SPACE CENTER
Roundup

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President's NASA budget $13.6 billion

President Bill Clinton is proposing a $13.57 billion budget for NASA in fiscal year 2000, a slight decrease from fiscal 1999's $13.66 billion mark.

The 2000 budget request to Congress includes $2.48 billion for the International Space Station, up slightly from $2.3 billion in 1999; $3.15 billion for launch vehicles and payload operations, including space shuttle expenditures, down slightly from $3.17 billion in 1999; $5.42 billion for science, aeronautics and technology, down from $5.65 billion in 1999; $1 billion for aerospace technology, down from $1.33 billion in 1999; $2.49 billion for mission support, down slightly from $2.51 billion in 1999; and $20.8 million for the Office of the Inspector General.

"For the past seven years, I've had the honor of standing before you … to present the proposed NASA budget," NASA Administrator Daniel S. Goldin said during a Feb. 1 press conference. "And as the years have passed by, the record of accomplishment grows and the promise of the future gets brighter. And this year is no exception. NASA keeps getting better and better."

Goldin said that even though the budget request for FY 2000 is slightly below last year's funding level, "we have more money for space science, for exciting new missions and for the research and advanced technologies that will enable bold, new ventures in the future." Explorations of Jupiter, Europa, Mars and Saturn are among these. Investments in new technologies that have reduced costs have made these ventures possible.

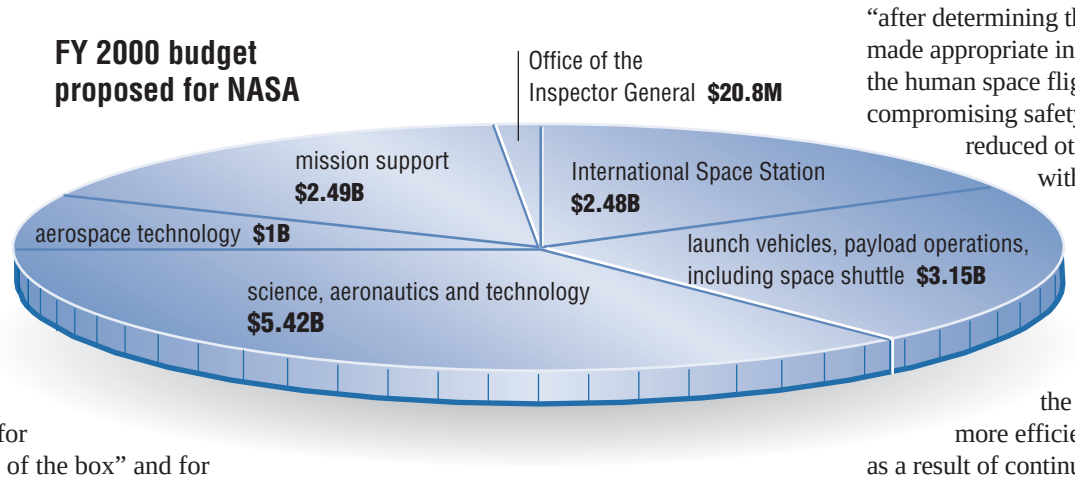
He applauded the NASA team for thinking "out of the box" and for "looking at technologies like air-breathing rockets, advanced information technologies and ultra-high temperature materials to cut the cost of launch by two orders of magnitude and improve safety by four orders of magnitude." The NASA team "continues to deliver, probing deeper and deeper into the universe, launching shuttle after shuttle safely and for less money, increasing our understanding of planet Earth, testing and developing new technologies for the new millennium, pushing the envelope on space-based medical research."

Goldin said that the Clinton Administration has backed off a proposal to pay the Russians to preserve their participation in the International Space Station. Last year, a decision was made to assist Russia in the near-term to facilitate its completion of essential station components, such as the Service Module, which is scheduled for launch no earlier than September.

NASA also moved forward to mitigate potential adverse impacts on the station's operations should the Russian partners not meet their commitments for supplying propellant and dry goods. Goldin noted that NASA covered FY 1998 and FY 1999 impacts and asked the Administration for assistance in covering FY 2000 and future costs. The Administration agreed to do so "after determining that we, NASA, had made appropriate internal reductions in the human space flight account without compromising safety and that we had reduced other NASA programs with lower priority," he said.

No reductions are targeted for shuttle operations because significant steps have been taken to make the program safer and more efficient. Goldin noted that as a result of continuous improvements and upgrades, the shuttle system now costs the American taxpayer 21 percent less to operate than it did in 1991 and 40 percent less when inflation is taken into account.

According to Goldin, NASA has asked The Boeing Co. to analyze the cost of completing construction of the existing space station habitation module. A decision whether to proceed with it or to use the TransHab instead will then be made. ■



Former JSC director to receive National Space Trophy

Former Johnson Space Center Director Dr. Christopher Kraft Jr. will receive the prestigious 1999 National Space Trophy from the Rotary National Award for Space Achievement Foundation.

The trophy, permanently housed at Space Center Houston, is presented annually to an individual selected by leaders of the aerospace industry for contributions to the United States space program. Last year's recipient was President George Bush.

"I'm pleased to be considered among all those who have received the award before," said Kraft. "Awards like these are given to the people who did the job and allowed me to be their leader. We must recognize that there were thousands of people, civil servants and contractor employees, who worked together over the years to make the space program successful."

A native of Phoebus, Va., Kraft began his career with the National Advisory Committee on Aeronautics in 1945 at Langley Research Center in Virginia. He joined the Space Task Group in 1961 as director of Flight Operations and immediately did much of the pioneering work for Project Mercury and the nation's human space flight program.

As director of Flight Operations, he led his group in developing flight rules and operational procedures that became the foundation for human space flight missions from Mercury through today's space programs. His foresight in perceiving the necessity for establishing alternate courses of action and detailed procedures to be followed in the event of systems failures is seen as one of his major contributions to human space flight.

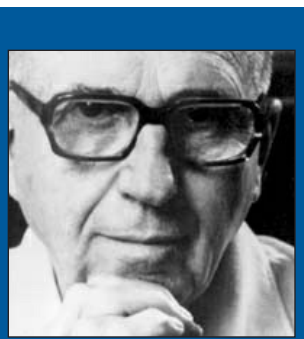
As director of Flight Operations at the Manned Spacecraft Center during the Apollo era, he was responsible for a major facet of one of the most difficult engineering tasks this nation has undertaken – landing a man on the moon and returning him safely to Earth. His group successfully managed all operational aspects of the first and second lunar landings.

Dr. Christopher Kraft Jr.

In 1972, he was appointed director of the Manned Space Center (later renamed the Johnson Space Center) where he directed the center's engineering, scientific, and management activities related to Apollo, Skylab and the Apollo-Soyuz programs. He served as director of JSC until August 1982.

Kraft developed new concepts in science and engineering and incorporated them into the space program. His studies led to the current configuration for managing operational aspects of the Space Shuttle Program.

The trophy will be presented at an awards banquet March 12 at Space Center Houston. ■



Scholarship fund requests applications.

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NASA College Scholarship Fund requests applications

For the seventeenth year, the NASA College Scholarship Fund is requesting applications from dependents of NASA employees for six college scholarships which will be awarded this year. The NASA College Scholarship Fund was established by Pulitzer Prize-winning author James A. Michener and contributions have been received from NASA employees through the Combined Federal Campaign as well as contributions from the JSC Chapter of the NASA Alumni League and the Freedom Forum. Seventy-eight scholarships have been awarded across the agency since inception of the Scholarship Fund in 1982. Applications are due by March 31.

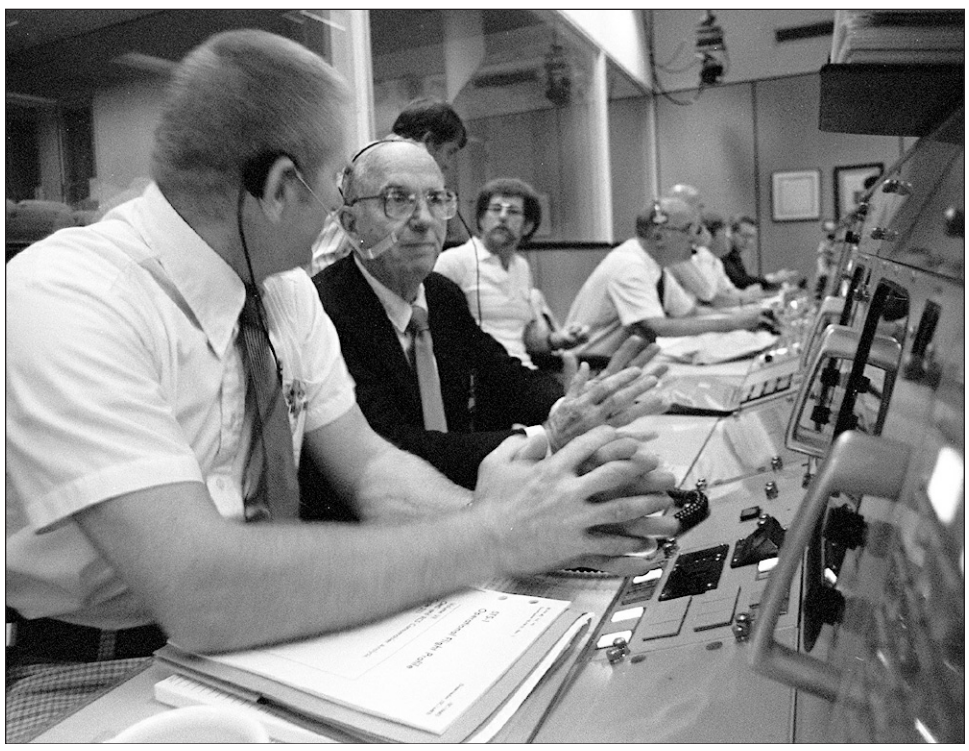
This fund will be awarding six scholarships of $2,000 each. The scholarship is renewable for six years, not to exceed $8,000. Applicants must be pursuing a course of study that will lead to an undergraduate degree in science or engineering at an accredited college or university in the United States.

Applicants must be dependents of current or retired NASA employees or dependents of former NASA employees who died while employed by NASA. Applicants must be graduated from an accredited public, private, or parochial high school or be currently enrolled in college with good academic standing. An applicant must have a combined high school grade and college (if any) grade point average of 2.5 on a 4.0 scale or the equivalent.

After meeting the minimum requirements, applicants will be ranked based on the following objective standards: (1) academic preparation, including grades, class rank, and pattern of courses; (2) school activities; (3) community activities; (4) performance on SAT or ACT; (5) written recommendations from individuals who know applicant; and (6) one-page statement of academic purpose by applicant.

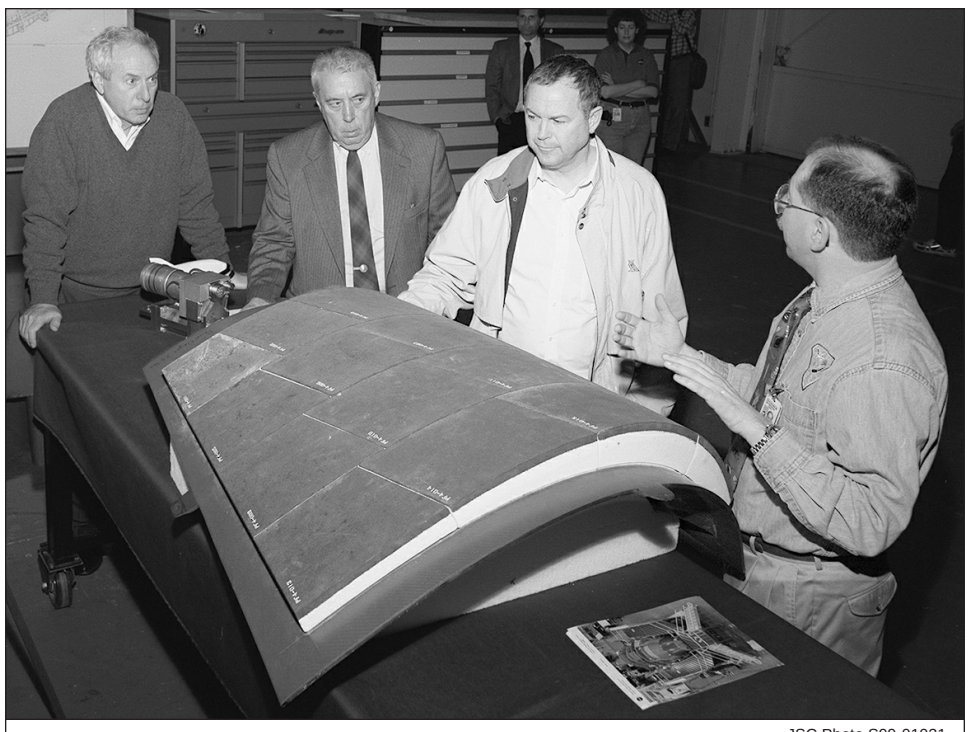
Application forms are available in Bldg. 1, Rm. 840.

Completed applications may be mailed to JSC, the NASA College Scholarship Fund, Inc.; Mail Code AH12/Scholarship Committee; Houston, TX; 77058. For more information, contact Mary O'Connell at x35774 or Teresa Sullivan at x31034. ■



JSC Photo S80-39549

Flight Director Gene Kranz discusses Mission Control operations with author James Michener during a 1980 visit to JSC. The NASA College Scholarship Fund, Inc. began with Michener's unsolicited donation of some of the proceeds from his book "Space." Michener said that he held the people of NASA in such high esteem for their good work through the years that he thought it important to make some contribution to them through the education of their children.



JSC Photo S99-01021

OFFICIAL VISIT – Congressman Dana Rohrabacher, chairman of the Subcommittee on Space and Aeronautics, United States House of Representatives, gets an up-close look at X-38 tiles in Bldg. 220 during a recent visit to JSC. X-38 Project Manager John Muratore, right, briefed him on the status of the project. Rohrabacher was accompanied by NASA Administrator Daniel S. Goldin, left, and JSC Director George Abbey.

Employees Empowered for Safety

VPP? What's in it for me?

By Kathy Packard

OK. So VPP is the new buzzword and we all know that it has something to do with safety, but if I think I'm safe why should I really care and what do we really achieve out of this effort to "get" VPP?

First of all, VPP is the pinnacle result of the accomplishment of having developed and instituted a top notch safety program that is demonstrated by a low lost-time injury rate, high productivity and morale, and a strong mission sense held by both management and labor.

VPP, or OSHA's "Voluntary Protection Program," is really the culmination of the adherence to a strong belief that meeting a deadline, or making a widget, or developing a plan means nothing if a worker's safety cannot be secured. It is a belief that when a high value is placed on human health and safety, then the worker feels his worthiness is measured not by just what he does, but by who he is and, subsequently, loyalty and fellowship are established. The worker is then unencumbered to reach his or her potential and everyone benefits.

When OSHA comes to visit us in the near future, and we have already embraced the simple philosophy that caring about our fellow worker's safety and taking proactive measures whenever possible to enhance our workplace safety is the essence to our success as a great agency, then we will be recognized as such in the form of an OSHA VPP Star site, something that tells the world that our highest prize is the safety, health and well-being of our people. ■

Saving has its rewards

By Mary Peterson

Saving does have its rewards. At least that's what the folks in the Safety, Reliability & Quality Assurance Directorate will tell you. And they have the cash-in-hand to prove it.

At a time when budget cuts come around almost as often as haircuts, SR&QA management decided there must be a way to encourage savings and recognize those employees who make a significant difference. Thus was born the Travel Efficiency Reward Incentive.

Announced in September of last year, the first recipients of the TERI reaped their benefits in a special recognition ceremony on January 29, or the end of the program's first quarter.

A Go-the-Extra-Mile (GEM) award and cash totaling $200 was given to LeRoy Graham in a special drawing among those eligible for the prize. To qualify for the drawing, each participant had to save at least $50 on a TDY (temporary duty) trip. Others making impressive debuts in the competition included Mike Canga with a savings of $908; Larry Starnes, $486; and Mark Erminger with $468.

According to Rich Dinkel, deputy director of SR&QA, "This is a pilot program that was brought about by having to work around a travel budget that is approximately 65 percent of what is actually needed to do our job. Obviously, we had to find newer and better ways to stretch our precious travel dollars."

It couldn't be done single-handedly, however, and it would need the participation of everyone in the organization to make it work. "We wanted to recognize those employees who give something of themselves so others can do their job – those who do the right thing for the right reason," said Dinkel.

> ***'We wanted to recognize those employees who give something of themselves so others can do their job – those who do the right thing for the right reason.'***
>
> —Rich Dinkel

Citing early success, Dinkel remarked, "For the first quarter alone, TERI has resulted in a savings of $4,129. Projected over the entire fiscal year, these savings will allow SR&QA personnel to execute an additional 16 trips, which, otherwise, would never occur. In fact, based on travel date history we collected, if every SR&QA traveler can and will save just $50 on every trip, as many as 42 trips could be added with the savings!" This is enough to make any directorate sit up and take notice.

So, how does SR&QA save money to make up for the 35 percent deficit in its travel budget? Among the things that were done included shortening the time of the trip, utilizing military BOQ (bachelor officer quarters), using a room rate below per diem, saving on rental car gasoline, saving on room rates by sharing a room, using government fuel, and, in one case, negotiating with the customer to provide lodging. Besides these, SR&QA has furnished its employees with a lengthy list of ideas and suggestions for saving money on travel, most of which are very easy to implement. It just means making it a habit to look for ways to save.

And, the more an employee saves, the better the chances for being rewarded. Every time an official travel order is executed that results in a savings of $50 or more in travel expenses, the employee's name is entered in a lottery pool. For every entry, there is one chance to win an award. The individual who saves the most travel money on a single trip is given 5 bonus entries, and second and third place entries each receive 3 and 1 bonus entries, respectively. One winner is selected each quarter by drawing an entry "from the hat."

For more information, contact CC de la Garza, x31033, the SR&QA administrative officer. ■

JSC★s SHINING STAR

Cooke pushes limits in space and at sea

By John Ira Petty

When Mrs. Moon took her fourth-grade class at Stevens Elementary in northwest Houston to the cafeteria to watch Alan Shepard's Mercury launch in 1961 on the school's black-and-white TV set, she didn't know what she was starting.

One of those fourth graders was Doug Cooke. From that moment he knew what he wanted to do in life – he wanted to be a part of the space program. Now he's manager of JSC's Advanced Development Office and that office's Exploration Office. That involves leading the future exploration effort throughout NASA. Now those efforts focus on a return to the moon and later to Mars. "All jobs have their moments, but this is a great one – probably one of the best jobs at NASA," Cooke says.

Through much of his NASA career, which began 25 years ago not long after he graduated from Texas A&M, Cooke has been involved in programs high on the list of NASA priorities.

He also helps design and sail America's Cup boats.

After watching the Shepard coverage and, as a fifth grader, the John Glenn Mercury mission, Cooke was determined to take all the science courses he could and worked hard at them. He graduated from Waltrip High School and with an aerospace engineering degree from A&M with 4.0 grade point averages.

'I really want to see us get started on what it takes to go beyond Earth orbit. Most of us at NASA want to go explore space – go back to the moon, to Mars I want to be in the middle of helping make that happen.'
–Doug Cooke

JSC Photo S98-20497

Doug Cooke, manager of the Exploration Office, is shown with models of Mars lander concepts.

His first job at JSC was in the entry analysis section, and he wound up putting together the aerodynamic flight testing for the shuttle's approach and landing tests and subsequent entry flight tests. "We were flying the shuttle in Mach regimes where nobody had ever done it before," Cooke said. "It was really a unique opportunity. I started that effort two years out of college."

In 1984 he moved to the space station program, heading an analysis group that came up with initial configuration, defined its orbital altitude, and internal configuration of modules.

Later he worked on proposals to achieve President Bush's goal of returning to the moon and going to Mars. Then, in 1991, he was program manager of the Exploration Programs Office. In 1993, a team was put together to redesign the space station – during that nine-month effort Cooke led the engineering of the redesign. A new vehicle organization was formed at JSC later that year where Cooke was vehicle manager. The office led the design and engineering of the International Space Station. Later he became deputy program manager (technical) for space station.

Two years ago, after the announcement of indications of past life in the Mars meteorite, he was asked to lead the Exploration Office. He works with JPL to design robotic missions that will help send humans there. They also will fly payloads on the shuttle to understand the technology required to send people to Mars.

Cooke was on the design team for America II America's Cup syndicate from 1983 to 1986. The boat, skippered by Houston's John Kolius, was eliminated before the cup finals. Now he's on the design team for the Aloha Racing America's Cup Challenge based in Hawaii. The Houston Yacht Club also is cooperating in that America's Cup campaign and the design team has offices there. Two new boats are to be launched in May and June.

In between he helped win the International 50-footer world championship with Kolius on a boat called Abracadabra, a competition that attracted the world's best sailors.

Sailing started at 16, with an invitation to sail with an uncle and a cousin to sail with them from Kemah to Padre Island on a 24-foot boat. Planning began in the winter for the June trip, and Cooke built and started sailing on a small sailboat. He soon went to work at a plant that made small fiberglass sailboats, and there met the owner of a Flying Dutchman, an Olympic class boat. Crewing got Cooke hooked on racing.

Through racing he met Kolius, with whom he jointly owned a boat. The America II campaign followed. It involved Cooke flying to Newport, Rhode Island, to sail the 12-meters almost every weekend. He traveled to Australia for the elimination rounds.

Cooke has a number of other interests – from Civil War weapons to classic cars to swimming. He says his wife, Renee, whom he met in high school, is very understanding of his fast-paced lifestyle. They have two children, Rebecca, 19, and Jeff, 16.

"I've been very fortunate," he said. "I've had a lot of great jobs over the years. It's been a great experience – it always seemed like I got to work on whatever the big effort was at the time.

"I really want to see us get started on what it takes to go beyond Earth orbit. Most of us at NASA want to go explore space – go back to the moon, to Mars," he said. "I want to be in the middle of helping make that happen." ■

Educators conference attracts record attendance

Teachers from throughout the United States and Canada discovered a multitude of ways to use space as a theme to motivate their students and enliven their classrooms during the 5th annual International Space Station Educators Conference February 5-6 at Space Center Houston.

This year's conference attracted 425 registrants from 29 states and 7 Canadian provinces, a record attendance. The event draws primarily elementary and high school teachers as well as museum educators and a few university professors who teach future teachers.

"A number of teachers from across the country attend this conference every year," said Susan Tortorici, Space Center Houston education specialist and conference organizer. "Many school districts send large groups of teachers every year because this event provides them with so much educational material on the nation's space program."

One purpose of the conference is to inform educators about the status of the space station and provide them with educational materials. The other reason is to encourage them to incorporate what they learn into their current curricula.

As Chuck Lloyd, NASA deputy manager, ISS Payloads Office, told the educators in his speech on the first day of the conference, "I ask you as educators to think about the information presented during this conference. It should penetrate each and every one of your educational areas. The challenge, most definitely for the earlier grades, is to try to apply this material."

Marcy Novak, elementary school teacher from Lombard, Ill., and educator with Chicago's Museum of Science and Industry, said she has attended every conference and has had much success in incorporating lessons learned into her classroom.

"I've been integrating space into my classroom for twelve years," said Novak. "I found it is the way to motivate students. Once you start working with space, you can teach them anything."

Although learning more about technical aspects of the ISS was of interest to the educators in attendance, equally important was the unique opportunity to network with their colleagues. Repeatedly, participants noted that the one-on-one discussions with others were of particular value. ■

Roxinne Hameister, right, Wellington High School teacher from Vancouver, conducts a workshop on the human body in space during the International Space Station Educators Conference. Workshop participants, below, simulate experiments that were conducted during STS-90, the Neurolab mission.

'I'm hopeful that experiments conducted in space, including those performed during the recent STS-90 Neurolab mission, will lead to treatments for many afflictions that affect human beings.'
– Roxinne Hameister, teacher

JSC photos 99e1445 and 01447

JSC workers earn Silver Snoopy Awards

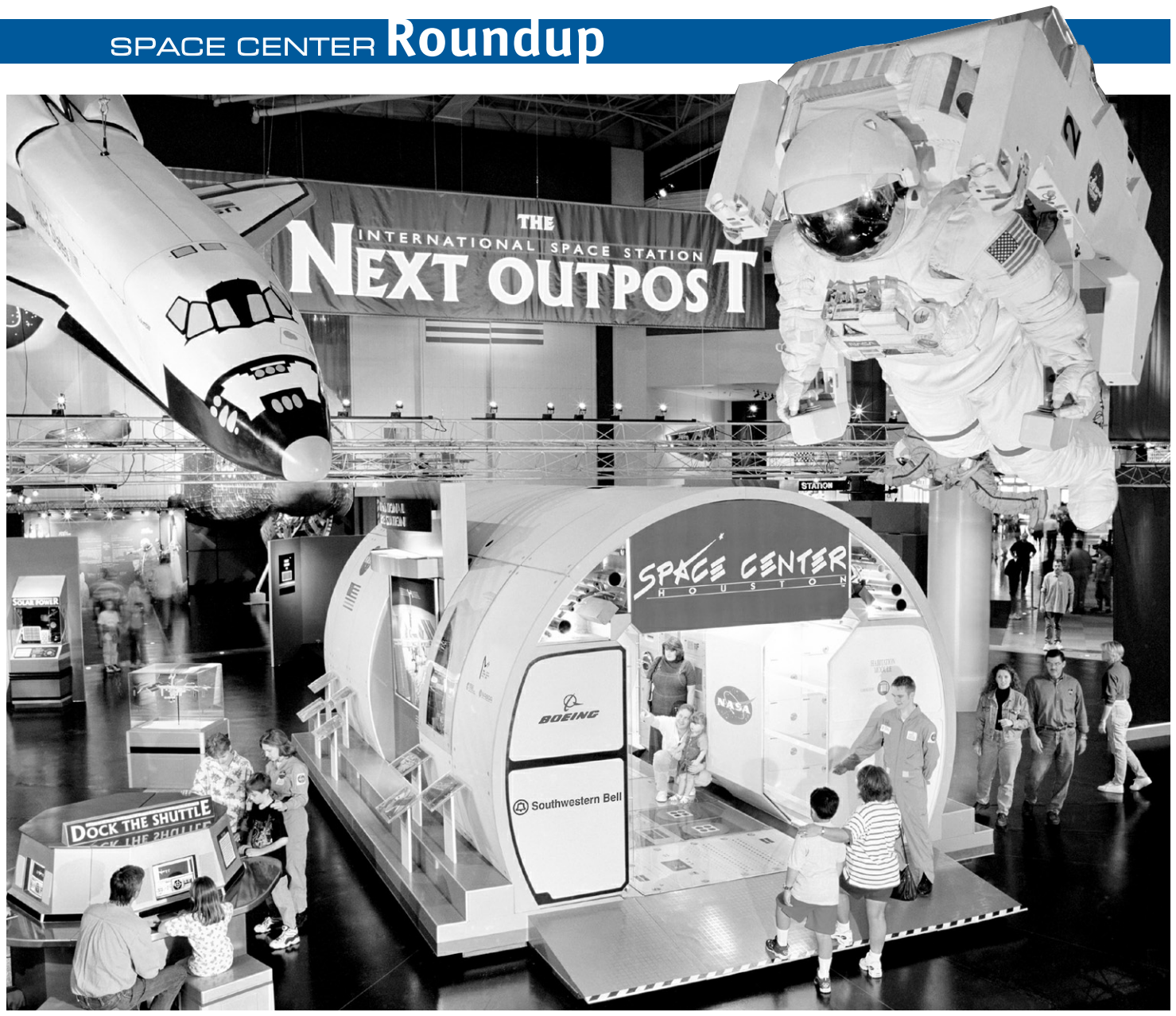
Fifty JSC civil service and contractor employees have, in recent months, become proud recipients of the much-coveted Silver Snoopy Award.

Civil service employees honored with Silver Snoopy awards are Cyndi Draughon, Office of the Chief Financial Officer; James Webb, Flight Crew Operations Directorate; Kim Anson, Ray Lachney, Elizabeth Spence, and Timothy Baum, Mission Operations Directorate; Philip West, Catherine Sham, Penny Saunders, and William Wood, Engineering Directorate; Charlyne Minick, Center Operations Directorate; Nancy Garrick, Human Resources Office; and Jack Bacon, William Robbins, and James Reuter, International Space Station Program.

Contractor recipients of the award are Dennis Finch, Air-Lock; William Geissler, Etcetera Services; Kevin Engelbert, James Gustafson, Jeff Scannell, and Stephen Anderson, Hamilton Standard; Edward Handwerk, Hernandez Engineering; Cheryl Corbin, Marcha Fox, and Deane Schwartz, SAIC; Cheri Armstrong, Barbara Rice, Stan Taraszewski, and Tinh Trinh, Wyle Laboratories; and Jorge Reyna, Russell Janik, Donald Johnson, Sean Lamb, David Sumpter, Gregory Brokmeyer, Craig Clark, David Dean, Scott Jensen, Barbara Lee, Peter Spehar, Monty Carroll, Gary Deardorff, Willie Edwards, Ray Morales, Joseph Neigut, Patrick O'Rear, Maxine Pedro, Elonsio Rayos, Jonathan Salton, and Justin Wilkinson, Lockheed Martin.

The 1999 call for nominations for the Silver Snoopy Award will be coming out soon. Any individual whose job performance has contributed significantly to flight safety or mission success is eligible for this very special award.

Information on the Silver Snoopy Award, as well as all other awards administered by the Space Flight Awareness Program, is available on the new SFA home pages. These can be accessed from the JSC home page under News and Events or at the SFA Web address http://www.srqa.jsc.nasa.gov/sfa/



Space Center Houston brings station close to home

On the cusp of the 21st century, America and 15 other nations have embarked on the most complex peacetime project ever in the history of the human race – the International Space Station. The culmination of the phenomenal, 20th-century technological revolution, the ISS embodies the pledge of lifting the human race to new heights in the coming millennium.

What is the ISS? What will it be like to live and work there for extended periods of time? And how will the world change from what we learn in this unrivaled scientific laboratory?

You can find out all that and much more without traveling 220 miles above Earth at Space Center Houston's newest exhibit "The Next Outpost," showcasing this unprecedented international project.

Presented by The Boeing Co., John L. Wortham and Son and the Strake Foundation, "The Next Outpost" brings the excitement and enormity of the ISS "down to Earth" for everyone. Guests can walk through a mockup of the Hab Lab and explore first-hand a hybrid of two space station components, featuring experiment racks and astronaut living quarters.

"The Next Outpost" will be open until May 1999. For additional information about Space Center Houston, please call 281-244-2100. ■

JASON team visits JSC

JSC Photo S99-00973

Curriculum writers from the JASON Project and sponsors from JASON corporate sponsor EDS visit JSC's Neutral Buoyancy Lab during their Jan. 14 site visit. The curriculum team is doing research for the program content of the March 2000 JASON Project featuring the International Space Station and the Aquarius underwater research facility in the Caribbean. The JASON Project is a year-round scientific expedition designed to excite and engage students in science and technology. It was founded in 1989 by Dr. Robert Ballard, after his discovery of the R.M.S. *Titanic*.

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