntsville, AL

Anne Marie Lacy,

City Attorney, Madison, AL

Glenda Reitzell,

Huntsville, AL

Lana Ritch,

Huntsville, AL

Jimmy Ray Smith,

Certified Gemologist, Jimmy Smith Jewelers, Decatur, AL

Arthur G. Stephenson,

Sector Vice President & NPOESS Deputy Program Manager, Northrop Grumman Space Technology

Daniel Wilson,

Managing Partner, Balch & Bingham, Huntsville, AL

U.S. Space & Rocket Center Foundation

Larry Capps, Chief Executive Officer

Jennifer Crozier, Executive Director

Officers

Joe Ritch, Chairman

Cynthia McCollum, Vice Chairman

Waymon Burke, Secretary/Treasurer

Members

Helen McAlpine

James L. Flinn III

Mark J. Lumer

William H. Stender, Jr.



USSRC Foundation members are (standing from left) Jim Flinn, Waymon Burke, Bill Stender, Joe Ritch, and (seated) Cynthia McCollum and Helen McAlpine. Mark Lumer is not pictured.

U.S. Space & Rocket Center

Executive Management

Larry Capps, President/Chief Executive Officer

Clif Broderick, Executive Vice

President/Chief Operating Officer

Ralph Bryson, Executive Vice

President/Aerospace Programs

Vice Presidents

Holly Beach, Marketing

Brenda Carr, Advancement

Elgin Carver, Safety/Security

Donnie Claxton, Finance/Controller

Marion Cox, Human Resources

Mike Flachbart, Aerospace Programs

Chris Johnson, Geospatial Training and Application Center

Mike Kelly, Domestic and International Licensing



USSRC Management are (standing from left) Ralph Bryson, Elgin Carver, Mike Flachbart, Clif Broderick, Larry Capps, Mike Kelly, Jennifer Crozier, Donnie Claxton and (seated) Holly Beach, Brenda Carr, Chris Johnson and Marion Cox.

U.S. Space & Rocket Center

Employee Association

John Stalnaker, President

Gregory Sanford, Vice President

Judith Kincaid, Secretary

Christy Oldaker, Treasurer



Employee Association officers are (from left) John Stalnaker, Judy Kincaid, Greg Sanford, and Christy Oldaker.

Construction Begins for New Visitor Entrance

Earth-moving equipment from the Madison County Public Works Department arrived in June and began site preparation for the \$21 million Saturn V Visitor Complex and Intermodal Center projects. By the time the county crew left in late September, workers had moved tons of dirt in carving out the footprint for the new 68,200-square-foot building. The building complex is comprised of two separate projects: a building to house the restored Saturn V rocket and a Federal Transit Administration intermodal bus facility (located at the back and to the left of the Saturn V building) that will become the new front door for the Center. Madison County Commission Chairman Mike Gillespie offered to provide the site preparation work as an in-kind donation to the project. Turner Universal is the construction manager for the project

and Gresham Smith and Partners is the architectural and engineering firm. United States Senator Richard Shelby obtained the FTA funding, and the Senator and Representative Bud Cramer have worked to obtain appropriations to make the Saturn V building a reality. The buildings are expected to be completed by fall 2007. The Intermodal Center will contain the Center's ticketing area, auditorium, and restrooms. The Saturn V building—which will be 476 feet long, 90 feet wide and 63 feet high—will house the restored rocket and other artifacts from the Apollo era. Because the rocket will be displayed at least 10 feet above floor level, the area under the rocket can be used for special events and conferences.

Groundbreaking ceremonies for the complex were held July 15, 2006, preceding the Third Annual Saturn/Apollo Reunion. Shown with shovels are (front left) Jim Flinn, Alabama Space Science Exhibit Vice Chair; Jim Ellis, NASA Marshall Space Flight Center; Loretta Spencer, Huntsville Mayor; Keith Starnes, Gresham Smith and Partners; Dr. George Mueller, Deputy Associate Administrator for Manned Space Flight Program from 1963-1969; Walter Cunningham, Apollo 7 Astronaut; Richard F. Gordon, Jr., Apollo 12 Astronaut; Larry Capps, Chief Executive Officer of the U.S. Space & Rocket Center; William H. Gurley, Chairman of the Saturn V Restoration Executive Committee; Joe Ritch, Chairman of the U.S. Space & Rocket Center Foundation; Brad Jones, Chair-elect of the Huntsville/Madison County Chamber of Commerce; and Micah Bullard, Turner Universal.



As part of the initial site preparation work, the crew from the Madison County Department of Public Works built a road leading from the western end of the construction site back to the Saturn V in order to facilitate the rocket's move, which is scheduled for summer 2007.



The Saturn V Visitor Complex and Intermodal Center is scheduled to be completed by fall 2007. The area surrounding the existing Saturn V replica, which stands on the western section of the USSRC property, will become an outdoor exhibit area where donors will be recognized and a permanent exhibit will be built featuring the nine lunar missions. This courtyard area will be paved with bricks sold as part of the Saturn V Restoration Project. At year's end, over 400 bricks had been sold.



Rocket Team Gathers for Reunion

Over 300 gathered for the *Third Annual Saturn/Apollo Reunion* held Saturday, July 15, 2006. Shown above are some of the members of the original Saturn V Rocket Team who attended the event that is coordinated by the Saturn V Restoration Executive Committee.

(1) Shown in the accompanying photo are special guests: Apollo 7 Astronaut Walter Cunningham (left); Dr. George Mueller, Deputy Associate Administrator for Manned Space Flight from 1963-1969; and Gemini XI and Apollo 12 Astronaut Richard F. Gordon, Jr. These Apollo veterans are shown with William H. Gurley (second from right), Chairman of the Saturn V Committee; Larry Capps (extreme right), CEO of the U.S. Space & Rocket Center; and Dorothy Davidson, who is a member of the Saturn V Committee and the USSRC's governing board, the Alabama Space Science Exhibit Commission. Mrs. Davidson and her husband, Dr. Julian Davidson, sponsored the *Third Annual Saturn/Apollo Reunion*. W.L. Halsey Food Service co-sponsored the event, and contributing sponsors included Purity Dairies, Johnson Brothers Wine, Inc., Supreme Beverage Company, Inc., Ameripride, Coca Cola USA, COSTCO, Crystal Mountain, Green Mountain Coffee, *The Huntsville Times*, Milo's Tea, Sam's Club, Sara Lee Bakery, and WLRH Public Radio.

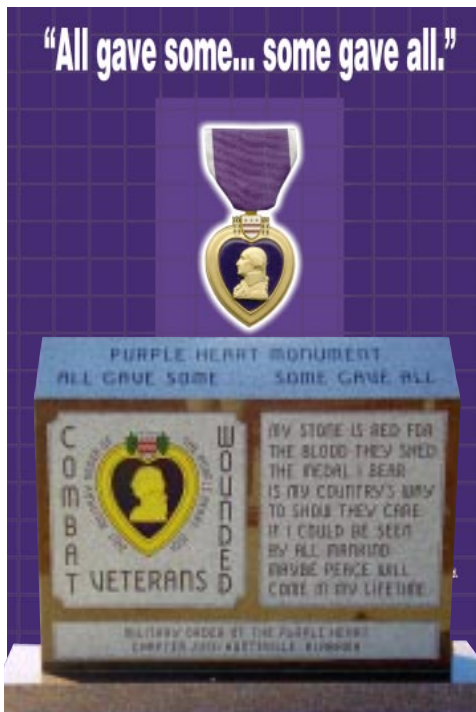


Museum Exhibits Bring Current Space Projects to the Public

The public is curious about the new initiative to journey to the moon, Mars, and beyond, and USSRC staff added several new exhibits this year with special emphasis on NASA's Vision for Space Exploration.

NASA Marshall built a new exhibit for the Visitor Information Center located in the lobby of the USSRC that features the vision, experience, integration abilities,

and talent that will help MSFC lead explorers back to the moon and into the universe. During the year, NASA staff made several trips to the Center to analyze—and in some instances borrow—Apollo hardware in preparation for the construction of the next generation space vehicles. A J-2 engine, which Center staff refurbished and placed on the museum floor as part of a propulsion exhibit, has attracted much attention as an updated version of the engine, a J-2X, will be used for future travel back to the moon.



Purple Heart Memorial Unveiled

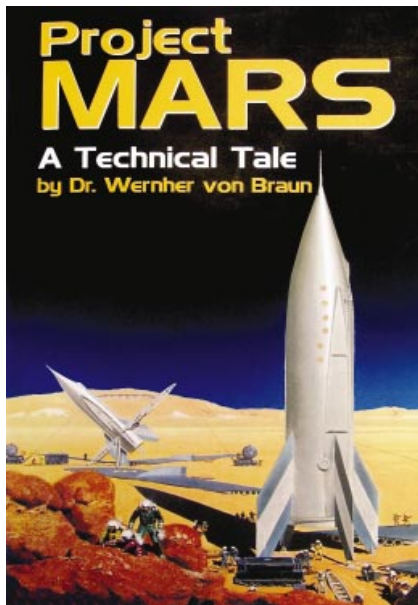
While many associate the USSRC with space, it was the Army that donated the 432 acres on which the Center sits. And, the law establishing the museum states that the facility will house and display exhibits for both the National Aeronautics and Space Administration and the Department of the Army.

With this strong military heritage, the USSRC was honored to officially become a part of the national Purple Heart Trail during ceremonies held September 12, 2006. A granite monument, provided by Chapter 2201 of the Military Order of the Purple Heart, is located just off the main pathway that leads visitors from the eastern parking lot into the museum entrance.

The Purple Heart Trail was established in 1992 by the Military Order of the Purple Heart Association, a non-profit, Congressionally-chartered service organization formed in 1932 and composed exclusively of Purple Heart recipients. The Purple Heart Trail originates in Mount Vernon, Virginia, and traverses the United States to California. Twenty-two states, plus Puerto Rico and Guam, have erected Purple Heart monuments, thus joining the "trail."

General George Washington conceived the idea for the Purple Heart award, known then

as the Badge of Military Merit, in August of 1782. It is the oldest military decoration in present use and is often described as the first award made available to the "common soldier." The Purple Heart is awarded to soldiers injured or killed as a direct result of combat activities.



USSRC Publishes von Braun Book

Bringing information on Mars to the public was not limited to museum exhibits. The USSRC published a fictional story, *Project Mars, A Technical Tale*, penned by Dr. Wernher von Braun in the 1940s that is available online at www.spacecamp.com and in the museum gift shop.

The USSRC archives stores many of Dr. Wernher von Braun's papers, and as part of an initiative to make these documents more readily available to the public, the USSRC partnered with space publisher CG Publishing (Apogee Books) to print the futuristic story of travel to the moon and Mars, which von Braun set in the 1980s. The book includes an appendix with technical information and formulas that the author used to support his theories on traveling to Mars.

Test Capsule Gives Glimpse of Future Design

Lockheed Martin presented to the USSRC a test capsule used in a series of water landing tests as part of the design and development of the next generation of NASA space vehicles. The capsule, now on display in Rocket Park located adjacent to the Saturn V rocket, was unveiled at a ribbon-cutting ceremony on June 5, 2006. Joan Underwood, Senior Manager of Communications for Lockheed Martin Space Systems in Denver, CO, coordinated the event, and she was joined by other Lockheed Martin representatives (shown from left) Pat McKenzie, Denver, CO, and Terry Abel and Steve Humphrey, both of Huntsville, AL, who are pictured with USSRC Chief Executive Officer Larry Capps. In August, Lockheed Martin received the NASA award to build Orion (the capsule that will sit above the Ares I rocket) that will transport explorers into space after the shuttle is retired.



Discovery Backpacks Developed for Younger Visitors

In an effort to make the museum more interactive for young children, this year the USSRC Education Department developed Discovery Packs to enhance the museum experience for children ages 10 and younger. The rolling backpack includes a guidebook with activities to be completed throughout the museum that are designed to get families engaged in active discovery of the museum exhibits. The activities include: "I Spy" types of games, a stuffed monkey (in recognition of the monkeys who flew in space), a model rocket, an astronaut glove box activity, and a film canister rocket to launch in Rocket Park. Because children are inquisitive, the backpack even includes a reference book full of questions and answers about space to assist parents. Museum visitors can check out the Discovery Packs at the front desk. A NASA Explorer Institute informal education grant helped to fund the project. Boeing donated additional backpacks to allow the program to expand to other topics (Saturn V, upper grades, and physics themes) in 2007.



Existing Exhibits Command Attention

In addition to adding new exhibits, the USSRC leased one of its traveling exhibits, *Laboratories in Space: Science in Orbit* to the Challenger Center in Hammond, Indiana, for three months. Such lease agreements further the USSRC educational mission and also help the revenue stream.

Center staff members aggressively work to preserve and maintain existing artifacts, many of which are displayed outdoors. This year, the SR-71 Blackbird spy plane was cleaned and painted and new decals, tires, and signage were applied just in time for the busy summer season.



Educator Numbers and Partnerships Increase in FY06

The educator programs at the USSRC continued to grow this year, with attendance for the summer teacher sessions increasing 13 percent over FY05. However, the program offerings expand far beyond the summer season. Staff in the Education Department work year-round conducting workshops on such topics as robotics, hydroponics, and an abbreviated SPACE ACADEMY® for Educators Program, which last year reached an additional 200 teachers.

A new partnership was established with Rhodes College to bring NASA



Stars, a program for Title I schools developed by education staff members at the USSRC and Marshall Space Flight Center, to the Memphis Public School System. The USSRC trained 16 Memphis teachers in preparation for the program that brought over 350 students to Huntsville in the fall of 2006. Tennessee Senators Bill Frist and Lamar Alexander provided funding for the program.

The Education Department also developed and coordinated teacher workshops for the Appalachian Regional Commission, another new partnership established in FY06. The two-day workshops reached over 90 teachers in distressed counties of Alabama, Mississippi, Ohio, and West Virginia. Each intense two-day workshop focused on one topic and provided in-depth content knowledge about the moon, Mars, rocketry, living and working in space, and Pro Desktop software. Funding will continue for 2007 with another 100 teachers participating in this unique professional development. In-kind partners in this program were Arizona State University, PTC Corporation, and Marshall Space Flight Center.

Corporations and Grants Support Summer Professional Development Programs

Most of the teachers earn scholarships in order to attend the six-day SPACE ACADEMY for Educators or the nine-day ADVANCED SPACE ACADEMY for Educators. Sponsorships and grants for these sessions, which are held in June and July, totaled more than \$1 million during FY06. Sponsoring organizations are as follows:

- 248 NASA Explorer Schools
- 205 Honeywell, Inc.
- 82 University of Alabama in Huntsville
- 90 The Boeing Corporation
- 77 International SPACE CAMP Teachers of the Year and International Teachers
- 16 NASA Stars/Rhodes College
- 15 Department of Defense
- 13 Iowa State University
- 7 Rockwell

Teachers Leave Gravity, Experience Scientific Principles

Northrop Grumman provided a once-in-a-lifetime opportunity to experience zero gravity to teachers attending International SPACE CAMP held the last week in July. The USSRC hosted 77 teachers, including National Teacher of the Year Kimberly Oliver of Broad Acres Elementary School in Silver Spring, Maryland, Teachers of the Year from each of the states and the U.S. territories, and master teachers from 24 countries.



During the camp, teachers received pre-flight training in weightlessness, and they designed an experiment that was conducted while the Zero Gravity (ZERO-G®) Corporation aircraft was in flight. USSRC Education Director Katrine Balch (who trained on a Zero-G flight in the spring) developed a teacher workshop, which she and her staff taught prior to the flight, on how the experience could be incorporated into science, engineering, technology, and mathematics curricula development.

In addition to the flights, teachers participated in a panel discussion featuring several members of Wernher von Braun's Rocket Team. Astronaut Frank Culbertson and Christa McAuliffe's mother, Grace Corrigan, also spoke to the group in separate presentations. The week's activities were funded by grants from e-Bay founder Pierre Omidyar and his wife Pam, by Toyota Motor Manufacturing of Alabama, and by the Council of Chief State School Officers, which has sponsored the National Teacher of the Year Award since 1952.

The countries that participated included Argentina, Australia, Austria, Belgium, Brazil, Canada, China, Costa Rica, the Czech Republic, Denmark,

Finland, France, Germany, Greece, Hungary, The Netherlands, New Zealand, Norway, Portugal, Russia, South Korea, Singapore, Switzerland, and Turkey.



Students Thrive on Challenges

For many children, learning space history, teamwork, and leadership skills is an eye-opening experience that introduces new opportunities never before considered. The camp experience is much the same for visually-impaired students. While SPACE CAMP staff members strive to accommodate children with accessibility challenges throughout the year, each September major adjustments are made to the Mission Center Complex when simulators and instrument panels are adapted for Braille and electronic magnification devices are integrated into the SPACE CAMP training area.



Dan Oates, a teacher at the West Virginia Schools for the Deaf and Blind, leads SCI-VIS (SPACE CAMP for Interested Visually Impaired Students) that brought 181 students to Huntsville this year. Oates works throughout the year to raise scholarship funds for these students who for the 2006 session came from the U.S., Canada, Ireland, and Australia. Delta Gamma has provided funding for the program since 1994, annually awarding a Service for Sight Grant. In recent years, Central Visions Solutions has been active in raising money for the program with Michael Rowley leading the company's effort.

An Australian teacher, Helen Young, who attended as a chaperone provided the following feedback on this year's program:

Thanks so much for the experience; I had an absolute 'ball' for all of my 2 weeks in USA, especially at SPACE CAMP. What the students are offered in experiences is fantastic and so right for those with a vision impairment. . . Throughout the week at SPACE CAMP, both Lee and I wrote e-mails each day to families about the progress our students were making: socially, in independence, academically, physically, and emotionally. We observed them achieve physical activities that we thought they would not attempt such as the pumper pole and climbing wall. We saw them assist other students with less vision through their own initiative when they are usually the ones who receive the most help at their schools. Their ability to accept responsibility for their roles in the missions was promising for their future careers. We loved and giggled at the social interaction that occurred at all times; it was a relief to see our students just being typical teenagers and developing networks that hopefully will continue. Parents read about their sons having to get themselves ready each day, organize their own belongings, and look after others who may need it. We hope it continues at home! The amount of space-related knowledge they gained is immense and generated much discussion during our last few days in USA. Interest has continued at home as one of our travel programs on TV featured SPACE CAMP a week after we returned—coincidence or not? We also e-mailed families about the team bonds that were established based on trust, dependence, and working for a common goal. It was interesting to watch some of our students assume leadership roles and take on decision making for the group. So, self esteem, confidence, self-advocacy, and self-reliance have all had a great workout. Finally, I would like to thank all who allow this camp to occur. The councilors know how to get the most out of the students and present challenges that stretch the students but are achievable, usually with plenty of group support (but that's the idea). We know some of the huge amount of work that goes on all year for the end result, and I'm guessing that there is so much more to this. If I have the chance, I will be back.



Astronauts and Celebrities Visit

During FY06, 452,964 visitors came to the USSRC, and while every person who came through the door is important, a few are well-known. Tom Hanks visited the Center in July to attend his son's graduation from SPACE CAMP. While here, he took time for a photo session with von Braun Rocket Team members Konrad Dannenberg (left) and Ernst Stuhlinger. Earlier in the year, Hanks sent a special message via DVD to Huntsville's Apollo veterans that ran prior to the community premiere of *Magnificent Desolation*, an IMAX® movie about moon exploration that Hanks narrates. This very high-profile member of the SPACE CAMP family also sent a second message directed to students on the importance of studying math, science, and technology, and that clip is shown daily as part of the *Magnificent Desolation* presentation.



Be Ready Day and Be Ready Camp Focus on Emergency Preparedness

Beneath the full-stack shuttle exhibit at the U.S. Space & Rocket Center (USSRC) in Huntsville, Alabama, Governor Bob Riley handed out diplomas to the 80 sixth-grade graduates of Alabama's first *Be Ready Camp*. This September 15, 2006, graduation marked a new era in Alabama's efforts in teaching ways that communities and families can prepare for emergencies, both natural and man-made. In addition to the four-day camp, the USSRC was the site for the state's 2006 *Be Ready Day* observance, which provided an additional 1,500 students from Madison County the opportunity to learn about the importance of being prepared for disasters. The Alabama Department of Homeland Security, the Governor's Office of Faith-Based and Community Initiatives, and the Madison County Emergency Management Office joined the Center in hosting the event. The event evolved as a result of the partnerships that the Center's Geospatial Training and Application Center (GTAC) has with these government agencies. The GTAC mission is to better educate the public and inspire them with real life

applications of the space-based technologies of geographic information systems, global positioning systems, and remote sensing. During *Be Ready Camp* and *Be Ready Day*, students learned how these geospatial technologies can be utilized in emergency preparedness.





Bob Springer inspired educators attending The Boeing Company's educator program that brought 90 teachers from across the globe.

SPACE CAMP to Celebrate Silver Anniversary

Planning for the 25th Anniversary of SPACE CAMP began in FY06. Holly Beach, Marketing Vice President, leads the committee of 26 staff members who are planning the special activities that will occur during 2007. Celebration week is scheduled for June 13-18, 2007, with special activities planned for each of the weeks in June, July, and the first weekend in August. Updates on the anniversary schedule and plans are posted at www.spacecamp.com/anniversary25th/. Last spring, the Center began distributing a quarterly newsletter by e-mail to more than 4,000 alumni who have provided addresses.



Flags Cleared for Shuttle Mission

As part of the SPACE CAMP 25th anniversary observance, NASA agreed to fly 249 special commemorative flags (four inches by six inches) on STS-116, launched in December. Jim Ellis of the Marshall Space Flight Center assisted the USSRC in getting a special exemption from a NASA rule that usually dictates that only one

commemorative item from a selected non-profit organization will fly. When the flags returned from space, each was mounted and framed for presentation to special friends of SPACE CAMP during anniversary events. Balch and Bingham, LLP, provided major funding to produce, mount, and frame the flags. HealthCare Office Solutions is the supporting sponsor.



Alumnus on Rover Team

SPACE CAMP alumnus, Dr. Jim Rice, has been interested in exploring space since he was seven years old and remembers his father taking him out to watch meteor showers as a young boy. "As I lay on the hood of his truck gazing up into the dark night watching meteors glowingly zip by overhead," Rice recounts, "it dawned on me that space was a real place to go and explore." Growing up, he built and launched numerous model rockets and vividly remembers the Apollo lunar landings. Rice, who was born and raised in Tuscaloosa, Alabama, recounts that his parents brought him to NASA's Marshall Space Flight Center in Huntsville numerous times. He worked at the USSRC as a counselor in 1985 helping to pioneer the SPACE CAMP program for adults.



Rice received a bachelor's degree in geology from the University of Alabama, a master's in geosciences from Northeast Louisiana University, and a Ph.D. from Arizona State University where he specialized in the study of the geomorphology of the channels and landforms on Mars.

He presently works with both *Spirit* and *Opportunity* and the THEMIS camera on board *Mars Odyssey*. Rice is also part of the team selecting the landing sites for both the *Mars Phoenix Lander* and *Mars Science Laboratory Rover* at the Mars Space Flight Facility located at Arizona State University.

IMAX® Focuses on the Moon and Mars

The moon and Mars commanded presence on the domed IMAX® screen at the USSRC through the premiere of two movies, *Roving Mars* and *Magnificent Desolation*.

Lockheed Martin and Redstone Federal Credit Union hosted the November 21, 2005, public premiere of *Magnificent Desolation*, an IMAX® movie produced, co-written, and narrated by Tom Hanks, which commemorates the Apollo lunar missions and salutes the 12 astronauts who left footprints on the moon.

Members of Wernher von Braun's Rocket Team were special guests for the event that featured former astronaut Bruce McCandless as the speaker. Earlier in the month, *Magnificent Desolation* Director Mark Cowen spoke at an event for local sponsors, the University of Alabama in Huntsville and WZYP, that assisted in promotional efforts for the movie's Huntsville debut. More than 115,000 visitors saw this movie at the USSRC by the end of September 2006.

Lockheed Martin hosted area educators, elected officials, and community leaders for the June 5, 2006, premiere of the Walt Disney film, *Roving Mars*. The film follows *Spirit* and *Opportunity*, the two Mars rovers that continue to outperform expectations on exploring the Martian surface. Dr. Jim Rice, a former SPACE CAMP counselor and an astrogeologist from Arizona State University, gave a lecture for museum and SPACE CAMP guests on the day of the event and also spoke to those attending the evening premiere. From the June opening until the end of the fiscal year, 41,485 visitors saw *Roving Mars*.

Joy Knight from Lockheed Martin Space Systems Company in Denver, CO, coordinated the premieres, and she was joined by local Lockheed Martin officials, Steve Humphrey, Vice President for Army Programs and Corporate Business Development, and Bob Drolet, Director of the Missiles and Space Company, in sponsoring the events.



USSRC Shows Profit

While the USSRC is a not-for-profit educational organization, the Center staff members work to earn a profit each year to provide funds for re-investing in infrastructure improvements. The USSRC brought in revenue of \$25.7 million in FY06 and held expenses to just under \$25 million, allowing the Center to post a profit for the fourth consecutive year. The Center employed 369 full-time equivalent employees during FY06 and provided a \$60.5 million economic impact on Madison County.

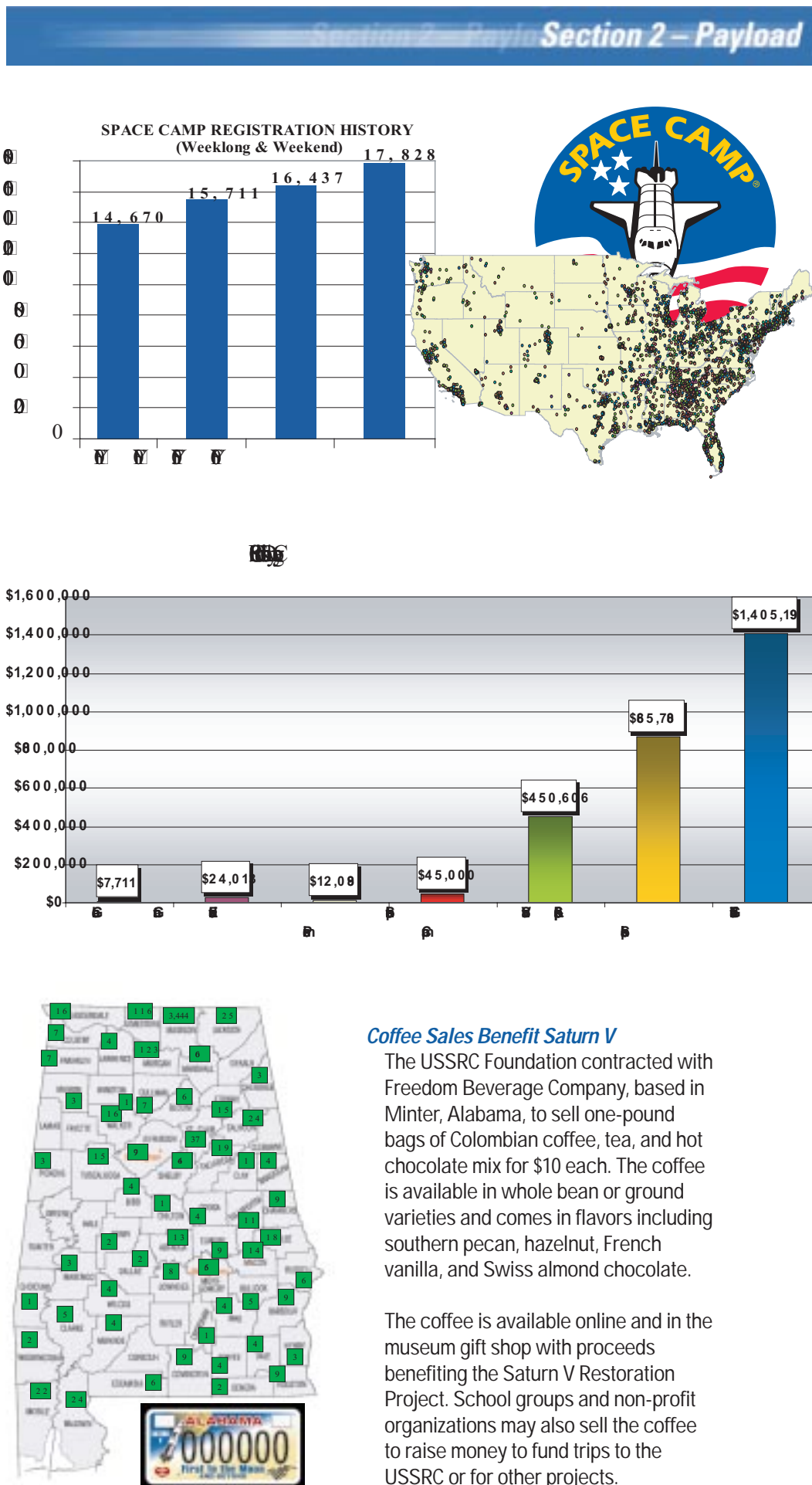
The accompanying graph (top right) shows the increase in the number attending camp programs during the past four years and the map of the United States illustrates where the campers live. Each dot on the map represents a Zip Code and depicts the geographical distribution rather than the number attending since one Zip Code could be the residence for one camper or for dozens of students who participated as part of a school group.

According to an analysis done by University of Alabama in Huntsville Professor Niles C. Schoening, the USSRC had a total employment impact of 854 jobs in Madison County during FY06.

The U.S. Space & Rocket Center (USSRC) Foundation posted \$1.4 million in revenue, a five percent increase over FY05, and added almost 100 new donors to its list of contributors. Contributions benefited teachers and students who attended camp programs, museum exhibits—including the Saturn V rocket—and events and premieres as shown in the graph above.

The Saturn V Tag Sales Exceed 4,000

Sales for the Saturn V *First to the Moon and Beyond* tag, a project of the USSRC Foundation, reached 4404 by the end of September and brought in revenue of \$96,484 for FY06. Sales were strongest in Madison County where 3,444 tags are on the road. However, as the accompanying map shows, the license plates are being purchased throughout the state.



U.S. Space & Rocket Center**SELECTED FINANCIAL AND OPERATING DATA***in millions*

Fiscal year ended	2007 (Budget)	2006 (Actual)	2005 (Actual)
-------------------	------------------	------------------	------------------

Revenues:

Camp Programs	\$15.88	\$12.84	\$12.75
Museum	8.40	7.73	7.61
Advancement/GTAC	8.01	3.49	4.39
Other	1.86	1.66	\$1.25
Total Revenue	\$34.15	\$25.72	\$26.00

Expenses:

Personnel Related	12.45	11.80	10.86
Facilities	2.41	2.55	2.00
Cost of Goods	2.55	2.27	2.32
Services	1.03	1.22	0.91
Program Related	1.75	1.59	1.35
Marketing	0.92	0.56	0.32
Travel	0.12	0.35	0.25
Finance	1.55	1.48	1.32
Other	0.77	0.86	0.76
Depreciation	2.27	2.30	2.15

Total Expenses	\$25.82	\$24.98	\$22.24
-----------------------	----------------	----------------	----------------

Net Income	\$8.33	\$0.74	\$3.76
-------------------	---------------	---------------	---------------

U.S. Space & Rocket Center Foundation**SELECTED FINANCIAL AND OPERATING DATA***in millions*

Fiscal year ended	2006
-------------------	------

Revenues:

Scholarship Donations	0.03
Sponsorship Donations	0.81
International Space Camp Donations	0.08
Geospatial Grant	0.03
Equipment Donations	0.08
Undesignated Donations	0.01
Saturn V Donations	0.36

Total Revenue	1.43
----------------------	-------------

Donation Transfers:

Geospatial Grant	0.02
Sponsorship/Scholarship Donations	0.91
Saturn V Donations	0.34

Total Transfers to U.S. Space & Rocket	1.28
---	-------------

Expenses:

Supplies - Program	0.01
Fundraising Expenses	0.03
Fundraising Event Expenses	0.01
Travel Expense	0.01
Print Media and Publications	0.01
Bad Debt Expense	0.01

Total Operating & Program Expenses	0.07
---	-------------

Total Expenses and Transfers	1.35
-------------------------------------	-------------

Change in Net Assets	0.08
-----------------------------	-------------

U.S. Space & Rocket Center Foundation**SCHOLARSHIP AND SPONSORSHIP DONATIONS***in thousands*

Fiscal year ended	2006
-------------------	------

Redstone Federal Credit Union	5.00
Clear Channel Communications	10.50
Honeywell International	466.96
Individual Donations	3.14
Toyota Motor Mfg. North America	40.00
Thomas Walter Clearman	2.70
A.J. Hulverson Family	0.85
AIAA	3.50
Rockwell Automation	4.50
Sanford Jenkins	0.53
The Sulzberger Family	25.09
Jim Flinn	1.20
Sidney White	0.80
Joe Collazo	0.40
Daniel Wilson	0.40
Army Community Services	11.18
Lockheed Martin Mechanisms Educ.Assoc.	1.48
Bettye A. Wehrli	1.10
Pierre & Pamela Omidyar Fund	25.00
ASMDA	25.44
GenCorp Foundation	1.00
Delta Gamma Foundation	7.50
Northrop Grumman	20.00
United Space Alliance	1.00
Julian & Dorothy Davidson	2.40
Englehard	0.50
Rockwell Collins	6.00
Lockheed Martin Space Systems	6.35
Qualis Corporation	5.00
The Boeing Company	138.68
Informal Education Products, LTD	1.00
Military Child Education Coalition	10.60
Central Vision Solutions	12.00
Pratt & Whitney Rocketdyne, Inc.	3.00
Council of Chief State School Officers	37.25
Aerospace Education Foundation	39.99
Raytheon	10.00
State of Alabama-Dept. of Children's Affairs-Grant	30.00
Motion Entertainment, LLC - Equipment	79.99

U.S. Space & Rocket Center Foundation**SATURN V DONATIONS***in thousands*

Fiscal year ended	2006
-------------------	------

MSFC Retiree's Association	2.75
City of Huntsville	100.00
Specialty Tag Revenue	82.54
Individual Donations	12.95
Northrop Grumman	5.00
Anonymous	5.00
Thomas Walter Clearman	3.00
Julian and Dorothy Davidson	60.00
Bobby Bradley	30.00
Madison County Commission	10.00
The Daniel Foundation	10.00
Wachovia Foundation	25.00
Southwest Consulting	5.00
John Clancy	1.00
Sylvia Balch Thomas	5.00
Mr. & Mrs. Mark C. Smith	15.00
Apogee Books/C.G. Publishing	12.15
Memorial-Max Sharpe	1.26

Foundation/Advancement Highlights—

The USSRC received over \$4 million in donations for the Saturn V Restoration Project, camp scholarship/sponsorship programs, and museum projects during FY06. While \$1.4 million was given to the Foundation, the remaining funds came directly to the USSRC. The Saturn V Restoration Project posted just over \$362,000 in charitable contributions, and Senator Richard Shelby and Congressman Bud Cramer secured an additional \$2.7 million in federal funding, bringing total cash revenue for the project to \$3.1 million for the year. At the close of FY06, \$5.4 million of the \$7.5 million goal had been raised for the Saturn V restoration. (See page 16 listing Saturn V 2006 donors.) In addition, Madison County Commission Chairman Mike Gillespie and the county Public Works crew provided a significant in-kind donation by doing the site preparation for the Saturn V Visitor Complex and Intermodal Center. This building project encompasses the Saturn V Center and an intermodal bus transportation building, funded by a Federal Transit Administration (FTA) appropriation obtained by Senator Shelby. Also, as an extension of the FTA project, Senator Shelby secured an additional \$1,000,000 in the FY06 transportation budget for a tramway system to link the USSRC to the Huntsville Botanical Garden. The money is appropriated over a four-year period, and \$238,000 was allocated for FY06.



Sponsorships

Donors generously supported sponsorship programs that pay tuition for students and teachers to attend camp, producing \$827,000 in revenue, a 38 percent increase over FY05.

Honeywell sponsored the largest program in FY06, bringing 205 teachers to SPACE CAMP. Army Community Services continued the longest running program by sponsoring 16 students for the twenty-second year. The USSRC welcomed a new camp sponsorship this year: the Sulzberger Foundation, which funded 20 students and two teachers selected from the Aerospace Academy High School and the Academy of Future Technologies, both located in the Bronx. Prior to year's end, Pratt & Whitney Rocketdyne established funding for a new educator program that will begin in summer 2007.

The Aerospace Education Foundation brought 30 students and two teachers, Army Community Services sponsored 16 students, and Military Child Education Coalition funded camp for 15 students in a special program established in memory of Bernard Curtis Brown, an 11-year-old killed on September 11, 2001, when his plane crashed into the Pentagon.

Scholarships

Over 370 students from throughout the world applied through the Center's general scholarship competition. Forty-five students received full scholarships and an additional 231 scored well enough to receive a partial scholarship. Northrop Grumman, the fund's largest corporate donor, sponsored 13 students. Other major 2006 sponsors are listed on page 16.

Students also attended through funding from three endowed scholarships: the Hudson-Howard Endowed Scholarship established by Mr. and Mrs. James R. Hudson, Jr., the Roberto Goizueta Endowed Memorial Scholarship funded by Coca-Cola in honor of a former CEO, and the Gary Griffin Endowed Scholarship.

ASMDA Sponsors Student Program

For more than 10 years, ASMDA has sponsored scholarships for children to attend SPACE CAMP. This year, 15 winners came from Alabama, Alaska, Colorado, Nebraska, Kwajalein Atoll, and Washington, D.C., for the July 2-7, 2006, session. The Alaskan winners were accompanied by Mike Gerhart (shown on back row at right in the photo above), a teacher who served as a chaperone. Winners are selected based on their handwritten essays and school grades.





Aerospace Highlights—

Many of those attending camp this year were faced with a new challenge—an expanded ropes course that incorporates elements of an existing low ropes course with two new high ropes activities. The additions include a tower (with a climbing wall, rappel platform, and 380-foot zip line) and a 32-foot pole that is designed so that climbers can stand on the top and ultimately leap off the edge to reach a suspended rope. The new facility is built on the eastern section of the property near AVIATION CHALLENGE and is visible from the I-565 overpass. Those attending adult programs (corporate and educator camps) and the 13-day program for high school students use the course, which can accommodate 72 people. All activities are supervised by staff who are specially trained for the ropes course.



Overall camp attendance was up over FY05, and camps for the new 8- and 13-day programs, designed for students who wanted to spend more time at the USSRC, proved very popular. Corporate camp programs posted a twenty-five percent growth in revenue over FY05 by hosting clients representing such sectors as aerospace, financial, insurance, firefighters/first responders, advertising, young professionals, and federal agencies. Guest astronaut speakers included Bill Anders, Gene Cernan, Mike Mullane, Storey Musgrave, Bob Springer, and Frank Culbertson.

Support Services Highlights—

The USSRC Food and Beverage Department provided phenomenal service during FY06 feeding over 700,000 meals. The menu selections ranged from kid-pleasing pizza (served on the camp line) and salads and sandwiches (sold in the museum's food court) to elegant entrees prepared by USSRC chefs for special gatherings. The Special Events/Catering Section coordinated 131 events, parties, and meetings for corporate clients generating revenue of \$447,000, a 16 percent increase over FY05.

Center Accounts for 100% of Property

As an agency of the State of Alabama, the USSRC must account for all property valued at \$500 or more. Staff from State Auditor Beth Chapman's office conducted the property audit January 23 through February 1, 2006, and the USSRC, led by Property Manager Terry Poole, accounted for 100 percent of the 2,088 items with an acquisition cost of \$10,756,284.13. The property ranges from office equipment to the items not typically found in a state agency—Mission to Mars motion-based simulator, the MIR Space Station mockup, and the Saturn 1B engine—to name just a few of the unique items on the USSRC inventory list.



Shuttle astronaut Mike Mullane entertained and informed corporate camp participants with stories of space exploration.



Marketing Highlights—

The USSRC Marketing Department negotiated several very high-profile sponsorship opportunities including: Arby's—SPACE CAMP appeared on over two million meal bags distributed by 3400 restaurants in this national promotion to launch a new healthy line of children's meals.

Hasbro Transformers Toy—This promotion featured cable television ads on Nickelodeon and Cartoon Network. SPACE CAMP was also featured on 800,000 product boxes and on in-store shelf hangers. The toy giant's marketing outreach also featured an Internet component, and traffic into the SPACE CAMP Web site from the Hasbro site was tremendous during the first quarter of 2006.

New Web site—Features of the new Web site include easier navigation, a more structured layout, and better imagery, and it is easily updated. Viewers can now find all the information they need – along with pictures, movies, and more.

In addition, the USSRC was featured in publications and on television: *USA Weekend*, which reaches an audience of 1.2 million, featured the USSRC in a July 2, 2006, article on adult fantasy camps. Andy Kindler did a comedy piece at SPACE CAMP that appeared on *Late Night with David Letterman* on September 18, 2006. Television crews from the Travel Channel, British Broadcasting Company (BBC), Australia, and Germany also shot segments at the USSRC.



Center Observes Challenger Anniversary

On January 28, the USSRC observed the 20th anniversary of the loss of Space Shuttle Challenger and the crew of seven. David King (left), Director of the NASA Marshall Space Flight Center, was the featured speaker for the special ceremony that was coordinated by the USSRC Media and Public Relations Director Al Whitaker. The Grissom High School ROTC provided the Honor Guard. Shown to the right of King are USSRC Chief Executive Officer Larry Capps and Dr. Mike Allison.

Human Resources Highlights—

Balancing the number of employees to the number of clients served is always challenging as the Center strives to

keep the operation streamlined while providing excellent customer service. Finding, hiring, and training just the right number of competent staff, which must be done in advance of knowing exactly what the spring and summer workload will be, is a yearly test for Marion Cox, Vice President of Human Resources (HR). This year, the staff/client ratio worked well with the Center employing 162 full-time staff members and 450 temporary/seasonal employees during the peak summer season. In order to fill the 345 counselor positions (that are counted in the temporary/seasonal number), Cox and her staff recruited at 25 universities, participated in four city blitzes, and conducted two job fairs at the USSRC. Training is a critical component to maintaining good customer relations and job knowledge, and last year the HR staff conducted orientation, customer service, and policies/procedures training for over 600 employees. In keeping with the Center's education mission, HR staff led the Center's participation in a community-based education program with Bob Jones High School, Butler High School, and Huntsville Center for Technology and coordinated a program allowing culinary arts and hospitality students to complete internships in the USSRC's food service department. The HR staff conduct annual drug and alcohol awareness training to ensure that the USSRC is re-certified as a Drug and Alcohol Free Workplace, and staff members also oversee pre-employment drug testing and random drug and alcohol testing.





Cooper Recognized for 25 Years of Service

Robert Cooper (shown second from left) receives congratulations from USSRC Chief Executive Officer Larry Capps at the 14th Annual Employee Length of Service Awards Presentation held in April. Cooper is shown with his wife, Glenda, and Human Resources Vice President Marion Cox (right). Cooper is the Lead Simulations Technician for the USSRC, and his troubleshooting and maintenance abilities are invaluable in keeping exhibits operating properly. While working full-time, Cooper went to school and learned how to repair Apple (MacIntosh) computers, a skill that was needed at the Center.

In addition to honoring Cooper, several other employees were recognized for their years

of service: 15 years—Samuel Boyd, Annette Fletcher, Yates Schneider, Van Brown, Yolanda Raysor, and Diana Standridge; 10 years—Geoffrey Abrams, Susan Moore, Irene Willhite, Vicki Berryhill, and Tracey Ward.

Museum Highlights—

Over 452,000 visitors came to the USSRC during FY06, an increase over the 10-year average of 372,000. Much of the additional traffic can be attributed to special events held at the Center, including after-hours parties and community activities such as the moonbuggy competition, *Taste of Huntsville*, and *Be Ready Day*.

Museum volunteers donated almost 700 hours to the museum this year, worth an estimated \$4,800 in service to the USSRC.

Membership Program Expands Activities

The museum membership program held seven events this year including three new activities: an Easter egg hunt, a summer picnic at the AVIATION CHALLENGE facility, and Rockets & Crème, where families built and launched rockets and then celebrated by eating ice cream. Peak membership for the year hit 2,024.

British Author Lectures

In keeping with the focus on the moon, Mars, and beyond, Alan Lawrie, author of the book *Saturn*, visited in January and lectured on the Saturn V. At the conclusion of his presentation, Lawrie led visitors on a tour of the restored Saturn V. Portions of his research for the book, which is being referred to as the most detailed history of the Saturn rocket system, was conducted with the assistance of USSRC curator/archivist Irene Willhite and James Willhite, exhibit coordinator.

Fifty-five members of the Saturn V Rocket Team signed 198 copies of *Saturn* that are available through the Web site of CG Publishing (<http://www.apogeespacebooks.com/Books/SaturnSig.html>) for \$200 each. Lawrie and the publisher donated \$12,500 from the online sales to the *Saturn V Restoration Project* during FY06.



Donations Made to Museum Archives

The special collections in the USSRC archives grew this year with additional donations from Dr. Ernst Stuhlinger, the chief scientist for the von Braun Rocket Team, and from Frederick I. Ordway III, a historian and author who worked with von Braun at NASA. Ordway, along with Rocket Team members Wernher Dahm, Konrad Dannenberg, Walter Haeussermann, Gerhard Reisig, Ernst Stuhlinger, and Georg von Tiesenhausen and USSRC Curator Willhite, compiled a paper entitled "A Memoir: From Peenemünde to Fort Bliss, White Sands, and Huntsville, U.S.A." The paper, which was presented at the 54th International Aeronautical Congress in Bremen, Germany, was printed this year.

Licensing Highlights—

During FY06, Mike Kelly, Vice President for Licensing, completed assimilation of the international SPACE CAMPS located in Japan, Turkey, Canada, and Belgium, and the licensees for SPACE CAMP Italy notified him that they hope to have that camp operational by 2008. With the increased interest in returning to the moon, the number of inquiries for international licensing grew during 2006, and a Korean group paid a non-refundable deposit for the right to exclusive negotiations for a facility in South Korea. The basic SPACE CAMP license, which includes the camp curriculum and the right to use the trademark, cost \$1.5 million during FY06. Due to the size of the investment, Kelly has found that it generally takes a few years to reach an agreement since these international clients also must equip a facility before the camp can open.

The Licensing office monitors unauthorized use of the trademarks registered to the USSRC, including the SPACE CAMP® mark, which is registered in countries where licensees are active and potential business is promising. Several letters citing unauthorized use of the SPACE CAMP mark were sent this year with all offending parties withdrawing use immediately. The USSRC also

successfully blocked, through the U.S. Patent and Trademark Office, several competing organizations that were attempting to register trademarks similar to trademarks held by the USSRC.

In addition to protecting existing registered marks, the USSRC successfully registered *First to the Moon* for use on license plates after resolving some initial obstacles at the trademark office. This protects Alabama's right to promote the state's heritage using a vehicle license plate, while blocking other states from being able to put the motto on their tags.

Trademarks held by the USSRC



Northrop Grumman Corporation signed a three-year sponsorship agreement with USSRC to become the major sponsor for NASA's *Great Moonbuggy Race*, which celebrated its thirteenth year in FY06. The agreement, worth \$270,000, helps ensure that NASA Marshall Space Flight Center's annual vehicle design and race competition will continue to attract and challenge the best student engineering teams from around the world.

Sixty college and high school teams from the U.S. and Puerto Rico competed April 7-8, 2006, on the grounds of the USSRC, with Pittsburg State University in Pittsburg, Kansas, winning the college division and Huntsville Center for Technology in Huntsville, Alabama, claiming the high school title.

SPACE CAMP around the Globe

SPACE CAMP (Alabama) • Opened – 1982
U.S. Space & Rocket Center
One Tranquility Base
Huntsville, AL 35805
www.spacecamp.com
1-800-63-SPACE

SPACE CAMP Japan • Opened – 1990
Spaceworld
Kitakyushu, Japan

SPACE CAMP Belgium • Opened – 1991
Euro Space Center
Rue Devant les Hetres, 1 - B-6890
Transinne - Belgium
<http://www.eurospacecenter.be/enstage.htm>
32-61-65-64-65

SPACE CAMP Canada • Opened - 1994
The Cosmodome
2150, autoroute des Laurentides
Laval, Québec H7T 2T8
<http://www.cosmodome.org/>
1 800 565-CAMP (2267)

SPACE CAMP Turkey • Opened - 2000
www.spacecampturkey.com
ESBAS-Aegean Free Zone
Space Camp Turkey
Gaziemir, Izmir, 35410 Turkey
+90 232 252 3500 (tel.)

SPACE CAMP Italy • Estimated to Open – 2008
Province of Benevento, Italy





"This competition provides the perfect venue for launching careers in math, science, and engineering," said Art Stephenson, former director of NASA's Marshall Space Flight Center who now serves as sector vice president for Northrop Grumman's Space Technology organization. "It allows students to demonstrate creative, real-time problem-solving skills in a fun but technically challenging environment, the same type of skills the nation will need to sustain a successful human space exploration program." Stephenson added that an entrant in this year's race could one day be driving an exploration vehicle for NASA on the surface of the moon or even Mars.

Teams of students entered in the Great Moonbuggy Race are required to design, build, and race a vehicle that addresses a series of engineering problems similar to problems faced by the builders of NASA's original lunar rover. Each moonbuggy must be a human-powered, "proof of concept" vehicle built by teams of six students. There are no restrictions on materials or cost, but the vehicle, when stowed, must fit into a volume measuring 4' x 4' x 4'.

The competition includes high school and college divisions. It consists of carrying the unassembled moonbuggy to the start line, assembling it, and then racing it around a half-mile simulated lunar terrain course that includes "craters," rocks, "lava" ridges, inclines, and "lunar" soil. During the "driving" portion of the competition, the vehicle must carry at least two passengers:

one male, one female. The team in each division with the lowest overall assembly/race time wins.

GTAC Highlights—

In addition to providing real-world training to students through *Be Ready Day* (featured on page 12), GTAC assisted a number of governmental agencies, colleges, and professional organizations with management of infrastructure and data during the year. These programs included partnerships with:

- Alabama Department of Homeland Security and various federal, state, and local government agencies to leverage existing data sets (new and old) to provide an overall 3D visual representation of this inventory within the state;

- National Geodetic Survey Cooperative CORS program, Alabama Department of Transportation, and Alabama Society of Professional Land Surveyors (ASPLS) to provide a consistent network of GPS correction signals to improve the availability, timely distribution, and widespread use of GPS correction data and technology for practical applications in the state of Alabama; and

- Alabama Natural Heritage Program, Alabama A&M University, Jacksonville State University, and Auburn University via Alabama View to develop methods of acquiring digital orthophotography for the entire state in a more cost effective manner via the Statewide Recurrent Fly Plan.

In addition, GTAC staff developed and/or implemented programs with:

Jim Walker, Director of the Alabama Department of Homeland Security, helped train students participating in Be Ready Camp.



- Alabama Department of Children's Services – Alabama Resource Management System (ARMS) to be able to visualize, analyze, query, and map the health, human, social, and cultural services and programs existing within the State of Alabama with existing socio-economic, demographic, and political data in an interactive internet-based mapping application;

- Alabama Department of Environmental Management (ADEM) – in-field reporting, automated inspection programs, and Brownfield program. These programs will automate existing reporting practices to include digital input forms, in-field inspection reporting, and secure transmission of data from the inspection computers to the appropriate databases housed within ADEM and will provide a web-based Brownfield GIS mapping program with document/content management system integration; and

- Alabama Criminal Justice Information Center – an operational concept for the use of tracking technology for Alabama law enforcement agencies and personnel.

GTAC contracts for these projects totaled \$1.3 million for FY06.

Outfitting the USSRC for the Moon, Mars, and Beyond

The USSRC is the largest space museum in the world, if measured by the number of space artifacts on display. While the Smithsonian's National Air and Space Museum has more floor space, especially with the addition of the Steven F. Udvar-Hazy Center, many of the Smithsonian artifacts relate to airplanes and earthbound flight. The stories presented within this publication give a glimpse of the plans USSRC staff initiated in FY06 to ensure that the museum (which is a Smithsonian affiliate and the Official Visitor Information Center for Marshall Space Flight Center) can retain its reputation as the premier space museum – that it remains known as – The Place for Space.

Providing the latest information on NASA's plans for future space exploration is central to that USSRC vision for educational outreach.

Marshall Space Flight Center will be on the forefront of returning astronauts to the moon and beyond as NASA moves forward with the Constellation Program that will extend a human presence throughout the solar system. The Exploration Launch Projects Office at NASA's Marshall Space Flight Center is responsible for design and development of the Ares I crew and Ares V cargo launch vehicles, a job for which Marshall is eminently qualified having managed the design and development of the Saturn V rocket that put mankind on the moon in the 1960s.

When Steve Cook, Manager of Marshall's Exploration Launch Project Office, visited the USSRC, he reinforced museum officials' resolve to update the museum and add exhibits focusing on the future. Cook talked about the wonderful opportunities the museum will have once the Saturn V Visitor Complex and Intermodal Center is complete not only to showcase the Saturn V but also to show the public how the historic rocket is influencing the design and development of the Ares vehicles. He is absolutely correct about this exciting educational opportunity.

We hope you will take time to visit in the coming months to see how we are building on the vision to make Huntsville, Alabama, the most informative and exciting destination for visitors interested in space exploration by ensuring that the USSRC expands its reputation as The Place for Space.

Ares Launch Vehicles Compared

The Ares rockets, named for the Greek god associated with Mars, will return humans to the moon and later take them to Mars and other destinations. The Ares I will use a single five-segment solid rocket booster, a derivative of the Space Shuttle's solid rocket booster, for the first stage. A liquid oxygen/liquid hydrogen J-2X engine derived from the J-2 engine used on Apollo's second stage will

power the second stage. The Ares I is designed to lift more than 55,000 pounds to low Earth orbit. This rocket will carry the Orion Crew Exploration Vehicle (CEV) in which up to six astronauts will ride into space.

Ares V, the heavy lift launch vehicle, will use five RS-68 liquid oxygen/liquid hydrogen engines mounted below a larger version of the Space Shuttle's external tank and two five-segment solid propellant rocket boosters for the first stage. The upper stage will use the same J-2X engine as the Ares I. The Ares V will be able to lift more than 286,000 pounds to low Earth orbit and 144,000 pounds to the moon. The Ares V will be approximately 360 feet tall, while the Saturn V was 363 feet tall. For more information about the Ares launch vehicles, visit www.nasa.gov/ares.





One Tranquility Base

Huntsville, Alabama 35805-3399

telephone: (800) 637-7223

www.spacecamp.com