



2006

ROTARY **N**ATIONAL **A**WARD FOR **S**PACE **A**CHIEVEMENT



For taking us all to new heights.

Lockheed Martin would like to congratulate Eileen Collins and all the Stellar Award nominees.

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20TH NATIONAL SPACE TROPHY RECIPIENT



Astronaut Eileen Collins

The Board of Advisors of the Rotary National Award for Space Achievement (RNASA) Foundation is pleased to present its highest honor, the National Space Trophy, to Astronaut Eileen Collins this year. She receives this award for her trailblazing achievement as the first female Space Shuttle Commander. Colonel Collins (USAF, Ret.) is the first woman to receive this honor.

The award is presented annually to an individual who has excelled in furthering national goals in the field of space. Col. Collins commanded the Return-to-Flight STS-114 mission in 2005, the first flight since the *Columbia* accident in 2003. Former Space Shuttle Commander Brewster Shaw, Vice President and General Manager of Boeing NASA Systems and RNASA Advisor, said, "As NASA's first female Space Shuttle Pilot and Commander, Eileen Collins has been a pathfinder, leader and role model, and is the embodiment of women in the aerospace industry."

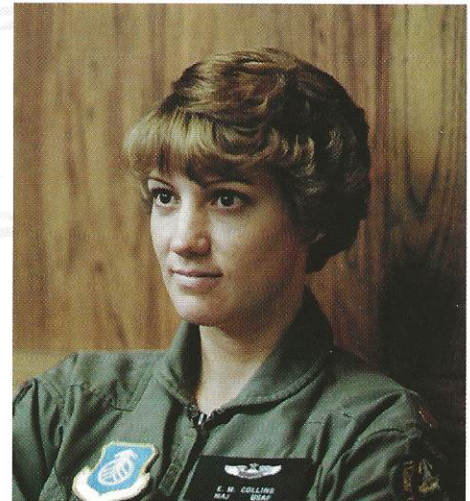
Eileen Collins was born November 19, 1956 in Elmira, New York. She grew up in a family with two brothers, a sister, and two very supportive parents, Jim and Rose Collins. In high school, she read about famous pilots including Amelia Earhart and was inspired by their example.

She graduated from Elmira Free Academy, Elmira, New York, in 1974, and received an associate in science degree in mathematics/science from Corning Community College in 1976. By 1977, she had saved enough money to earn a pilot's license. She earned a degree in mathematics and economics from Syracuse University in 1978. With good grades, flying experience, and a letter of recommendation from her ROTC supervisor, she became one of the first women to go straight from college into Air Force pilot training.

In 1979 Collins graduated from Air Force Undergraduate Pilot Training at Vance AFB, Oklahoma where she was a T-38 instructor until 1982. From 1983 to 1985, she was a C-141 aircraft commander and instructor pilot at Travis AFB, California. She spent the following year as a student with the Air Force Institute of Technology, and earned a master of science degree in operations research from Stanford University. From 1986 to 1989, she was assigned to the U.S. Air Force Academy in Colorado, where she was an assistant professor in mathematics and a T-41 instructor pilot. She received a master of arts degree in space systems management from Webster University in 1989.

While at the Academy, Collins met her husband Pat who was also in the military. They were married in the Academy chapel. They have two children.

She was selected for the astronaut program while attending the Air Force Test Pilot School at Edwards AFB, California, from which she graduated in 1990. She completed her initial training and became an astronaut in July 1991. She was initially assigned to Orbiter engineering support, and later served on the astronaut support team responsible for Orbiter prelaunch checkout, final launch configuration, crew ingress/egress, and landing/recovery. She also worked in Mission Control as a CAPCOM, served as the Astronaut Office Spacecraft Systems Branch Chief, Chief Information Officer, Shuttle Branch Chief, and Astronaut Safety Branch Chief.



Astronaut Candidate Collins at a briefing in Oklahoma in 1990



STS-84 Pilot Collins, May 1997

Continued on next page

20TH NATIONAL SPACE TROPHY RECIPIENT CONT.



Collins speaks at Ellington after STS-93 in July 1999

Collins would be the first female Space Shuttle Commander. She said, “When I was a child, I dreamed about space - I admired pilots, astronauts, and explorers of all kinds. It was only a dream that I would someday be one of them. It is my hope that all children, boys and girls, will see this mission and be inspired to reach for their dreams, because dreams do come true!”

Her historic first flight as commander was STS-93 in July 1999. The first launch attempt was scrubbed at T-8 seconds because of a sensor problem and the second attempt because of lightning. *Columbia* launched successfully just after midnight on July 23 and later deployed the *Chandra X-ray Observatory*. Designed to conduct comprehensive studies of the universe, the telescope has enabled scientists to study exotic phenomena such as exploding stars, quasars, and black holes. Collins performed the twelfth night landing of the Shuttle program.



STS-114 Cdr. Collins visits the Zvezda module of ISS in 2005

Collins’ first flight was STS-63 in February 1995, the first for a female pilot. Commanded by James Wetherbee, the 20th flight of *Discovery* performed the historic first close encounter with the Russian Space Station *Mir* after overcoming challenges posed by leaking thrusters. They held position within 37 feet of *Mir* for ten minutes and then backed out to 400 feet and did a fly around. The mission also hosted SPACEHAB-3, a space walk, and the deployment and retrieval of the *Spartan 204* astronomy satellite.

Her next flight, STS-84 in May 1997 was NASA’s sixth Shuttle mission to dock with the *Mir* Space Station and included Russian Elena Kondakova on the Shuttle crew. During the nine-day flight, the crew transferred nearly four tons of supplies and equipment between *Atlantis* and *Mir*. After passing up the first landing opportunity because of clouds, Commander Charlie Precourt and Pilot Collins landed at KSC, returning Jerry Linenger home after his stay on *Mir*.

On March 5, 1998, the White House announced that



Collins training in 2002

Collins next commanded the STS-114 Return-to-Flight mission of *Discovery* that docked with the *International Space Station*. The much-anticipated flight evaluated new procedures for flight safety and Shuttle inspection and repair techniques. Bad weather at Kennedy required a landing at Edwards Air Force Base, California on August 9.

Collins retired from the Air Force in January 2005. She has now logged over 6,751 hours in thirty different types of aircraft and over 872 hours in space.

RNASA Advisor and *CNN* anchor Miles O’Brien said that Colonel Collins is, “First in everything she has done—courageous—skilled—always prepared—a true pioneer.” The RNASA Foundation congratulates Colonel Collins for her outstanding achievements.

A space-themed background featuring a large, detailed view of the Moon in the upper center, a smaller view of Earth in the top left corner, and a satellite or space station component in the lower right. The background is filled with stars.

CONGRATULATIONS Colonel Eileen Collins

on your stellar accomplishments and
pioneering the way for future generations.



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20 YEARS OF SPACE ACHIEVEMENT



commitment leadership



Congratulations to Col. Eileen Marie Collins (USAF, Ret), recipient of the 2006 National Space Trophy

For more than 25 years, Col. Collins has represented the US Air Force, NASA, and her country by providing service to—and leadership for—the flight and space community. Col. Collins was the first woman to fly as Pilot of Space Shuttle flight STS-63 and as Commander of Space Shuttle flight STS-93. Col. Collins provided key leadership and support to the NASA Return to Flight effort by serving as the Commander on Space Shuttle flight STS-114. A veteran of four space flights, she has logged more than 800 hours in space and more than 6,700 hours in 30 other types of aircraft.

We honor Col. Collins' leadership and join in her commitment to human flight and space exploration.

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20TH RNASA ANNIVERSARY KEYNOTE SPEAKER



NASA Administrator Michael Griffin
(Photo NASA/Renee Bouchard)

We are privileged tonight to have NASA Administrator Dr. Michael Griffin deliver our keynote address. Griffin was nominated by President George W. Bush on March 14, 2005, and confirmed by the United States Senate on April 13, 2005. In his first address to employees, he said, "I have great confidence in the team that will carry out our nation's exciting, outward-focused, destination-oriented program. . . I share with the agency a great sense of privilege that we have been given the wonderful opportunity to extend humanity's reach throughout the solar system." Just eight days later, Griffin honored the RNASA Foundation by making time in his busy schedule to join us in recognizing Dr. Glynn Lunney with the National Space Trophy.

Prior to being nominated as NASA Administrator, Griffin served as Space Department Head at Johns Hopkins University's Applied Physics Laboratory in Laurel, MD. He was previously President and Chief Operating Officer of In-Q-Tel, Inc., and served in several positions within Orbital Sciences Corporation of Dulles, VA, including CEO of Orbital's Magellan Systems Division and General Manager of the Space Systems Group.

Earlier in his career, Griffin was Chief Engineer and Associate Administrator for Exploration at NASA, and Deputy for Technology at the Strategic Defense Initiative Organization. He has been an adjunct professor at the University of Maryland, Johns Hopkins University, and George Washington University, where he taught courses in spacecraft design, applied mathematics, guidance and navigation, compressible flow, computational fluid dynamics, spacecraft attitude control, astrodynamics and introductory aerospace engineering. He is the lead author of more than

two dozen technical papers, as well as the textbook, *Space Vehicle Design*.

NASA employees chuckled last year when Griffin remarked, "The only promise or pledge I can bring to you is to surround myself with people who are at least as capable as I am. They say that a good manager wants to be the dumbest person on his team; that's my goal, and some people have assured me that it should not be hard to achieve." Griffin has a bachelor's degree in Physics from Johns Hopkins University; a Ph.D. in Aerospace Engineering from the University of Maryland; and five masters degrees: in Aerospace Science from Catholic University of America; in Electrical Engineering from the University of Southern California; in Applied Physics from Johns Hopkins University; in Business Administration from Loyola College; and in Civil Engineering from George Washington University. He is also a certified flight instructor with instrument and multiengine ratings.

A registered professional engineer in Maryland and California, Griffin is a Fellow of the American Astronautical Society and the American Institute of Aeronautics and Astronautics (AIAA), and is a member of the Institute of Electrical and Electronic Engineers. He is a recipient of the NASA Exceptional Achievement Medal, the AIAA Space Systems Medal and the Department of Defense Distinguished Public Service Medal, the highest award given to a non-government employee.

At a recent meeting of the National Press Club, Griffin said, "the Vision for Space Exploration asserts that the proper goal of the nation's space program is that of human and robotic exploration beyond low Earth orbit. . . . America needs to explore again. Let's turn this vision into reality in space exploration for the 21st century."



Michael Griffin and Eileen Collins after STS-114
(Photo NASA/Renee Bouchard)

POWERING DREAMS INTO REALITY

Congratulations to Eileen Collins,
2006 National Space Trophy recipient,
from the employees of
Pratt & Whitney Rocketdyne.

We also congratulate the
Stellar Award nominees and winners
for their contributions to
American success in space.

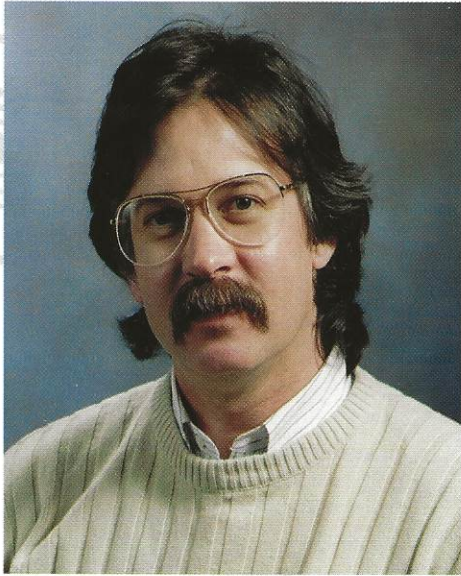


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2006 COMMUNICATOR AWARD RECIPIENT



Mark Carreau

(Photo © Houston Chronicle)

The RNASA Board of Directors is pleased to recognize Mark Carreau with the 2006 Space Communicator Award. The citation states that Carreau “has distinguished himself for his work ethic, his professional ethics and his skill for communicating complex issues in an understandable, interesting and exciting manner. In doing so, he has contributed greatly to the public’s understanding of and appreciation for the accomplishments of the American space program.”

The Space Communicator award was created in 1997 in honor of KTRK, Channel 13 space reporter and long-time RNASA Advisor Stephen Gauvain who was tragically killed in a car accident in 1996. The Award is presented to an individual or team that makes exceptional contributions to the public’s understanding of and appreciation for the value and benefits of space exploration. Previous recipients include William Harwood of CBS, Miles O’Brien of CNN, Elliot Pulham of the Space Foundation, and the NASA-Contractor Communications team that responded so adeptly after the *Columbia* accident.

Mark Carreau has been a daily newspaper reporter for over thirty years. A native of Wichita, Kansas, he graduated from the University of Kansas in 1972 where he majored in communication theory and studied pre-medical science courses. He earned a master’s degree in journalism from Kansas State University in 1974. After graduation, Texas was his first choice of places to live and work. While he hoped to use his educational background to one day write on medicine and science, he never in his wildest dreams believed he would report on space exploration.

Carreau began his career as in Texas in 1974 with the *Orange Leader*. He moved to the *Fort Worth Star*

Telegram, Arlington Bureau in 1977, and joined the *Houston Post* in 1979 as the City Hall reporter. Carreau joined the *Houston Chronicle* in 1984.

January 28, 1986 was his first day on the space beat, the day of the *Challenger* tragedy. He compassionately reported about the tragedy and the effect it had on the families, friends and co-workers of the *Challenger* crew. Through the subsequent investigation, he demonstrated great ability to understand complex, technical issues and convey them to the public.

He wrote about Return-to-Flight following both Space Shuttle tragedies, and in between he reported on Shuttle science missions, robotic missions to Mars and other worlds, servicing of the *Hubble Space Telescope* and construction of the *International Space Station*. He’s reported from Houston, Washington, Florida, California and other places where the space story continues to unfold.

Passionate about space, Carreau works tirelessly and demonstrates a rare compassion that leads him to honestly seek out and report the truth in a way that distinguishes him in his field. He has earned a reputation in the space community as a professional journalist whose honesty and integrity are matched only by his diligence to tell the story, whether it is good news or bad news.

Carreau has said that space fascinates him. He invests the time to learn about space, its complex technology and science. In an age of internet postings and blogs, where the term “fair and balanced” is often exaggerated, Mark Carreau abides by true journalistic values. He checks his facts, he seeks answers, he explains both sides of an issue, he is accurate and he is trusted by his peers and by the members of the space community about which he reports, and about which he cares. The RNASA Foundation offers its sincere gratitude and congratulations on a job well done by an outstanding communicator.



Mark Carreau (front, right) at press conference in 2006

EILEEN COLLINS

Congratulations to

Eileen Collins

First female Space Shuttle Commander

2006 National Space Trophy Recipient

for her contributions to
the pioneering role of
women in the
aerospace
industry



Amelia Earhart

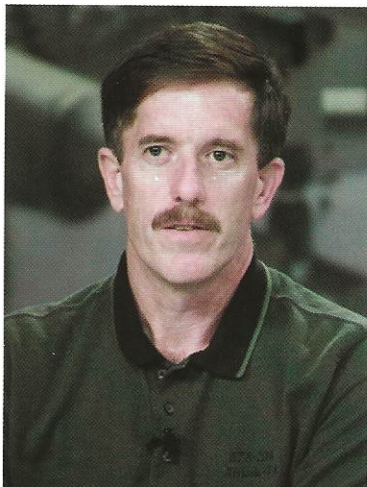
*First female pilot to attempt a
round-the-world flight in 1937*



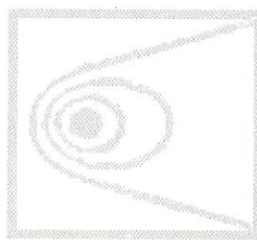
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20TH RNASA STELLAR AWARD PRESENTERS



James F. Reilly, II, Ph.D.



Joan Higginbotham



Returning for his fifth year presenting the stellar awards is veteran astronaut Dr. James Reilly, II. Selected in 1994, Reilly first worked technical issues for the Astronaut Office Computer Support Branch. He flew on *Endeavour* as a mission specialist on STS-89 in January 1988, the eighth shuttle-*Mir* docking mission that delivered Andy Thomas to *Mir* and returned David Wolf.

After this flight, Reilly became the Astronaut Office lead on shuttle training. In July 2001, he flew on STS-104/ Flight 7A, an assembly mission for the *International Space Station (ISS)*. He performed three spacewalks to install the joint airlock. He has logged over 517 hours in space. Reilly is currently assigned to the crew of STS-117 that will deliver solar arrays to the *ISS* assuming STS-121, STS-115 and STS-116 successfully complete their missions. He is also designated as payloads and procedures operations lead for the Astronaut Office *ISS* Branch.

After receiving his Bachelor of Science degree in 1977, Reilly entered graduate school and was selected to participate as a research scientist specializing in stable isotope geochronology as part of the 1977-1978 scientific expedition to Marie Byrd Land, West Antarctica. In 1979, he was an exploration geologist with Santa Fe Minerals Inc., in Dallas. From 1980 to the time he was selected for the astronaut program, Reilly was an oil and gas exploration geologist for Enserch Exploration Inc., in Dallas, rising to the position of chief geologist of the Offshore Region. While serving as an exploration geologist, he was also actively involved in the application of new imaging technology for industrial applications in deep water engineering projects and biological research. Reilly spent approximately 22 days in deep submergence vehicles operated by Harbor Branch Oceanographic Institution and the US Navy.

Born in Mountain Home Air Force Base, Idaho, Reilly considers Mesquite, Texas, his hometown. He enjoys flying, skiing, photography, running, soccer, hunting and fishing.

The RNASA Foundation is pleased to have astronaut Joan Higginbotham presenting stellar awards this evening. Higginbotham began her career as a Payload Electrical Engineer at KSC in 1987. She worked on payload bay reconfiguration, electrical compatibility tests, analysis in support of simulation tools and on interactive displays detailing Space Shuttle processing procedures. Higginbotham served as backup orbiter project engineer for Space Shuttle *Atlantis*. She participated in the integration of the orbiter docking station used for Shuttle/*Mir* docking missions. She was promoted to lead orbiter project engineer for *Columbia*. In this position, she managed the integration of vehicle testing and troubleshooting from the firing room. She participated in 53 Shuttle launches during her nine years at KSC, and earned numerous awards for her achievements.

Higginbotham graduated with a B.S. degree in Electrical Engineering from Southern Illinois University at Carbondale in 1987. While working at KSC, she continued her education by earning a Masters of Management in 1992 and a Masters in Space Systems in 1996 from the Florida Institute of Technology. She moved to Houston after her selection as an astronaut in 1996 and was assigned to work in the Payloads & Habitability Branch, the Shuttle Avionics & Integration Laboratory, and the KSC Ops Support Branch where she tested International Space Station modules for operability, compatibility, and functionality prior to launch. She worked in the Astronaut Office CAPCOM Branch in support of numerous Space Station and Space Shuttle missions. She was also assigned to the Robotics Branch and as the Lead for the International Space Station Systems Crew Interfaces Section. Higginbotham is assigned to STS-116 that is scheduled to fly after STS-121 and STS-115. Her primary task will be to operate the Space Station Remote Manipulator System.

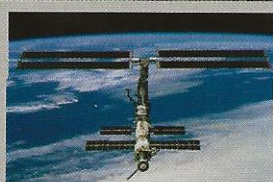
Higginbotham is from Chicago and enjoys music, motivational speaking, cycling and weight training.



Congratulations to
Colonel Eileen Collins
2006 National Space
Trophy Recipient

and all of the
2006 Stellar Award Winners

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20TH ANNIVERSARY HISTORY OF SPACE ACHIEVEMENT



RNASA Foundation Committee
Back L to R: Duane Ross, Bill Geissler, Robert Wren, Bill Taylor, Richard Jackson, Sheila Self, Marcus Havican, Jeffrey Carr, Jack Lister. Front L to R: Tim Kropp (Treasurer), Marianne Dyson, John Wilkins, Ann Charles, Floyd Bennett (Chairman), Dr. L. Jean Walker, Frank Perez, Mary Alys Cherry, Rodolfo Gonzalez (Secretary). Not pictured: Shelley Baccus, Gary Johnson, Jennifer Mitchell, Bill Vantine.
(Photo by J. Pamela Photography, Inc.)

Tonight we celebrate the dream of a national award for space achievement that became a reality twenty years ago. It all began with former NASA manager and Space Center Rotary Club member Owen Morris who felt that contributions by individuals in the space program deserved more recognition by the public. He decided that a properly-designed award program could help draw attention to the many benefits provided by the space program. He shared the idea with Space Center Rotary Club President Charles Hartman (1923-2001). Hartman and Robert Wren, who would be president the following year, enthusiastically embraced the idea. They formed a committee with Hartman as Chairman that evolved into the Rotary National Award for Space Achievement Foundation.

Initiating a new national award was as full of challenges as space itself. For the award to have the desired prestige, the committee decided that everything should be first class, starting with the trophy. Steuben Glass of New York proposed a breathtakingly beautiful trophy design (see page 30). Raising over \$35,000 for the 500-pound, four-foot tall custom lead crystal presented the first of many challenges. According to Wren some of the other challenges included “establishing a foundation, creating contact lists, creating a board of advisors, creating a nomination/selection process, making hotel/dinner/program arrangements, and establishing goals for the annual event.”

Hartman and Morris recruited the people with contacts and necessary knowledge to meet the challenges. One of these was former NASA manager Jack Lister. He said in a recent interview that, “The idea for this program was so powerful and exciting that I do not believe that we ever had a problem sustaining interest or getting outstanding volunteer support.” He should know—he’s been on the board for all twenty years, as has Robert Wren. Other early recruits included NASA employees Ron Blilie, Al Jowid, and Robert Mitchell; Air Force officers Harold Neely (1910-1995) and John Watson; contractor employees Chuck Jacobson, Frank Morgan, and Sam Boyd; University of Houston Provost Charles Hardwick; and Rotarians John Francis, Billy Smith (who served as their attorney), Don Kirk, Floyd Boze, Lamar Bowles, and Terry Stock.

Lister spearheaded the creation of an Advisory Board of space experts and managers to review nominations on a national

basis to select the trophy winners each year. The original 32 advisors included NASA center directors, presidents of companies and universities, military commanders, members of the news media, astronauts and political leaders. The current board (see page 30) of 59 includes leaders from all of these areas plus previous award winners. Though their titles and affiliations have changed since 1987, seven of the original advisors serve on the current board including; Jim Asker; Norman Augustine; Aaron Cohen; Gerald Griffin; Christopher Kraft; Robert McCall; Harrison Schmitt; and Richard Truly. Four of these individuals were selected by their peers to be recognized with the National Space Trophy: Truly (1989), Cohen (1991), Augustine (1992), and Kraft (1999).

After about three years of planning, the committee had everything in place for the premier event. The advisors chose Max Faget as the recipient of the first National Space Trophy. About 350 aerospace industry and government leaders and guests gathered to celebrate and recognize space achievement in March 1987 at the Hyatt Regency hotel. The event was a huge success thanks to hundreds of volunteer hours and the generous support of sponsors.

In 1989 the RNASA Foundation expanded its award program to include Stellar Awards to recognize the important contributions of the “unsung heroes” of the space program. The first Stellar Award was presented to Charles (Chuck) Biggs of the NASA JSC Public Affairs Office “on behalf of the millions of persons around the world to whom he has made the excitement of space exploration a reality.” Four awards were given in 1989, 1990, and 1991 in various categories including news media, academia, military service, spacecraft processing, legislative support, and life sciences. In 1992, a Corona award for lifetime achievement was presented to Robert Gilruth. More stellar awards by categories were given out in 1995 and 1996, and a Corona for lifetime achievement was awarded to John Young in 1997 and Walter Chronkite in 1999.

In 1997 the categories and nomination process for Stellar Awards were expanded to recognize a more diverse group of people at all stages of their careers. Subject categories were

Continued on next page



MEI TECHNOLOGIES

Merging Excellence and Innovation



Salutes Eileen Collins for her Leadership of Return to Flight and NASA Human Space Flight Missions



Max Faget in 1987

(now in his third year on the committee). The number of nominees has grown from seventy in 1997 to 127 this year.

When asked to name one of the most memorable events, Lister said, "Unquestionably, the dinner in 1998 to recognize President George Bush was my most memorable. This dinner was the largest attended (approx. 800) and attracted many high officials from government and industry alike. I believe this dinner helped entrench the credibility and importance of this program as a national entity."

To Wren, the first award to Max Faget and the Corona Award to Robert Gilruth were especially memorable. Jeffrey Carr, RNASA Advisor and Director of Public Relations for United Space

replaced with age groups plus teams. Nominations were sought from leaders in industry, government, and the military. The nominees are ranked by an Evaluation Committee chosen by the RNASA Board of Directors. This is the tenth year that former JSC center directors Aaron Cohen and Chris Kraft have served as evaluators. Others include Pete Aldridge, George Bekey, Max Faget, Bill Muhlberger, Al Diaz, John O'Neill, and Glynn Lunney

Alliance, remembers Tommy Holloway's acceptance speech in 2001 "He went on and on about his gratitude for his wife, his family and the values that guided him in life and in his career. It reminded me of how this program is built on the sacrifice and perseverance of so many people."

It has been twenty years now since Owen Morris had the vision to establish an awards program to celebrate and recognize the many benefits of space exploration. He could never have done it without the "Service Above Self" attitude of the Space Center Rotary Club and the many generous sponsors who understand the vital role the space program plays in our lives. "I think the single greatest impact of these awards is to remind all those who attend that they are part of a very special family—space explorers," Carr said. "The exploration of space is still very much in its infancy. And to celebrate the career accomplishments of working engineers, scientists, technicians and communicators alongside the very legends of space reinforces that kinship and with it, the pioneering spirit that drives us all."

Floyd Bennett joined Space Center Rotary and RNASA in 1995. As RNASA President for the past four years, Bennett said, "We are continuing the original goals of Morris & Hartman with nominations of people who have made a difference in the U. S. Space Program, and by presenting, with the help of our sponsors and production team, an event applauded as 'most prestigious'."

Thank you and congratulations to all the volunteers, supporters, and award winners who have made the Rotary National Award for Space Achievement the premier awards program in the field of space exploration.

2TH ANNIVERSARY
RNASA BANQUET

Friday, March 24, 2006

6:00

RECEPTION

Victoria Stone, pianist

7:00

WELCOME

Floyd V. Bennett, Chairman, RNASA Foundation

PRESENTATION OF THE COLORS

Clear Creek High School Army JROTC Color Guard

NATIONAL ANTHEM

Shari Wilkins, soloist

INVOCATION

**Father Joseph J. McCarthy, O.CARM., Pastor,
Saint Bernadette Catholic Church**

DINNER

8:15

OPENING VIDEO

MASTER OF CEREMONIES

Dayna Steele

KEYNOTE SPEAKER

Dr. Michael Griffin, NASA Administrator

PRESENTATION OF SPACE COMMUNICATOR AWARD

PRESENTATION OF STELLAR AWARDS

**Dr. James F. Reilly, II, Astronaut
Joan Higginbotham, Astronaut**

PRESENTATION OF NATIONAL SPACE TROPHY

PRESENTATION OF THE OMEGA WATCH

Lt. Gen. Thomas Stafford (Ret.)

RECOGNITION OF SPONSORS AND CLOSING

A photograph of two space shuttles in orbit above Earth. The larger shuttle, Discovery, is on the right, and a smaller shuttle is on the left. The Earth's blue and white clouds are visible in the background.

Eileen Collins

Flies High

SAIC Congratulates Eileen Collins, Recipient of the
Rotary National Award for Space Achievement

20TH NASA STELLAR AWARD NOMINEES - EARLY

Stellar award nominations are solicited from NASA, the military, and industry leaders in human and unmanned spaceflight programs for individual and team achievements. The Early Career category is for individuals up to age 33. Winners are ranked based on which accomplishments hold the greatest promise for furthering future activities in space.

Tara S. Angstadt of NASA Johnson Space Center - Technical excellence, hard work, dedication, and leadership as lead engineer for the Non-Toxic Auxiliary Propulsion Testbed project and in development and test of liquid oxygen attitude control systems for future spacecraft.

Joseph P. Arves, II of Lockheed Martin, Michoud Ops - Exceptional accomplishments in pioneering the development of hybrid propulsion, leading to a successful sounding rocket flight test, and in 2005, the longest known burn of a large scale hybrid motor.

Christopher M. Bunk of ARES Corporation - Service as a pioneer of knowledge management and collaborative technologies that facilitate the capture and sharing of knowledge capital throughout the space industry.

Matthew Carter of SPACEHAB, Inc. - Superlative contribution to the space program through the development and management of cargo carrier hardware to be used as the first commercial critical spares stowage platform on the *International Space Station*.

Darby Cooper of The Boeing Company - Outstanding contributions to the Space Shuttle Program through his leadership of the Debris Transport Analysis activities that resulted in a safe return to launch in July 2005.

John M. Fabry of Pratt & Whitney Rocketdyne - Invaluable structural expertise, analysis, design guidance, proactive failure prevention, failure analysis, and effective cause and corrective action that have directly led to the success of the RS-68 engine program.

Paula S. Gothreaux of ARES Corporation - Visionary leadership and demonstrated technical capability in providing tools to preserve astronaut safety in the evolving environment of the *International Space Station (ISS)*.

Cynthia Grayson of ARES Corporation - Effective team leadership and technical excellence in contributions to payload safety for the Space Shuttle.

Jeremy M. Hemler of ATK Thiokol - Exceptional initiative in the design and integration of Reusable Solid Rocket Motor (RSRM) testing in support of NASA's safe Return-to-Flight and "Test Before You Fly" initiatives.

Brian D. Krolczyk of United Space Alliance, LLC - Exceptional contributions to the development of on-orbit Space Shuttle wing leading edge repair materials and repair techniques through risk analysis and safety leadership.

James A. Liakus of The Boeing Company - Uncommon initiative and sustained outstanding support to Space Shuttle Ground Operations and Integrated Logistics.

Joshua E. McMillin of ATK Thiokol - Outstanding contribution and demonstrated technical expertise in solid rocket motor design and analysis for the Space Shuttle RSRM and heavy life launch vehicle five-segment booster.

Capt. Peter E. Muend of the United States Air Force - Overcoming technical hurdles through brilliant innovation and corporate vision that have benefited multiple U.S. space programs.

David A. Nordling of Pratt & Whitney Rocketdyne - Technical excellence in the area of advanced electric propulsion systems as well as numerous contributions to other advanced propulsion and power systems.

Mark H. Pond of ATK Thiokol - Critical contributions to the two most significant changes incorporated in the RSRM nozzle since the design was qualified at the start of the Space Shuttle Program.

Christine M. Reichert of NASA Johnson Space Center - Exceptional contributions to the development of the *International Space Station* Backup Control Center and the Backup Advisory Team concept, and for the real-time implementation and real-time support during the Hurricane Rita Evacuation.


Brian J. Remark of The Boeing Company - Sustained outstanding contributions in Orbiter thermal systems and on-orbit imagery for the STS-114 "Return-to-Flight" mission, and for contributions to Orbiter turnaround operations.

Dr. Patricia B. Schmidt of The Boeing Company - Exceptional technical leadership as EVA console shift lead in the *ISS* Mission Evaluation Room for the STS-114 "Return-to-Flight" mission and as co-chair of the EVA System Problem Resolution Team.

Matthew P. Scudder of The Boeing Company - Technical excellence and leadership in real-time mission support to the *ISS* Electrical Power System, providing new advances in mission support data monitoring.

Kawika W. Tupou of Pratt & Whitney Rocketdyne - Valuable insight, attention-to-detail and willingness to help others in addition to his regular responsibilities, and for serving as a valued and respected member of both the RS-27 and RS-68 engine teams.

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ATK congratulates the
Stellar Award winners and
Col. Eileen Collins
recipient of the
National Space Trophy

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Kenneth N. Utley of The Boeing Company - Outstanding contributions and leadership in the area of Space Shuttle Orbiter wiring, including investigation of wiring anomalies and the mitigation of damage to Orbiter wiring to ensure the safety of the Shuttle crew.

Michael C. Valvo of Engineering Research Consultants - Outstanding efforts to design, develop and integrate miniature processors for Robonaut, Tendril, Spider-naut and Mini-AERCam robots.

Darby J. Vicker of NASA Johnson Space Center - Exemplary performance and dedication in the development and application of high fidelity computational modeling analysis of launch vehicle aerodynamic environments for the Space Shuttle, helping to assure the safety of future Shuttle missions.

Dr. Leonard L. Yowell of NASA Johnson Space Center - Exceptional leadership in bringing nanotechnology applications to human spaceflight and integrating across multiple disciplines and backgrounds.

1st Lt Brent D. Ziarnick of the United States Air Force, 2d Space Ops Squadron - Outstanding contributions to military space strategy, officer development, and space advocacy through professional writing, public outreach, and cadet space programs that are helping to lay the foundation for tomorrow's American space power.



Space City Films Salutes Eileen Collins

Recipient of the 2006 National Space Trophy

Space City Films, Inc.

Digital Motion Pictures for the 21st Century

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Houston, Texas, USA 77058

281.480.9669 voice
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20TH NASA STELLAR AWARD NOMINEES - MIDDLE

The Middle Career category of Stellar Nominees is for individuals ages 33-50.

Casey J. Adams of The Boeing Company - Technical excellence in leading the ISS Power Lab and extensive system expertise in command and data handling, software and firmware requirements, ISS electrical power system operation, and integrated testing.

Darryl L. Archer of The Boeing Company - Many years of outstanding efforts in resolving thermal issues for both the Space Shuttle and ISS Programs and for recent Orbiter Return-to-Flight thermal damage model efforts.

Frank Bauer of NASA Goddard Space Flight Center - Tireless work to engage the youth of our nation and the world in the exploration of space through the unique direct communications made possible by amateur radio on human spaceflight missions.

Jeffrey H. Bispham of The Boeing Company - Excellence in leadership of lifting and handling support to the Checkout, Assembly and Payload Processing Services contract at the Kennedy Space Center.

Scott A. Boller of Pratt & Whitney Rocketdyne - Critical efforts to ensure that astronauts can safely and efficiently assemble and maintain ISS Electric Power System hardware on orbit.

Timothy M. Boudreaux of the United States Air Force, HQ SWC/TC - Leading technical expertise and service as a ceaseless source of rapid innovation ideas for global combat war fighters and commanders.

Curt M. Carlton of The Boeing Company - Excellent technical leadership in development of on-orbit Orbiter inspection and repair capability at ISS, including leadership in designing and certifying the new Instrumented Worksite Interface flight test hardware that will be an invaluable tool for measuring EVA loads and boom system response during EVA inspection and repair operations.

Randall E. Carter of The Boeing Company - Critical Thermal Protection System and Reinforced Carbon-Carbon expertise which contributed to the success of the STS-114 "Return-to-Flight" mission.

Craig Clokey of United Space Alliance, LLC - Contributions beyond expectations to strengthening the Flight Safety processes, by dedicating his leadership skills and technical expertise to enhance the flight readiness process, thus successfully preparing USA and NASA for return-to-flight.

Edward L. Collins, Jr. of ATK Thiokol - Significant contributions to the aerospace industry and manned spaceflight through sustained exceptional effort, coupled with keen engineering insight and technical expertise in nozzle design and engineering.

Stephen A. Cook of NASA Marshall Space Flight Center - Exemplary leadership during the Exploration Systems Architecture Study endeavor, allowing its successful completion that established a baseline exploration architecture that will return U.S. Astronauts to the Moon and pave the way for human travel to Mars and beyond.

Dr. Johnny L. Golden of The Boeing Company - Recognized technical expertise in the field of materials and processes as applied to aerospace design and manufacturing of human spacecraft materials, space environments effects on materials, thermal control finishes, corrosion control and chemical processing of materials and failure analysis

Col. James D. Halsell, Jr of NASA Johnson Space Center - Exceptional service in pivotal leadership and advisory positions leading to the successful Space Shuttle "Return-to-Flight" mission, STS-114.

Roselle B. Hanson of NASA Johnson Space Center - Outstanding support to the Vision for Space Exploration through the successful award of contracts for the next-generation human spacecraft.

Caris A. Hatfield of NASA Johnson Space Center - Exceptional leadership, technical expertise, and management contributions in development of strategic planning options to resolve the complex challenges for the U.S. and international partners in completing the *International Space Station* with a reduced number of Space Shuttle flights.

Michael J. Lauer of Pratt & Whitney Rocketdyne - Outstanding contributions to the design of both manned and unmanned spaceflight hardware.

Scott McDade of Lockheed Martin Space Operations - ISS program expertise applied in the development of external carrier strategies to meet on-orbit stowage, repair, and resupply of external cargo during ISS assembly, and in support of planning ISS operations for the post-Shuttle era.

continued next page



Stellar Award winners receive a high-quality marble trophy such as the one shown here.

20TH NASA STELLAR AWARD NOMINEES - MIDDLE

Brian J. McGurk of The Boeing Company - Significant contribution to the Space Shuttle program's success through application of mechanical systems engineering excellence.

Scott R. McIntyre of The Boeing Company - Sustained excellent leadership in the execution of Integrated Testing and Verification for the *International Space Station* Elements.

Lillian Ng of Pratt & Whitney Rocketdyne - Outstanding contributions to Rocketdyne's Expendable Propulsion Programs by providing exceptional technical support and leadership.

David M. O'Dell of NASA Marshall Space Flight Center - Exceptional dedication, hard work, and technical excellence in the design, fabrication, troubleshooting, analysis, and test of Power Avionics Hardware for Space, including the *International Space Station* Environmental Control Life Support System.

Gregory T. Oliver of NASA Johnson Space Center - Demonstrated long-term commitment to enhancing Space Shuttle safety by developing the STS-114 "Return-to-Flight" mission entry overflight risk assessment capability and the difficult return-to-flight launch area risk process.

Kimberly A. Page of The Boeing Company - Sustained superior leadership of Multi Purpose Logistics Module processing at the Kennedy Space Center, and contributions to the STS-114 "Return-to-Flight" mission.

Michael J. Penney of Science Applications International Corporation - Exceptional technical leadership in Safety, Reliability, and Quality Assurance for the Space Shuttle program in the areas of design solutions, certification, risk assessments, and problem recurrence control.

David J. Pogue of Barrios Technology - Significant contributions to improving flight safety for astronauts and subsequently to the success of the Space Shuttle and *International Space Station* (ISS) programs.

Steve M. Poulos, Jr. of NASA Johnson Space Center - Outstanding leadership and management for the Space Shuttle program in the design, development, certification and testing of the orbiter vehicle.

Amanda B. Rice of The Boeing Company - Exceptional technical contributions to implementation of intelligent real-time software monitoring applications for ISS payload racks and to upgrades for the ISS Payload Data Library in support of the ISS user community.

Christopher E. Singer of NASA Marshall Space Flight Center - Outspoken and tireless leadership of the implementation of a major cultural change at Marshall Space Flight Center that has led to more open and honest recognition and communication of technical issues, risks and concerns.

Daniel C. Smith of Lockheed Martin Technical Operations - Outstanding technical and leadership achievements contributing to the design and superb performance of the spacecraft control laws used in the Hubble Space Telescope's Two-Gyro Science Mode.

John A. Smith of The Boeing Company - Exceptional leadership skills, superior performance and dedication in delivering problem resolutions for the significant issue of Space Shuttle Orbiter Composite Overwrap Pressure Vessels.

Matthew E. Smith of Lockheed Martin - Personal dedication, exceptional leadership, and outstanding technical accomplishment as the Atlas Program Director of Technical Management resulting in 77 (and counting) consecutive "one launch at a time" successful Atlas missions, including four first-of-a-kind launch vehicle configurations.

William P. Stockton of Science Applications International Corporation Significant contributions to Space Shuttle Safety and Mission Assurance Integration through demonstrated superior leadership and commitment to technical excellence.

Robert D. Wilkes, Jr. of Jacobs Sverdrup - Excellence in engineering design and hardware development for on-orbit extravehicular repair of the Space Shuttle Orbiter Thermal Protection System.

Maurice D. Winner III of The Boeing Company - Sustained leadership excellence in support of *International Space Station* Truss Processing at the Kennedy Space Center.

Mark A. Winquist of Pratt & Whitney Rocketdyne - On-going achievements in the development combustion devices used in the rocket engine industry.

Maj. John W. Wong of the United States Air Force, Space & Missile Systems Center - Outstanding vision and commitment leading the implementation of \$1.1B in satellite development, evolving operational procedures and concepts for satellite control, and leading the industry in improved concepts for satellite integration and test.

Jon L. Zelon of ARES Corporation - Exceptional level of professional responsibility, technical expertise and leadership as program manager in support of the evolving Crew Exploration Vehicle, and related leadership achievements associated with the development of an external storage platform and related flight support equipment for the *International Space Station*.

"It is sincerely a great privilege to be a Stellar Award winner, and I proudly display my award on my desk so that I can recall what a special honor I have received, and what an incredible evening I was able to share with my husband and friends." - Kim deGroh, NASA Glenn, 2005 Middle Career winner.

20TH NASA STELLAR AWARD NOMINEES - LATE

The Late Career category of Stellar Nominees is for individuals over age 50.

Bohdan Bejmuk of The Boeing Company - Outstanding technical leadership and innovation in the development and operation of the Space Shuttle, from participation in the original design through support of the STS-114 "Return-to-Flight" mission.

Dr. Allan Benjamin of ARES Corporation - Visionary leadership and innovation using statistical analysis for the Space Shuttle debris problems and uncertainty analysis for both manned and unmanned space flight, resulting in modifications and a timely return-to-flight for the STS-114 mission.

James E. Callen of Lockheed Martin - Exceptional service on a continual and sustained basis over 30 years of outstanding leadership and technical contributions to NASA Human Spaceflight programs at the Johnson Space Center

Dr. Amitabha DebChaudhury of Pratt & Whitney Rocketdyne - Providing the highest level of technical support in creating innovative structural and system engineering analysis methods and related software solutions in support of all Rocketdyne programs.

Steven B. Denning of ATK Thiokol - Successful management of over 300 critical suppliers and more than \$100M in annual spending for critical Space Shuttle materials and components used in the Reusable Solid Rocket Motors and Booster Separation Motors.

Norman F. Eddy of ATK Thiokol - Recognized technical expertise for Space Shuttle program solid rocket motor internal insulation performance for over 30 years.

James R. Gilmore of Pratt & Whitney Rocketdyne - Continuous achievements to the development of the rocket engine industry, with contributions to numerous Rocketdyne programs, including RS-27, RRTT, IPD, X-33, and RS-68.

Kauser Imtiaz of The Boeing Company - Industry-recognized expertise in structural analysis of air and space vehicles, and technical analysis of ISS Multi-Purpose Logistics Module structural welds that cleared the MPLM for flight on the STS-114 "Return-to-Flight" mission.

Ying Ming Kuo of NASA Johnson Space Center - Outstanding leadership in the development of multi-body dynamics algorithms for the simulation of complex NASA robotic and spacecraft systems

Daniel Levack of Pratt & Whitney Rocketdyne - Numerous contributions to the advancement of liquid rocket propulsion technology throughout a career of innovative, thoughtful, and energetic technical leadership.

Dr. Jane T. Malin of NASA Johnson Space Center - Outstanding accomplishments in the research and development of advanced software technologies that will enable human-centered, autonomous support systems for current programs and future exploration missions.

Dianne M. Marsh of ATK Thiokol - Instrumental orchestration of all configuration control policies and procedures over the last 25 years for the Solid Rocket Motor and Reusable Solid Rocket Motor programs, and for the Booster Separation Motor and the Reinforced Carbon-Carbon repair programs.

Larry S. McCormick of The Boeing Company - Outstanding management of a Space Shuttle Orbiter closed-loop problem reporting system and innovative leadership in developing a "state of the art" Orbiter scanning capability to capture and preserve Orbiter system knowledge.

Michael Mott of The Boeing Company - For more than a decade and a half, Mike Mott made numerous far-reaching contributions to the future of humankind's space exploration goals; his leadership and innovation were key in helping to ensure NASA's mission success, and his sound guidance, wise counsel and boundless enthusiasm will be sorely missed.

Leonard S. Nicholson of The Boeing Company - Over 40 years of distinguished service in key leadership roles spanning the Gemini, Apollo, Skylab, Apollo-Soyuz, Space Shuttle and Space Station programs.

Dr. Arthur C. Nunes of NASA Marshall Space Flight Center - Exceptional and groundbreaking development of the original Friction Stir Welding Process Model which provides the fundamental basis for all future Friction Stir Weld Development.

W. Craig Olsen of ATK Thiokol - Operations leadership in dealing with the introduction and implementation of new Supply Chain Management systems.

Richard J. Otto of The Boeing Company - Over 30 years of outstanding technical and configuration management leadership contributions to America's aeronautical and human space flight programs, including the *International Space Station*.

Anil K. Patel of United Space Alliance, LLC - Sustained, significant contributions to the Solid Rocket Booster Thermal Protection System Return-to-Flight re-qualification effort that ensured the outstanding reliability, efficiency, and performance of the Solid Rocket Booster Thermal Protection System.

Bobbie E. Pond of Jacobs Sverdrup - Over 40 years of exceptional support in a variety of engineering and management fields that were critical in the development of human-rated space environment testing and to the success of human spaceflight.



11 NASA TESTS, 89 FLIGHTS IN SPACE,
118 MISSIONS, 6 MOON LANDINGS, ONE WATCH.



MY CHOICE.


OMEGA

20TH NASA STELLAR AWARD NOMINEES - TEAM

Rodolfo Gonzalez, Jennifer Mitchell and Shelly Baccus coordinated the 2006 Stellar Award nomination process.

21st Ops Group Ground based Electro-Optical Deep Space Surveillance Detachments of the United States Air Force, Space Command - Providing critical information on potential on-orbit hazards and the need for possible Collision Avoidance to the *International Space Station* and Space Shuttle programs, based on tracking hundreds of objects that pose a risk to human-spaceflight.

45th Weather Squadron Lightning Support Improvement Team of the United States Air Force, 14th Air Force - Significant improvements in forecast accuracy for several important lightning issues challenging the 45th Space Wing and NASA.

Anthropometry and Biomechanics Facility / Neutral Buoyancy Laboratory Weigh-out Team of NASA Johnson Space Center - Critical reductions to the risk of crew injury training for the "wall of EVA" necessary for ISS construction and operations, with the creation of a world-class biomechanics infrastructure at Johnson Space Center to study human performance for microgravity and planetary spacewalks that has had, and will continue to have, far reaching consequences in enabling astronauts to work in space.

Deep Impact Mission Team of Ball Aerospace & Technologies Corp. and the Jet Propulsion Laboratory - Successful management of the delivery of the two Deep Impact mission's spacecraft to Comet Tempel 1; the Impactor spacecraft performed a high-speed impact with the comet, and the Flyby spacecraft gathered in-situ science.

Experimental Satellite System-11 Operations Team of the United States Air Force, Space and Missile Systems Center - Successful demonstration of the ability to safely conduct robust, extended duration rendezvous and proximity operations with on-orbit noncooperative objects using a low-cost, reproducible micro-satellite and innovative procedures.

External Stowage Platform 2 Team of SPACEHAB, Inc. - Successful model for international cooperation within the space program through the development and management of the first commercial critical spares stowage platform on the *International Space Station*.

Geostationary Operational Environmental Satellite N-P Management Team of NASA Goddard Space Flight Center - Dedicated and innovative leadership of the development of a new generation of environmental satellites, of which GOES N will be the first to launch, bringing more accurate forecasting of dangerous weather systems - saving lives and minimizing property damage

Huntsville Materials Application Team of Pratt & Whitney Rocketdyne - Outstanding, sustained and innovative technology development that markedly improve the producibility and reliability of Space Station systems and the Space Shuttle Main Engine.

Hypersonic Flight Test Team of the United States Air Force, 412th Test Wing - Significant contributions to aerospace programs that will determine our nation's access to and prowess in space.

ISS Flight Attitude Approval for Space Shuttle Return-to-Flight Team of The Boeing Company - Technical excellence in supporting development of new ISS flight attitudes for Orbiter mated operations and continuing ISS assembly operations.

ISS Flight Software Team of The Boeing Company - Excellence in development and delivery of ISS software and maintenance of a library of software that has grown to 1.5 million lines of source code on-orbit, supported on the ground by a robust test environment comprised of another 4 million source lines of simulation software, and 11 million source lines of test scripts.

ISS Guidance Navigation and Control Team of The Boeing Company - Vital contributions to the continued operation of the ISS after the *Columbia* accident and to the Space Shuttle Return-to-Flight by developing unique ways to exploit the flexibility built into the GN&C flight software, thereby allowing the ISS to fly in new attitudes and with new attitude control techniques to protect ISS hardware.

ISS P3/P4 Battery Replacement and VEF Rotation Team of The Boeing Company - Technical excellence in the execution of the replacement of the next power module element (P3/P4) batteries prior to launch, in order to ensure adequate battery capacity and on-orbit life for continued assembly and operations.

Johnson Space Center Language Education Center Team of TechTrans International, Inc. - Intense dedication and professionalism in tailoring instruction of *International Space Station* (ISS) partner languages to NASA specialists by cost-effectively using the latest technology and techniques, resulting in expedited progress in students' foreign language proficiency.

Joint Space Operations Center of the United States Air Force, 14th Air Force - Providing tailored space effects and products 24 hours a day, 7 days a week and 365 days a year, including planning and direction of \$120B+ in space weapon systems and encompassing over 25,000 personnel at 44 locations worldwide.

Mars Global Surveyor Team of Lockheed Martin Technical Operations - Outstanding technical achievement and dedication in the successful low-cost design, development, integration, test and operation of the Mars Global Surveyor spacecraft that has produced unprecedented science discoveries, laying the foundation for the Mars exploration of today and tomorrow.

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Perot Systems
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Science Application International Corporation (SAIC)
SPACEHAB, Inc.
TechTrans International
United Space Alliance
University of Houston Clear Lake

Thanks to Stellar Evaluators

Dr. Aaron Cohen
Dr. Christopher C. Kraft, Jr.
Dr. Glynn S. Lunney

Special Thanks

Hyatt Regency Houston
MRI Technologies
NASA Johnson Space Center

Credits

ROTARY NATIONAL AWARD FOR
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Cover Art by Pat Rawlings
Printing by Minuteman Press - Bay Area
Audio/Visual Production by Space City Films
Production Advisor, Jeff Carr
Photos from NASA unless otherwise noted

2003

20TH NASA STELLAR AWARD NOMINEES - TEAM

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Materials and Processes Technical Information System Team of NASA Marshall Space Flight Center - Exceptional contributions to the design and development of a new generation of the MAPTIS-II database that will be used to provide materials information for all NASA flight hardware and programs.

Materials for *International Space Station* Experiment 5 Collar Development Team of MEI Technologies, Inc. - Success engineering team leadership in the emergency development of a collar to allow deployment of the DoD Materials for *International Space Station* Experiment - 5 (MISSE-5) payload on the STS-114 "Return-to-Flight" mission.

MB-XX Upper Stage Engine Team of Pratt & Whitney Rocketdyne - Outstanding accomplishment of the MB-XX Upper Stage Engine Team for their successful testing of the MB-XX Demonstrator Engine.

Micro Miniature Mass Spectrometer Team of SPACEHAB, Inc. - Development of an innovative device that utilizes micro-electro mechanical systems to alert crew members in space of dangerous particles in the air and that weighs 90 percent less than the current technology.

Nanotube Research and Development Team of Jacobs Sverdrup - Exceptional dedication, hard work, and technical excellence in furthering the understanding of nanomaterials and the application to fuel cells, light weight composites and carbon dioxide removal systems.

Orbiter Boom Sensor System Hardware Mounting Team of The Boeing Company - Excellence in the design, development, certification and rapid delivery of Orbiter Boom Sensor System mounting hardware that was crucial to the inspection of the Space Shuttle during STS-114.

Oxygen Hazards Analysis Team of NASA Johnson Space Center - Outstanding sustained leadership in the development of procedures and processes to analyze and mitigate fire hazards in oxygen systems, thus enhancing safe human spaceflight.

Professional Development Team of the United States Air Force, Space and Missile Systems Center - Providing high quality and dependable professional development opportunities for all 6,300 military, civilian and contractor personnel at the Space and Missile Systems Center.

Propellant Internal Instrumentation Team of ATK Thiokol - Technical achievement for the design and development of direct propellant measurements of pressure, heat flux, temperature and strain during full-scale Reusable Solid Rocket Motor (RSRM) operation for ballistic, aerothermal, and structural model validation.

Return-to-Flight Shuttle Imaging Weather Team of the United States Air Force, 14th Air Force - Development of a process and model to ensure that Shuttle imaging during the first stage of launch would not be obstructed by clouds.

Reusable Solid Rocket Motor Nozzle Carbon Fiber Rope Team of ATK Thiokol - Successful characterization and implementation of an innovative thermal barrier design for nozzle joints that significantly increases the reliability of the RSRM nozzle.

Rigid Insulation Development Team of The Boeing Company - Excellence in the design, development, certification and rapid delivery of hardware that allowed significant hardening of the Orbiter Thermal Protection System.

Safety Mission and Assurance Logistics and Maintenance Team of GHG Corporation - Outstanding support to the *International Space Station (ISS)* NASA Logistics and Maintenance Team in providing technical expertise, diligence to detail, and engineering excellence in reviewing Logistics and Maintenance Analysis Records and improving the accuracy of *ISS* Maintenance data.

Science Crew Operations and Utility Testbed Team of NASA Johnson Space Center - Outstanding technical skills and dedication in developing the Science, Crew, Operations and Utility Testbed mobile platform to evaluate advanced rover technologies and operational concepts.

Shuttle Derived Launch Vehicle Industry Team of The Boeing Company - Providing valuable facts and data to NASA in support of the selection of a family of launch vehicles to enable the Vision for Space Exploration.

Space 300 Team of the United States Air Force, National Security Space Institute - Fulfilling a critical need in the space community's ability to deal with future national security space issues, and providing an unprecedented evolution in space community knowledge and thinking.

Space Power Team of the United States Air Force, National Security Space Institute - Exceptional dedication and technical excellence in designing and developing a state of the art, one-of-a-kind application training and wargame scenario facility to train Space professionals across DoD, NRO and NASA.

Space Shuttle Debris Team of The Aerospace Corporation - Essential support of NASA's Space Shuttle Program in determining the nature and risk of ascent debris for the STS-114 "Return-to-Flight" mission.

Space Shuttle Debris Team of The Boeing Company - Outstanding innovation, technical excellence and dedication in the development of a Shuttle Debris Transport Analysis tool and in the use of the tool to assess potential debris impacts to the Orbiter.

Space Shuttle Main Engine High Pressure Oxidizer Turbopump Flight Readiness Team of Pratt & Whitney Rocketdyne - Successful execution of the knife-edge seal cracking investigation and recycle recovery plan that were critical elements of the successful STS-114 "Return-to-Flight" mission.

continued next page

Perot Systems would like to congratulate
2006 National Space Trophy Award winner
Colonel Eileen Collins
and all 2006 Stellar Award winners for
their contributions to space exploration.

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Spectral Imagery Applications Team of the United States Air Force, Space Warfare Center - Outstanding contribution to the development of future space-based hyperspectral and polarimetric imagery technologies and procedures.

Statistical Analysis of the Debris Field for Return-to-Flight Team of ARES Corporation - Outstanding efforts that have significantly increased NASA's ability to understand the impact of potential damage to the Orbiter from BSM particles and ice/ice-frost.

Strategic Analysis Team of Booz Allen Hamilton - Detailed assessment of future ISS flight rate options and their associated assembly sequences, feasibility, and risks, resulting in adoption of the proposed configuration and assembly sequence by the Multilateral Coordination Board with a plan for the Space Station Control Board to assess the technical aspects of this new approach at the Heads of Agency meeting.

Team Onizuka of the United States Air Force, 14th Air Force - Outstanding leadership and significant contributions to manned and unmanned space flight through the development of new operation procedures for the Air Force Satellite Control Network.

Team Titan of the United States Air Force, Space and Missile Systems Center - Successful final flight of the last Titan in October 2005 from Vandenberg AFB, CA, resulting in 368

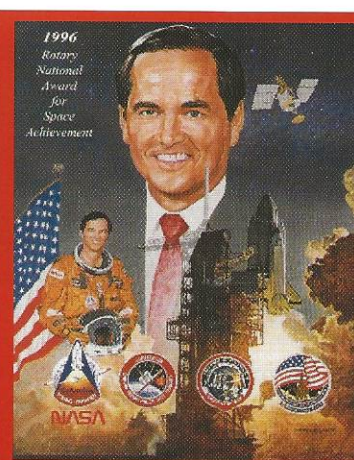
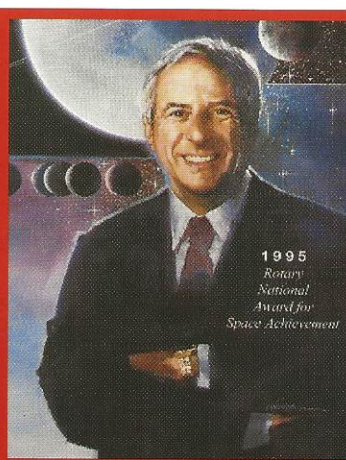
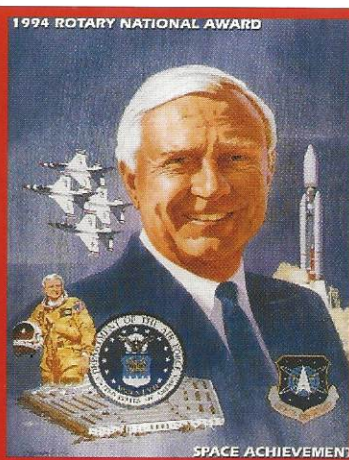
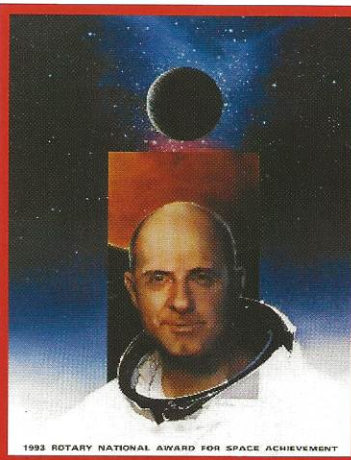
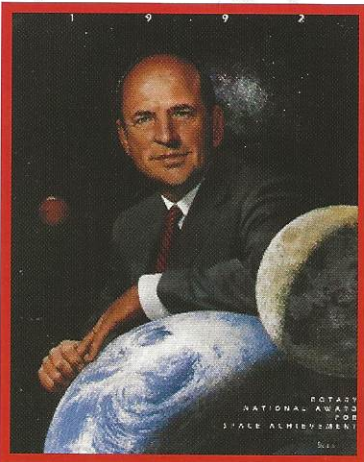
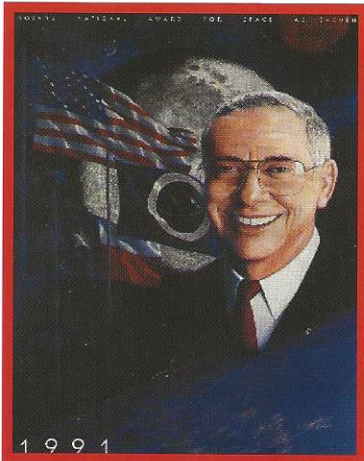
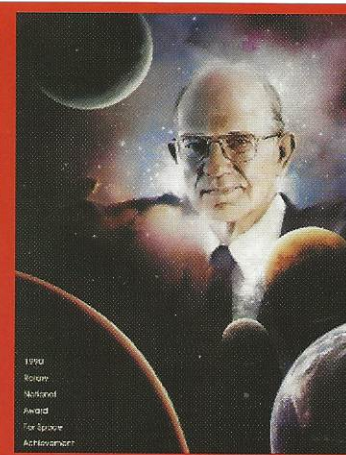
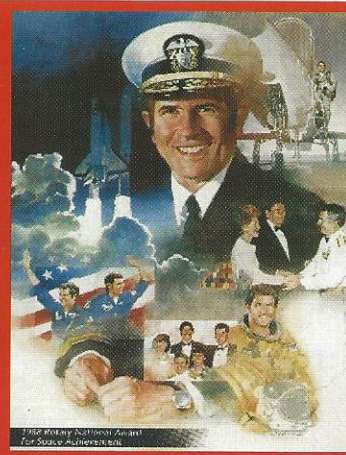
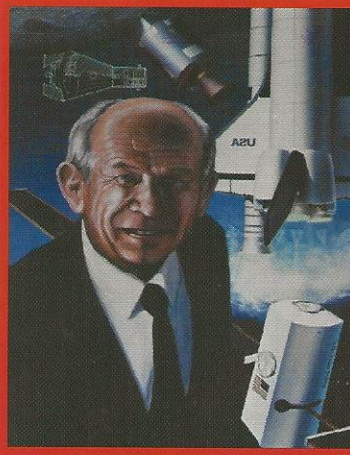
launches and fifty years of ICBM and launch vehicle service to our Nation.

Titan Launch Vehicles Team of Lockheed Martin - Inspiring leadership, dedication, and unyielding resolve in bringing to closure the 50-year history of the Titan Program after spectacular success of NASA and USAF missions, culminating in the successful launches of the last two Titans, carrying critically needed National Reconnaissance Office payloads.

Trick Team of NASA Johnson Space Center - Outstanding achievement in developing the Trick simulation environment as the architectural standard for integrated engineering simulation at Johnson Space Center, allowing for significant commonality and cost savings.

Wargame Team of the United States Air Force, Space Warfare Center - Significantly improved national security through innovative wargame design involving concepts of operating and integrating military, civil and commercial space assets.

Water Processor Assembly and Oxygen Generator Assembly Development Team of Hamilton Sundstrand Space Systems International - Successful development and delivery of our nation's first flight-qualified life support technologies, enabling the regenerative supply of water and oxygen for long- duration human space exploration.



P REVIOUS N ATIONAL

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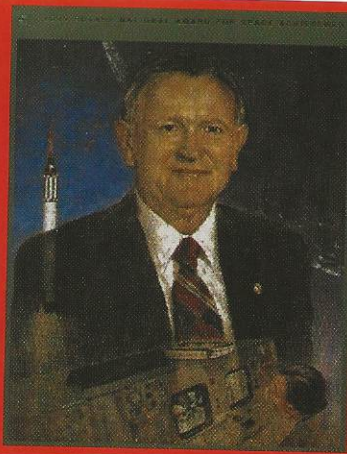
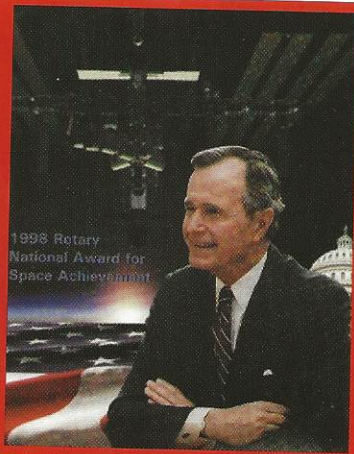
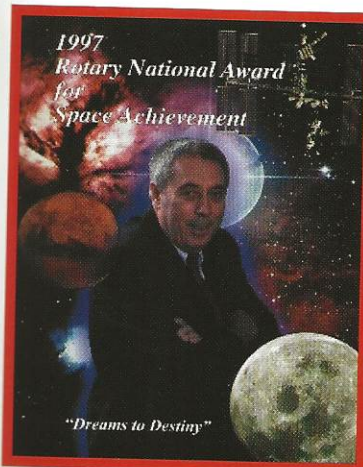
- 1987 Dr. Maxime Faget
- 1988 Hon. Don Fuqua
- 1989 V. Adm. Richard Truly, USN (Ret.)
- 1990 Dr. Lew Allen

Middle column:

- 1991 Dr. Aaron Cohen
- 1992 Dr. Norman R. Augustine

Left to right; bottom row:

- 1993 Lt. Gen. Thomas Stafford, USAF (Ret.)
- 1994 Edward C. "Pete" Aldridge, Jr.
- 1995 Daniel Goldin
- 1996 Capt. Robert L. Crippen, USN (Ret.)



SPACE TROPHY WINNERS

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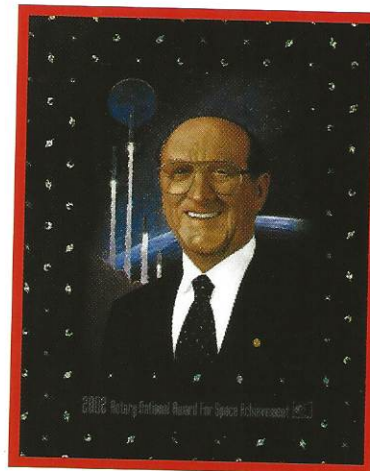
- 1997 George W. S. Abbey
- 1998 President George H. W. Bush
- 1999 Dr. Christopher C. Kraft, Jr.
- 2000 Capt. John W. Young, USN (Ret.)

Middle column:

- 2001 Tommy Holloway
- 2002 Dr. George E. Mueller

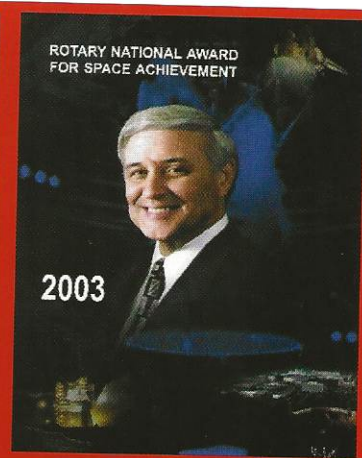
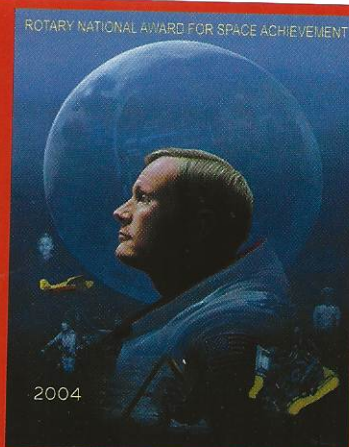
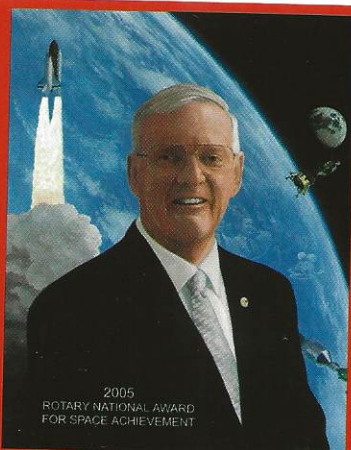
Left to right; bottom row:

- 2003 Roy S. Estess
- 2004 Neil A. Armstrong
- 2005 Dr. Glynn S. Lunney



About 2006 Cover

Renowned space artist Pat Rawlings created the 2006 cover portrait of Eileen Collins. Employed by SAIC, he painted the 1987, 1991 and 2001-05 covers. His art appears in the SAIC calendars, in major space and scientific publications, and broadcast media around the world.



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The Board of Advisors elects the annual National Space Trophy winners.

The National Space Trophy, a seven-foot, 500-pound lead crystal sculpture designed by Steuben Glass of New York is on permanent display at Space Center Houston.

USA HONORS EILEEN COLLINS

PATHFINDER, LEADER, ROLE MODEL



United Space Alliance salutes Eileen Collins for her leadership during STS-114, NASA's Return to Flight. Her career achievements make Eileen an exemplary role model for all members of the spaceflight community. She is uniquely qualified to join the ranks of those rare individuals who have been honored with the National Space Trophy.

CONGRATULATIONS!



United Space Alliance

LEADER.
PATHFINDER.
ROLE MODEL.
INSPIRATION.

For all that she's done and all that she is, the men and women of Boeing are proud to congratulate Eileen Collins on receiving the 2006 National Space Trophy.

