
2015
ROTARY NATIONAL AWARD FOR SPACE ACHIEVEMENT
ULA
BEAT ARMY
NAVY

Col. ROBERT D. CABANA 2015 National Space Trophy Recipient

Robert D. Cabana, Director Kennedy Space Center
(NASA Photo)

The Rotary National Award for Space Achievement (RNASA) Foundation takes great pleasure in recognizing Colonel Robert D. Cabana, USMC (Ret.), Director of NASA's Kennedy Space Center (KSC) and former NASA astronaut as the recipient of the prestigious 2015 National Space Trophy. As Director, Cabana manages all NASA facilities and activities at KSC.

Nominated

Cabana was nominated by NASA Johnson Space Center (JSC) Director Dr. Ellen Ochoa, former JSC Director Michael L. Coats, and Dr. Michael D. Griffin, Chairman and Chief Executive Officer (CEO) of Schafer Corporation "for his exceptional leadership and executive guidance in leading the evolution of the NASA Kennedy Space Center as the world's premier multiuser spaceport in support of NASA's exploration goals."

Rick Hieb, Vice President of Lockheed Martin Civil Programs, also nominated Cabana "for outstanding leadership, commitment, vision and public service benefiting America's security and our Nation's human space exploration program." John Zarrella said, "I have known Bob for decades while I was covering the U.S. Space Program for CNN. During those years it became very evident, very quickly that no one cared more about the successes of the program. No one hurt more over the failures. And no one had greater hope about the future." And Elliot Holokauahi Pulham, Chief Executive Officer of Space Foundation said "I can think of no one more deserving of the 2015 National Space Trophy than Bob Cabana."

Robert Cabana by his bike.
(Cabana Photo, 1967)

Education

Cabana was born in Minneapolis, Minnesota. He graduated from Washburn High School, Minneapolis, Minnesota, in 1967. He earned a Bachelor of Science degree in mathematics from the United States Naval Academy in 1971, and was commissioned a second lieutenant in the U.S. Marine Corps.

Military Career

After graduation from the Naval Academy, Cabana attended the Basic School in Quantico, Virginia, and completed Naval Flight Officer training in Pensacola, Florida, in 1972. He served as an A-6 bombardier/navigator with Marine Air Wings in Cherry Point, North Carolina and Iwakuni, Japan.

1977 – Cabana receiving the DAR Award for top Marine to complete Naval Flight Training in 1976
(Cabana Photo)

He returned to Pensacola in 1975 for pilot training and was designated a Naval Aviator in September 1976, earning the Daughters of the American Revolution award as the top Marine to complete flight training that year. He was then assigned to the Second Marine Aircraft Wing in Cherry Point, North Carolina, where he flew A-6 Intruders.

1978 - Cabana piloting VMA (AW) 332
(Cabana Photo)

He graduated with distinction from the U.S. Naval Test Pilot School in 1981, and served at the Naval Air Test Center in Patuxent River, Maryland, as the A-6 Program Manager, X-29 Advanced Technology Demonstrator Project Officer and as a test pilot for flight systems and ordnance separation testing on A-6 and A-4 series aircraft. During his career, Cabana has logged over 7,000 hours in 50 different kinds of aircraft.

Prior to his selection as an astronaut candidate, he served as the Assistant Operations Officer of Marine Aircraft Group Twelve in Iwakuni, Japan. Cabana retired from the U.S. Marine Corps in August of 2000.

Astronaut Career

Cabana was selected as an astronaut candidate in June 1985. Following completion of initial astronaut training, Cabana became an astronaut in July, 1986. He was assigned to the JSC Astronaut Office, serving in a number of leadership positions, including lead astronaut in the Shuttle Avionics Integration Laboratory; Mission Control Spacecraft Commu

(continued on next page)

Col. Robert D. Cabana 2015 National Space Trophy Recipient

Cabana Navy evaluation AD-1 oblique wing, 1981 *(NASA Photo)*

(continued from page 3)

nicator, famously known as CAPCOM; and Chief of NASA's Astronaut Office. A veteran of four space flights–STS-41, STS-53, STS-65 and STS-88 –Cabana has logged more than 910 hours in space.

On STS-41, Cabana piloted Space Shuttle Discovery. STS-41 launched from KSC on October 6, 1990. During the four-day mission, crew members successfully deployed the Ulysses spacecraft, starting the interplanetary probe on its four-year journey, via Jupiter, to investigate the polar regions of the Sun. Crew members also conducted numerous other experiments involving radiation measurements, polymer membrane production and microgravity effects on plants. The mission was accomplished in 66 orbits of the Earth, ending with a successful landing at Edwards Air Force Base, California, on October 10, 1990.

Cabana also piloted Space Shuttle Discovery on STS-53. Launching from KSC on December 2, 1992, the crew of five deployed a classified Department of Defense payload and then performed several Military-Man-in-Space and NASA experiments. After completing 115 orbits of the Earth in 175 hours, Discovery landed at Edwards Air Force Base on December 9, 1992.

On STS-65, Cabana commanded a crew of seven aboard Space Shuttle Columbia. STS-65 launched from KSC on July 8, 1994. The crew conducted the second International Microgravity Laboratory mission, utilizing the long Spacelab module in the payload bay. The flight consisted of 82 experiments from 15 countries and six international space agencies. During the record setting 15-day flight, the crew conducted experiments that focused on materials and life sciences research in a microgravity environment, paving the way for future operations and cooperation aboard the International Space Station (ISS).

Commander STS-88 Space Shuttle Endeavour, 1998 *(NASA Photo)*

Following 236 orbits of the Earth Space Shuttle Atlantis landed at KSC on July 23, 1994.

Cabana commanded STS-88's crew of six aboard Space Shuttle Endeavour. This historic mission began assembly of the ISS, the largest international cooperative space venture in history. STS-88 launched from KSC on December 4, 1998, carrying the Unity node with two pressurized mating adapters. During the 12-day mission, Unity, the U.S.-built node, was mated with Zarya, the Russian-built Functional Cargo Block. Two crew members performed three spacewalks to connect umbilical's and attach tools/hardware in the assembly and outfitting of the station. Additionally, the crew performed the initial activation and first ingress of the space station, preparing it for future assembly missions and full-time occupation. The crew also performed IMAX Cargo Bay Camera operations and deployed two satellites, Mighty Sat 1, built by the U.S. Air Force Phillips Laboratory, and SAC-A, the first successful launch of an Argentine satellite. On December 13, 1998, Space Shuttle Endeavour undocked from the young ISS for the return to Earth. The mission was accomplished in 185 orbits of the Earth, ending with a successful night landing at KSC on December 15, 1998.

Cabana Astronaut photo – ISS Node I 1998 *(NASA Photo)*

NASA Experience

Upon completion of astronaut training in July 1986, Cabana's initial assignment was as the Astronaut Office Space Shuttle Flight Software Coordinator until November 1986. At that time, he was assigned as the Deputy Chief of Aircraft Operations for JSC, where he served for two-and-a-half years.

He then served as the lead astronaut in the Shuttle Avionics Integration Laboratory, where the orbiter's flight software was tested prior to flight. Cabana has served as a Capsule Communicator in Mission Control during space shuttle missions and as Chief of Astronaut Appearances.

Prior to his assignment to command STS-88, Cabana served for three years as the Chief of NASA's Astronaut Office. Following STS-88, Cabana served as the Deputy Director of Flight Crew Operations. After joining the ISS program in October 1999, Cabana served as Manager for International Operations.

(continued on page 34)

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2015 National Space Trophy Recipient

As well as all Stellar Award nominees and winners for their dedication and excellence in the advancement of America's space goals.

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DR. ELLEN OCHOA 2015 National Space Trophy Presenter

Dr. Ellen Ochoa, Director of the Johnson Space Center
(NASA Photo)

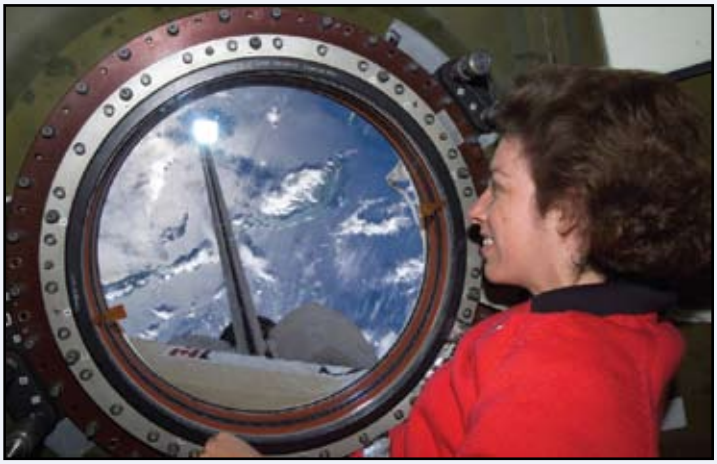
Dr. Ellen Ochoa, Director of the Johnson Space Center and former NASA astronaut STS-56, STS-66, STS-96, and STS-110, will present the prestigious 2015 Rotary National Award for Space Achievement to Colonel Robert D. Cabana, Director of the Kennedy Space Center and former NASA astronaut, STS-41, STS-53, STS-65, and STS-88.

Dr. Ochoa said, "Bob has done a masterful job of transforming Kennedy Space Center into a multi-user spaceport, supporting both government and commercial space access. His leadership skills, evident throughout his career in the Marines, in the Astronaut Corps, and in a variety of senior roles at NASA, are now enabling the world to explore and work in space."

Dr. Ochoa earned a Ph.D. and M.S. in Electrical Engineering from Stanford, and a B.S. in Physics from San Diego State University. She began her career as a research engineer at Sandia National Laboratories and NASA Ames Research Center. She has 3 patents in the area of optical information processing and numerous publications in technical journals. She is a Fellow of the American Institute of Aeronautics and Astronautics and the American Association for the Advancement of Science.

Selected to join the Astronaut Corps in 1990, she subsequently served as a crew member on four space shuttle missions in a variety of roles including leading onboard scientific activities, operating the robotic arm, and serving as flight engineer during the launch, rendezvous, and entry phases of the mission. Prior to being named Center Director in 2013, Dr. Ochoa was Deputy Center Director for five years; she previously led the Flight Crew Operations Directorate, managing the astronaut office and the aircraft operations divisions.

As the first Hispanic female astronaut, Dr. Ochoa has given more than 300 presentations focusing on the importance of a STEM education. She has four schools named after her, several books written about her for the K-8 grades, and has been profiled in textbooks and on websites geared toward encouraging females and minorities to pursue technical fields. She is the recipient of many awards including NASA's highest award, the Distinguished Service Medal, honorary doctorates from The Johns Hopkins University and Worcester Polytechnic Institute, and the Presidential Distinguished Rank of the Senior Executive Service.



Astronaut photo from STS-110, April 16, 2002
(NASA Photo)

SPACE FOUNDATION

All of us at the Space Foundation
congratulate Robert D. Cabana,
2015 recipient of the prestigious
National Space Trophy; well deserved
recognition of his years of dedicated
service and exceptional leadership
in our nation's space program.

Also, our wholehearted congratulations
to tonight's Stellar Award winners.

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JOHN ZARRELLA Emcee

Zarrella as the emcee of the 2014 RNASA Gala
(RNASA Photo)

The RNASA Foundation is pleased to have former CCN correspondent John Zarrella as the emcee of RNASA's 29th annual awards gala. On January 3, 2014, Zarrella retired from CCN after thirty-two years. He covered the space program as a correspondent for thirty years.

His company, JZ Media, handles space reporting, commercial and corporate voice-over work, media training, and a space blog. The JZ Media website is Johnzarrellamedia.com.

Zarella is currently working for CCTV America - China Central Television which is a 24 hour English language network. He covered the Orion launch for CCTV. Other CCTV projects include a story about Dr. Franklin Chang Díaz, President and CEO of Ad Astra Rocket Company and former astronaut, STS-61-C, STS-34, STS-46, STS-60, STS-75, STS-91 and STS-111, a story on coral reef restoration, and a story about hunting for treasure from Spanish galleons.

Zarella has also done voice over work for Guy Harvey Adventures. He was the Emcee for the Eutelsat satellite company following a launch of one of their satellites on a space x rocket, and he will be the emcee for the Astronaut Hall of Fame Induction Ceremonies in May.

From Miami Beach, Florida, Zarrella earned a bachelor's degree in English from St. Thomas University, formerly Biscayne College in 1976 where he helped establish the college's journalism program.

Zarrella worked in local television from 1975 to 1981 in Miami, West Palm Beach, Baltimore, and Atlanta. He served as executive producer at WJTV-TV in Miami and WBAL-TV in Baltimore.

Zarrella joined CNN in November 1981 as executive producer at CNN world headquarters in Atlanta where he was responsible for the overall look and content of all hard newscasts.

He was CNN's Miami correspondent, named to this position when the Miami bureau was established in December 1983. Zarrella was responsible for CNN's coverage of news in Florida, Central and South America and the Caribbean.

From 1981 to 1983 he was the Executive Producer of Daybreak. Zarrella was hired to create and launch the program. In 1985, he was assigned for four months to CNN's Cairo Bureau.

Zarrella was a principal correspondent for CNN's coverage of the U.S. space program and he covered 75 Space shuttle launches.

Zarrella also covered John Glenn's 1998 return to space, Hubble, Hubble Repair, Challenger, Columbia, both returns to flight, Atlantis final flight, Endeavour's trip through L.A., Mars Landers, Curiosity, Pathfinder, and the Polar Lander.

He wrote and hosted a year long special series for CNN's American Morning, "Counting Down Cady", following astronaut Cady Coleman (Missions STS-73, STS-93, Soyuz TMA-20, Expedition 26/27) as she prepared and trained for flight to the International Space Station Soyuz TMA-20, Expedition 26/27. The series ran between 2009 and 2010.

Zarrella also wrote and hosted a one hour documentary for CNN "Beyond Atlantis: The Next Frontier" on July 8, 2011, after NASA's final space shuttle launch – STS-135.

He has been honored numerous times for his reporting contributions. In 2003, the Florida Emergency Preparedness Association gave Zarrella its prestigious Media Award for "outstanding efforts to inform the public of the problem of hurricanes and the issues faced by emergency managers." In 2002, the National Hurricane Conference awarded him its Outstanding Achievement Award for his work on "Hurricane: When the Big One Hits".

Zarrella's many awards include two Emmy Awards for his coverage for Katrina, Oklahoma City, Pacific Sunami, and the Presidential election coverage. He has also been honored with the 2013 Media Award from the National Space Club Florida, the 2009 Media Award from the National Space Club in Huntsville and two National Hurricane Conference Media Awards. He is married to Robin Zarrella with four children, and enjoys fishing, golf, and gardening.

John Zarella, former CNN correspondent -CCTV-Merritt Island September 2014
(Zarrella Photo)

COLONEL RANDY "KOMRADE" BRESNIK Stellar Awards Presenter

NASA Astronaut-STS-129 and U.S. Marine Corps Colonel Randy "Komrade" Bresnik
(NASA Photo)

The RNASA Foundation welcomes NASA Astronaut and United States Marine Corps Colonel Randy "Komrade" Bresnik as a Stellar Award presenter this evening. In November 2009, he flew as a Mission Specialist on STS-129.

Bresnik was born in Fort Knox, Kentucky. Growing up in Southern California, he graduated from Santa Monica High School in 1985. Bresnik earned a Bachelor of Arts degree in Mathematics from The Citadel in 1989, and later a Master of Science degree in Aviation Systems from the University of Tennessee-Knoxville in 2002.

In May 1989, Bresnik received his commission as a Second Lieutenant in the U.S. Marine Corps from the NROTC unit at The Citadel. After graduation he attended the Basic School and Infantry Officers Course at Marine Corps Base Quantico, Virginia.

He was designated a Naval Aviator in 1992 and reported to the Navy Fighter/Attack Training Squadron VFA-106, Cecil Field, Florida, for initial F/A-18 training. His first squadron was VMFA-212 at Marine Corps Air Station Kaneohe Bay, Hawaii, then MCAS El Toro and MCAS Miramar, California, where he made three overseas deployments to the Western Pacific. While assigned to VMFA-212, Bresnik attended the Marine Corps Weapons and Tactics Instructors Course (WTI) and Naval Fighter Weapons School (TOPGUN).

He attended U.S. Naval Test Pilot School (USNTPS) at NAS Patuxent River, Maryland, from January 1999 to December 1999. Bresnik then served as F/A-18 Test Pilot/Project Officer/Project Coordinator at VX-23, the Naval Strike Aircraft Test Squadron on the F/A-18 A-F variants.

In November 2002, he reported to Marine Aircraft Group 11 (MAG-11) as the Future Operations Officer. In January 2003, MAG-11 deployed to Ahmed Al Jaber Air Base, Kuwait. From Al Jaber, Bresnik flew combat missions in the F/A-18 with VMFA (AW)-225 in support of Operation Southern Watch and Operation Iraqi Freedom. He was the Operations Officer of VMFA-232 when he was selected for the astronaut program.

Bresnik was selected as a member of NASA Astronaut Group 19 in May 2004 and completed his Astronaut Candidate Training in February 2006.

November 2009, Bresnik flew as the MS-2/Flight Engineer on STS-129. STS-129 was an 11-day mission from November 16, 2009 to November 27, 2009. The flight included three spacewalks and Bresnik was an Extra-Vehicular crewmember on the second and the third spacewalks. He is the first graduate of The Citadel to have the opportunity to fly in space.

In 2010, Bresnik trained as a Cave-a-naut in the extreme environment training of the European Space Agency's Cooperative Adventure for Valuing and Exercising human behavior and performance Skills (CAVES), in Sardina, Italy. This was the first spaceflight analog of its type living deep beneath the surface of the Earth.

From September 7 – 13, 2014, he commanded the NEEMO 19 undersea exploration mission aboard the Aquarius underwater laboratory. As Aquanauts, their mission focused on the evaluation of time-delay and telementoring operations for Environment Mission Operations program.

Bresnik's awards and military decorations include the Legion of Merit, Defense Meritorious Service Medal, Meritorious Service Medal, Strike/Flight Air Medal (3), Navy and Marine Corps Commendation Medal with Combat "V" (3), Navy and Marine Corps Achievement Medal (3), and the Presidential Unit Citation.

He is married to the former Rebecca Burgin of Pompton Plains, New Jersey. She is the brains of the family as well as the lead Attorney for International Law at the Johnson Space Center. They have a son and a daughter. While he was off-planet doing spacewalks, back on Earth she gave birth to their daughter. He enjoys travel, music, photography, classic cars, scuba diving, motorcycling, flying warbirds, and being a Father.

"Komrade", his wife Rebecca and their children
(Bresnik Photo)

TRACY CALDWELL DYSON Stellar Awards Presenter

Astronaut Tracy Caldwell Dyson STS-118 and Expeditions 23/24
(NASA Photo)

The RNASA Foundation welcomes NASA Astronaut Tracy Caldwell Dyson as a Stellar Award presenter this evening. In August 2007, she flew as a Mission Specialist on Space Shuttle Endeavour flight STS-118 and was part of the Expedition 23/24 crew on the International Space Station between April 4, 2010 and September 25, 2010.

Caldwell Dyson was born in Arcadia, California. She earned a Bachelor of Science degree in Chemistry at the California State University, Fullerton in 1993, and a Ph.D. in Chemistry at the University of California, Davis, in 1997.

As an undergraduate researcher at the California State University, Fullerton, Caldwell Dyson designed, constructed and implemented electronics and hardware associated with a laser-ionization, time-of-flight mass spectrometer for studying atmospherically relevant gas-phase chemistry.

At the University of California, Davis, her dissertation work focused on investigating molecular-level surface reactivity and kinetics of metal surfaces using electron spectroscopy, laser desorption, and Fourier transform mass spectrometry techniques. She also designed and built peripheral components for a variable temperature, ultra-high vacuum scanning tunneling microscopy system.

During that time, and many years prior, she also worked as an electrician/inside wireman for her father's electrical contracting company doing commercial and light industrial construction.

In 1997, Caldwell Dyson received the Camille and Henry Drefus Postdoctoral Fellowship in Environmental Science to study atmospheric chemistry at the University of California, Irvine .

Selected by NASA in June 1998, she reported for Astronaut Candidate Training in August of that same year. The completion of this training and evaluation qualified her for flight assignment as a mission specialist.

In 1999, Caldwell Dyson was assigned to the Astronaut Office ISS Operations Branch as a "Russian Crusader" participating in the testing and integration of Russian hardware and software products developed for ISS.

In 2000, she was assigned prime Crew Support Astronaut for the ISS Expedition 5 crew and began working inside Houston's Mission Control Center as spacecraft communicator (CAPCOM) for both space shuttle and space station operations serving also as the lead CAPCOM for ISS Increment 11.

Caldwell Dyson flew onboard Shuttle Endeavour on STS-118 during August 2007. She served as a Mission Specialist #1 and directed 4 spacewalks as the prime Intra-Vehicular "IV" crewmember on this flight.

With crewmates Alexander Skvortsov and Mikhail Korniyenko, Caldwell Dyson then joined the Expedition 23 crew aboard ISS in April 2010, launching from the Baikonur spaceport aboard a Russian Soyuz capsule (Soyuz TMA-18). After 176 days duty as part of both the Expedition 23 and 24 crews, she, along with her Russian crewmates, returned to Earth in September 2010.

She has completed three contingency spacewalks, logging more than 22 hours to replace a failed coolant pump.

Caldwell Dyson's awards include an Honorary Doctorate, California State University, Fullerton in May 2008, NASA Performance Awards in 2001 and 2002, NASA Go the Extra Mile (GEM) Award in 2001, NASA Superior Accomplishment Award in 2000 and the NASA Group Achievement Award - Russian Crusader Team in 2000, the Camille and Henry Dreyfus Postdoctoral Fellowship in Environmental Science in 1997 and the Outstanding Doctoral Student Award in Chemistry from the University of California, Davis in 1997.

She is married to Pastor and Naval Aviator George Dyson IV. Caldwell Dyson is a private pilot and is conversational in American Sign Language (ASL) and Russian. She is also the lead vocalist for the all-astronaut band Max Q. Caldwell Dyson's recreational interests include anything involving tools and spending time with her husband and dog, especially in outdoor activities, and supporting her husband's ministry mentoring at-risk youth.

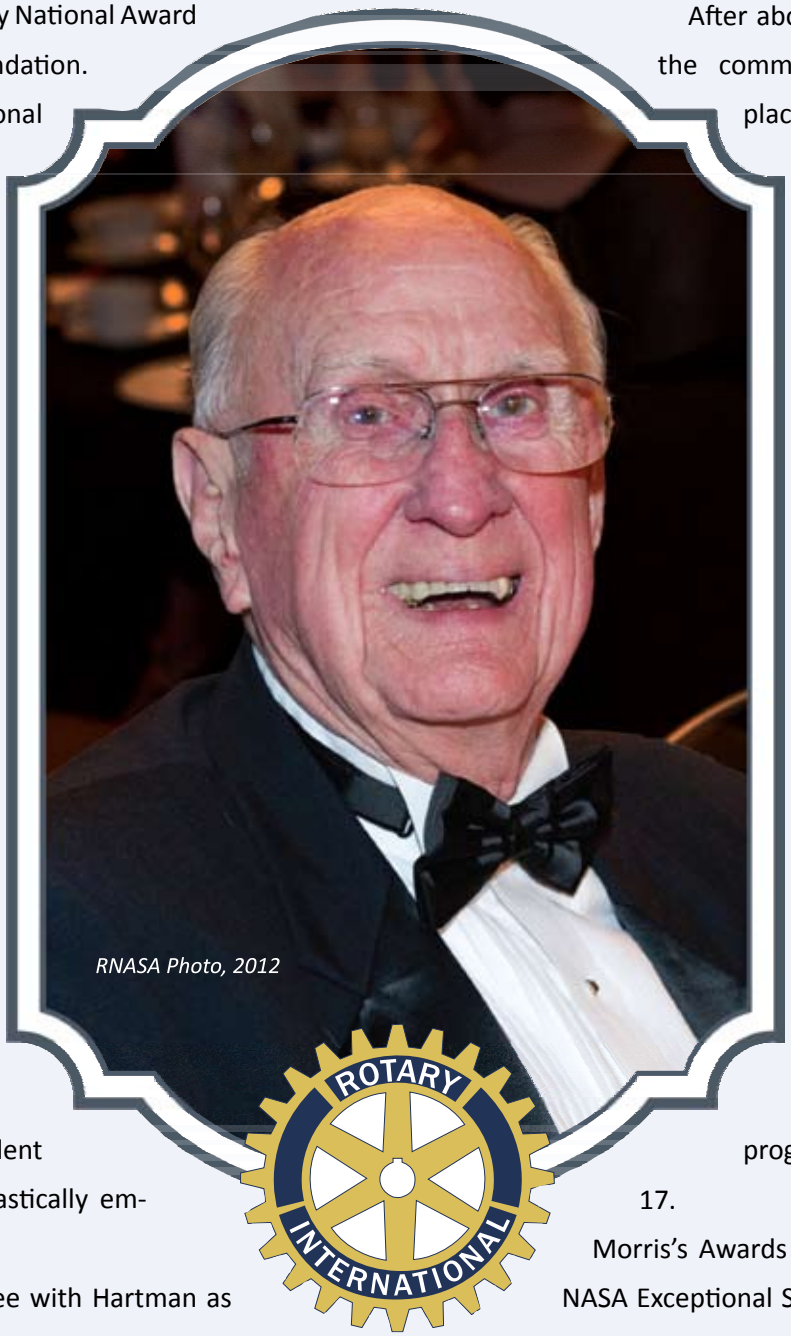
Tracy with her husband George
(Dyson Photo)

IN MEMORY OF OWEN MORRIS

The late Owen Glenn Morris, former NASA manager and Space Center Rotary Club member, is being recognized for his contribution to the Rotary National Award for Space Achievement Foundation.

The dream of a national award for space achievement was born in 1985 when former NASA manager and Space Center Rotary Club member Owen Morris felt that contributions by individuals in the space program deserved more recognition by the public.

Morris 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. Hartman and Robert Wren, who would be president the following year, enthusiastically embraced the idea.



RNASA Photo, 2012

They formed a committee with Hartman as Chairman that evolved into the Rotary National Award for Space Achievement Foundation. Hartman, Wren, and Morris recruited the people with contacts and necessary knowledge to meet the challenges. One of these was former NASA manager Jack Lister.

After about two years of planning, the committee had everything in place for the premier event. The advisors chose Dr. Maxime A. Faget, the Director of Engineering and Development at NASA as the recipient of the first National Space Trophy in 1987.

Morris was hired by NACA in Langley, Virginia to design and operate a supersonic wind tunnel. In 1958, NACA became NASA and Morris joined the Space Task Group, focusing on the Apollo Program.

He served as chief engineer and project manager for the lunar module, as well as Apollo program manager for Apollo 17.

Morris's Awards and Citations include the NASA Exceptional Service Medal in 1969, the United States Medal of Freedom in 1972, and the NASA Distinguished Service Medal in 1973. He died on December 29, 2014. He was 87.

RNASA FOUNDATION

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 16) 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 33) 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 23-32) 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) 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 programs. Following the 2014 event, proceeds were donated to the NASA Aerospace Scholars Program which provides thousands of students the opportunity to experience the exciting work being done at Johnson Space Center. In addition, General Bolden designated a portion of the funds to the Military Child Education Coalition and the Astronaut Scholarship Foundation. Finally, RNASA donated a sum to the Space Center Houston 747 carrier project.

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.

All ROWS L TO R: THIRD ROW: Geoff Atwater (Treasurer), Duane Ross, Scott Rainey (SCR President), Steven Fredrickson **SECOND:** Bill Taylor (Vice Chairman), Shelley Baccus, Tim Kropp, Irene Chan, Rodolfo Gonzalez (Chairman), Lindsey Cousins, Gary Johnson , Delia Stephens, Bob Wren **FRONT:** L. Jean Walker (Secretary), Frank Perez, Jenny Devolites, Pat Patton, Mary Alys Cherry **NOT PICTURED:** Floyd Bennett, Jeff Carr, Stephanie Castillo, Susan Gomez, Jacinda Green, Philip Harris, Marcus Havican, Mike Hernandez, Joe Mayer, Jayant Ramakrishnan, Branelle Rodriguez, Celina Rogers, Lori Wheaton
(J. Pamela Photography, 2015)

PREVIOUS NST RECIPIENTS

1987 - Maxime Faget
1988 - Don Fuqua
1989 - Richard Truly
1990 - Lew Allen
1991 - Aaron Cohen
1992 - Norman R. Augustine
1993 - Thomas Stafford
1994 - Edward C. "Pete" Aldridge
1995 - Daniel Goldin
1996 - Robert L. Crippen
1997 - George W.S. Abbey
1998 - George H.W. Bush
1999 - Christopher C. Kraft
2000 - John W. Young
2001 - Tommy Holloway
2002 - George E. Mueller
2003 - Roy S. Estess
2004 - Neil A. Armstrong
2005 - Glynn S. Lunney
2006 - Eileen Collins
2007 - Eugene F. "Gene" Kranz
2008 - Eugene Cernan
2009 - Michael D. Griffin
2010 - William H. Gerstenmaier
2011 - Kevin P. Chilton
2012 - Michael L. Coats
2013 - Kay Bailey Hutchison
2014 - Charles F. Bolden

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PROGRAM

29th Annual Rotary National Award
for Space Achievement Gala
Friday, April 24, 2015
Houston Hyatt Regency Imperial Ballroom

6:00
RECEPTION

7:00
WELCOME
Rodolfo González
Chairman, RNASA Foundation

PRESENTATION OF THE COLORS
Clear Lake High School, Clear Creek ISD
Cadets from 2nd Battalion JROTC

NATIONAL ANTHEM
Kam Franklin
Lead singer for The Suffers

INVOCATION
Steve Oglesbee
Lead Pastor, Clear Lake Presbyterian Church

DINNER

8:15
2013 YEAR-IN-REVIEW FILM
Space City Films

MASTER OF CEREMONIES
John Zarrella
Former CNN space correspondent

PRESENTATION OF STELLAR AWARDS
Randy Bresnik and Tracy Caldwell-Dyson
NASA Astronauts

PRESENTATION OF NATIONAL SPACE TROPHY TO ROBERT D. CABANA
Ellen Ochoa
NASA Johnson Space Center Director

PRESENTATION OF THE OMEGA WATCH
Thomas Stafford

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The employees of Aerojet Rocketdyne congratulate Colonel Robert D. Cabana, Director Kennedy Space Center, recipient of the 2015 National Space Trophy. We also congratulate the Stellar Award nominees and winners for their contributions to the American Space program.

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2015 RNASA STELLAR AWARDS PROGRAM

Each fall, the RNASA Foundation solicits Stellar Award nominations of space industry workers and teams deserving of special recognition. This year, 107 individual and 40 team nominations were received in four categories (see citations on pages 23-32). "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 Devolites, 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 (JSC) and an awards luncheon with a distinguished speaker. This year's speaker was Mark Geyer(see profile on page 21). Nominees 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 and that meet the criteria of recognizing "unsung heroes." The winners are announced at the banquet where they receive a distinctive engraved marble trophy generously sponsored this year by Orbital ATK.

STELLAR AWARDS EVALUATION PANEL

Dr. Glynn S. Lunney
RNASA Photo

Dr. Glynn S. Lunney, is a member of the RNASA Board of Advisors who is serving his thirteenth 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 what is 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 D. Aldrich
RNASA Photo

Arnold D. Aldrich is a member of the RNASA Board of Advisors who is serving his eighth 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, California. 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's 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.

General Kevin P. Chilton is a member of the RNASA Board of Advisors who is serving his third year on the Stellar Award Evaluation panel. The former astronaut and commander of US Strategic Command received the 2011 National Space Trophy.

General Kevin P. Chilton
RNASA Photo

A graduate of the U. S. Air Force (USAF) Pilot Training and Test Pilot Schools, Chilton holds a B.S. in engineering science from the USAF Academy and an M.S. in mechanical engineering from Columbia University. He served operation and test assignments in the RF-4, F-4, and F-15 prior to his selection as an astronaut in 1987.

Chilton piloted the maiden flight of Endeavour on STS-49 in 1992, and the Space Radar Laboratory mission, STS-59, in 1994. In 1996, he commanded STS-76, the third docking mission to the Russian Space Station Mir. He served as deputy program manager for the International Space Station until leaving NASA in 1998.

Chilton served on the Air Force Space Command Staff, the Air Staff, the Joint Staff, and commanded the 9th Reconnaissance Wing, 8th Air Force, Joint Functional Component Command for Space and Global Strike, and Air Force Space Command. From 2007 to 2011, he commanded the U. S. Strategic Command overseeing plans and operations for all U. S. forces conducting strategic deterrence and the Department of Defense's space and cyberspace operations. He retired from the Air Force in 2011 and now serves as a director of Orbital Sciences, Level 3, Anadarko, the Aerospace Corporation, and Schafer Corporation.

Colonel Eileen Collins, USAF (Ret.) and former NASA astronaut, STS-63, STS-84, STS-93, and STS-114, is a member of the RNASA Board of Advisors who is serving her first year on the Stellar Awards Evaluation Panel. She was the recipient of the 2006 National Space Trophy and she received the award as NASA's first female Space Shuttle Pilot and Commander.

Col. Eileen Collins
RNASA Photo

Collins earned her associate's degree in math/science from Corning Community College in 1976, her BA in math and economics from Syracuse University in 1978, a Master of Science degree in operations research from Stanford University in 1986, and a Master of Arts degree in space systems management from Webster University in 1989.

She was a T-38 instructor pilot at Vance AFB in Oklahoma, and a C-141 commander and instructor at Travis AFB in California. From 1986 to 1989, Collins taught math at the USAF Academy in Colorado and was a T-41 instructor. She graduated from the Air Force Test Pilot School at Edwards AFB in 1990 before her selection that year as a pilot astronaut. Collins first flight was the first for a woman pilot.

Collins flew on STS-63 Discovery from February 3-11, 1995, STS-84 Atlantis from May 15-24, 1997, STS-93 Columbia from July 23-27, 1999, which was the first Shuttle mission to be commanded by a woman, and STS-114 Discovery from July 26 to August 9, 2005.

Her special honors include the Defense Superior Service Medal, Distinguished Flying Cross, Defense Meritorious Service Medal, Air Force Meritorious Service Medal with one oak leaf cluster, Air Force Commendation Medal with one oak leaf cluster, Armed Forces Expeditionary Medal for service in Grenada (Operation Urgent Fury, October 1983), French Legion of Honor, NASA Outstanding Leadership Medal, NASA Space Flight Medals, Free Spirit Award, and the National Space Trophy.

STELLAR LUNCHEON SPEAKER

Mark S. Geyer, Program Manager for NASA's Orion Multi-Purpose Crew Vehicle (MCPV) was the featured speaker at the Stellar Awards Luncheon earlier today. Orion is NASA's next generation of spacecraft and was built to enable human exploration of the solar system.

Mark Geyer
NASA Photo

As Program Manager of Orion, Geyer is responsible for the day-to-day management, development, and integration of the Orion system.

He was born in Indianapolis, Indiana. Geyer earned a Bachelor of Science in aerospace engineering from Purdue University in 1982 and a Master of Science in aerospace engineering from Purdue University in 1983.

He was the Manager of the Russian Elements Team International Space Station from 1997-2000, and he was responsible for integrating the Russian ISS hardware elements into the International Space Station. Geyer was also the Lead negotiator between NASA, the Russian Space Agency and their contractors regarding technical integration and programmatic plans.

From 2000–2004, he was the Manager of the International Space Station Program Integration Office and was responsible for the definition of the International Space Station assembly sequence and the primary office for technical integration of the International Partners International Space Station elements: Russia, Canada, Europe and Japan.

In 2005, Geyer was the Manager of the System Engineering and Integration for the Development Program Division of the Exploration Systems Mission Directorate at NASA Headquarters in Washington, D.C. From 2005-2007, he was the Deputy Manager of the Constellation Program. In 2007, Geyer became the Program Manager for NASA's Orion Multi-Purpose Crew Vehicle.

His awards include the NASA Exceptional Service Medal, Space Flight Awareness Leadership Award, NASA Outstand-

ing Leadership Medal, NASA Meritorious Executive Rank Award, NASA Distinguished Executive Rank Award Nominee, Federal Engineer of the Year Nominee, and NASA's Outstanding Leadership Medal.

Geyer is married to the former Jacqueline Lewis and has three children, Samantha, Russell and Andrew.

OMEGA WATCH PRESENTER
Lt. Gen. THOMAS STAFFORD, USAF (Ret.)

Lt. Gen. Thomas P. Stafford
RNASA Photo

Once again, OMEGA has generously 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 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 more than a decade of support to our annual event.

EARLY CAREER STELLAR NOMINEES

Esteban D. Barajas of Aerojet Rocketdyne - Exceptional contributions to the Space Launch System RS-25 Engine Program.

Tracy L. Belford of NASA Kennedy Space Center - Outstanding legal counsel of the highest quality that facilitated the growth of a globally competitive U.S. commercial space sector at Kennedy Space Center.

Frank Bremer of Lockheed Martin - Technical excellence and extraordinary achievement contributing to the development and qualification of the Orion Crew Module propulsion system for NASA's historic Exploration Flight Test-1.

Kyle A. Brewer of NASA Johnson Space Center - Exceptional contributions to real-time operations, implementing quality and efficiency improvements in ISS mechanisms and maintenance operations.

Gloria H. Choi of UTC Aerospace Systems - Excellent leadership with outstanding technical expertise in circuit design focused on the highest standards required for crewed flight.

Anthony DiCello of The Boeing Company - For outstanding technical leadership contributing to the completion the International Docking Adapter for the International Space Station.

Melinda S. Dutton of Orbital ATK - Outstanding work ethic and results-driven focus enabling the resolution and implementation of corrective actions for the asbestos-free insulator replacement of the SLS solid rocket booster.

Erin Eichenberg-Bicknell of Orbital ATK - Extensive accomplishments and deep dedication to key programs in Orbital's National Security Business Area.

1st Lt. Gregory J. Eslinger of USAF - Outstanding leadership of a 97-member team in the rapid design/build of a ground control system for a $1B SECDEF-directed communication satellite demonstration.

Jason Grow of The Boeing Company - Exceptional engineering and leadership to successfully achieve full-scale Space Launch System Core Stage Feedline Liquid Oxygen test stand design, build and test in 2014.

2014 Early Career Stellar Award recipients. L to R: Hurley (presenting), Hillshafer, Gray, Maunder, Swenson, Diez, Amar, Manyapu, Nyberg (presenting), Not pictured: Webber *(RNASA photo, 2014)*

Nicole C. Jordan of NASA Johnson Space Center - Outstanding contributions to future space exploration as a spacesuit development expert, NASA Lead for the first SpaceX cargo vehicle, and Crew Office Lead for the Boeing CST-100 commercial crew vehicle.

John J. Lauterbach of GeoControl Systems - Outstanding contributions to the space simulation and testing capabilities at JSC through facility upgrades and helium refrigeration system operations in support of the James Webb Space Telescope program.

Nicholas Lindsay of SpaceX - Exceptional leadership overseeing the SuperDraco engine test program, a critical component of the Dragon 2 spacecraft's unique integrated launch abort system.

Eric W. Maier of NASA Johnson Space Center - Outstanding leadership in human spaceflight training and the user implementation of a new training management system.

Alex Manka of Orbital ATK - Significant contributions to the success of the Cygnus Orb-D1 mission.

Peter Masi of Jacobs - Exceptional engineering support to vacuum test operations at JSC, contributing immeasurably to the success and continued evolution of the nation's manned spaceflight program.

Dr. Gioia D. Massa of NASA Kennedy Space Center - Significant contributions to the Space Life and Physical Sciences Program at KSC.

Maj. Walter McMillan of USAF SAF/AQS - Unwavering pursuit of affordable and viable military satellite communication alternatives, paving the way for future satellite communication systems.

Diego Mugurusa of UTC Aerospace Systems - Outstanding systems engineering and technical analysis, including systems engineering leadership for Orion Environmental Control and Life Support Systems.

Dr. Jeb S. Orr of The Charles Stark Draper Laboratory - Exemplary technical excellence and innovation in developing and demonstrating the Adaptive Augmenting Control algorithm for launch vehicles.

Richard E. Pierce of Lockheed Martin - Outstanding leadership and technical excellence for the Forward Bay design and build on EFT-1.

Robert H. Plunkett of MEI Technologies Inc. - Outstanding technical and managerial leadership of the optimization of payload integration, which has enabled maximum return for ISS External Science Platforms.

Matthew W. Ritsko of NASA Goddard Space Flight Center - Exceptional dedication leading and innovating business activities on a flight project while making time to mentor others.

Laura Rouillier of The Boeing Company - Outstanding passion and technical contribution to human spaceflight vehicles, and attention to building collaborative relationships for joint success.

Daniel G. Schauerhamer of MRI - Exemplary technical excellence, problem solving and dedication in advancing computational fluid analysis capabilities to help ensure NASA mission success.

Rubik B. Sheth of NASA Johnson Space Center - Exceptional leadership in thermal technology development to support future manned spaceflight.

Capt. Alexander Simpson of USAF - Outstanding leadership in developing a NASA manned-space flight launch vehicle, a national defense target launch missions, the NASA Abort Test Booster mission, and the Army PATRIOT Missile Segment Enhancement national defense test mission.

Sasha M. Sims of NASA Kennedy Space Center - Outstanding leadership and success of the Kennedy Space Center Program Management Forum and overall Business Office performance for Ground Systems Development and Operations Program.

Nathan B. Stastny of USAF Air Force Research Laboratory - Exceptional advancements in state-of-the-art automated passive relative navigation for space rendezvous and proximity operations resulting in a unique Air Force capability for space superiority during crucial space situational awareness activities.

Nicholas P. Wasinger of USAF SMC/RNSE - Outstanding initiative sustaining and modernizing launch range system, enabling space vehicle launches from Cape Canaveral, FL and Vandenberg AFB, CA.

Saul Weiss of Lockheed Martin - Outstanding imagery processing, compression, and downlink system design that ignited the world's imagination with views from Orion's Exploration Flight Test-1.

Stephen M. Wells of The Boeing Company - Exceptional vibration, shock, and acoustic products that consistently exceeded the NASA customer's expectations.

MID CAREER STELLAR NOMINEES

Robert E. Bardwell II of The Boeing Company - Outstanding technical excellence in weights and mass properties analysis and control, and innovative propellant management techniques to support Shuttle, Ares I Upper Stage, and Space Launch System Core Stage applications.

Cristina M. Benzenhafer of The Boeing Company - Outstanding technical excellence in refining the propulsion design definition process, and propulsion component and subsystem integration, improving first time quality.

Dean A. Coleman of Lockheed Martin - Outstanding contributions to ISS and Orion MPCV crew safety and mission success, including leadership of Orion's aerodynamic decelerator system mortars on EFT-1.

Nicholas H. Cummings of NASA Kennedy Space Center - Outstanding leadership of Kennedy Space Center's operations planning and development approach, and the Ground Systems Development and Operations Program.

Kristi H. De Grys of Aerojet Rocketdyne - Outstanding contributions in leadership, development, and in the areas of arcjet and Hall current thruster electric propulsion for national and international spacecraft.

Julius Edelmann of NASA Kennedy Space Center - Exceptional project management skills in leading the space station payload processing facility science annex.

Steven M. Fuqua of SAIC - Outstanding technical contributions to the advancement of human space flight, including Extravehicular Activity.

Stace W. Garrett of The Boeing Company - Exceptional achievements as a vision-driven aerospace engineer and manager with 20+ years of experience leading aerospace program teams and developing space systems.

Ismael Gonzales of Lockheed Martin - Exceptional achievement in the design, development, and test of the state of-the-art automated vehicle management system for the Orion spacecraft.

Christopher P. Hansen of NASA Johnson Space Center - Outstanding leadership and technical expertise during the Extravehicular Activity 23 Mishap Investigation.

Gregory A. Hausman of Aerojet Rocketdyne - Exceptional contributions and leadership in the areas of liquid rocket propulsion and space power to advance America's space programs.

Michael S. Heckler of Lockheed Martin - Outstanding human spaceflight contributions to improve ISS and Orion MPCV crew safety and ensure mission success.

William L. Howorth of NASA Johnson Space Center - Outstanding coordination and leadership of the interagency working group responsible for ensuring ensure safe operations of NASA assets in space.

Charles A. Joyce of Oceaneering Space Systems - Exceptional technical excellence and diligence in the first three years of Robonaut 2 technology demonstration aboard the International Space Station.

Michael A. Kincaid of NASA Johnson Space Center - Exceptional leadership of strategic communications by developing greater stakeholder awareness of the benefits of human space exploration through creative media, education and outreach products.

Julie A. Kramer White of NASA Johnson Space Center - Outstanding technical contributions to human space flight as the Orion Multi-purpose Crew Vehicle Chief Engineer.

Brian N. Laird of USAF SMC - Exceptional leadership and outstanding technical oversight of operational safety suitability and effectiveness for the Launch and Test Range System.

Capt. Victor H. Miramontes of USAF - Exceptional contributions in information assurance, and cryptography for a $1B SECDEF-directed communication satellite demonstration.

Christopher Neman of Lockheed Martin - Outstanding technology and leadership contributions leading to successful Mission Control Center projects requiring integration across multiple NASA centers.

Jeffrey Newton of The Boeing Company - Outstanding leadership in Space Launch System (SLS) Main Propulsion Systems, crucial to closing on component and subsystem design for the SLS Critical Design Review.

Kwaku B. Nornoo of Jacobs - Exceptional electrical systems innovations for human spaceflight, including contributions to MPCV parachutes and high definition ISS cameras.

Christopher E. Perret of The Boeing Company - Exemplary contributions to human space flight safety and success through technical expertise in functional analysis, system architecture, and requirements verification and compliance.

Garrett Reisman of SpaceX - Outstanding leadership and technical expertise instrumental to the development of the Dragon 2 manned spacecraft.

Mark J. Ricciardo of Aerojet Rocketdyne - Outstanding innovation, technical excellence, and support of the RL-10 Program in its quest to provide sustainable and affordable propulsion solutions while maintaining its mission success legacy.

Jason J. Robinson of Orbital ATK - Exceptional dedication and technical excellence resulting in the successful preparation of the Cygnus mission operations team for CRS missions to the ISS.

Gordon R. Russell of Orbital ATK - Exemplary performance, outstanding leadership, and creation of a model of teamwork, mutual respect, and collaborative innovation in the Space Launch System program office.

Keith M. Shinozaki of Aerojet Rocketdyne - Exceptional contributions and leadership in the areas of liquid rocket propulsion and space power to advance America's space programs.

Colin D. Sipe of Lockheed Martin - Outstanding development of cutting-edge composite material for the Orion spacecraft upper aeroshell subsystem, critical for crew protection on future deep-space missions.

Mark Y. Sonoda of NASA Johnson Space Center - Outstanding leadership in human spaceflight training of astronauts, flight controllers, and instructors.

Renee Marie Spinhirne of Lockheed Martin Space Systems - Outstanding technical leadership and successful execution of the integrated test campaign for avionics and system testing for MPCV EFT-1.

2014 Middle Career Stellar Award recipients. L to R: Nyberg (presenting), Ballinger, Steffy (for Dorsch), Orlowski, Sproles, Nicholson, Durkin, Hurley (presenting), Not pictured: Beal, Douglass *(RNASA photo, 2014)*

Edmund Taddey of UTC Aerospace Systems - Exceptional technical skill and leadership in engineering to development of systems and components for human space and unmanned space.

Carson A. Taylor of MEI Technologies Inc. (MEIT) - Exceptional leadership and execution of the payload integration process for numerous major payload experiment missions deployed via the Shuttle and ISS.

Allison Thomas of UTC Aerospace Systems - Outstanding contributions to human spaceflight including Active Thermal Control, Environmental Control and Life Support Systems for ISS, Orion and future exploration EVA suit concepts.

Maj. Bryan Titus of USAF SAF/AQS - Demonstrated history of excellent performance and leadership in space acquisitions, satellite payload processing, and on-orbit satellite anomaly resolution to ensure continued operation for a variety of satellite systems.

Thomas E. Walker of ARES Technical Services - Outstanding leadership, innovation, multi-organizational integration and successful execution of EFT-1 recovery operations.

Todd Wantuch of Orbital ATK - Extensive accomplishments and dedication to the USAF Geosynchronous Space Situation Awareness program and mission area.

Michael D. Waugh of NASA Kennedy Space Center - For sustained exemplary service and dedication to the International Space Station Program.

Lt. Col. Jeffrey Wiemeri of USAF - Outstanding leadership of the Rocket Systems Launch Program team responsible for developing and building three space missions and one target launch mission.

Gary B. Williamson of Lockheed Martin - Outstanding leadership and technical work utilizing innovative approaches for the development of Mission Control Center Command Systems in support of multiple programs for human spaceflight.

Darrell G. Winfield of The Boeing Company - Outstanding contributions to the design, development, verification, integration and on-orbit configuration of ISS, including project management of the nitrogen / oxygen recharge system.

LATE CAREER STELLAR NOMINEES

Thomas P. Butler of The Boeing Company - Exceptional contributions leading the execution of numerous highly successful and program critical International Space Station development projects.

George E. Cain of Lockheed Martin - Exceptional design and development of liquid propulsions systems for NASA's deep-space human exploration spacecraft achieving significant improvements in affordability and schedule.

Mark Caron of UTC Aerospace Systems - Exceptional technical skills and engineering leadership in developing systems to enable human space travel on-board ISS, Orion and Boeing CST-100.

Dr. Eric L. Christiansen of NASA Johnson Space Center - Outstanding leadership of the Hypervelocity Impact Technology Group in the protection of crew members and spacecraft from micrometeoroids and orbital debris.

Cary R. Christopherson of Lockheed Martin - Exceptional leadership in integrating EFT-1 across NASA, ULA, and Lockheed Martin stakeholders.

Kurt W. Coffman of Aerojet Rocketdyne - Outstanding support to the RS-68 and RS-27 programs and long term contributions to America's space programs.

David S. Copeland of The Boeing Company - Outstanding leadership in advancing science on-board the International Space Station.

Denise DiFilippo of The Boeing Company - Exceptional analytical expertise in sparing and supportability assessments for the International Space Station.

George Dorsey of Orbital ATK - Exceptional contributions to the integration of the Cygnus Pressurized Cargo Module within the CRS Program.

Scott D. Dubach of The Boeing Company - Outstanding technical integrity, attention to detail, and engineering expertise devoted to the aerospace industry and products that have enabled successful human space travel and exploration.

Eric W. Ernst of NASA Kennedy Space Center - Outstanding leadership of design, development and construction of the NASA Mobile Launcher, human spaceflight's gateway to deep space exploration.

Mark S. Geyer of NASA Johnson Space Center - Exemplary leadership in planning and executing Exploration Flight Test 1 -- the first beyond earth orbit flight in the nation's new human space exploration program.

James P. Heflin of The Boeing Company - Exceptional technical excellence leading to the successful recovery of the SLS core stage supplier feedline system design.

John V. Iovine of NASA Johnson Space Center - Outstanding performance and dedication in the management of the International Space Station Passive Thermal Control System.

John Jordan of Orbital ATK - Outstanding contributions as Orbital Chief Engineer for the highly successful Landsat-8 development.

Robert A. Kalb of Aerojet Rocketdyne - Superior leadership and dedication to ensuring alignment with requirements, hardware quality, and process compliance resulting in 100% mission success.

Brian Keller of Orbital ATK - Outstanding leadership and technical management as lead engineer for rendezvous/proximity operations for Orbital's Cygnus.

Dr. Edward J. Lewandowski of NASA Glenn Research Center - Outstanding long-term contributions and exceptional technical leadership in the development and testing of Stirling radioisotope power systems.

Kevin J. Melcher of NASA Glenn Research Center - Exceptional technical and leadership contributions in developing innovative systems health management technologies for NASA Human Exploration and Operations programs.

Mohammed K. Nasrullah of The Boeing Company - Exceptional project management expertise and contributions to the Space Shuttle and the International Space Station programs.

Joseph T. Nowetner of UTC Aerospace Systems - Sustained leadership, performance and commitment to the safety and operational excellence of human spaceflight extravehicular activity.

Thomas W. Paulus of Aerojet Rocketdyne - Outstanding leadership and technical management as lead systems development and test engineer for the RL10C-1 program.

Mark R. Reinecke of UTC Aerospace Systems - Outstanding contributions to the SLS Core Stage thrust vector control system from Ares I transition to six successful component critical design reviews.

Barry K. Rogers of L-3 Communications - Exemplary career supporting human spaceflight by development of robotics visualization, analysis, and planning software products critical to ISS assembly and resupply missions.

Robert A. Rossato of UTC Aerospace Systems - Exceptional NASA EVA Recovery Team support in response to on-orbit space suit close call with Short EMU 3011.

Randy Jay Rubens of The Boeing Company - Exceptional leadership and innovation in aerospace programs and advanced aerospace systems for over thirty years, from Space Shuttle Orbiter to DARPA Orbital Express to Boeing's Commercial Crew Transportation System.

Donald R. Sauvageau of Orbital ATK - Exceptional contributions as an industry leader and driving force within the space industry for the advancement of human spaceflight.

George Schamel of Lockheed Martin Space Systems - Outstanding leadership of the Orion Power and Data Unit (PDU) subsystem effort that designed, built, tested and supported the integration of the four complex flight PDU's leading to a successful Orion EFT launch.

Steven A. Scheer of The Boeing Company - Exceptional leadership of ISS on-orbit dynamic loads pre-flight verification.

Mary Beth Schwartz of NASA Johnson Space Center - Outstanding leadership efforts resulting in significant improvements in risk management, management of resources, and quality system management for S&MA and its partners.

Kenneth O. Schwer of NASA Goddard Space Flight Center - Outstanding project management contributions at NASA.

David Shefsky of Exelis Inc. - Exceptional management of the NASA Space Network Blossom Point Antenna System Project, a first step in establishing the newest ground station.

Charles L. Sherck of USAF SMC - Outstanding leadership and program management skills resulting in exceptional range support for National Security Space and DoD space launch operations.

Nancy E. Tolliver of The Boeing Company - Unwavering commitment, personal sacrifice, and devotion to the Human Spaceflight industry, space exploration, and mission safety.

Richard E. Troutman of The Boeing Company - Tireless performance as the Core Stage Structural Integrity Technical Lead Engineer, directly contributing to the SLS Program meeting its CDR requirements and NASA customer expectations.

2014 Late Stellar Award recipients. L to R: Hurley (presenting), Mulder, Hewitt, Kranz, McCasland, Davies, Dalton, Vogt, King, Nyberg (presenting), Not Pictured: Freeman *(RNASA photo, 2014)*

STELLAR TEAM NOMINEES

ATK Space Launch System Forward Skirt – Full Scale Structural Test Team of Orbital ATK - Outstanding achievement in successfully adding over 35% certification capability to the Solid Rocket Booster heritage forward skirt through innovated testing concepts, saving $35M.

Active Thermal Control System (ATCS) Pump Module Anomaly Resolution Team of The Boeing Company - Exceptional resolution of a zero fault tolerant failure of the external active thermal control system pump module on the International Space Station.

Advanced Extremely High Frequency Hall Thruster Team of USAF Air Force Research Laboratory - Exceptional resolution of an unexpected performance issue affecting the electronic propulsion systems onboard Advanced Extremely High Frequency satellites.

Avionics Subsystem Integration and Test Facility First Light Team of The Boeing Company - Outstanding achievement of one of the SLS Core Stage's first critical path milestones, SITF-D "First Light", providing the SLS Avionics and Software team the infrastructure and capability to begin active hardware/software integration and risk reduction ac

Cargo Mission Contract – Cargo Processing Team of Lockheed Martin - Outstanding responsiveness to the Orbital 3 mishap and demonstrating maximum flexibility in accommodating additional resupply hardware and critical spares on SpaceX 5.

Commercial Crew Transportation Capability Source Evaluation Board of NASA Kennedy Space Center – Innovative strategies enabling procurement of a safe and reliable U.S. Commercial Crew Transportation System to transport NASA astronauts to and from the International Space Station.

D361 Investigation Phase 2 Modeling and Analysis Team of Aerojet Rocketdyne - Exceptional industry-leading analysis efforts in support of the Delta IV D361 Phase 2 flight anomaly investigation.

Delta II Launch Restart Team of Aerojet Rocketdyne - Exceptional support to the restart of Delta II missions while maintaining flawless mission success and exemplary customer support.

Edwards/ Armstrong Space Transit and Space Launch Test Team of USAF, 412th Test Wing - Outstanding teamwork by venturing into the unknown and supporting the technology development of several new airborne space launch platform capabilities.

Falcon 9 Launch Operations Team of SpaceX - Outstanding technical and operational performance leading to a remarkable pace of launch for the Falcon 9 rocket, including four back-to-back launches from July to September 2014.

Functional Fault Model (FFM) Modeling Conventions and Practices Team of NASA Glenn Research Center - Exceptional contributions developing cross-program functional fault modeling conventions as an enabling technology for NASA ground and human-rated launch systems.

Geosynchronous Space Situational Awareness Program Team of Orbital ATK - Successful delivery and launch of the Geosynchronous Space Situational Awareness Program, a space neighborhood watch system.

Global Precipitation Measurement Team of NASA Goddard Space Flight Center - Outstanding engineering creativity and dedication, overcoming multiple obstacles during the development of the GPM Core Observatory to on schedule and under budget.

Hosted Payload Office of USAF - Pioneering achievement in developing and awarding a first-of-a-kind $495M contract for government hosted payloads on commercial satellites to deliver more affordable, disaggregated, and resilient space systems.

ISS Common Communications for Visiting Vehicles Antenna Assembly and Laser Retroreflector Team of Lockheed Martin - Outstanding creativity, practicality and teamwork in the development of a low-cost space antenna assembly multi-purposed to also include spacecraft navigation hemispherical retroreflector arrays and accommodations for mounting future ISS external equipment.

International Space Station EVA Recovery Team of NASA Johnson Space Center - Exceptional failure investigation and corrective action leading to the reinstatement of ISS US EVA capability following the water intrusion mishap on US EVA 23.

Lunar Laser Communications Demonstration Team of Booz Allen Hamilton - Outstanding innovation in developing and demonstrating space laser communications, enabling high-bandwidth communications for space exploration while reducing size, mass, and power requirements.

Lunar Laser Communication Demonstration Team of MIT Lincoln Laboratory - Exceptional teamwork in designing, building, testing, integrating, and operating the record-shattering lunar laser communication demo.

Lunar Laser Communications Demonstration Team of NASA Goddard Space Flight Center - Historic demonstration of laser communications from the Moon at record-breaking data rates.

MAVEN Mission Team of Lockheed Martin - Successful orbital capture and sampling of Mars' upper atmosphere to provide answers to long-standing questions about the red planet.

Meteorological System Computer (MSC) Range External Interface Network Project Team of USAF SMC - Exceptional dedication, persistence, and technical excellence in upgrading the meteorological system computer on the Eastern Test Range.

Morpheus Lander Team of NASA Johnson Space Center – Outstanding implementation of the design, development and operation of a prototype lander, executing over 60 terrestrial flight tests and demonstrating high performance LOX/methane propulsion, autonomous precision landing and hazard avoidance to benefit future robotic and human exploration missions.

NASA Sustainable Land Imaging (SLI) Architecture Study Team of NASA Goddard Space Flight Center - Outstanding contribution to defining the future of land imaging missions for the United States.

Orbital Orb-1 Integration and Operations Team of Orbital ATK - Exceptional dedication and technical excellence resulting in successful integration, processing, launch and operations of the highly successful Orb-1 mission.

2014 Team Stellar Award recipients. L to R: Nyberg (presenting), Monteiro-Knight (Boeing), Pearce (DARPA), Shen (Boeing), Jackson (NASA GRC), Breger (Draper), Laidley (Orbital), May (NASA MSFC), Hollister (UTC), DeMauro (Orbital), Hellekson (ATK), Hurley (presenting) *(RNASA photo, 2014)*

Orbiting Carbon Observatory 2 (OCO-2) Team of Orbital ATK - Excellent teamwork in final Assembly, Test, Launch, and Operations of the Orbiting Carbon Observatory 2 spacecraft.

Orion EFT-1 Communications and Outreach Team of NASA Johnson Space Center - Outstanding communication and public engagement efforts that created global excitement for Orion's Exploration Flight Test-1 and the future of human space flight.

Orion EFT-1 NASA Management Team of NASA Johnson Space Center - Successful leadership of the joint government-industry team to accomplish EFT-1 while advancing management innovations and improving affordability.

Orion Exploration Flight Test-1 Industry Team of Lockheed Martin Space Systems - Successful spaceflight test of NASA's new Orion spacecraft designed for human exploration of our solar system.

Orion Hardware Development Team of Lockheed Martin Space Systems - Innovative development and manufacturing of a new spacecraft design for future deep-space exploration missions

Orion Software & Avionics Team of Lockheed Martin Space Systems - Exceptional innovation and performance of new software and avionics systems developed for NASA's future deep-space exploration missions.

Payload Activity Requirements Coordinator Team of a.i. solutions, Inc. - Exceptional support in the development of planning requirements for the operation of science payloads onboard the ISS.

RL10C-1 Engine Development Team of Aerojet Rocketdyne - Successful development, certification and first flight of the RL10C-1 engine, powering the Atlas V launch vehicle upper stage with the NROL-35 payload on December 12, 2014.

Revolutionize ISS for Science and Exploration (RISE) Team of NASA Johnson Space Center - Unprecedented initiative and ingenuity in leading the reengineering of the ISS program to ensure the stewardship of science discovery and the fostering of successful commercial industry in space.

Rocket Systems Launch Program Team of USAF - Outstanding teamwork developing and building two NASA launch vehicles, an international space weather launch vehicle and a PATRIOT target launch vehicle.

Solar Power for Electric Propulsion Team of NASA Glenn Research Center - Successful development of innovative solar array technology to enable high-power solar electric propulsion for 21st century space exploration.

Space Launch System Anti-Geyser Test Team of The Boeing Company - Outstanding success in achieving full-scale SLS Core Stage Feedline Liquid Oxygen test stand design, building and testing in 2014.

Space Launch System Core Stage Critical Design Review Team of The Boeing Company - Outstanding team success in furthering the new development and design of the largest and most powerful launch vehicle to provide beyond earth orbit capability.

SpaceCube Team of NASA Goddard Space Flight Center - Successful development of SpaceCube hybrid data processing technology, enabling the next generation of advanced space flight applications.

Spacecraft Factory of the Future: Operations & Checkout Team of Lockheed Martin Space Systems - Extraordinary performance in transforming the Operations and Checkout facility into the "Human Spacecraft Manufacturing Factory of the Future."

Vertical Assembly Center Activation Team of The Boeing Company - Selfless individual dedication, outstanding teamwork and exceptional overall performance in the delivery of the largest spacecraft welding system in the world and the manufacturing centerpiece of the Space Launch System.

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Col. Robert D. Cabana 2015 National Space Trophy Recipient

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From August 2001 to September 2002, he served as Director, Human Space Flight Programs, Russia. As NASA's lead representative to the Russian Aviation and Space Agency (Rosaviakosmos) and its contractors, he provided oversight of all human space flight operations, logistics and technical functions, including NASA's mission operations in Korolev and crew training at the Gagarin Cosmonaut Training Center in Star City.

Cabana Astronaut photo NASA T-38, 1996 *(NASA Photo)*

Upon his return to Houston, Cabana was assigned briefly as the Deputy Manager of the ISS program. From November 2002 to March 2004, he served as Director of the Flight Crew Operations Directorate and was responsible for directing the day-to-day activities of the directorate, including the Astronaut Corps and aircraft operations at Ellington Field. He was then assigned as Deputy Director of JSC, where he served for three and a half years. He next served as the Director of the Stennis Space Center in Mississippi. A year later he was reassigned as the tenth director of KSC.

During his tenure at KSC, Cabana has overseen completion of the ISS; brought the Space Shuttle program to a safe and successful close; lead KSC through an extensive transition period; implemented a clear, strategic vision for the future; and transformed KSC from a NASA program-focused field installation, to a diverse, multiuser spaceport.

Cabana is also leading modernization efforts to transform KSC into a 21st century spaceport with capabilities to launch spacecraft built and designed by both NASA and private industry, while also overseeing development of a U.S. commercial crew transportation capability. Under his leadership, KSC continues to deliver on NASA's programmatic work, including processing and launching rockets, preparing payloads for science and commercial missions, developing technologies to advance exploration.

Awards

Cabana, a 2008 inductee into the Astronaut Hall of Fame, has received numerous awards and decorations, including the Daughters of the American Revolution Award for the top Marine to complete naval flight training, 1976; U.S. Distinguished Graduate U. S. Naval Test Pilot School; the De La Vaulx Medal presented by the Federation Aeronautique Internationale, 1994; Defense Distinguished Service Medal; Defense Superior Service Medal; Legion of Merit; Distinguished Flying Cross; Defense Meritorious Service Medal; Meritorious Service Medal; National Intelligence Medal of Achievement; two NASA Distinguished Service Medals; two NASA Medals for Outstanding Leadership; two NASA Exceptional Service Medals; four NASA Space Flight Medals; the 2013 Dr. Kurt H. Debus Award; and the 2015 National Space Trophy.

Organizations

Cabana is a Fellow in the Society of Experimental Test Pilots; Associate Fellow, American Institute of Aeronautics and Astronautics; and member of the Association of Space Explorers.

Cabana's Family

Cabana is extremely proud of his three children: Jeffrey, a pilot in the Marine Corps; Chris, a science teacher; and Sarah, a teacher, artist, and super mom. One of his greatest joys is his six grandchildren: Emily, Jackson, Bennett, Ryan, Kaden, and Lily. He believes they shine from his "Lake Wobegon" roots, where all the women are strong, the men are good looking, and the children are all above average.

Cabana family photo, 1979 *(Cabana Photo)*

"THE MOON IS ESSENTIALLY GREY"

Jim Lovell, Apollo 8 Command Module Pilot

Apollo 8 Command Module Pilot James Lovell, one of the first human beings to have a close-up view of the moon, reported from his lunar orbit on Christmas Eve in 1968, "The moon is essentially grey." The OMEGA Speedmaster "Grey Side of the Moon" honours the pioneering spirit (and colour sense) of Lovell and his fellow astronauts.

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