2012
ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT

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MICHAEL L. COATS

2012 National Space Trophy Recipient

Rotary National Award for Space Achievement

Mike Coats
(RNASA photo)

The 2012 National Space Trophy winner is former astronaut, Captain, USN (Ret.), and NASA Johnson Space Center (JSC) Director Michael L. Coats.

As director of JSC, Coats is responsible for a team of more than 3,200 civil servants and an annual budget in excess of $4.5 billion dollars.

Father's Influence

Coats was born into a military family in 1946 in Riverside, California. His father, Col. Loyd A. Coats, USAF, was the biggest single influence on his life. "He was an Air Force bomber pilot, flying B-17's with the 8th Air Force in WWII and then B-29's in Korea," Coats told RNASA. "His eyesight deteriorated. He then became commanding officer of the Maintenance Squadron for the SR-71 spy plane. He also had a tour in Thailand during the Vietnam War."

Coats' mother, Clarice "Jan" Coats of Oklahoma City, stayed home with Michael, his brother and three sisters, and somehow found time to become a competitive bridge player.

"My early childhood obsession with landing planes on aircraft carriers came about because I wanted to make my parents proud and still do something a bit different than my father," Coats said. "Becoming a Navy pilot was my goal from a very young age.

Love at First Sight

The other great love of his life was also settled at a young age, in the summer before his senior year of high school. "We were with my father at Amarillo AFB when I first saw Diane at the base swimming pool," Coats said. "Cupid was on target, and I walked home that day and quite seriously told my mother I just saw the girl I was going to marry. Instead of laughing as I expected, my mother said, 'Tell me all about her.' I hadn't yet spoken to her, so I was embarrassed I didn't know her name, or even the sound of her voice. I was determined to introduce myself the next day at the pool, but she was with her boyfriend all day. I had to return to Riverside to start football practice, so I thought I had lost my future wife before I even knew her name."

"During my first year at the Naval Academy, my mother kept writing me about a wonderful girl who lived behind them in base housing. She kept insisting I write to this young lady. To make my mother happy, I finally did so. I eventually asked for a picture. Needless to say, it was an unforgettable day when the picture arrived, and I realized she was the same girl I had seen at the pool two years earlier!" Her name was Diane Carson.

Diane's father, an Air Force dentist, had been transferred from Amarillo to Riverside. The seemingly predestined couple corresponded cross-country for four years. They married at Tinker AFB in Oklahoma City in 1969. "My mother always enjoyed reminding me she 'found' my wife for me," Coats said. "But," he added, "I would remind her I had stated my intent to marry Diane two years before she 'found' her!"

Mike and Diane Coats, 1969
(Photo courtesy Mike Coats)

Coats graduated from Ramona High School in 1964. "I was blessed with a long string of outstanding teachers in Riverside," Coats said. "I was well prepared to compete academically when I entered the Naval Academy."

During his plebe year, Coats' father visited him in Annapolis. His father had "lost a lot of friends in each of the wars and seemed reluctant to tell us his 'war stories.'" So Coats hadn't fully appreciated his father's accomplishments until that visit. "He was in his dress uniform wearing all his medals," Coats remembered. "Every midshipman and officer did a double take and stared at his chest full of medals. I flew 315 combat missions in Vietnam and logged over 400 carrier landings, but I don't feel like I came close to measuring up to his record during three wars. He was the hardest working man I've ever seen and retired as a full colonel despite never having gone to college."

First Flight

In 1968, Coats received his B.S. degree from the Naval Academy. He earned his pilot's wings the next year. "I had never flown a plane until I reported to Navy flight training at Pensacola," Coats said. "My first solo, in the Navy's T-34 basic trainer, was a bit of a surprise. To say my heart was pounding is an understatement. I can understand why it's not uncommon for a student to forget about landing again to pick up his instructor and just flies back to home base

(continued next page)

MICHAEL L. COATS

2012 National Space Trophy Recipient

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alone. Fortunately, I didn't strand my instructor out in the boondocks, which is not particularly career enhancing!"

After earning his wings, he served aboard the USS Kitty Hawk in Southeast Asia. He then served as a flight instructor with the A-7E Readiness Training Squadron in Lemoore, California from 1972 until he was selected for the U.S. Naval Test Pilot School in Patuxent River, Maryland in 1973. After serving as project officer and test pilot for the A-7 and A-4 aircraft, he became an instructor at Patuxent. During this time, he also earned a master's degree in science and technology from George Washington University. He then earned a master's in aeronautical engineering in 1979 from the U.S. Naval Postgraduate School in Monterey, California.

Astronaut Experience

The crew of STS-41D
(NASA photo, 1984)

Coats was selected as an astronaut in 1978. He served as Capcom in Mission Control for STS-4 and 5 in 1982.

Coats first flew as pilot of STS 41D in 1984, the maiden flight of Discovery. Henry Hartsfield was commander and Judy Resnick, Steve Hawley, Richard Mullane, and Charlie Walker were his fellow crewmembers. This six-day flight launched August 30, 1984 and deployed three satellites (SBS-D, SYNCOM IV-2, and TELSTAR 3C), operated the Continuous Flow Electrophoresis experiment, tested a solar wing (OAST-1), and filmed an IMAX movie. The crew earned the nickname "Icebusters" after removing vent ice with the robotic arm.

Coats was selected commander of STS 61-H. That mission was canceled following the Challenger accident in January 1986.

"The Challenger tragedy was simply devastating," Coats said. "I had lost several good friends in Vietnam and at the Naval Air Test Center, but losing so many close friends at once was hard to comprehend and accept. The first six years in the astronaut office had been like a dream come true. We were working 12 to 14 hour days and loving it. When Challenger happened, it was like a sledgehammer blow reminding us that spaceflight is a difficult, risky, and unforgiving business."

Coats grieved for all his fellow astronauts, but most especially for Challenger's pilot, Mike Smith. "We had been at the Naval Academy together, on the same ship and airwing while flying missions in Vietnam, in the same Navy Test Pilot School class, and then shared an office as the two spin instructors at the Naval Test Pilot School," Coats recalled. "We discussed at great length whether to apply for the first class of Shuttle astronauts. I decided the night before the deadline to apply 'just to see how far I'd get,' and Mike decided he wanted to wait and see what the 'peacetime' Navy was like." Smith applied two years later and joined the next astronaut class.

Coats during STS-29
(NASA photo, 1989)

"I've been determined since then to do what I could to make human spaceflight as safe as possible," Coats said. "While it's important and inevitable that the human race will leave planet Earth and begin to explore the universe, there are no shortcuts to space. We have to take the time and expend the resources to do it right."

Coats commanded STS-29 in March of 1989 with crewmembers John Blaha, James Bagian, James Buchli, and Robert Springer. After this flight of Discovery which deployed a Tracking Data Relay Satellite, Coats became the acting chief of the Astronaut Office.

The first unclassified DoD flight, STS-39, was Coat's final flight, also on Discovery. The primary customer for this flight was Mike Griffin, then with the Strategic Defense Initiative (now Missile Defense Agency). "I consider myself fortunate to have had the opportunity to work with Mike for more than 20 years," Coats said. "I quickly came to appreciate

STS-39 crew prelaunch breakfast
(NASA photo, 1991)

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Space is a place without limits. A frontier where peacekeepers, weather watchers, climate monitors, and explorers use space systems to learn more and do more. Visionaries like Mike Coats, astronaut, leader and winner of the 2012 National Space Trophy, and all the Stellar Award nominees. Thanks to them, the greatest voyages are yet to come.

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MILES O'BRIEN

Rotary National Award for Space Achievement

MAYOR ANNISE PARKER
Welcome Speaker

Annise Parker
(RNASA image, 2010)

The RNASA Foundation is pleased to have the Honorable Annise D. Parker, Mayor of Houston, welcome our guests this evening.

As Executive Officer, the Mayor administers oaths and signs all motions, resolutions, and ordinances passed by City Council. She also presides over City Council meetings, presents an annual budget for approval, and is responsible for advising Council of the City's financial condition. Despite her busy schedule, she has made numerous trips to D.C. as an advocate for Johnson Space Center's programs.

Born in 1956, Parker is a second generation native Houstonian who grew up in the Spring Branch area. She lived abroad for two years with her family at the U. S. Army base in Mannheim, Germany when she was a teenager.

Parker attended Rice University in Houston, graduating in 1978 with a BA in anthropology and sociology. Parker spent 20 years working in the oil and gas industry, including 18 years with Mosbacher Energy Company. She also co-owned a retail bookstore for ten years and a bookkeeping and income tax company for 15 years.

Parker was sworn in to her first term as mayor of Houston on January 4, 2010, and began her second term this January. She is Houston's 61st mayor, one of only two women to hold the City's highest elected office. As the City's chief executive officer, she is responsible for all aspects of the general management of the City and for seeing that all laws and ordinances are enforced. Houston is the fourth-largest city in the United States.

Prior to her election as mayor, Parker served for six years as Houston city controller. She served as an at-large member of Houston City Council from 1997 to 2003. She is the only person in Houston history to hold the offices of council member, controller, and mayor.

Parker and her life partner, Kathy Hubbard, have been together since 1990. They have two children.

MILES O'BRIEN
Master of Ceremonies

Miles O'Brien
(RNASA image, 2011)

Former RNASA Space Communicator Award Winner Miles O'Brien brings years of media experience and a rocket blast of good humor to his duties as Master of Ceremonies for our annual event.

O'Brien owns Miles O'Brien Productions, LLC. Based in Washington, D.C., the company creates stories for media outlets including the PBS NewsHour, FRONTLINE, Discovery Science Channel, National Science Foundation, Spaceflightnow.com and corporate clients.

O'Brien was born in Detroit, Michigan. He earned a history degree from Georgetown and began his broadcasting career in 1982 in D.C. He was a reporter and anchor at TV stations in Massachusetts, Florida, New York, and Missouri. O'Brien joined CNN in 1992.

While with CNN in Atlanta and New York, O'Brien served as CNN's science, space, aviation technology, and environment correspondent. He anchored programs including Science and Technology Week, Headline News Primetime, and CNN American Morning. O'Brien's reports of Hurricane Katrina in 2005 helped earn CNN a Peabody award.

O'Brien has covered all aspects of space including reports on the Hubble Space Telescope, the shuttle dockings at Mir, the first space station launch from Kazakhstan, John Glenn's return to space, landings on Mars, the winning of the Ansari X-Prize, and the tragic loss of Columbia and its crew. After years of negotiations, NASA had signed an agreement with CNN that, if not for the disaster, would have made O'Brien the first journalist to fly on a space shuttle. O'Brien followed the investigation and successful return to flight. He left CNN in December 2008.

A third-generation pilot with an instrument rating, O'Brien has also reported extensively on civil aviation issues and crash investigations. He grew up flying Cessnas and Pipers rented by his father and owns a Cirrus SR-22.

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MARK SIRANGELO
Lt. Gen. THOMAS STAFFORD, USAF (Ret.)

Rotary National Award for Space Achievement

MARK SIRANGELO
Keynote Speaker

Mark Sirangelo
(Photo courtesy SNC)

The RNASA Foundation is pleased to have Mark N. Sirangelo, Corporate Vice President of Sierra Nevada Corporation (SNC) Space Systems, present the keynote address. SNC is a multi-billion dollar U.S. company that employs more than 2,300 people in 16 states. SNC Space Systems, which recently opened an office in Houston, has participated in more than 400 space missions, including a dozen to Mars. They are currently developing the SNC Dream Chaser to fly humans to space. The first flights are planned for later this year.

Based at the SNC offices in Louisville, Colorado, Sirangelo is a recognized leader of the growing commercial space sector. He was named to the Defense Industry's Fast Track 50, Deloitte's Fast Track 500, selected as a finalist in Ernst & Young's Entrepreneur of the Year, and had his company included in Inc. Magazine's top 200 companies and inducted into the Space Foundation's Technology Hall of Fame.

Mark Sirangelo with Dream Chaser model
(Photo courtesy SNC)

He serves as a trustee for the Aeronautics Industries Association, chairman emeritus of the Commercial Spaceflight Federation, and he is the founding and current chairman of eSpace, a nonprofit organization that supports STEM education and the development of entrepreneurial space companies.

Sirangelo is also a champion of children, serving as a trustee and board member of the National Center for Missing and Exploited Children; and as the founder, vice chairman, and treasurer of the International Centre for Children.

Sirangelo was previously chairman and CEO of SpaceDev, Inc. that merged in 2008 with SNC Space Systems. SpaceDev designed and built the hybrid rocket motors for Scaled Composite's SpaceShipOne that won the Ansari X-Prize in 2004.

With a BS, an MBA, and a JD from Seton Hall University in New Jersey, Sirangelo is also a U.S. Army veteran, a licensed pilot, and a photographer.

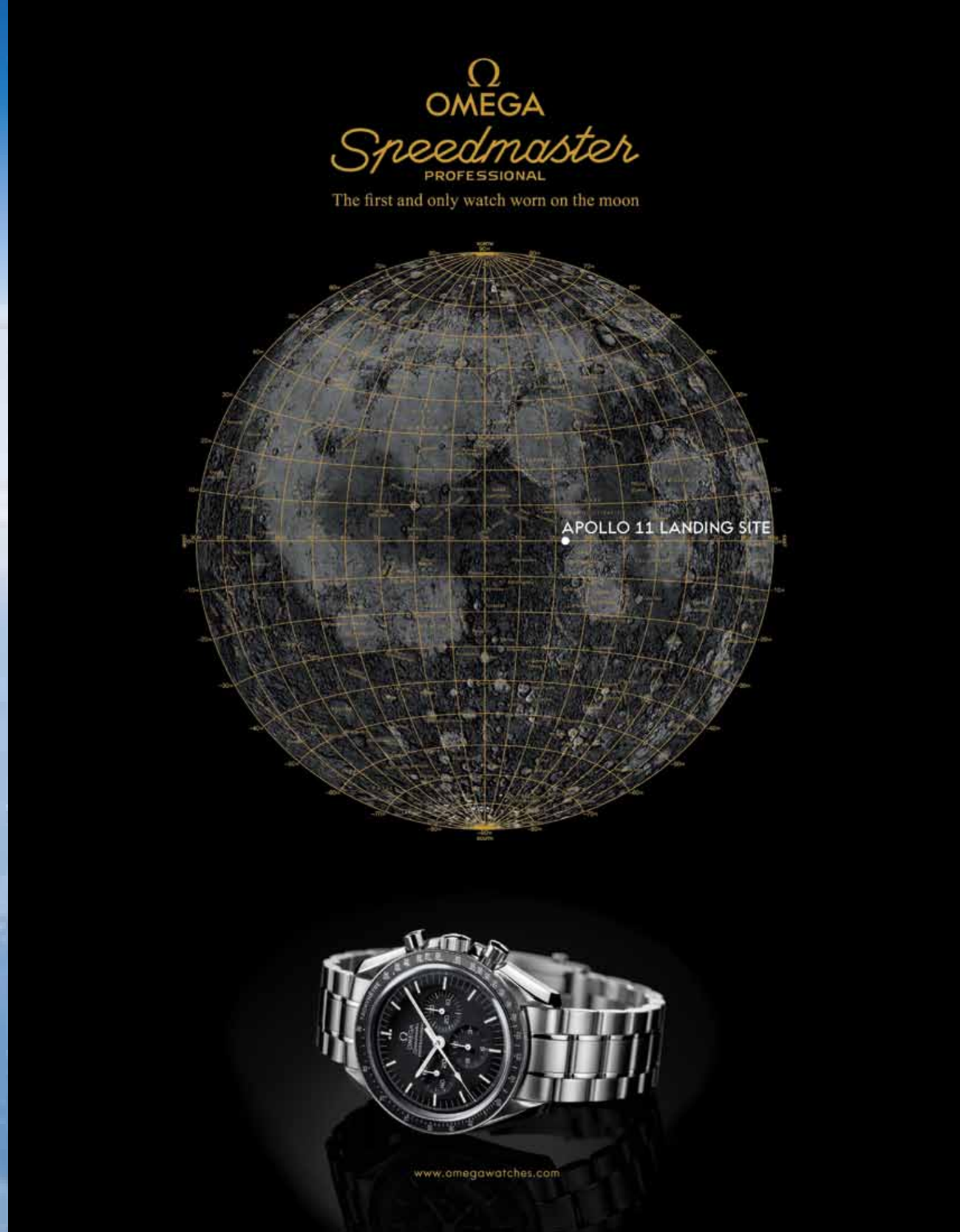
Lt. Gen. THOMAS STAFFORD, USAF (Ret.)
Omega Watch Presenter

Lt. Gen. Thomas Stafford, USAF (Ret.)
(RNASA Photo)

Once again, Omega has donated a watch to the recipient of the National Space Trophy. The watch is presented by Lt. Gen. Thomas P. Stafford, USAF (Ret.), the recipient of the Trophy in 1993, and a member of the RNASA Board of Advisors.

From Weatherford, Oklahoma, Stafford graduated from the U.S. Naval Academy in 1952 and became an Air Force fighter and test pilot. He joined NASA as an astronaut in 1962. He was the pilot for Gemini 6 in 1965 and the commander for Gemini 9 the next year. Stafford commanded Apollo 10 in 1969 and Apollo-Soyuz in 1975. He left NASA to command the Air Force Flight Test Center, and in 1978 became Deputy Chief of Staff at Air Force Headquarters in D.C. He retired in 1979, and co-founded the consulting firm of Stafford, Burke, and Hecker in Alexandria, Virginia. In 1990, Stafford chaired the team that prepared "America at the Threshold" to advise NASA on returning to the Moon and exploring Mars.

The RNASA Foundation wishes to express its gratitude to Omega and General Stafford for a decade of generous support to our annual event.



DR. K. MEGAN McARTHUR

Stellar Presenter

Rotary National Award for Space Achievement

K. Megan McArthur, PhD
(NASA photo)

The RNASA Foundation is pleased to welcome back NASA Astronaut K. Megan McArthur, PhD as a Stellar Award presenter. McArthur was a member of the final Hubble repair mission in May 2009. She is currently the International Space Station visiting vehicles lead.

Born in Honolulu, Hawaii in 1971, McArthur considers California, where her parents currently live, her home state. She graduated from St. Francis High School in Mountain View, Calif. in 1989 and headed to the University of California-Los Angeles. She earned her BS in aerospace engineering there in 1993, and then did graduate work at the Scripps Institution of Oceanography in La Jolla, California.

McArthur's research at Scripps focused on underwater acoustic propagation, digital signal processing, and on determining geoacoustic models to describe very shallow water waveguides--using measured transmission loss data in a genetic algorithm inversion technique. During at-sea data collection operations, she served as chief scientist. She also planned and led diving operations during sea-floor instrument deployments and sediment-sample collections.

While at Scripps, she participated in a range of in-water instrument testing, deployment, maintenance, and recovery, and collection of marine plants, animals, and sediment. McArthur also volunteered at the Birch Aquarium at Scripps, conducting educational demonstrations for the public from inside a 70,000 gallon exhibit tank of the California Kelp Forest. She completed her PhD in oceanography at UC-San Diego in 2002.

McArthur was selected as a mission specialist by NASA in July 2000 and reported for training that August. After two years of training and evaluation (and completing her PhD), she was assigned to the Astronaut Office Shuttle Operations Branch working technical issues on shuttle systems in the Shuttle Avionics Integration Laboratory. McArthur then served as the crew support astronaut for the Expedition 9 crew, Edward Fincke and Gennady Padalka. She spent six months in Russia during this mission aboard the International Space Station which extended from April to October of 2004. She also worked in the Space Station and Space Shuttle Mission Control Centers as a CAPCOM.

McArthur's first flight into space was aboard Space Shuttle Atlantis on STS-125, the fifth and final shuttle mission to the Hubble Space Telescope. It launched on May 11, 2009.

The 19-year-old telescope spent six days in the shuttle's cargo bay undergoing an overhaul. The crew, commanded by Scott Altman and piloted by Gregory Johnson, overcame frozen bolts, stripped screws, and stuck handrails to refurbish the Hubble Space Telescope with four new or rejuvenated scientific instruments, new batteries, new gyroscopes, and a new computer. McArthur's primary

McArthur during STS-125
(NASA photo)

responsibility was operation of the robotic arm during five spacewalks conducted by Andrew Feustel, Michael Good, John Grunsfeld, and Michael Massimino. Atlantis landed on May 24, 2009.

The mission successfully extended and improved the observatory's capabilities through 2014. In completing her first space mission, McArthur logged almost 13 days in space, traveling 5,276,000 miles in 197 Earth orbits.

McArthur is married to fellow astronaut and Stellar Award presenter, Lt. Col. Robert L. Behnken, USAF. McArthur enjoys SCUBA diving, backpacking, and cooking.

Here's to this year's out-of-this-world achievers.

Congratulations to Captain Michael L. Coats, USN (Ret.), 2012 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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Lt. Col. ROBERT BEHNKEN, USAF, PhD

Stellar Presenter

Rotary National Award for Space Achievement

Lt. Col. Robert Behnken, USAF, PhD
(NASA photo)

In keeping with the RNASA tradition of having experienced astronauts present the Stellar Awards, the Foundation is pleased to have Astronaut and Lt. Col. Robert L. Behnken, USAF, PhD, as a presenter this year. Behnken is a veteran of two Shuttle flights and six spacewalks.

Behnken was born in St. Ann, Missouri in 1970. He graduated from Pattonville High School in Maryland Heights, Missouri, and then he attended Washington University in St. Louis. He joined the Air Force ROTC there and earned his BS in physics and mechanical engineering in 1992. Behnken did his graduate work at the California Institute of Technology, earning a masters' and PhD in mechanical engineering in 1993 and 1997, respectively. His graduate work involved developing control algorithms and hardware for flexible robotic manipulators, and his thesis was on nonlinear control applied to stabilizing rotating stall and surge in axial flow compressors.

After graduate school, Behnken was assigned as a technical manager and developmental engineer for munitions systems at Eglin AFB in Florida. His next assignment took him to Air Force Test Pilot School at Edwards AFB, Calif. After graduation, he was assigned to the F-22 Combined Test Force at Edwards where he served as the lead flight test engineer for the 4th F-22.

Lt. Col. Behnken was selected as an astronaut by NASA in July 2000. He has more than 1,000 flight hours in more than 25 different aircraft.

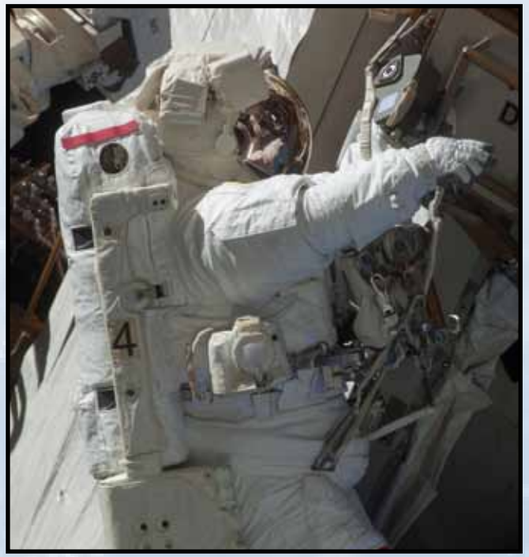
After completion of astronaut training in 2002, Behnken supported the Astronaut Office Shuttle Branch's launch and landing activities at Kennedy Space Center (KSC) in Florida.

Behnken's first flight was on STS-123 that both launched and landed at night in March 2008. This flight of the Space Shuttle Endeavour was the 25th space station assembly flight. STS-123 delivered the Japanese Kibo laboratory and the final element of the Canadian-built station's mobile servicing system called Dextre. Behnken performed three spacewalks and operated the new Dextre robotic arm during the mission.

In 2006, Behnken served as an aquanaut during the NEEMO 11 mission aboard the Aquarius underwater laboratory, living and working underwater for seven days. In the fall of 2008, Behnken joined the STS-400 crew that was on standby in case the final Hubble servicing mission (STS-125) had needed rescue (but fortunately, didn't).

In February 2010, Behnken once again launched at night and flew on Endeavour to the space station. The crew of STS-130 delivered and outfitted the Tranquility Node and the Cupola, a portal with seven windows. Behnken once again performed three spacewalks and enjoyed a night landing at KSC at the end of a successful flight.

Behnken currently serves as the Astronaut Office Deputy Chief for the International Space Station. He is married to fellow astronaut and Stellar Award presenter, K. Megan McArthur, PhD. He enjoys mountain biking, skiing, and backpacking.



Behnken during STS-130
(NASA photo)

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Captain Michael L. Coats, USN (Ret.)
2012 National Space Trophy Winner

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DR. MICHAEL GRIFFIN

Trophy Presenter

Rotary National Award for Space Achievement

Mike Griffin
(RNASA photo, 2010)

Previous National Space Trophy winner and former NASA Administrator Mike Griffin nominated Mike Coats to receive the Trophy this year and will share in presenting it to him. Griffin called Coats, "a naturally gifted leader with excellent communication and people skills." He noted that this past year has been extremely demanding, as well as an emotional one for Johnson Space Center (JSC). "Leading the close-out of the 30-year Space Shuttle Program, a program which has in many ways defined the workforce at JSC, was possibly his most challenging leadership task to date," Griffin said. "Coats was successful because of his abilities as a leader and his consistent approach of proactively sharing information with the entire workforce about on-going program transition activities. He has proven to be an absolute standout among a group of very talented and intelligent directors."

Griffin is currently an eminent scholar and professor of mechanical and aerospace engineering at the University of Alabama in Huntsville.

Born in Aberdeen, Maryland, Griffin earned his BA in physics from Johns Hopkins University (JHU) in 1971. Griffin completed a master's in aerospace science from Catholic University in 1974, and his PhD in aerospace engineering from the University of Maryland in 1977. He later earned master's degrees in electrical engineering from the University of Southern California, applied physics from JHU, civil engineering from George Washington University, and business administration from Loyola College of Maryland.

His first job was with Link Division of Singer Corporation. In 1974, he joined Computer Science Corporation at NASA Goddard in Maryland. In 1977, Griffin joined the Jet Propulsion Laboratory in California to work on Mars programs. In late 1979, he returned to JHU where he worked on hypersonics, the Hubble Space Telescope, the Air Force Polar BEAR satellite, the Shuttle Astro-1 payload, and on missile defense for the Strategic Defense Initiative Organization (SDIO). He also taught aerospace engineering at the University of Maryland and at George Washington University.

He joined American Rocket Company in California in 1986 and worked on launch vehicle development. In 1987, he went to work for the SDIO.

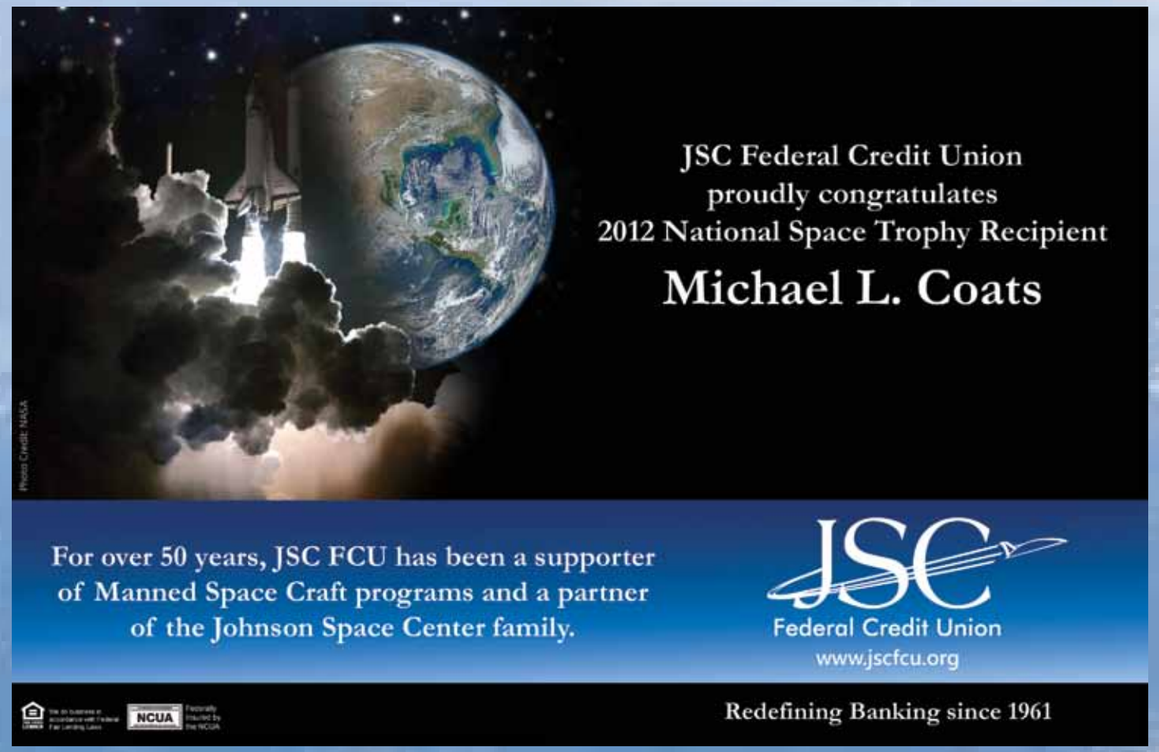
Griffin was NASA Associate Administrator for Exploration from 1991-93. He was co-director of the Access to Space Study, team leader for the space station redesign, and led NASA efforts to analyze the Mars Observer failure. In 1993, Griffin was named NASA's chief engineer, responsible for review of all NASA programs, including the Hubble repair.

Griffin served as general manager of Space Industries in Houston from 1994-95. He then joined Orbital Sciences in Virginia, responsible for programs including the X-34 reusable launch vehicle and the ORBCOMM and ORBVIEW satellite constellations. He later became CEO of Magellan Systems, Inc., a division of Orbital Sciences.

In 2002, Griffin became president and COO of In-Q-Tel working on CIA technology applications. He returned to JHU and oversaw the preparation, launch, and early operations of MESSENGER that launched to Mercury in 2004.

Selected as NASA Administrator by President Bush in 2005, Griffin developed the plan for completing the International Space Station after the loss of Columbia. He initiated the first procurement of commercial cargo and crew service in the agency's history. He left NASA in January 2009.

Griffin is married to the former Rebecca (Becky) Lee Hann whom he met in Houston in the early 90s. Besides flying and golf, Griffin enjoys amateur radio, skiing, and scuba diving.



WILLIAM PARSONS

Trophy Presenter

Rotary National Award for Space Achievement

Bill Parsons
(Photo courtesy Bill Parsons)

In nominating Mike Coats for the National Space Trophy, Bill Parsons wrote that, "Coats worked diligently to effectively balance institutional and program demands, ensuring the safe and successful fly out of NASA's Space Shuttle Program." Parsons knows first-hand what a difficult job it is to lead a NASA center, having been director or deputy director of three different NASA centers.

Parsons is currently president and CEO of RD AMROSS, LLC, a United States joint venture of Pratt & Whitney Rocketdyne and NPO Energomash. RD AMROSS, LLC markets liquid propulsion rocket engines for NPO Energomash, including the RD-180 that provides the main thrust on the Atlas V Launch Vehicle made by United Launch Alliance. NPO Energomash manufactures the RD-180 engine and provides design, manufacturing, testing, and other services for liquid propulsion rocket engines. Pratt & Whitney provides manufacturing, mission engineering, and management support and is licensed to produce the RD-180 in the U.S.

Born into a military family in Magnolia, Mississippi, William Parsons moved a lot as a child. He earned his bachelor's of engineering from the University of Mississippi. He joined the Marines and spent time in Japan and Korea. He left the Marines in 1983 and took a job with Pam Am World Services at Kennedy Space Center (KSC) in 1986. He joined NASA in 1990 in the Shuttle Operations Directorate. He was Shuttle flow director and helped create the Space Station Hardware Integration Office in 1994. He deployed to Alabama and California to help bring the first U.S. hardware contribution to the International Space Station to KSC for launch. During his time in Florida, he earned a master's of engineering management degree. In 1997, he moved to the Stennis Space Center in Miss. as chief of operations of the Propulsion Test Directorate. In 1998, Parsons relocated to Johnson Space Center (JSC) in Houston, and in 2000 was appointed deputy director. He was appointed director of the Stennis Space Center in 2002.

In 2003, Parsons became the Space Shuttle Program manager and led the Return to Flight activities for the Agency. He played a key role in the success of the Discovery STS-114 mission and then returned to Stennis as director a second time. He led hurricane Katrina recovery efforts at Stennis and at the Michoud Assembly Facility in New Orleans.

Parsons returned to KSC as deputy director in early 2006, and then became the ninth director of KSC in January 2007. He left NASA in October of 2008. He was vice president, Strategic Space Initiatives, Lockheed Martin, Information Systems and Global Solutions-Civil until April 2011 when he joined RD AMROSS, LLC.

Parsons has received numerous honors including the Presidential Rank Award (Meritorious Executive); NASA's Exceptional Service Medal and Distinguished Service Medal; the National Intelligence Medal of Achievement; and the Silver Snoopy. He also has received the Distinguished Alumni Award and the Engineering Alumni of the Year award from the University of Mississippi and the Alumni of the Year award from the University of Central Florida.

Parsons with Roy Estess at JSC in 2000.
(NASA photo)

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Rotary National Award for Space Achievement

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PROGRAM

Friday, April 27, 2012
Houston Hyatt Regency Imperial Ballroom

6:00
RECEPTION
Victoria Reva, Pianist

7:00
WELCOME
Rodolfo González, Chairman, RNASA Foundation
Honorable Annise Parker, Mayor of Houston

PRESENTATION OF THE COLORS
Clear Lake High School Army JROTC Color Guard
Cadet 1LT Dylan Culbreth, Commander; Cadet SFC Dara Rancifer
Cadet SFC Katelyn Ehmry; Cadet 1LT Andrew Spicer

NATIONAL ANTHEM
Julia Cole

INVOCATION
Rev. Steve Oglesbee, Lead Pastor, Clear Lake Presbyterian Church

DINNER

8:15
2011 YEAR-IN-REVIEW FILM
Space City Films

MASTER OF CEREMONIES
Miles O'Brien, Miles O'Brien Productions

KEYNOTE
Mark Sirangelo, Corporate Vice President, Sierra Nevada Space Systems

PRESENTATION OF STELLAR AWARDS
K. Megan McArthur, PhD, NASA Astronaut
Lt. Col. Robert Behnken, USAF, PhD, NASA Astronaut

PRESENTATION OF NATIONAL SPACE TROPHY to Michael L. Coats
Bill Parsons, President of RD AMROSS, LLC
Mike Griffin, PhD, Professor, University of Alabama in Huntsville

PRESENTATION OF THE OMEGA WATCH
Lt. Gen. Thomas Stafford, USAF (Ret.)

RECOGNITION OF SPONSORS AND CLOSING

MICHAEL L. COATS

ARES Corporation celebrates the 26th Anniversary of
The Rotary National Award for Space Achievement (RNASA)
Foundation, and congratulates Michael L. Coats for his
leadership and devotion to the U.S. space program.

ARES CORPORATION

Transforming Challenge Into Success

Program Integration | Engineering Analysis | Risk Management
Modeling and Simulation | Information Technology | Safety and Mission Assurance

2012 RNASA BOARD OF ADVISORS

Rotary National Award for Space Achievement

Some members of the RNASA Board of Advisors. Back row L to R: Dittemore, Whitesides, Vantine, Abbey, Engle, Coats, Stafford,Chilton, Collins, Reightler, Wilkins, Nield, Carr, Lunney, Hutchinson, Mike Griffin, Brandenstein, Carreau. Front row L to R: Kranz, Barnes, Hendershot, Johnson, Gerry Griffin, Kraft, Aldrich, O'Brien. *(NASA Photo, May 6, 2011)*

George W. S. Abbey
Jim Albaugh
Arnold D. Aldrich
Edward C. Aldridge Jr.
Neil A. Armstrong
Jim Asker
Dr. Norman R. Augustine
Virginia A. Barnes
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V.Adm. Richard H. Truly, USN (Ret.)
Dr. William Vantine
George Whitesides
Capt. John W. Young, USN (Ret.)

2012 RNASA FOUNDATION

Rotary National Award for Space Achievement

The Rotary National Award for Space Achievement (RNASA) Foundation was founded in 1985 to organize and coordinate an annual event to recognize outstanding achievements in space and create greater public awareness of the benefits of space exploration. Each year, the Foundation presents the National Space Trophy (NST) to an outstanding American (see previous winners on page 33) who has made major contributions to our nation's space program.

Nominations are solicited each fall from leaders in government, industry, and professional organizations. The winner is selected by a vote of the RNASA's Board of Advisors (page 20) that includes current and former NASA center directors, leaders of aerospace corporations, space journalists, and previous award recipients.

Since 1989, the RNASA Foundation has also recognized the "unsung heroes" of the space program with Stellar Awards (pages 24-32) for individual and team achievements.

The RNASA Foundation is a nonprofit organization governed by a Board of Directors, a majority of whom must be members in good standing of the Space Center Rotary (SCR) club. One third of the directors are elected each June for three-year terms except for the SCR president who serves for one year while president.

The RNASA Committee (pictured above) serves the board and includes the directors, officers, corporate representatives, event coordinators, and dedicated Rotarians who help organize and produce a quality and memorable evening for our sponsors (page 17) and guests.

Excess funds remaining after event expenses are donated to space-related educational programs. Last year, the proceeds were donated to the United States Air Force Academy Endowment in honor of NST Winner Gen. Kevin Chilton, and to the Texas High School Aerospace Scholars program that provides thousands of students the opportunity to experience the exciting work being done at Johnson Space Center.

The RNASA Foundation is grateful for the enthusiasm and support it receives from the aerospace industry, educational organizations, NASA, and the Department of Defense that allows the continued recognition of outstanding achievements in space exploration.

Back row L to R: Jayant Ramakrishnan, Daniel Weber, Bill Taylor (Vice Chairman), Robert Wren, Marcus Havican, Joseph Mayer, Duane Ross, Richard Larson.
Middle row L to R: Gary Johnson, Jack Lister, Shelley Baccus, Mary Alys Cherry, Rodolfo González (Chairman), Marianne Dyson, Jeannie Kranz, Floyd Bennett, Bill Geissler.
Front row L to R: L. Jean Walker (Secretary), Jennifer Mitchell, Geoff Atwater (Treasurer), Frank Perez, Irene Chan, Susan Gomez.
Not pictured: Kippy Caraway, Jeff Carr, Jess Davis, Mike Dennard, Steven Fredrickson, Jacinda Green, Philip Harris, Mike Hernandez, Tim Kropp, Diana Norman, Branelle Rodriguez, and Lori Wheaton.

2012 RNASA STELLAR AWARDS PROGRAM

Rotary National Award for Space Achievement

Each fall, the RNASA Foundation solicits Stellar Award nominations of space industry workers and teams deserving of special recognition. This year, 99 individual and 28 team nominations were received in four categories (see citations on pages 24-32). "Each company and organization may only nominate a select few people or teams in each category, so just being nominated is quite an achievement," noted Jennifer Mitchell, the RNASA Stellar Awards Committee chairman. "The Foundation is proud to bring the outstanding work of all the nominees to the attention of a wider community."

All nominees are treated to an insiders' tour of Johnson Space Center and an awards luncheon with a distinguished speaker. They receive framed certificates of recognition and blue ribbons to wear at the evening banquet so that guests can identify them and offer their congratulations.

The winners of the Stellar Awards are chosen by an esteemed panel of judges based on which accomplishments will have the most impact on future space activities. The winners are announced at the banquet where they receive a distinctive engraved marble trophy.

Dr. Chris Kraft
(RNASA photo)

Stellar Awards Evaluation Panel

Dr. Christopher C. Kraft Jr. is a founding member of the RNASA Board of Advisors, and he has led the RNASA Stellar Award Evaluation Panel since 1997.

Kraft joined NASA's predecessor at Langley Field, Virginia in 1945 and spent fourteen years testing aircraft. When NASA formed in 1958, Kraft was one of the 36 original members of the Space Task Group developing Project Mercury.

Kraft was the first flight director and led Flight Operations through Apollo 12. He became the director of what is now Johnson Space Center (JSC) in 1971, playing a vital role in the success of the final Apollo missions and the first Space Shuttle flights.

Since his retirement in 1982, he has served as a consultant and board member of various Houston companies, as director-at-large of the Houston Chamber of Commerce, and as a member of the Board of Visitors at his alma mater, Virginia Polytechnic Institute and State University.

His book, "FLIGHT: My Life In Mission Control," published in 2001, was a New York Times bestseller. Kraft received the 1999 National Space Trophy. In 2011, Building 30 at JSC was named the Christopher C. Kraft Jr. Mission Control Center in his honor.

Dr. Glynn Lunney
(RNASA photo)

Dr. Glynn S. Lunney is a member of the RNASA Board of Advisors who is serving his ninth year on the Stellar Awards Evaluation panel. He was the 2005 National Space Trophy winner.

Lunney graduated from the University of Detroit in 1958. He worked at the Lewis (now Glenn) Research Center in Cleveland, Ohio and transferred to Langley in Virginia in 1958. Lunney joined the Space Task Group in 1959 and moved to Houston in 1962. He was a flight director for Gemini and Apollo and head of the Flight Director's Office starting in 1968. He received an honorary doctorate from the University of Scranton in 1971. In 1972, Lunney became manager of the Apollo-Soyuz Test Project, and manager of the Apollo Spacecraft Office starting in 1973.

Lunney served at NASA Headquarters twice during 1976 and later in 1980, first as deputy associate administrator (AA) for Space Flight, and then as acting AA for Space Transportation Operations. In 1981, he returned to Houston to manage the Space Shuttle program.

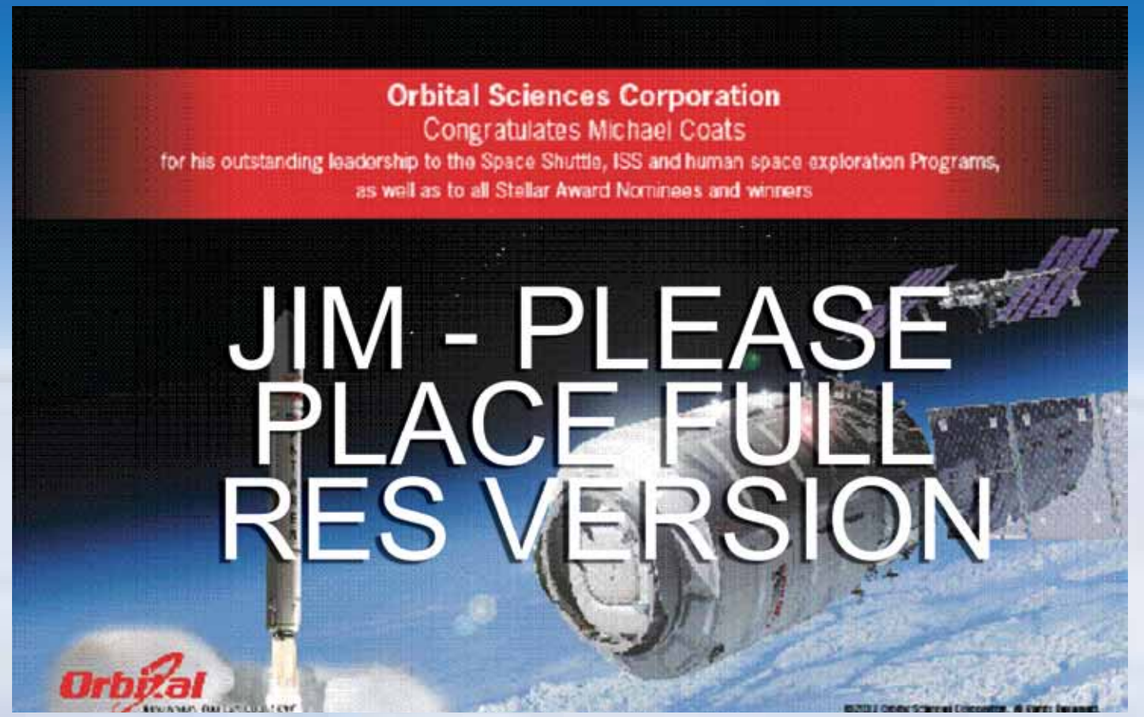
In 1985, Lunney left NASA and became president of Rockwell's Satellite Systems Division in California. After a tour at Rockwell Space Systems Division, he returned to Houston in 1989 to lead Rockwell's Space Operations Co. that became part of United Space Alliance (USA) in 1995. Lunney was VP and program manager of USA's Space Flight Operations contract until his retirement in 1999.

Arnold Aldrich
(RNASA photo)

Arnold D. Aldrich is a member of the RNASA Board of Advisors who is serving his fourth year on the Stellar Award Evaluation panel.

Aldrich joined the Space Task Group at Langley Field in 1959 following graduation from Northeastern University. He held a number of key flight operations management positions during the Mercury, Gemini, and Apollo programs. He served as Skylab deputy program manager; Apollo Spacecraft Program Office deputy manager during the Apollo Soyuz Test Project; Orbiter Project manager during development of Space Shuttles Discovery and Atlantis; and Space Shuttle program manager. Following the Challenger accident, Aldrich was appointed director of the National Space Transportation System (Space Shuttle program) at NASA Headquarters where he led recovery and return-to-flight efforts. He then served as AA for Aeronautics and Space Technology and, later, AA for Space Systems Development.

In 1994, Aldrich left NASA and joined Lockheed Missiles and Space Company in Sunnyvale, Calif. He was vice president, Commercial Space Business Development and then vice president, Strategic Technology Planning. With the merger of Lockheed and Martin Marietta, he became director of Program Operations at Lockheed Martin headquarters in Bethesda, Maryland. He retired in 2007 and is now an aerospace consultant. Aldrich has received numerous honors including the Presidential Rank of Distinguished Executive and the NASA Distinguished Service Medal.



Stellar Award Luncheon Speaker

Dr. Tracy Caldwell Dyson
(NASA photo)

Dr. Tracy Caldwell Dyson spoke at the Stellar Award luncheon which was held at South Shore Harbour Resort earlier today. Dyson earned a BS in chemistry from California State University at Fullerton in 1993 and a PhD in chemistry from the University of California (UC) at Davis in 1997. As a postdoctoral student at UC-Irvine, she studied atmospheric chemistry.

Selected as an astronaut in 1998, Dyson was a Capcom for Shuttle and International Space Station (ISS) operations prior to her first flight. She flew on Endeavour on STS-118 in August of 2007. She operated the robotic arm during installation of the S5 truss segment on the ISS, and she was the intravehicular crewmember for four spacewalks.

Dyson launched from Kazakhstan aboard Soyuz TMA-18 in April 2010 as part of the ISS Expedition 23 crew. She spent nearly six months in space and performed three contingency spacewalks to remove and replace a failed pump module on the ISS. She returned from space on September 25, 2010.

EARLY CAREER STELLAR NOMINEES

Rotary National Award for Space Achievement

Stellar Award winners receive an engraved marble trophy such as this one.
(RNASA photo)

Dr. Andrew F. J. Abercromby of Wyle—Technical excellence and innovation in advancing the Lunar Electric Rover/Multi-Mission Space Exploration Vehicle from concept to functional prototype.

Pamela A. August of United Space Alliance—Exceptional dedication and support to assembly and maintenance operations of the International Space Station (ISS).

Matthew Bullivant of Pratt & Whitney Rocketdyne—Sustained superior support to engineering and to the RL10 unmanned space flight program at Pratt & Whitney Rocketdyne.

Nathaniel P. Clark of The Boeing Company—Outstanding achievement in resolving the Space-X Dragon induced plume loads issue of proximity operations jet firings on ISS solar arrays.

Babak E. Cohanim of Draper—Outstanding technical leadership in the development, test and demonstration of autonomous precision guidance, navigation, and control for robotic landers.

Brian R. Crisp of United Space Alliance—Outstanding leadership of the U.S. Command and Data Handling Instructor and Onboard Data Interfaces and Network officer flight control teams supporting ISS flight operations.

Dr. Pablo Cruz of NASA Johnson Space Center—Outstanding contributions to the Johnson Space Center's Shuttle transition planning and implementation.

Scott Duffin of Orbital Sciences Corporation—Exceptional dedication and technical excellence resulting in the successful design, development and test of the Cygnus Service Module propulsion systems in support of NASA's ISS cargo resupply program.

Aaron D. Fournier of NASA Kennedy Space Center—Exceptional contributions to enhanced safety and mission success of the Delta II vehicle.

Christina Gallegos of NASA Johnson Space Center—Outstanding accomplishments on test and development projects contributing to the ISS and Constellation programs, as well as Morpheus and multiple other advanced projects.

Matt Gamble of Pratt & Whitney Rocketdyne—Exemplary performance and significant contributions to U.S. launch site propulsion processing and mission success.

Christopher A. Gilmore of ARES—Exemplary contributions to the development and validation of the Solar Array Constraint Engine tool that simplifies power balance analysis, reduces the probability of error, and provides the ability to better predict violation of the longeron shadow.

Rachel J. Holyoak of ATK—Outstanding achievements in configuration management improvements on NASA human spaceflight programs.

Shane B. Juhl of USAF—Outstanding leadership in developing and demonstrating new space materials, and leading a national symposium for materials for space.

Adam C. Lauchner of The Boeing Company—Exceptional contribution to the improvement of payload integration activities in support of scientific research on the International Space Station.

Kelly Mallini of Barrios—Rare combination of ability, insight, anticipation, communication, and leadership skills resulting in successful management of key ISS assignments.

2011 Stellar Award Early Career winners: L to R: Richard Arnold *(presenting)*, Lindsay Powell *(Boeing)*, Michael Marando *(Pratt & Whitney Rocketdyne)*, John Lawlor *(Lockheed Martin)*, Stephanie Sipila *(NASA JSC)*, Steohen Higgs *(Oceaneering),* Michelle Gonzalez *(ATK)*, Scott Klempner *(USAF)*, Ryan Starn *(L-3 Communications)*, and Stephanie Wilson *(presenting) (NASA photo)*

Christopher L. Nelson of Oceaneering—Outstanding leadership, unwavering attention to detail and exemplary work ethic in managing the development, delivery and sustaining engineering of extravehicular activity (EVA) space hardware.

Bradley J. Niese of NASA Johnson Space Center—Innovative contract strategy enabling the first flight test of the Multi-Purpose Crew Vehicle Orion, providing a clear business approach for the program's next steps forward.

Erica M. Nyman of NASA Johnson Space Center—Outstanding Motion Control Systems leadership supporting Commercial Crew development and real time ISS Mission Operations.

Julie Reiss of Hamilton Sundstrand—Exceptional technical and skills leadership in systems engineering to support EVA prior to and during assembly of the International Space Station.

Adam M. Schlesinger of NASA Johnson Space Center—Exceptional cross-agency and international contributions to network developments, space data standards, and integrated communication testing and analysis for Space Shuttle, ISS, and Orion.

Scott R. Segadi of United Space Alliance—Successful development of improved training processes to eliminate holes in crew and mission safety on the International Space Station.

Kelvin R. Shorts of Lockheed Martin—Results-oriented, high-energy professionalism leading to a successful record of accomplishments including architecture and system design of NASA manned spaceflight system.

Timothy Szamborski of Pratt & Whitney Rocketdyne—Acute attention to detail as lead of RS-68 test operations, ensuring all areas of the test process are covered resulting in an outstanding test program for the RS-68 family of engines supporting the Delta IV launch vehicle.

Christopher R. Vande Zande of NASA Johnson Space Center—Significant contributions towards the execution of safe EVA operations and continued advancements in the development of continually evolving EVA suits.

Jason Wennerberg of Pratt & Whitney Rocketdyne—Significant contributions to engineering and large rocket engine development for human spaceflight and demonstration of leadership in the advancement of space technologies.

Mark S. Wurtzler of NASA Johnson Space Center—Outstanding technical contributions to crew and vehicle safety and team leadership in electrical power transitions for the ISS.

MID CAREER STELLAR NOMINEES

Rotary National Award for Space Achievement

James E. Alexander of SAIC—Sustained outstanding leadership as a project manager in the NASA WB-57 Aircraft Program Office.

Lora J. Bailey of NASA Johnson Space Center (JSC)—Exceptional service and dedication in support of the engineering design, development, and test of the Morpheus prototype lunar lander vehicle.

Chris A. Barthel of Pratt & Whitney Rocketdyne—Outstanding support of the RS68 CDVS engine controller and leadership of the instrumentation team.

Robert P. Behr of The Boeing Company—Outstanding Business Support to the International Space Station (ISS) program and other Human Space Flight initiatives.

Judith C. Blackwell-Thompson of NASA Kennedy Space Center—Superior leadership and unmatched dedication to NASA, the Space Shuttle program, and human spaceflight for launch and landing and as Processing and Operations chief.

Ella May Bogdan of Honeywell—Outstanding leadership and engineering support in hardware buildup, operations planning, and anomaly resolution for the International Space Station rate gyro assembly.

Ross Gordon Boxleitner (deceased) of Oceaneering—Outstanding technical excellence and leadership in the development and operations of space suits and related technologies.

Michael J. Burghardt of The Boeing Compan—Exceptional technical expertise and leadership in positions of increasing responsibility in management in the Space Shuttle and Commercial Crew programs.

Kenneth S. Chow of Orbital Sciences Corporation—Outstanding leadership as technical manager and team leader of Orbital Sciences Cygnus Vehicle Computer Based Control System team.

Belinda Chritz of Hamilton Sundstrand—Innovative project management and exemplary leadership of the Hamilton Sundstrand Orion Power Management and Distribution team in support of NASA's multi-purpose crew vehicle (MPCV).

Dr. Simon J. Clemett of ERC—Exceptional accomplishments in the study of organic compounds in planetary materials.

Nicholas P. Costen of MEIT—Outstanding innovation in the advancement of detector technology including process development used in fabrication of the micro-shutter array for the James Webb Space Telescope.

Dr. Timothy P. Crain of NASA Johnson Space Center—Exemplary leadership and engineering accomplishments throughout his career as a recognized expert in guidance, navigation, and control for spaceflight.

Suzanne R. Davidson of The Boeing Company—Outstanding management of the upgrade project developing the next generation of the ISS joint station local area network.

Robert A. Douglass of USAF—Outstanding achievements in expanding U.S. spacelift through development and operationalization of the Minotaur IV launch vehicle.

Teri L. Hamlin of NASA Johnson Space Center—Distinguished achievements in Shuttle risk progression assessment, providing NASA improved methods for assessing the risks of new and future space programs.

James R. Harder of The Boeing Company—Outstanding design maturation of the CST-100 spacecraft Launch Abort System, providing unprecedented abort coverage for human spaceflight missions.

Robert S. Harper of The Boeing Company—Exceptional contribution to the improvement of payload integration human factors verification in support of scientific research on the International Space Station program.

Paul R. Hearn of Hamilton Sundstrand—Outstanding support of the ISS, including development of the common cabin air cooling system and fans inside the habitation modules, and as lead analyst for the water processor and oxygen generation assembly.

2011 Stellar Award Mid-Career winners: L to R: Stephanie Wilson *(presenting)*, Connally accepting for Kenneth Head *(Pratt & Whitney Rocketdyne)*, Dr. Edward Wassell *(MEIT)*, James Galbraith *(Oceaneering)*, Timothy Reith *(Boeing)*, Mark Jackson *(Draper)*, LeRoy Cain *(NASA JSC)*, Jennifer Kimbell *(USA)*, Randy Fitz *(ATK)*, Shawn Greenwell *(NASA KSC)*, Martin Wilson *(USA)*, and Richard Arnold *(presenting)*. *(NASA photo)*

Paul B. Henry of United Space Alliance—Outstanding leadership of a new simulation training process for flight controllers supporting ISS mission operations.

Kenneth E. Hersey of MEIT—Outstanding technical expertise in passive antenna design, fabrication, and test experience to meet multidiscipline and system requirements for communications and microwave instruments.

Dr. Henry Hoang of The Boeing Company—Exceptional contribution to the successful payload integration activities in support of scientific research on the ISS.

Joshua B. Hopkins of Lockheed Martin—Exemplary accomplishments in leading development and expanding public understanding of human exploration missions to asteroids, the far side of the moon, and Mars.

George W. Jacobs of NASA Kennedy Space Center—Successful completion of the NASA Space Shuttle program and execution of the Shuttle Transition and Retirement Project Office.

Anna M. Jarvis of United Space Alliance—Outstanding leadership, project management, and technical excellence in extravehicular activity throughout the entire ISS assembly sequence.

George J. Kessler of Jacobs Technology—Exceptional dedication and exemplary performance in promoting science, technology, engineering, and math (STEM) through the NASA JSC HUNCH (High school students United with NASA to Create hardware) program.

Andrew C. Ketchum of Pratt & Whitney Rocketdyne—Outstanding leadership in development testing of the first J-2X rocket engine system.

Kevin J. Lunde of Pratt & Whitney Rocketdyne—Technical excellence and exceptional leadership towards the advancement of the state-of-the-art in rotating machinery for rockets.

Roger A. Luty of United Space Alliance—Outstanding innovation and technical excellence in development of a unique ISS systems integrated simulation (ISIS) training environment and software applications.

Thomas A. Marshall of L-3—Exceptional contributions to the Gravity Recovery and Interior Laboratory (GRAIL) project through performance of software IV&V analysis.

Brian L. McDonald of NASA Johnson Space Center—Outstanding leadership as the Deputy Chief of the JSC Expedition Vehicle Division in development of new and innovative models for flight control and training.

Doyle J. Mills of L-3—Exceptional contributions to NASA's Shuttle, MPCV, and advanced technology programs in the area of flight hardware and software integration.

Ian Mitchell of Draper—Exceptional leadership in developing autonomous rendezvous and docking guidance, navigation, and control systems for crewed and automated visiting vehicles to the ISS.

(continued on next page)

2011 Stellar Award Late Career winners: L to R: Richard Arnold *(presenting)*, Michael Dunham *(Boeing)*, Timothy Nalette *(Hamilton Sundstrand)*, E. Cary Ralston *(ATK)*, Gen. Ellen Pawlikowski *(USAF)*, George Roberts *(Pratt & Whitney Rocketdyne)*, Edward Bechtel *(Pratt & Whitney Rocketdyne)*, and Stephanie Wilson *(presenting)*. Greg Ray *(Boeing)* not pictured. *(NASA photo)*

(continued from page 27)

Katrien L. Morgan of ARES—Exemplary contributions to the development of the alternate capture volume for primary and backup birthing ports of the ISS United States' orbital segment.

Mark Mulrooney of MEIT—Exceptional contributions as a multi-talented performer, passionately supporting many NASA tasks with dedication and respect for his customer and team members.

Joseph F. Pellegrino of ATK—Outstanding career accomplishments including Space Shuttle systems trainer, Robotics program manager, spacecraft manager, and mission manager spanning the Space Shuttle, Space Station, Constellation, and Robotic Satellite Servicing programs.

Robert Earl Rose of Jacobs Technology—Outstanding contribution to space hardware development programs.

Nancy L. Rustemeyer of United Space Alliance—Outstanding contributions to the assembly and operation of the ISS.

Jorge Salazar of Barrios—Visionary leadership in developing ISS operations concepts to adapt to the new era of space exploration.

Victor T. Sanders of The Boeing Company—Outstanding leadership in payload integration for the ISS, enabling the advancement of science for the benefit of humanity.

Col. Michael D. Sarchet of USAF—Exceptional leadership of a team of national experts leading to the successful mission-saving recovery of Advanced Extremely High Frequency Flight #1.

Joan A. Singer of NASA Marshall Space Flight Center—Distinguished career including recent exceptional accomplishments in leading and guiding three highly visible, high priority human space flight efforts.

Samuel Skielnik of Pratt & Whitney Rocketdyne—Outstanding contributions leading to advancement of automated data processing for expendable launch vehicles.

Thomas W. Stegman of MEIT—Exceptional commitment to technical excellence in assuring success of the DoD Space Test program's STP-H3 project.

Rayelle E. Thomas of NASA Kennedy Space Center—Exceptional dedication, hard work, technical excellence and sustained leadership in furthering NASA's commitment to developing a commercial crew human space capability to the ISS.

Scott B. Thurston of NASA Kennedy Space Center—Exceptional technical and programmatic expertise and developing innovative solutions to achieve National Space Transportation Policy objectives that enable the future of commercial human space transportation.

Gregory M. Vaselakos of Oceaneering—Outstanding technical leadership, anomaly assessment skills, and exemplary work ethic in the technical management of the delivery and sustaining engineering of extravehicular activity space hardware.

Julie H. Watanabe-Sloan of Pratt & Whitney Rocketdyne—Technical excellence and exceptional leadership resulting in state-of-the-art innovations in rotating machinery for rockets.

LATE CAREER STELLAR NOMINEES

Rotary National Award for Space Achievement

Larry Campbell of MEIT—Significant contributions in the EMI/EMC (electromagnetic interference/compatibility) area to many spacecraft missions and their success.

John P. Cipolletti of United Space Alliance—Continuous support for the nation's spaceflight programs through exceptional leadership, engineering knowledge, and aerospace systems' expertise.

Jeffrey N. Crislip of The Boeing Company—Outstanding contribution to the improvement of payload integration activities in support of scientific research on the International Space Station (ISS).

Thomas M. Davis of USAF/DoD—Extraordinary accomplishments and far reaching impact in leading the development and demonstration of small satellites and space technologies including the pioneering ORS-1, TacSat-3, and XSS-10 programs for the Department of Defense.

Dennis Eads of SAIC—Storied aerospace career exhibiting strong leadership skills and unparalleled technical expertise that have significantly reduced risk, and strongly impacted NASA programs and projects.

Dr. Antonio L. Elias of Orbital Sciences Corporation—Exemplary career and outstanding technical excellence in the conception, development and execution of multiple new generations of Earth-to-orbit transportation systems.

John W. Evans of Pratt & Whitney Rocketdyne—Exceptional leadership ensuring timely, quality deliveries of RL10 engines enabling the Atlas V and Delta IV family of launch vehicles to deliver payloads to orbit providing important capabilities for the nation.

Vernon P. Gregoire of Pratt & Whitney Rocketdyne—Exceptional leadership in the development of space propulsion systems for the military and human space programs.

Robert D. Harris of Oceaneering—Outstanding safety leadership in establishing the safety and medical oversight of the contractor space suit testing facilities for future space exploration.

David Hartman of Hamilton Sundstrand—Demonstrated expertise, technical solutions, and leadership in fluid and thermal control systems for manned and unmanned space applications, including the ISS and Space Shuttle.

James M. (Milt) Heflin of NASA Johnson Space Center (JSC)—Significant leadership contributions to JSC and NASA and continued demonstrated commitment to safety, excellence, and integrity as the JSC Associate Technical Director.

Bradley Johnson of ATK—Extraordinary engineering contributions and team building, leading rocket motor teams to innovative, reliable, high performance solutions for the Orion launch abort system.

Hemanth A. Kadam of The Boeing Company—Outstanding achievement in resolving the Space-X Dragon induced plume loads issue of proximity operations jet firings on ISS solar arrays.

Ira L. Kight of NASA Kennedy Space Center—Continued leadership and service to the International Space Station and human exploration programs.

Alexander B. Kisin of MEIT—Outstanding contributions to high precision telemetry systems, digital systems, communication systems physical layers, and ground support test instruments for spacecraft.

Becky Little of United Space Alliance—Superior job performance, outstanding leadership, and personal commitment to Space Shuttle and ISS training capabilities in support of human space flight training, international partner training integration, and overall missions.

Michael S. Mickiewicz of Hamilton Sundstrand—Expert knowledge and technical application of acoustic and vibration testing for NASA hardware, including the Space Shuttle, extravehicular mobility unit and ISS environmental control and life support systems.

Sarah L. Murray of NASA Johnson Space Center—Outstanding leadership of international training integration for crew and flight controllers in support of the ISS.

Stacey T. Nakamura of NASA Johnson Space Center—Exceptional career dedicated to NASA's commitment to safe and successful implementation of spaceflight missions, ensuring the safety of its people and property.

(continued on next page)

(continued from page 29)

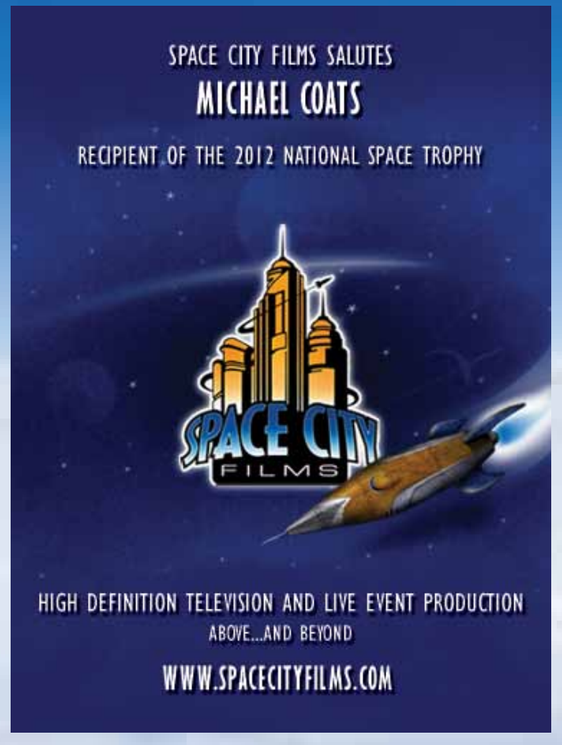
John M. Penn of L-3—Exceptional contributions to the development of the Trick simulation environment, used to develop high-fidelity simulation for NASA astronaut training and spacecraft engineering analysis.

Bradley Sutherland of ATK—Outstanding leadership in developing and implementing world-class manufacturing practices for solid rocket motors.

James G. Tellier of Pratt & Whitney Rocketdyne—Exceptional leadership and technical excellence in designing and developing rocket engine turbo machinery.

Ronald Tyre of Pratt & Whitney Rocketdyne—Demonstrated superior leadership, technical excellence, selfless dedication and an overarching personal commitment for over three decades to the primary NASA and Space Shuttle program objectives of continued safe flight and 100 percent mission success.

Scot N. Wilke of The Boeing Company—Exceptional leadership of the process improvements activities in support of the International Space Station program.



2011 Stellar Award Team winners: L to R: Stephanie Wilson *(presenting)*, Minotaur-Orbital/Lou Amorosi, Orion NASA-JSC/Griff Corpenning, Regenerative-Boeing/Greg Gentry, ISS Thermal-Boeing/Lupe Gonzales, Orion-Orbital/Henri Fuhrmann, Orion-LM/Roger McNamara, Spitzer/Suzanne Dodd, and Richard Arnold *(presenting). (NASA photo)*

TEAM STELLAR NOMINEES

Rotary National Award for Space Achievement

ARES Corporation Commercial Crew Development (CCDev-II) Probabilistic Risk Assessment Team—Exemplary contribution of an effective probabilistic risk assessment of commercial crew spacecraft planning to carry humans to the International Space Station (ISS).

ARES Corporation ISS Program Probabilistic Risk Assessment Team—Exemplary contribution of risk-informed evaluations and probabilistic risk assessment of the ISS as its mission status transitions from construction to research operations.

ATK Clean Slate Planning Team—Outstanding team achievement in implementing an innovative method for creating manufacturing and inspection planning that addressed long-standing barriers to successful execution on the shop floor.

ATK Graphite Epoxy Motor (GEM) 60 Launch Site Team—Unprecedented team success in customer support at the launch sites, providing concurrent, multi-functional solutions to motor integration.

Boeing Advanced Recycle Filter Tank Assembly (ARFTA) Project Team—ARFTA hardware deliveries accelerated to allow for ULF-7 (Utilization and Logistics Flight 7, STS-135) launch of reusable tanks for improved urine processing treatment for the ISS.

Boeing Commercial Crew Abort Trajectories Wind Tunnel Test Team—Successful design, development and execution of abort trajectory wind tunnel testing for a pusher abort system design.

Boeing Enhanced Processor and Integrated Communications On-Orbit Tester Team—Outstanding achievement in support of the Transition to the APIC (advanced programmable interrupt controller) computers on the ISS.

Boeing Longeron Shadowing Real Time Analysis Process Team—Successful development of the Longeron Shadowing Real Time Analysis process, enabling NASA to better evaluate the risk of shadowing of ISS solar array longerons during key events such as visiting vehicle dockings.

Boeing Michoud Assembly Facility Production Pathfinder Team—Completion of a production system pathfinder that enabled NASA validation of an approach for the next generation space launch system.

Boeing Pump Module (PM) Logistics Module Carrier (LMC) Flight Support Equipment (FSE) Team—Successful accelerated design, manufacturing, integration, and verification of the LMC FSE for STS-135 to return a failed on-orbit pump module.

Boeing Solar Alpha Rotary Joint–Full Redundancy (SARJ-FR) Project Team—Successful design, manufacturing, and integration of SARJ-FR hardware (electronic controller, mechanical attachments, cabling, soft goods), mitigating top program risk for future SARJ failures.

Draper Orion Guidance, Navigation, and Control (GN&C) Flight Software Development Team—Exceptional contributions to the creation, implementation and test of an automatic software generation development process for the Orion GN&C flight software.

Honeywell Orion Flight Software Smart Mass Memory Card (SMMC) Team—Exceptional dedication, hard work, technical excellence, and driving for solution in the design and modeling of the Orion Avionics SMMC that resulted in high reusability and cost saving.

Lockheed Martin Orion Avionics and Software Integration Team—Successful integration of avionics hardware, flight software, simulation, ground support equipment and lab infrastructure for the Orion Multi Purpose Crew Vehicle (MPCV) program Integrated Test Lab in Denver, Colorado.

Lockheed Martin Orion MPCV–Ground Test Vehicle Production and Integrated Testing Team—Production of the Orion MPCV crew module and successful integrated testing with the launch abort system.

Lockheed Martin Students Shaping America's Next Spacecraft (SSANS) Team—Outstanding leadership in engaging students in an engineering learning initiative supporting the Orion MPCV program.

MEIT Spacesuit and Space Vehicle Comparative Ergonomic Evaluation Team—Innovative methods that changed the way spacesuits are evaluated and increased awareness of suit-seat-vehicle interface issues.

NASA Johnson Space Center Sensor Test for Orion Relative Navigation Risk Mitigation (STORRM) Team—Outstanding technical excellence in the development and demonstration of Orion relative navigation sensor technologies for use in future crewed and un-crewed rendezvous, proximity operations, and docking capabilities.

(continued next page)

COVER ART

Rotary National Award for Space Achievement

(continued from previous page)

NASA Johnson Space Center WB-57 Halo Viper Team—Outstanding team performance in the completion of the High Altitude Observatory (HALO) Viper mission in support of operations in Southwest Asia for NATO.

NASA Kennedy Space Center Syros Partership Development Team—Outstanding leadership and dedication to the development of the Syros Partnership that was crucial to its establishment.

National Space Biomedical Research Institute Leadership Team—Innovative leadership in creating an unprecedented facility for university, NASA, and industry innovations in space bioengineering and medicine.

Orbital Sciences Pressurized Cargo Module Team—Exceptional dedication and technical excellence resulting in the successful design, development and test of a new pressurized cargo module in support of NASA's ISS cargo resupply program.

Pratt & Whitney Rocketdyne J-2X Engine Program—Successful development, assembly, and test of the first J-2X upper stage rocket engine system.

Robonaut 2 (R2) Team of NASA Johnson Space Center, Oceaneering, General Motors, and Jacobs—Outstanding team contributions to advancements in the field of dexterous humanoid robotics.

United Space Alliance Orbital Communications Adapter (OCA) Automation Team—The OCA Automation Team is instrumental in helping to achieve the Mission Operations Directorate's goal of increased automation to bring human spaceflight support at JSC into 21st century technology.

United Space Alliance Portable Computer System (PCS) Test Automation Tool Team—Outstanding contributions to automated testing, enabling greater testing coverage and efficiency and higher quality PCS software for critical ISS operations.

USAF/DoD Operationally Responsive Space-1 (ORS-1) Team—Successful and pioneering team accomplishments in rapid design, development, test, and fielding of a highly innovative space-based imagery and ground system to meet United States Central Command's need for enhanced battlefield awareness.

USAF Space Based Infrared Systems (SBIRS) Geosynchronous Satellite (GEO-1) Launch and Early Orbit Team—Successful launch of the SBIRS GEO-1 satellite, delivering unprecedented global, persistent and taskable infrared surveillance, protecting the nation and allies.

Pat Rawlings, Pam Culpepper, Mike Coats, and Philip Harris outside of Building 1 at JSC
(Photo by J. Pamela, 2012)

Eagle Applied Sciences, LLC, sponsored the services of renowned space artist Pat Rawlings to create the original portrait of Michael Coats on display tonight and reproduced on the cover. Pam Culpepper, a well-known photographer and Rotarian, collaborated with Rawlings on this year's portrait.

Pat Rawlings painted the portrait for the first National Space Trophy winner in 1987, again in 1991, and for every winner since 2001. "I wanted to tell Mike Coats' story as a representative of the planet, the USA, NASA and of Johnson Space Center in Houston," Rawlings said.

His paintings, digital images, and designs have appeared in hundreds of magazines, books, TV programs, and films (see list at www.patrawlings.com). Rawlings uses computer models, topographical maps, and space and family photos to ensure accuracy and to explore the connections between extraterrestrial locations, the history of space exploration, and the possibilities of tomorrow's technology.

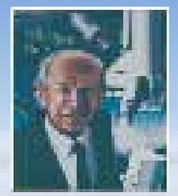
Pam Culpepper of J. Pamela Photography (www.jpamela.com) is a member of the Space Center Rotary club whose photos have often graced the pages of RNASA publications (see page 21). She captured Coats in his natural environment outside of Building 1 at JSC against the backdrop of the Agency, state and national flags.

A University of Houston-Clear Lake distinguished alumnus and a certified professional photographer, Culpepper has photographed three presidents, two first ladies, movie stars and proudly, many of our astronauts. While she lightheartedly claims, "If you want to be taller, thinner or younger, come see me, Dr. Culpepper, practicing plastic surgery without a license," you can entrust her to beautifully preserve life's unforgettable milestones and events.

Coats' portrait will be on display with the National Space Trophy at Space Center Houston for the coming year.

PREVIOUS NATIONAL SPACE TROPHY RECIPIENTS

Rotary National Award for Space Achievement

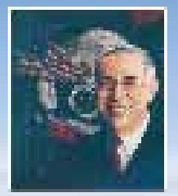


1987 - Dr. Maxime Faget

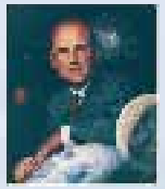
1988 - Hon. Don Fuqua

1989 - V. Adm. Richard Truly, USN (Ret.)

1990 - Dr. Lew Allen



1991 - Dr. Aaron Cohen



1992 - Dr. Norman R. Augustine

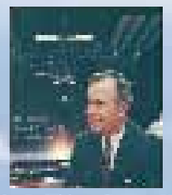
1993 - Lt. Gen. Thomas Stafford, USAF (Ret.)

1994 - Edward C. "Pete" Aldridge, Jr.

1995 - Daniel Goldin

1996 - Capt. Robert L. Crippen, USN (Ret.)

1997 - George W.S. Abbey



1998 - President George H.W. Bush

1999 - Dr. Christopher C. Kraft, Jr.

2000 - Capt. John W. Young, USN (Ret.)

2001 - Tommy Holloway

2002 - Dr. George E. Mueller

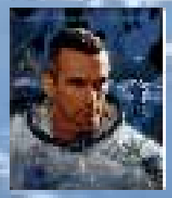
2003 - Roy S. Estess

2004 - Neil A. Armstrong

2005 - Dr. Glynn S. Lunney

2006 - Col. Eileen Collins, USAF (Ret.)

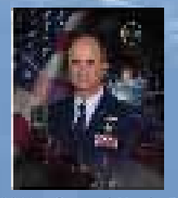
2007 - Eugene F. "Gene" Kranz



2008 - Capt. Eugene Cernan, USN (Ret.)

2009 - Dr. Michael D. Griffin

2010 - William H. Gerstenmaier



2011 - General Kevin P. Chilton

MICHAEL L. COATS

2012 National Space Trophy Recipient

Rotary National Award for Space Achievement

(continued from page 4)

his technical expertise and common sense, and we've been friends ever since."

STS-39 launched on April 28, 1991. Coats' crew of L. Blaine Hammond, Guion Bluford, Greg Harbaugh, Richard Hieb, Donald McMonagle, and Charles Veach, worked in two shifts to complete experiments and to deploy and retrieve the Shuttle Pallet Satellite (SPAS) II. The high inclination flight offered an amazing view. Coats said, "We were glued to the windows whenever we had a spare minute." After this flight, Coats had logged 463 hours in space.

Coats addresses crowd at shuttle party
(NASA photo, 2011)

Gifted Leader

Coats left NASA in 1991 and became a vice president for Loral Space Information Systems. From 1996-98, he served as vice president of Civil Space Programs for Lockheed Martin Missiles and Space in Sunnyvale, California. He then became vice president of Advanced Space Transportation for Lockheed Martin Space Systems Company in Denver, Colorado.

Soon after Griffin became NASA Administrator, he offered Coats, whom he calls a "naturally gifted leader," the position of Director of JSC. Coats assumed the position in November 2005.

Under Coats' leadership, JSC implemented some 80 partnerships and hosted summits and job fairs to help displaced workers. To help NASA attract and retain future leaders, Coats instituted the Program Project Management Development, the Space Systems Engineering Development, and the Project Leadership programs. Other initiatives included Joint Leadership and Employee Leadership teams, a Formal Mentoring Initiative, the Innovation and Inclusion Consortium, and a Young Professionals Group. "Attracting our young people into the STEM fields of study is crucial if the United States is going to be globally economically competitive," Coats said. "An agreed upon and sustainable vision for space exploration is a necessary first step in retaining our rising stars like our young career Stellar Awardees."

Life is Good

NASA has recognized Coats with honors including the Distinguished Service Medal and the JSC Presidential Rank Award. He's also earned many military honors including the Defense Superior Service Medal and three Distinguished Flying Crosses. He was inducted into the Astronaut Hall of Fame in 2007, and tonight receives the 2012 National Space Trophy.

Proud parents of Laura and Paul
(Photo courtesy Mike Coats)

Mike and Diane are the proud parents of Laura and Paul. Paul is a lawyer with Lockheed Martin, and Laura's husband, Patrick Larkin, has his own practice in Pearland, Texas. Laura works part-time at Clear Lake High School since the birth of identical twins, Abby and Anna, five years ago. Coats said, "Life is good when my biggest problem is getting them mixed up and calling them by the wrong names. They usually just give me a look like 'there goes Pops again'."

"Pops" and Diane at Disney with Abby and Anna *(Photo courtesy Mike Coats)*

Coats added, "I have been blessed to work with dedicated and highly motivated people who routinely make the impossible look easy. The Space Shuttle and the International Space Station are tremendous achievements, but just the first of many rungs on the ladder to the stars. I can't wait to get to work in the morning and can't wait to get home to my family in the evening. It's nice to be able to tell Abby and Anna that sometimes dreams really do come true."

EXPLORE!

ATK congratulates all Stellar Award nominees, winners, and Capt. Michael L. Coats, USN (ret), recipient of the 2012 National Space Trophy for excellence in the advancement of America's space goals.

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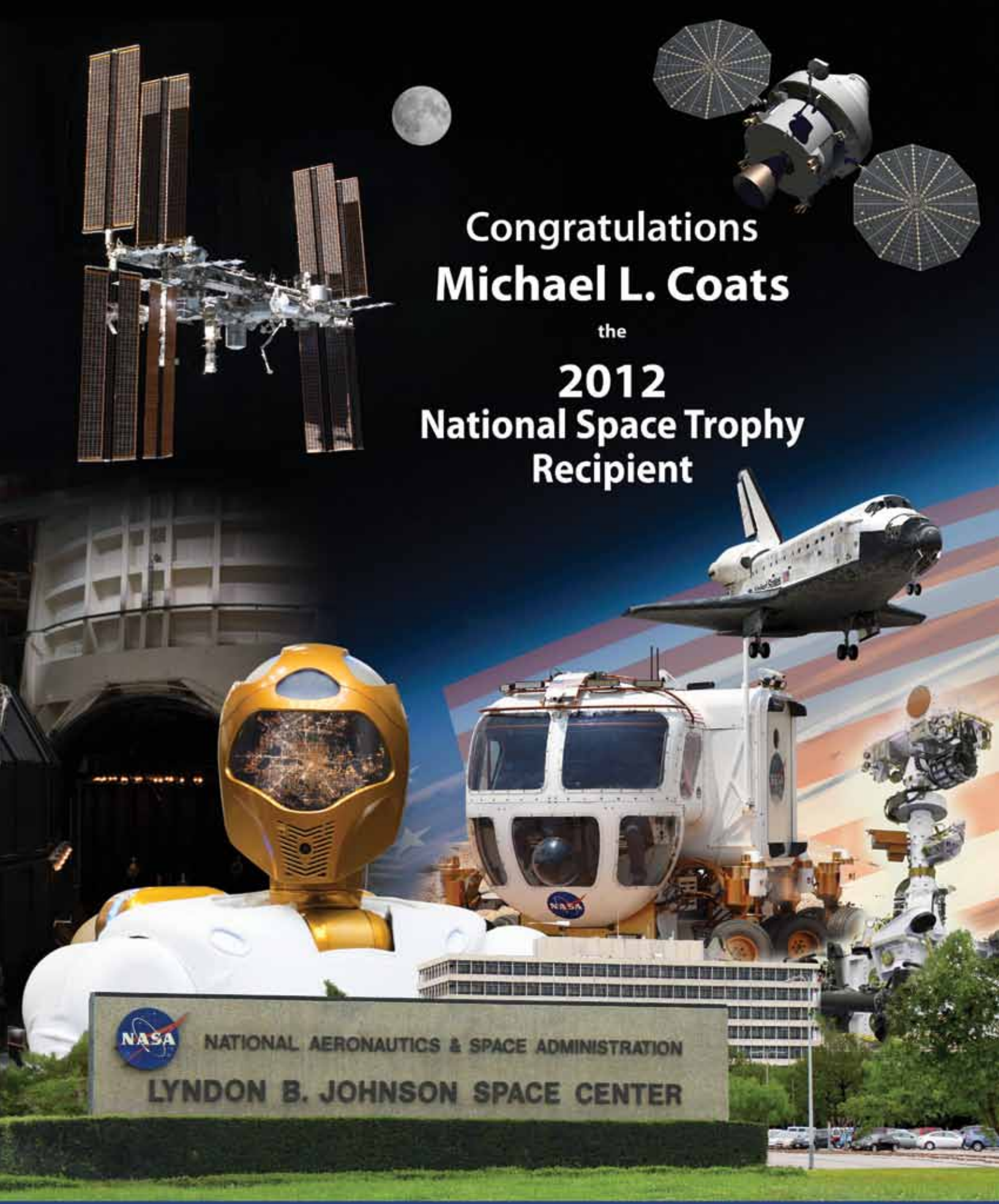
Congratulations
Michael L. Coats
the
2012
National Space Trophy
Recipient
NASA
NATIONAL AERONAUTICS & SPACE ADMINISTRATION
LYNDON B. JOHNSON SPACE CENTER

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