



ATK congratulates all Stellar Award nominees, winners, and Gen. Kevin P. Chilton, recipient of the 2011 National Space Trophy for excellence in the advancement of America's space goals.





tary National Award

for

promote understanding and support

for the strategic importance of our

national space assets and our nation's

NATIONA,

CEACHIEVER

ROTAPL

FORSP

After high school graduation in Space 1972, he attended the USAF Academy Achievement in Colorado. His first solo flight was in (RNASA) Foun- a sail plane there. He noted, "The same dation is delighted skills I learned on that very first airplane, to award former Com- which was a glider, were useful in landmander of U.S. Strategic ing the shuttle because it was a glider, Command and former Astro- too." In 1976, Chilton earned his BS in naut General Kevin P. Chilton engineering sciences and his Air Force the 2011 National Space Trophy. commission. He then completed a mas-Former Astronaut and RNASA Board ter's degree in mechanical engineering of Advisors member, Daniel Branden- on a Guggenheim Fellowship at Columstein, said Chilton was being "recog- bia University of New York in 1977. nized for his leadership and efforts to

Chilton received his wings Chilton remembers his parents RF-4 Phantom II and was assigned waking him up in the wee hours of to the 15th Tactical Reconnaissance May 5, 1961 to watch Alan Shepard's Squadron at Kadena Air Base, Japan. launch on a little black and white TV in From 1978-80, he flew the RF-4 in able to do," he told RNASA. But flying and was assigned to the 67th Tacran in the family. His father Jim was a tical Fighter Squadron at Kadena.

flight test engineer, In 1982, Chilton attended his uncle the USAF Squadron Officer School was a at Maxwell AFB, Alabama, and fin- gest challenge he faced on a spaceflight. United ished as the number one graduate Airlines that year, receiving the Secretary pilot, of the Air Force Leadership Award. on STS-59, the Space Radar Laboratory

to the Astronaut Office years later. NASA Astronaut Shannon

In 1984, Chilton was se- the first spacewalk lected for the USAF Test Pilot from the shuttle ate and First Lt. named Cathy who Born in Los Angeles in was enrolled in the Test Engineering

and his mother Shirley 9th and 7th Tactical Fighter Squadhad been rons at Holloman AFB, New Mexico. an Amer- Chilton flew F-15s until 1984. His i c a n F-15 instructor first called him "Chili," Airlines a nickname that fellow F-15 pilot, steward- Brian Duffy, would carry forward

Chilton in T-38 (NASA photo)

ess. He also grew up near the Los Ange- School at Edwards AFB, Califor- while docked to les International Airport. "So I was ex- nia. While at Edwards, he shared a space station. posed to aviation early on," he admitted. some classes with a physics gradu-

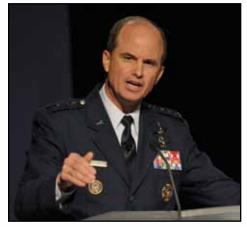
1954, he attended St. Bernard High Course. They were married in 1988. School in Playa del Rey, California where he was taught by the Sisters Graduating number one in of Charity from Leavenworth, Kan- his class in 1984, Chilton was aswhere he was taught by the Sisters sas. He said they "had a big influ- signed to Eglin AFB, Florida, ence on me." Years later, he invited where he flew all models of the

www.atk.com

#### **Kevin P. Chilton** \*\*\*\* **2011 NATIONAL SPACE TROPHY WINNER**

The Ro- them to watch him launch into space.

#### **Air Force Pilot**



Gen. Kevin Chilton (Photo by Dan Rohan, 10-08-10)

civilian and military space programs." at Williams Air Force Base (AFB), F-15 and F-4 and served as an of-Arizona in 1978. He qualified in the ficer in the 3247th Test Squadron.

#### **NASA Astronaut**

Selected by NASA in 1987, their California home. "I had no inkling Korea, Japan, and the Philippines. In Chilton first served as pilot of Endeavthat was something I'd want to do or be 1981, he converted to the F-15 Eagle our on STS-49 in May 1992. The mission (commanded by Dan Brandenstein) utilized the first-ever three-person EVA to retrieve Intelsat VI which needed a new upper stage to reach geosynchronous orbit. Chilton called this retrieval the big-

> Chilton piloted Endeavour again (SRL) mission, in April 1994. SRL con-Subsequently assigned to the sisted of three large radars and a carbon monoxide sensor that studied the Earth.

> > He commanded Atlantis on STS-76 in March 1996. This third docking mission to the Russian Space Station Mir transferred Lucid and accomplished

Cont. next page

**Kevin P. Chilton** \*\*\*\* **2011 NATIONAL SPACE TROPHY WINNER** 

#### cont. from previous page

While at NASA. Chilton also served as lead capcom, T-38 safety officer, and he supported the Infrared Background Signature Survey vering Vehicle programs. He also squeezed in some time as lead guitarist for the astronaut band, Max Q.

APAY NATIONA,

CEACHIEVE

FOR

ton was deputy program manager for the ISS Program, a task he cited as one of his biggest challenges at NASA. In

network of satellite command and con- rine personnel. He noted that leadership trol, communications, missile warning and launch facilities. He instituted a "back to basics" approach at the Space and Missile Systems Center which resulted in an unprecedented 51 consecutive successful national security space launches.

Chilton's leadership also ensatellite and the Orbital Maneu- sured the Eastern and Western Ranges successfully supported 26 launch operations, including the Space Shuttle, spacelift, missile defense and ballistic missile tour was the successful execution of testing. Also, during his command, the Operation Burnt Frost. Analysts had Following his last flight, Chil- Evolved Expendable Launch Vehicle Program achieved full operational capability.

this role, Chilton worked closely with implementation of the command's numhis Russian counterparts to develop ber one mission priority to evolve from

October 2007, Chilton oversaw a global including USAF, army, navy, and mais "all about building a team," and that he "enjoyed working with all of them." Commander Chilton was responsible for all nuclear weapons, "including nuclear missiles, subs, and nuclear bombers," he explained, as well as operations of all U.S. forces conducting strategic deterrence. "What we were doing was absolutely critical to the United States."

> One of the high points of his determined a non-functional National Reconnaissance Office (NRO) satellite carrying a tank of 1,000 pounds Chilton significantly improved of hydrazine fuel could be a threat to human life. Chilton led the planning and coordination of more than two



STS-49 Landing of Endeavour, Chilton during STS-59, Mir during STS-76 (NASA photos)

partnering agreements which were the space surveillance to true space situbasis for future international participabeen part of the great NASA team."

#### **Military Commander**

Chilton left NASA in 1998. He served on the Air Force Space Command Staff, and then the Air Staff, the Joint Staff, the 9th Reconnaissance Wing, the 8th Air Force, and the Joint Functional Component Command for Space and Global Strike. He was promoted to four-star general on June 26, 2006, the first former astronaut to reach this rank.

As Commander, Air Force Space Command from July 2006 to

ational awareness (SSA). He developed tion. He said he is "very proud to have future links for SSA and refined tactics, techniques and procedures to standardize and improve analysis of space threats.

> In January 2007, Chilton watched over the operational and intelligence integration to track and assess the Chinese anti-satellite test, the largest space breakup event in history. This endeavor fused traditional with non-traditional warning sources to verify that no friendly satellites were at risk from the debris.

From 2007 to 2011, Chilton commanded U.S. Strategic Command, in charge of 40,000 people,

dozen federal agencies, including Missile Defense Agency, the NRO, NASA and the Pacific Command that took the action to shoot down the satellite on Feb. 20, 2008.

cont. on page 34



our nation's civilian and military space programs." Congratulations, Chili.

United Space Alliance

# Congratulations to General Kevin P. Chilton, Recipient of the 2011 National Space Trophy



#### **Miles O'Brien** \*\*\*\* **2011 RNASA EMCEE**

CEACHIEVE annual gala.

NATIONA

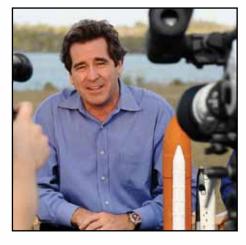
ROTAPL

FOR

Productions, LLC, a private pro- Hurricane Katrina in 2005 helped duction company based in Wash- earn CNN a Peabody award. He ington, D.C. Through his company, left CNN in December 2008. he creates engaging stories for various media outlets including the PBS NewsHour, FRONTLINE, Discov- aspects of human and unmanned erv Science Channel, National Sci- spaceflight. He reported on the ence Foundation, Spaceflightnow. first and subsequent repair miscom and various corporate clients.

troit, Michigan in 1959 and grew up station crew from Kazakhstan, in Grosse Pointe Farms. He earned John Glenn's return to space in 1998, Week."

While with CNN in Atlanta and New York, O'Brien served as



**O'Brien** during STS-133 (Photo courtesy Miles O'Brien, 2011)

The RNA- CNN's science, space, aviation SA Founda- technology, and environment tion is excited correspondent. He anchored to have broadcast news and talk programs, includ-news veteran Miles ing Science and Technology O'Brien as Master of Week, CNN Saturday and Sun-Ceremonies for our 25th day Morning, Talkback Live, Headline News Primetime, CNN Live From, and CNN American O'Brien owns Miles O'Brien Morning. O'Brien's reports of

O'Brien has covered all sions to the Hubble Space Telescope, the shuttle dockings at O'Brien was born in De- Mir, the launch of the first space

a history degree from Georgetown several robotic landings on Mars, and and began his broadcasting career the private sector endeavors such as the in 1982 at WRC-TV in D.C. He was winning of the Ansari X-Prize. He crea reporter and anchor at TV stations ated a documentary, "Terminal Count: in Boston, Massachusetts; Tampa, What it Takes to Make the Space Shut-Florida; Albany, New York; and St. tle Fly" in 2001, and continued cover-Joseph, Missouri. O'Brien joined age of the successful Mars Exploration CNN in 1992 producing stories for Rovers, Spirit and Opportunity, that CNN's daily programming and writ- began their travels in 2003. He began ing and hosting the weekly broad- serving as Chairman of the NASA cast "CNN Science & Technology Advisory Committee's Education and Public Outreach Committee in 2009. (He's on leave until this June.)

> When the Space Shuttle Columbia and its crew were lost in 2003, O'Brien came to Johnson Space Center and prepared in-depth reports on the investigation and return-to-flight in 2005. Unknown to viewers at the time, the loss of Columbia represented the sudden end of a long- in 2002. He first served as held dream for O'Brien. Only days emcee for the RNASA before (and after years of negotiations) CNN and NASA had reached in 2004 and 2005, an agreement that would have made and again for the O'Brien the first journalist to fly on past four years. the Space Shuttle and to visit the International Space Station.

A third-generation pilot with an instrument rating, O'Brien grew



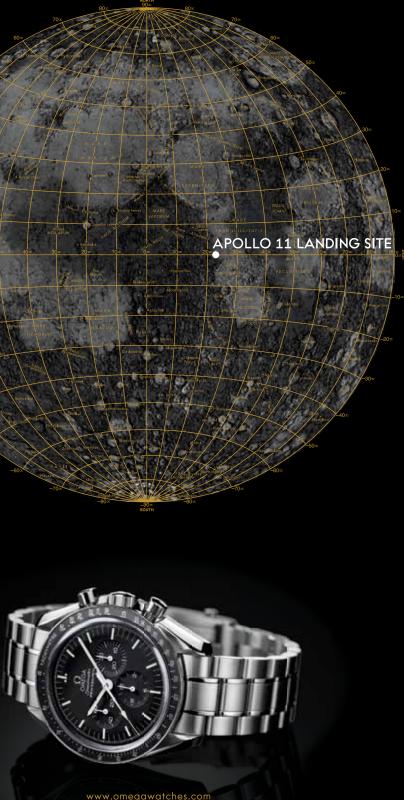
Miles O'Brien (NASA photo)

up flying Cessnas and Pipers rented by his father. He has owned a Cirrus SR-22 for the past six years.

O'Brien has reported extensively on civil aviation issues and crash investigations, including the 2001 terrorist attacks. He also anchored much of CNN's coverage of the war in Iraq and Afghanistan, explaining the intricacies of military aviation techniques and strategy. In 2009, a documentary shot by O'Brien and his wife Sandy called, "Over Africa, Flying Low and Slow with Kenya Wildlife Service," appeared at air shows across the country and in the IMAX theater at the Air & Space Museum in Washington, D.C.

The RNASA Foundation recognized O'Brien with a Space Communicator Award







The first and only watch worn on the moon

#### Hon. Edward Emmett $\star$ **2011 RNASA WELCOME ADDRESS**

CEACHIEVE The RNA-SA Foundation is pleased to have Harris County Judge Edward M. Emmett welcome attendees to the 25th annual awards gala. Emmett has served as Harris County, Texas's top official since March 2007. He also serves on numerous boards and committees, including chairman of the Harris County Juvenile Board, and the Juvenile Detention Alternatives Initiative Executive Steering Committee.

NATIONA

ROTAPL

FORSPI

Emmett attended Bellaire High School. He graduated from Rice University in 1971 with a bachelor of arts degree in economics. In 1974, he graduated from the University of Texas at Austin with a master's of public affair's degree.

A member of the Texas House of Representatives from 1979 to 1987, Emmett was chairman of the Committee on Energy, a member of the Transportation Committee, and represented the state on numerous national committees relating to energy and transportation policy.

In 1989, President George H.



Emmett has a wide breadth of experience in transportation and logistics policy. He was named one of the Top 20 Logistics Professionals by the Logistics Forum in 2003, and the Transportation Clubs International gave him its "Transportation Person of the Year" award in 2005.

He was appointed judge in March, 2007,

elected in 2008, and reelected in 2010. He currently oversees a budget of about \$1.2 billion serving more than 4 million

people in the thirdlargest county in the United States. Emmett also is

director of Harris County's Office of Homeland Security and Emergency Management, a role that took on special significance when Hurricane Ike struck the Gulf Coast in September 2008.

During his State of the Country address in March, Emmet said, "the

current State of the County is financially challenging, but from that challenge can come a clearer focus. ... As a former legislator, I am confident that our state will live up to the words in our state song, 'We are the boldest and grandest.' Now is the time for boldness, so we may, as the song says, 'grow in power and worth, throughout the ages long."

Judge Emmett State of the Country Address

(Photo by Dabfoto Creative/David A. Brown, March 2011)

Emmett and his wife, Gwen, have been married for 35 years and have four children and seven grandchildren.

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

Congratulations to General Kevin P. Chilton, 2011 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.



It's in our power.™

Judge Emmett at flood control meeting (Photo courtesy Harris County)



ratt & Whitney

PrattWhitneyRocketdyne.com

Pratt & Whitney Rocketdyne

DA SARACE ACHIEVEME Col. Steven W. Lindsey, phy to General Chilton. flights, Lindsey was the mission commander on the final this spring.

200 NATIONAL

hometown. He has a BS in engineer- Glenn, Jr. who was then age 77. ing sciences from the USAF Academy. After four years with the 12th Tactical Ohio. He earned a MS in aeronautical airlock. engineering there in 1990. He's also a distinguished graduate and recipient standing test pilot of the USAF Test Pilot School Class 89A.

experimental test pilot, where he was an F-16 Flight Commander. In1993, Lindsey attended Air Command and Staff College at Maxwell AFB, Alabama. Upon graduation in 1994, he SEEK EAGLE Office.



Lindsev during STS-133 (NASA photo)

### Col. Steven W. Lindsey, USAF (Ret.) **2011 NATIONAL SPACE TROPHY PRESENTER**

Selected by NASA in 1995, Lindsey first flew as pilot of Columbia on STS-USAF (Ret.) 87 in 1997. This was the fourth U.S. Miis presenting the crogravity Payload flight. During one of National Space Tro- two EVAs to test space station equipment, Lindsey piloted the first flight of the AER-A veteran of five space Cam Sprint, a free-flying robotic camera.

His second flight was as pilot of flight of Space Shuttle Discovery Discovery on STS-95 in 1998. This 9-day mission included the deployment and retrieval of the Spartan solar-observing Born August 24, 1960, in spacecraft, the Hubble Space Telescope Arcadia, California., Lindsey consid- orbital systems test platform, and the flight ers Temple City, California, to be his of the oldest human in space, Senator John

Lindsey commanded the crew Reconnaissance Squadron at Berg- of STS-104 in July, 2004, a flight of the strom AFB, Texas, he attended gradu- Space Shuttle Atlantis. This tenth mission ate school at the Air Force Institute of to the International Space Station deliv-Technology, Wright-Patterson AFB, ered, installed, and first utilized the Quest with numerous awards throughout

STS-121, the second return-toof the Liethen-Tittle Award as the out- flight test mission after the Columbia accident, was commanded by Lindsey. Flying Discovery in July 2006, the 13-day flight tested new equipment and procedures that In 1990, Lindsey was as- increase the safety of space shuttles, resigned to Eglin AFB, Florida as an paired a rail car on the International Space Station and produced never-before-seen, high-resolution images of the Shuttle during and after its July 4th launch.

Lindsey retired from the Air Force was reassigned to Eglin as an Integrat- in September 2006 and served as chief of ed Product Team leader in the USAF the Astronaut Corps until his assignment as commander of STS-133, the final flight of Discovery. STS-133 launched on Feb-

ruary 24, 2011. The mission transported the logistics carrier, Leonardo, to its permanent docked location on one of the space station's ports. The shuttle also carried the third of four ExPRESS logistics carriers and the humanoid robot, Robonaut. The mission was the 133rd flight of the Space Shuttle Program as well as the 39th and final flight of Discovery, with the orbiter completing a cumulative total of a whole year (365 days) in space when it landed on March 9, 2011.



Lindsey (NASA photo)

Lindsey has been recognized his career, including; the Legion of Merit, Distinguished Flying Cross, Defense Superior Service Medal, Defense Meritorious Service Medal, 4 NASA Space Flight Medals, NASA Outstanding Leadership Medal, NASA Distinguished Service Medal, NASA Exceptional Service Medal, Air Force Meritorious Service Medal, Air Force Commendation Medal, Air Force Achievement Medal, and Aerial Achievement Medal. He's a member of the Society of Experimental Test Pilots, USAF Academy Association of Graduates, and the Association of Space Explorers.

Lindsev is married to the former Diane Renee Trujillo. They have three children. He enjoys reading, skiing, scuba diving, windsurfing, camping, mountain biking, and dirt biking.

# **TEST PILOT.**

# **ASTRONAUT.**

**GENERAL**.

# **ROLE MODEL.**

For his decades of service and leadership, and invaluable contributions to America's security and space programs, Boeing is proud to congratulate General Kevin P. Chilton on receiving the 2011 National Space Trophy.



## Stephanie D. Wilson **2011 RNASA STELLAR AWARD PRESENTER**

CEACHIEVER Astronaut Stephanie D. Wilson present Stellar Awards this year. Discovery.

NATIONA

ROTAPL

FORSP

Born in 1966 in Boston, Massachusetts, Wilson earned her B.S. in dition 13 crew member Thomas Reengineering from Harvard University iter to the station. Discovery landed in 1988. She worked for two years for the former Martin Marietta Astronautics Group in Denver, Colorado, As a loads and dynamics engineer for the ery, STS-120, launched on October Titan IV rocket, Wilson was responsible for performing coupled loads Harmony node to the ISS and carried analyses for the launch vehicle and payloads during flights. Wilson left Martin Marietta in 1990 to attend the from the ISS. During the flight, the University of Texas where she earned her MS in engineering science in the Z1 (central) truss to the end of 1992

as a member of the Attitude and Articulation Control Subsystem for the Galileo spacecraft at the Jet Propul-California. Wilson also supported the Interferometery Technology Program as a member of the Integrated Modeling Team.

Wilson became the second African KSC on November 7, 2007.



Wilson during STS-131 (NASA photo)

T h e American woman to fly in space. Her R N A S A first flight on Discovery was the sec-Foundation is ond return-to-flight test flight, STSpleased to have 121, commanded by Steve Lindsey that launched on July 4, 2006. Wilson supported robotic arm operations for vehicle inspection, multi-purpose lo-She is a veteran of three gistics module (MPLM) installation, flights on the Space Shuttle and EVAs. She also was responsible for the transfer of more than 15,000 pounds of supplies and equipment to the ISS. The mission delivered Expeon July 17, 2006.

Her second flight on Discov-23, 2007. The flight delivered the Expedition 16 crew member Dan P6 solar array was re-located from the port side. During the re-deploy of the 27,000 pounds of supplies and equiparray, the panels snagged and were dam- ment, including a tank full of ammonia Wilson then took a position aged. An unplanned spacewalk was successfully performed to repair the array.

Wilson was again responsible for sion Laboratory (JPL) in Pasadena, robotic arm operations and also served as the flight engineer. She was one of a record of four women in space at the same to the ISS) was packed with more than time, including ISS Commander Peggy 6,000 pounds of hardware and sci-Whitson, Shuttle Commander Pam Mel- ence results and returned to Earth in roy, and Wilson's fellow Mission Special- Discovery's payload bay on April 20, Selected by NASA in 1996, ist Wendy Lawrence. Discovery landed at 2010.

on STS-131, which

launched at night on

April 5, 2010. She

was again one of four women in space, in-

cluding her fellow

Mission Specialists

Lindenburger, Naoko

Yamazaki, and Expe-

dition 23 crewmember Tracy Caldwell

Dorothy

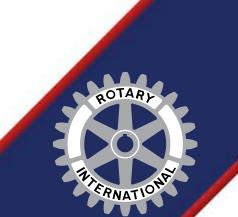
Metcalf-



Wilson (NASA photo)

Dyson. The flight delivered more than that required three spacewalks and robotics to install it, new crew sleeping quarters, and experiment racks. Wilson was responsible for robotics and EVA support. The Leonardo MPLM (which is now permanently attached

A member of AIAA, Wil-Wilson headed son has logged 42 days in space. to the ISS onboard She enjoys snow skiing, muthe Space Shuttle Dis- sic, stamp collecting, and (of covery a third time course) traveling.





MEITechnologies (MEIT) also commends its Stellar Award nominees, and all nominees, for their contribution to our nation's space advancement. Thank you, RNASA, for 25 years of recognizing outstanding Americans dedicated to space exploration.

Visit us online at www.meitechinc.com



L-3 STRATIS extends its warmest congratulations to General Kevin P. Chilton, winner of the National Space Trophy, for his extraordinary commitment to our nation's space program.

We salute all of the 2011 Stellar Award nominees and winners for their dedication to the mission. L-3 is proud to join the space community in thanking RNASA for its 25 years of honoring the "unsung heroes" of the American space program.

L-3 STRATIS has supported the NASA mission since 1969. Learn more by visiting www.L-3stratis.com/nasa.

STRATIS

MEI Technologies proudly congratulates 2011 National Space Trophy recipient,

# **General Kevin Chilton**

**MEIT SALUTES YOU** 



### EXTRAORDINARY COMMITMENT DESERVES CONGRATULATIONS



L-3com.com

The RNA-CEACHIEVE on the International Space Station.

NATIONA

ROTARL

FOR

1963 in Cheverly, Maryland and grew vices in 2001 to teach middle school up in nearby Bowie. He earned his B.S. mathematics and science at the Interfrom Frostburg State University, Mary- national School of Kuala Kencana in land, in 1985. He took a position as an West Papua, Indonesia. He accepted a oceanographic technician at the United similar teaching position in 2003 at the States Naval Academy in 1987 while American International School of Buhe worked on his teacher certification charest in Bucharest, Romania. from Frostburg. Upon completing his certification in 1988, Arnold became a science teacher at John Hanson Middle ist educator by NASA in May 2004, School in Waldorf, Maryland.

ducted research in biostratigraphy at tegration Team in the Space Station the Horn Point Environmental Labo- Branch, working on technical issues ratory in Cambridge, Maryland. He with JAXA hardware. In August 2007, earned a master's in marine, estuarine Arnold completed aquanaut training and environmental science from the and served as a mission specialist on University of Maryland in 1992. He the NASA Extreme Environment Misthen spent a year working in marine sion Objectives (NEEMO) mission 13. science including time at the Cape Cod During the 10-day mission, the crew of National Seashore and aboard a sail NEEMO XIII conducted experiments training/oceanographic vessel head- in and around Aquarius, the world's quartered in Woods Hole, Massachu- only undersea laboratory. setts.



Arnold during STS-131 (NASA photo)

#### **Richard R. Arnold II** \*\*\*\* **2011 RNASA STELLAR AWARD PRESENTER**

In 1993, Arnold joined the SA Founda- faculty at the Casablanca Amerition welcomes can School in Casablanca, Morocco, Astronaut Rich- teaching college preparatory biology ard R. Arnold II as a and marine environmental science. Stellar Award presenter During that time, he presented workthis year. Teacher, Aqua- shops at various international educanaut, and Astronaut Ricky tion conferences focusing on science Arnold has braved teaching teaching methodologies. In 1996, he middle school science in the U.S. and his family moved to Riyadh, Saudi and abroad, lived underwater for ten Arabia, where he was employed as a days, and completed two spacewalks middle and high school science teacher and science department chair at the American International School. Arnold Arnold was born in November was hired by International School Ser-

Selected as a mission specialhe completed astronaut candidate training in February 2006. He was While teaching, Arnold con- initially assigned to the Hardware In-

> Arnold's first spaceflight was onboard the Space Shuttle Discovery on STS-119 in March, 2009. The launch on March 15 was the 125th of the Shuttle Program guitar. and the 36th for Discovery. The flight delivered the fourth starboard integrated truss segment, S6, and the fourth set of solar arrays and batteries to the International



Arnold (NASA photo)

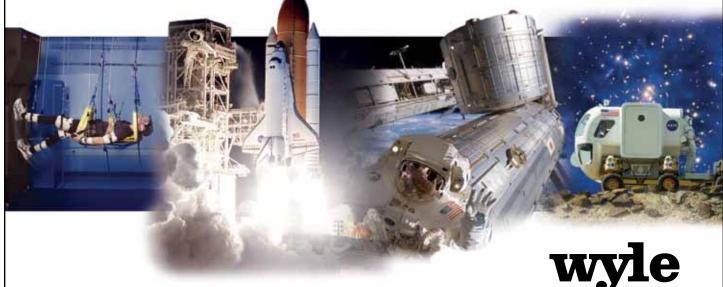
Space Station. Japanese Astronaut Koichi Wakata rode up on Discovery and took the place of Expedition 18 Flight Engineer Sandra Magnus who returned with the STS-119 crew. The shuttle flight, commanded by Lee Archambault and piloted by Tony Antonelli, included Mission Specialists John Phillips as well as Arnold's fellow spacewalkers, Steven Swanson and Educator Astronaut Joseph Acaba. Arnold performed two spacewalks totaling 12 hours and 34 minutes. Discovery landed at Kennedy Space Center on March 28, 2009 after twelve days in space. A few months later, Arnold was the guest of honor and delivered the commencement speech to the High School Class of 2009 at Bowie High School.

Arnold lives in Houston with his wife Eloise Miller. They have two daughters. Arnold enjoys running, fishing, reading, kayaking, bicycling, ornithology, paleontology, and playing the

achievements to the military and space programs.



### Congratulations to General Chilton the 2011 National Space Trophy Winner



Decades of experience leading the integration of life sciences and engineering for human health and performance for NASA and beyond.



Contact Wyle at www.wyle.com

ARY NATIONAL RD 25<sup>th</sup> TOR SHOP CEACHIEVENER

#### Rotary National Award for Space Achievement Foundation $\bigstar \bigstar \bigstar \bigstar$ **BOARD OF ADVISORS**

George W.S.Abbey **Jim Albaugh** Arnold D.Aldrich Edward C.Aldridge Jr. Neil A. Armstrong im Asker Dr. Norman R. Augustine Virginia A. Barnes Capt. Daniel Brandenstein, USN (Ret.) Col. Robert D. Cabana, USMC (Ret.) Dr. Donald J. Campbell Jeffrey E. Carr Mark E. Carreau Capt. Eugene Cernan, USN (Ret.) Capt. Michael L. Coats, USN (Ret.) Col. Eileen M. Collins, USAF (Ret.) Col. Richard O. Covey, USAF (Ret.) Capt. Robert Crippen, USN (Ret.) Capt. Frank L. Culbertson Jr., USN (Ret.) Robert Dickman Ronald D. Dittemore Maj. Gen. Joe H. Engle, ANG/USAF (Ret.) Hon. Donald Fugua William H. Gerstenmaier Hon. John H. Glenn Jr. Dr. Gerald D. Griffin Dr. Michael D. Griffin Henry W. Hartsfield lim Hartz I. Milt Heflin Cynthia Hendershot Shepard W. Hill

Tommy W. Holloway Neil B. Hutchinson Hon. Kay Bailey Hutchison Sandra G. Johnson John C. Karas Dr. Joseph P. Kerwin Dr. Christopher C. Kraft Jr. Eugene F. Kranz Debbie Kropp Dr. Glynn S. Lunney **Bob Mitchell** Dr. George E. Mueller Dr. George C. Nield Miles O'Brien William W. Parsons Brig. Gen. J. Gregory Pavlovich Thomas B. Pickens III Elliot G. Pulham William F. Readdy Capt. Kenneth S. Reightler Jr., USN (Ret.) Hon. Harrison H. Schmitt Col. Brewster H. Shaw, USAF (Ret.) W.Tom Short Lt. Gen. Thomas P. Stafford, USAF (Ret.) Dr. William A. Staples Richard D. Stephens Randy Stone V.Adm. Richard H. Truly, USN (Ret.) Dr. William Vantine **George Whitesides** S. John Wilkins III Capt. John W. Young, USN (Ret.)

#### **CORPORATE TABLE SPONSORS**

The Aerospace Corp.

Alliant Techystems, Inc. (ATK)

**ARES** Corporation

Ball Aerospace & Technologies Corp.

Barrios Technology

Bastion Technologies, Inc.

The Boeing Company

**Booz Allen Hamilton** 

Draper Laboratory

GeoControl Systems, Inc.

GHG Corporation

Hamilton Sundstrand

Honeywell

acobs

L-3 STRATIS

Lockheed Martin

ManTech International

MEI Technologies, Inc.

Oceaneering Space Systems

Omega Watch

Orbital Sciences Corp.

Pratt & Whitney Rocketdyne

SAIC

SpaceX

Stinger Ghaffarian Technologies (SGT)

TechTrans International, Inc. UHCL School of Business

United Space Alliance

Wyle Integrated Science &

Engineering

ARES Corp. Alliant Techystems, Inc. (ATK) **Booz Allen Hamilton** Hamilton Sundstrand acobs L-3 STRATIS Lockheed Martin ManTech International MEI Technologies, Inc. **Omega Watches** Orbital Sciences Corp. Pratt & Whitney Rocketdyne SAIC Space City Films The Boeing Company United Space Alliance Wyle Integrated Science & Engineering

**GENERAL CHILTON'S** PORTRAIT SAIC

**STELLAR AWARD** TROPHIES Alliant Techsystems, Inc. (ATK)

**STELLAR AWARD PENS Fisher Space Pen** 

The RNASA Board of Advisors nominates and elects the winner of the National Space Trophy (photo on left). These distinguished volunteers are leaders in government, industry, and the media, and are intimately involved with the space program.

Night launch of STS-76 March 22, 1996. (NASA photo)

### Rotary National Award for Space Achievement Foundation $\overrightarrow{x}$ $\overrightarrow{x}$ $\overrightarrow{x}$ 2011 SPONSORS

#### **PROGRAM BOOK SPONSORS**

**OMEGA WATCH** Omega Watch

#### **STELLAR AWARD EVALUATION PANEL**

Arnold D.Aldrich Dr. Christopher C. Kraft Jr. Dr. Glynn S. Lunney

#### **SPECIAL THANKS**

leffrey Carr Irene Chan Craig Insurance David Hamblin, CPA Hyatt Regency Houston **MRI** Technologies NASA Johnson Space Center United Space Alliance

#### CREDITS

Program book writing/editing by Marianne Dyson Printing by MinuteMan Press/Bay Area Multimedia by Space City Films Cover art by Pat Rawlings/SAIC Art & design by Lindsey Cousins/ Bayside Graphics



7:00 WELCOME Rodolfo González, Chairman, RNASA Foundation Honorable Edward Emmett, Harris County Judge

PRESENTATION OF THE COLORS Clear Creek High School Army JROTC Color Guard

NATIONAL ANTHEM Bianca Higgins, Clear Springs High School, CCISD "So You Think You Can Sing" Winner

INVOCATION Father Vincent Nguyen, Pastor, St. Claire of Assisi Catholic Church, Clear Lake

DINNER

8:15 YEAR-IN-REVIEW VIDEO Space City Films

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

MULTIMEDIA PRODUCTION Space City Films

PRESENTATION OF STELLAR AWARDS Stephanie D.Wilson, NASA Astronaut Richard R. Arnold II, NASA Astronaut

PRESENTATION OF NATIONAL SPACE TROPHY to GENERAL CHILTON Col. Steven. W. Lindsey USAF (Ret.), NASA Astronaut

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

RECOGNITION OF SPONSORS AND CLOSING



ears 1987-2011 National Space Trophy Recipients

Starting at 12 o'clock (clockwise): 2011 General Kevin P. Chilton 2010 William H Gerstenmaier 2009 Dr. Michael D. Griffin 2008 Capt. Eugene Cernan, USN (Ret.) 2007 Eugene F."Gene" Kranz 2006 Col. Eileen Collins, USAF (Ret.) 2005 Dr. Glynn S. Lunney 2004 Neil A. Armstrong 2003 Roy S. Estess 2002 Dr. George E. Mueller 2001 Tommy Holloway 2000 Capt. John W.Young, USN (Ret.) 1999 Dr. Christopher C. Kraft Jr. 1998 President George H.W. Bush 1997 George W.S. Abbey 1996 Capt. Robert L. Crippen, USN (Ret.) **1995** Daniel Goldin **1994** Edward C. "Pete" Aldridge, Jr. **1993** Lt. Gen. Thomas Stafford, USAF (Ret.) **1992** Dr. Norman R. Augustine **1991** Dr. Aaron Cohen 1990 Dr. Lew Allen 1989 V.Adm. Richard Truly, USN (Ret.) **1988** Hon. Don Fuqua **1987** Dr. Maxime Faget

6:00 RECEPTION Victoria Reva, pianist

## NATIONA ROTAPL

FORSPI

#### **RNASA FOUNDATION** \*\*\*\* COMMITTEE

CEACHIEVE The Rotary National Award for Space Achievement Foundation is proud to be celebrating the 25th anniversary of recognizing the people whose exemplary work in the field of space exploration has had, and will continue to have, lasting benefits to the nation and world.

Established by the Space Center Rotary Club, the RNASA Foundation presented the first National Space Trophy to Dr. Maxine Faget in 1987. The names and images of the first 25 years worth of winners appears on page 18. Individuals are nominated by leaders in government, industry, and professional organizations. The winner is then selected by a vote of the Foundation's Board of Advisors (page 16) that includes current and former NASA center directors, leaders of aerospace corporations, space journalists, and previous award recipients. BoA members can be identified by their red lapel ribbons. The confidential votes are tabulated by an independent accounting firm.

Since 1989, the RNASA Foundation has also recognized the "unsung heroes" of the space program with Stellar Awards (pages 24-33) for individual and team achievements. Space Communicator Awards have been presented six times. Three individuals, Dr. Robert Gilruth (1992), Capt. John Young, USN (Ret.) (1997), and Walter Cronkite (1999) were honored with Corona Awards for superior lifetime achievements.

The RNASA Foundation is a nonprofit organization that depends on corporate sponsorships (page 17) to create an event that has become the "Academy Awards of Space Achievement." Excess funds remaining after event expenses are donated to spacerelated educational programs. Past recipients include the National Flight Academy adjacent to the National Museum of Naval Aviation in Pensacola.



**RNASA Foundation Committee. 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, David Coney, Jess Davis, Steven Fredrickson, Jacinda Green, Miguel Hernandez, Nicole Kem, Tim Kropp, Diana Norman, Branelle Rodriguez, and Lori Wheaton. (Photo By J. Pamela, 2011)

Florida; Parks College of Engineering at St. Louis University; Purdue; the University of Houston-Clear Lake; the U.S. Space and Rocket Center Foundation to support Space Camp; and the Wings of the Eagle Foundation.

Since 1999, the RNASA Foundation has also supported the Texas High School Aerospace Scholars program with donations that allow more students to participate. Students are nominated by their Texas state legislator through a competitive process, and then complete ten on-line lessons to qualify for a week-long summer workshop at Johnson Space Center. More than 9,000 students have participated in the program which includes briefings by engineers, scientists, and astronauts; and then working as members of teams to design realistic space settlements.

The Foundation is grateful for the enthusiasm and support it has received during its 25-year history. The support from the aerospace industry, educational organizations, NASA, and the Department of Defense assures the continued recognition of outstanding achievements in space exploration and support of the next generation of space explorers.



Congratulations **Kevin Chilton** 

**Recipient of The Rotary National Award** for Space Achievement

Ready for what's next. To achieve success is admirable, but to contribute to the prosperity and advancement of space and cyberspace operations is extraordinary. Booz Allen Hamilton, a leading strategy and technology consulting firm, is proud to recognize General Kevin Chilton as the recipient of The Rotary National Award for Space Achievement. We applaud his extraordinary contributions and achievements to successfully advance space and cyberspace operations.

Ready for what's next. www.boozallen.com/defense

### **General Kevin P. "Chilli" Chilton**

Booz | Allen | Hamilton

delivering results that endure

APAT NATIONAL FOR CEACHIEVE

> Christopher C. Kraft Jr., Glynn S. Lunney, Arnold D. Aldrich (RNASA)

are solicited each year from government, military, and industry leaders in four categories. The Foundation received 29 early career, 51 mid-career, 35 late career, and 36 team nominations. NASA nominated 19 individuals and seven teams, the USAF nominated five individuals and four teams, and industry nominated 91 individuals and 25 teams.

The nominations are reviewed by a Stellar Awards Evaluation Panel led by the legendary Dr. Christopher C. Kraft, Jr. Kraft has been involved with the RNASA awards from the beginning, as a member of the RNASA Board of Advisors, and has served as a **RNASA Stellar Award evaluator since** 1997.

From Phoebus, Virginia, 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. He created the engineering and operations organization that designed and controlled the first human missions.

Dr. Kraft was the first flight director, and held that position for all of Mercury, and the first seven flights

The RNASA Foundation congratu- through Apollo 12. He became the dilates the 151 Stellar Award nominees rector of what is now Johnson Space for 2011. "We had a record number of Center after its first director, Robert nominees this year," reported Jennifer Gilruth, transferred to NASA Head-Mitchell, the RNASA Stellar Awards quarters in 1971. Kraft played a vital Committee chairman. The nominations role in the success of the final Apollo missions and the first Space Shuttle flights.

> He retired in 1982 and 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, was published in 2001 and was a New York Times bestseller. Kraft has received numerous awards, including the 1999 National Space Trophy.

The 2005 National Space Trophy winner, Apollo flight director and Shuttle manager Dr. Glynn S. Lunney, served for the eighth year on the Stellar Awards Evaluation Panel.

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 of Gemini. He led Flight Operations 1968. He received an honorary doctor-

ate 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.

Another Space Task Group veteran, Arnold Aldrich, served for his third year on the RNASA Stellar Award Evaluation Committee.

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

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

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 congratulate all the Stellar Service Medal.

Prior to this evening's banquet, Stellar Awards nominees (wearing blue ribbons) enjoyed a behind-the-scenes tour of Johnson Space Center and were recognized at a special luncheon at the Nassau Bay Hilton. STS-125 Hubble Servicing Mission pilot Captain Gregory C. ("Ray J") Johnson, USN (Ret.) was the featured luncheon speaker. After his presentation, the nominees received certificates and commemo-



**KRAFT, LUNNEY, ALDRICH** \*\*\*\* **2011 STELLAR EVALUATION PANEL** 

> ovation You Can Count On® Project manager during development of Space Technology and, later, AA for rative RNASA Fisher Space Pens. Space Shuttles Discovery and Atlantis;

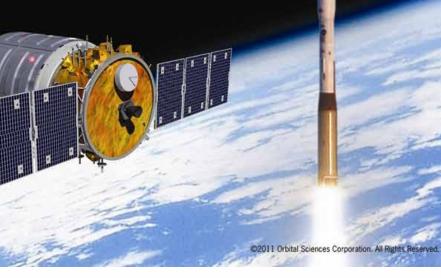
Space Systems Development.

joined Lockheed Missiles and Space the greatest promise for furthering fu-Company in Sunnyvale, California. He ture activities in space, the extent to was vice president, Commercial Space Business Development and then vice president, Strategic Technology Plan- to which the nominee meets the goal of ning. With the merger of Lockheed and Martin Marietta, he became director of



Capt. Gregory C. Johnson, USN (Ret.) (NASA photo)

**Orbital Sciences Corporation** Congratulates General Kevin P. Chilton for his many outstanding achievements and years of service to his country, as well as to all Stellar Award Nominees and winners



Stellar winners are selected In 1994, Aldrich left NASA and based on which accomplishments hold which the nominee played a key role in the accomplishment, and the extent recognizing "unsung heroes."

> The winners will receive engraved marble trophies this evening from Stellar Award presenters Astronauts Stephanie D. Wilson and Richard R. Arnold, II. The RNA-SA Foundation is pleased to Award nominees and winners for their outstanding accomplishments.

### Early Career Category **2011 RNASA STELLAR AWARD NOMINEES**

Anthony P. Bartolone of NASA Kennedy Space Center - Outstanding leadership to the Space Shuttle Program as the external tank/solid

rocket booster lead project engineer, integrating a large multi-center team to minimize impacts to shuttle launch operations.

NATIONA

CEACHIEVE

ROTARL

Kevin R. Beaulieu of Barrios Tech**nology** - Innovative application and exceptional technical knowledge in the area of image processing and analysis providing safety assurance to astronaut crews.

Andrew C. Clifton of Lockheed Martin Space Systems Company -Exceptional group leadership and effective NASA customer interface in maximizing value and meeting Orion system collaboration for crewed landmilestones.

nev Rocketdyne - Successful early career progression from expert structural engineer to rocket engine program analysis coordinator.

Ryan L. Dardar of Lockheed Martin Space Systems Company - Exceptional performance on the Orion Crew Module Team in performing design, analysis and proof testing of the Orion ground test article.

Alton Davenport of Lockheed Martin Space Systems Company - Outstanding dedication to delivering products of the highest standard on the Orion Crew Module Structures Team.

Dr. Kevin Duda of Draper Laboratory - Excellence and innovation in research and development of human ing systems.

Brian R. Corriveau of Pratt & Whit- Lee F. Echerd of ARES Corporation - Exceptional dedication and commitment to preserving United States access to space and avenues for International Space Station (ISS) resupply.

> Michelle M. Gonzalez of ATK - Outstanding achievements on the deceleration system for Ares I and fast track qualification of the booster separation motors, enabling the advancement of human spaceflight.

**Stephan Higgs of Oceaneering Space** Systems - Outstanding leadership, unwavering attention to detail and exemplary work ethic in managing the mission support and crew training associated with extravehicular activity space hardware.

Robert L. Hirsh of NASA Johnson Space Center - Outstanding contributions to the advancement of autonomous systems, software, and robotics for human space exploration.



2010 Stellar Awards Winners in Early Career Category L to R: Astronaut Michael Foreman (presenting), White, Vyoral, Putnam, Peterson, Prouty, Kelly, Astronaut Megan McArthur (presenting). (NASA, 2010)

#### **Early Career Category Continued** \*\*\*\* **2011 RNASA STELLAR AWARD NOMINEES**

States Air Force - Exceptional technical ability applied to the design of innovative measurement apparatuses for characterizing charge migration and material degradation and their effects on mission critical spacecraft materials.

Capt. Patrick R. Jackson of the United States Air Force - Extraordinary leadership in completing remaining system engineering tasks on the next generation Global Positioning System satellite, ensuring improved capabilities and reliable accurate navigation for all users for years to come.

**Rafael Jimenez of NASA Johnson** Space Center - Exceptional innovation and technical excellence in creating an integrated propulsion system testbed utilizing a commercial/government partnership.

Tim A. Kassebaum of J and P Technologies - Significant technical contributions to the Human Spaceflight Program as a systems safety engineer monitoring all aspects of the shuttle propulsion system.

Saman Kholdebarin of MEI Technologies - Performance surpassing expectations as development lead for critical test equipment of the Thermal Infrared Sensor Program.

Brett E. Killian of Lockheed Martin Space Systems Company - Outstanding support and excellent finite element stress analysis of the Orion Program crew module.

Dr. Scott L. Klempner of the United States Air Force - Exceptional leadership during the delivery and launch of Advanced Extremely High Frequency Flight 1 (AEHF-1) and contributions to the AEHF-1 orbital recovery plan following a major anomaly.

#### John H. Lawlor of Lockheed Martin

- Technical excellence in the development of the Orion crew impact attenuation system to ensure crew safety and optimum performance.

Joshua L. Hodges of the United Adele Luta of Barrios Technology - Andrea Wilkinson of Hamilton Exceptional contributions in extra vehicular activity training and flight operations during a very aggressive time period in space operations history.

> Michael Marando of Pratt & Whitney Rocketdyne - Outstanding efforts to ensure safe flight of space shuttle main engines.

> Lindsay A. Powell of The Boeing Company - Exceptional skill, professionalism and dedication on the Space Shuttle Program Ascent Loads Team.

Sofia I. Russi of the United States Air Force - Distinguished service as officer in charge of training for USAF Eastern Range Atlas V Launch Operations, resulting in nine successful launches, and as the current operations lead for the USAF's only end-to-end intercontinental ballistic missile engineering test facility.

Susan V. Schuh of MEI Technologies, Inc. - Exceptional dedication and outstanding effort producing the first searchable archived ISS Crew Comments Database established at NASA.

Stephanie A. Sipila of NASA Johnson Space Center - Sustained leadership and superior efforts to support the future of the ISS through successful extravehicular activity.

Ryan P. Starn of L-3 Communications - Exceptional contributions to NASA Space Station Program regenerative life support system software reliability and robustness and development of innovative system software modeling augmenting independent verification and validation methods.

Jerald A. Webber of The Boeing **Company** - Excellence and innovation in development and implementation of improved shuttle propulsion systems modeling and analysis tools, reducing engineering analysis time and improving flight safety.

Sundstrand - Key contributions to return-to-flight efforts for shuttle mechanical flight controls, and leadership of shuttle flight support.

Stephen D. Zenter of United Space Alliance - Outstanding efforts as the lead on-board data interfaces and network flight controller for ISS Flight ULF-4 and Increment 23/24.



The launch of Endeavour on STS-59, with Kevin Chilton as pilot, was captured by Karen Dillon of San Jose, California, who observed the liftoff from the NASA causeway in Florida on April 9, 1994. Other crewmembers onboard were Sidney Gutierrez (Commander), Linda Godwin, Jay Apt, Michael Clifford, and Thomas Jones. (NASA photo)

CEACHIEVE Barry of Vision Analytics, Inc. - Outstanding leadership and critical capability to human spaceflight strategic assessments.

NATIONA

ROTARL

FOR

**Olga Bauman of TechTrans** International - Outstanding leadership of the Johnson Space Center Language Education Center, development of innovative mission-oriented language training, and seamless coordination with affiliates at Gagarin Cosmonaut Training Center, ensuring that ISS crews have the language skills needed to work safely and successfully on orbit.

Thomas E. Booth of Pratt & Whitnev Rocketdyne - Exceptional leadership and dedication in data analysis and performance prediction for the RS-68A development and certification program.

Christopher G. Boree of Lockheed Martin Space Systems Company - Exceptional leadership, technical excellence and dedication in the development of the Attitude Control Motor Valve Control System and Launch Abort Systems (LAS) instrumentation culminating in the successful flight test of the Orion LAS for Pad Abort 1.

Marc R. Bouffard of Pratt & Whit**nev Rocketdyne -** Outstanding support and commitment to the Space Shuttle Main Engine Program.

LeRoy E. Cain of NASA Johnson **Space Center -** Outstanding leadership as Chairman of the Space Shuttle Program Mission Management Team.

Gabrielle C. Cockrell of Wyle Integrated Science and Engineering Group - Pioneering approaches to enhance mission success and minimize ISS on-orbit crewmember concerns for their families back home by ensuring that both crewmembers and their families receive exceptional support.

### Mid-Career Category **2011 RNASA STELLAR AWARD NOMINEES**

**Rocketdyne** - Outstanding engineering expertise in assuring mission readiness of the RD-180 booster engine for both Atlas III and Atlas V programs.

**Dawn M. Diecidue-Conners of Lock**heed Martin - Outstanding and sustained service in execution of Space Shuttle Program external tank certificate-of-flight readiness requirements.

Michael S. Dimel of The Boeing Com**pany** - Noteworthy contributions to the Space Shuttle Program as Mission Support Room Team leader, including extensive knowledge of the space shuttle systems and its operations.

James M. Engle of The Boeing Company - Outstanding leadership in implementing systems engineering and integration processes and techniques in support of the Space Shuttle Program.

Frances Ferris of The Boeing Company - Outstanding leadership in addressing technical issues associated with space shuttle orbiter vehicle design and operations.

Randy J. Fitz of ATK - Personal dedication and accomplishments instrumental in the successful production of reusable solid rocket motor (RSRM) and RSRM vehicle energetic components and hardware.

James A. Galbraith of Oceaneering Space Systems - Unparalleled knowledge of human spacecraft materials and processes and related testing, analysis, investigation and approval for human rated spacecraft hardware.

Gregory J. Gentry of The Boeing **Company** - Outstanding support to the Space Station Program for design and operation of the environmental control and life support system.

Shawn M Greenwell of NASA Kennedy Space Center - Superior leadership and unmatched dedication to the Space Shuttle Program integrating a large multidiscipline launch team to ensure the safe and successful processing and launching of the space shuttle fleet.

Rebecca Scott Connally of Pratt & Whitney Michelle B. Guillot of Lockheed Martin Space Systems Company - Exceptional accomplishments in development and implementation of thermal protection systems on the space shuttle external tank.

> Jennifer P. Hall of United Space Alliance - Outstanding dedication and leadership contributions to space shuttle operations in support of successful human spaceflight.

> Kenneth A. Head of Pratt & Whitney Rocketdyne - Exceptional support to the Space Shuttle Main Engine Program including technical knowledge of high pressure turbomachinery, turbine aerodynamics, secondary flow and thermal analysis.

> Mark Jackson of Draper Laboratory -Excellence in the development and integration of guidance, navigation and control systems for the Orion crew vehicle.

> **Robert P. Janney of Wyle Integrated** Science and Engineering - Successful leadership of the evolution of biomedical flight controllers and medical operations support for shuttle and International Space Station (ISS) from a back-roomonly support function to a critical element of the Mission Control Team.

> Scott Johnson of NASA Johnson Space Center - Exceptional leadership, commitment to teamwork, and dedication to professional excellence resulting in safe and successful space shuttle missions.

> Jennifer L. Kimball of United Space Alliance - Outstanding leadership of the U.S. and Russian Guidance, Navigation and Control Flight Control Teams supporting Space Station Flight Operations.

> Anne Y. Kotake of Pratt & Whitney Rocketdyne - Outstanding support to the successful certification of the RS-68A engine system.

Kenneth D. Kueny of Orbital Sciences **Corporation** - Extraordinary efforts to develop a suite of simulators for software development and integration with the ISS.



2010 Stellar Awards Winners in Middle Career Category L to R: Astronaut Megan McArthur (presenting), Mason, Kakuska, Fitzgerald, Campbell, Bell, Menkin, Wiley, Willcoxon, Zeitler, and Astronaut Michael Foreman (presenting) (NASA, 2010)

shall Space Flight Center - Exceptional contributions and nationally recognized expertise in the area of high performance nonmetallic materials and processes.

Terry C. Lee of Lockheed Martin Space Systems Company - Outstanding leadership and oversight of the shuttle external tank build activities in Final Assembly/B420 Test and Checkout.

Donn A. Liddle of MEI Technologies, Inc. - Demonstrated technically gifted and skilled professional leadership of the NASA Johnson Space Center Photogrammetry team/Image Science and Analysis Group.

Gregory Loe of Honeywell - Outstanding technical excellence in development and implementation of entry flight control system in support of Orion crew module design.

**Ricardo A. Machin of NASA John**son Space Center - Sustained demonstration of uncompromising technical excellence and exceptional leadership in support of safe human spaceflight.

ration - Outstanding leadership and technical excellence in large scale integrated hazard analysis for human spaceflight.

Manuel Mauricio of Jacobs Technology - Exceptional service developing state-of-the-art spaceflight systems for NASA and international partners at the Johnson Space Center.

Michelle L. Meerscheidt of MEI Technologies, Inc. - Exceptional and expert contributions to space shuttle propulsion testing and safety programs.

Alicia C Mendoza of NASA Kennedy Space Center - Exceptional leadership of the NASA Launch Vehicle Processing Directorate to implement the Agency's goal of safe completion of the Space Shuttle Program while helping lead the nation's Space Program into the future. Katrien L. Morgan of ARES Corporation - Exemplary contributions to the

development of future visiting vehicle requirements to enable successful integration with the ISS.

Matthew D. Lansing of NASA Mar- Michael J. Massie of ARES Corpo- William H. Muddle of Pratt & Whitney Rocketdyne - Outstanding dedication, passion, and technical excellence in support of America's Human Spaceflight Program.

> Peter P. Nickolenko of NASA Kennedy Space Center - Outstanding leadership and unwavering dedication to the Space Shuttle Program.

> Matthew Owens of MEI Technologies - Significant contributions to the Thermal Infrared Sensor Project including multiple field programmable gate array designs.

> > cont. next page

APAY NATIONAL FOR CEACHIEVE cont. from previous page

> Srikanth Parvathaneni of ATK - Extraordinary leadership of safety and quality, achieving results under the intense operational demands of the launch site while maintaining exceptional safety and quality standards.

Timothy W. Reith of The Boeing Company - Outstanding leadership in addressing technical issues associated with space shuttle orbiter vehicle design and operations.

Daniel J. Rybicki of Jacobs Engi**neering** - Exceptional contributions. hard work, and selfless dedication to ensuring the successful development and manufacturing of spaceflight hardware.

Darren J. Samplatsky of Hamilton Sundstrand - Outstanding support of the NASA's Human Spaceflight Program through sound judgment and uncompromising commitment to mission success in technical leadership of the oxygen generation assembly and Sabatier life support systems.

#### **Mid-Career Category Continued** \*\*\*\* **2011 RNASA STELLAR AWARD NOMINEES**

Larry N. Sikes of SAIC - Crucial contributions in establishing the rapid integration and test facility as a world class laboratory for the agency, improving product quality and reliability while mitigating risks by preventing NASA and other agencies from receiving inferior products.

Brian T. Smith of NASA Johnson Space Center - Outstanding dedication and leadership contributing significantly to the success of the International Space Station Program as a lead flight director.

Brian P. Smith of Lockheed Martin -Outstanding contributions to the nation in advancing human-rated spacecraft power systems technology.

Thomas W. Stegman of MEI Technologies - Leadership and technical excellence assuring the DoD Space Test Program Houston 3 payload was successfully delivered and integrated with the ISS on STE-134.

Sujatha Sugavanam of The Boeing **Company** - Innovative advanced analvsis technique to assess random vibration environments of foam-packaged hardware in support of human spaceflight.

and for every winner since 2001.

"I enjoy creating a visual tapestry

that represents the trophy winner's history

and contributions in the field of space,"

Rawlings said. His paintings, digital im-

ages, and designs have appeared in hundreds of magazines, books, TV programs,

Becky J. Thompson of NASA Kennedy Space Center - Outstanding leadership and contributions in support of the shuttle and future programs.

Dr. Edward J. Wassell of MEI Technologies Inc. - Superior contributions advancing micro electro-mechanical systems and detector fabrication processes resulting in positive impacts on quality, scientific data and leading edge innovation.

Maura White of NASA Johnson Space Center - Exemplary support of human spaceflight imagery activities, including tireless support of spaceflight crews in the creation, collection, delivery and exhibition of ISS and Space Shuttle Program imagery products, contributing significantly to mission success.

Martin J. Wilson of United Space Al**liance** - Leadership, technical expertise and innovation in the development of reusable thermal protection systems to support the Space Shuttle Program.

#### **Pat Rawlings** \*\*\*\* **2011 PROGRAM BOOK COVER ARTIST**

Pat Rawlings (Photo courtesy Rawlings)

Science Applications International Cor- and films (see list at www.patrawlporation (SAIC) sponsored the services ings.com). Rawlings uses computer of renowned space artist Pat Rawlings models, topographical maps, and space and family photos to ensure acto create the original portrait of General Chilton that is on display tonight and is curacy and to explore the connections reproduced on the cover. Rawlings paintbetween extraterrestrial locations, the ed the portrait for the first National Space history of space exploration, and the Trophy winner in 1987, again in 1991, possibilities of tomorrow's technology.

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

### Late Career Category \*\*\*\* **2011 RNASA STELLAR AWARD NOMINEES**



2010 Stellar Awards Winners in Late Career Category L to R: Astronaut Michael Foreman (presenting), Henderson, Kan, Witherup, Clubb, and McArthur (presenting). Hartnett not pictured. (NASA, 2010)

Edward W. Bechtel of Pratt & Whitney Rocketdyne - Outstanding technical leadership and insight in developing combustion device technologies and rocket engine components.

George E. Biggs of ATK - Outstanding technical excellence in the field of avionics development and operations.

Col. John H. Casper of NASA Johnson **Space Center** - Outstanding leadership in solving complex issues for the Space Shuttle Program, including dual docked operations and launch on need strategies.

Fred Clark of Draper Laboratory -Long term history of excellence in applying statistical techniques to the development and verification of rendezvous and proximity operations for NASA missions.

Gary L. Collier of The Boeing Company - Outstanding support, from preliminary design to fleet implementation, of the orbiter boom sensor system, and continued work to ensure its safe usage in flight.

Glen R. Curtis of ATK - Continuous and visionary leadership instrumental in driving fundamental and lasting improvements in reusable solid rocket motor and Ares I processes and systems and flight hardware robustness on the Space Shutand safety.

Ann D. Dorris of United Space Alliance - Outstanding contributions in reconfiguration production innovations and supportability of the International Space Station (ISS) Program.

Michael J. Dunham of The Boeing **Company** - Exemplary leadership of the Space Shuttle Orbiter Stress, Loads, and Dynamics Team, enabling the Space Shuttle Program to fly safely and with confidence since returning to flight.

Bennie Ray Ferrell of Lockheed Martin Space Systems **Company** - Outstanding leadership and commitment demonstrated tle Program.

> cont. next page

APT NATIONAL CEACHIEVE cont. from previous page

> Jose M. Fuentes of SAIC - Outstanding contributions to human spaceflight ensuring the safety and mission success of the extravehicular mobility unit.

Joe D. Gamble of MEI Technologies, **Inc.** - Expert contributions to the Orion Pad Abort 1 drogue parachute oscillation analysis efforts.

Donna L. Herring of United Space Alliance - Visionary and transformational leadership inspiring quality and performance excellence for more than 25 years to the Space Shuttle Program.

Dan E. Jackson of Barrios Technol**ogy** - Extensive history of outstanding operational leadership, technical excellence and innovative solutions dedicated to providing innovative and high quality tools in support of spaceflight operations.

Kevin Jackson of Orbital Sciences Corporation - Distinguished effort to develop an operationally superior and affordable communications suite for the Cygnus autonomous cargo transfer vehicle.

Linda Karanian of Lockheed Martin Space Operations - Untiring dedication and important contributions to U.S. preeminence in human spaceflight through a unique blend of technical knowledge, understanding of the legislative process, and ability to communicate and integrate between diverse groups ranging from corporate executives, other companies, members of Congress, and political staffers.

Dr. Joy Kelly of Jacobs Technology - Demonstrated strong leadership skills and unparalleled technical expertise by significantly improving the quality and safety on the space shuttle, ISS, and other spacecraft, including reduction of safety related risk.

#### Late Career Category Continued \*\*\*\* **2011 RNASA STELLAR AWARD NOMINEES**

Philip Lintereur of The Boeing Com- Donald E. Reed of NASA Johnson pany - Outstanding team leadership and innovative contributions to improving safety and efficiency of fluids and payload processing for NASA's Human Spaceflight Program.

Paul K. McConnaughey of NASA Marshall Space Flight Center - Outstanding dedication to NASA's technical excellence and delivery of complex system solutions vital to America's scientific exploration of space.

Timothy Nalette of Hamilton Sundstrand - Sustained advances in life support air revitalization technologies for the Human Spaceflight Program.

Duc G. Nguyen of Pratt & Whitney Rocketdyne - Nationally recognized expertise in computer modeling and integrated system optimization of rocket propulsion systems.

Sunil Patel of Hamilton Sundstrand - Masterful team guidance and superb technical contributions to Orion power management and distribution.

Gen. Ellen M. Pawlikowski of the United States Air Force, Air Force Research Laboratory - Visionary leadership of defense space flight in service to the United States.

E. Cary Ralston of ATK - Extraordinary leadership and program management achievement in the execution of human space propulsion programs.

Venkat Ramachandran of Lockheed Martin Space Systems Company -Successful leadership and technical excellence in stress analysis instrumental to the development of the Orion Launch Abort System (LAS) for Pad Abort 1, Orion's first fully integrated, and flawless, flight test of the LAS.

Gregory A. Ray of The Boeing Company - Exceptional technical expertise and leadership in positions of increasing responsibility in engineering and management for the Space Shuttle Team.

Space Center - Outstanding leadership, technical expertise, and dedication that contributed to the success of the first integrated flight test of the Orion Launch Abort Vehicle Pad Abort 1.

George Roberts of Pratt & Whitney Rocketdyne - Outstanding dedication, professionalism, and technical excellence in supporting human spaceflight for more than 45 years.

Ned J. Robinson of NASA Johnson **Space Center -** Exemplary service and achievement in system test engineering excellence.

**Christopher T. Rodgers of The Boeing** Company - Outstanding leadership, vision, and dedication during a 38-year career with America's Spaceflight Program.

Brian Saunders of Pratt & Whitney **Rocketdyne** - Significant contributions to NASA's Human Spaceflight Program in the area of embedded safety critical software.

Richard A. Schmidgall of NASA Johnson Space Center - Outstanding dedication, perseverance and attention to detail for contract closeout and transition for the Agency's largest complex contract.

Sarma Susarla of L-3 Communications - Outstanding technical excellence and leadership in improving the ISS flight software and supporting artifacts, and an exemplary career finding solutions for NASĀ.

Roger Wacker of Honeywell - Exceptional comprehension and recognized expertise in the intricate details of the Orion attitude control design.

John G. Welborn of Lockheed Martin Space Systems Company - Outstanding leadership contributions to the Space Shuttle Program.

William Wightman of Oceaneering Space Systems - Stellar design skills and dedication to effective solutions that optimize function, weight, size, reliability. simplicity, risk, and development speed for the U.S. Space Program.

## Team Category **2011 RNASA STELLAR AWARD NOMINEES**

309th Software Maintenance Group Exploration Development Labora-Solar Electro-Optical Network Team of the United States Air Force - Exceptional software support by the 309th Software Maintenance Group Solar Electro-Optical Network Team to advance Air Force solar forecasting.

Constellation Earned Value Management (EVM) Team of Stinger Ghaffarian Technologies, Inc. - Tremendous dedication and expertise demonstrated by the Constellation Program Earned Value Team's successful implementation of EVM for program integration.

ments Team for DoD Air Force Research Laboratory Space Vehicle **Directorate of ARES Corporation -**Excellence in the development of new space weather measurements in the band around the Earth's magnetic field.

**Employee Retention Initiative Team** of NASA Kennedy Space Center - Unprecedented efforts to maintain shuttle employee focus and pride during the critical juncture of the Space Shuttle Program closeout.



**Stellar Award Trophy.** Winners receive a marble trophy similar to the one shown here. (RNASA)

tory Pad Abort 1 Team of Lockheed Martin - Outstanding efforts in support of the Orion Flight Test Article Pad Abort 1 test by successfully developing the testbed used for verification.

External Tank Camera Team of Lockheed Martin - Outstanding teamwork in the development, certification and delivery of the space shuttle external tank cameras successfully flown post-Columbia to enhance crew safety.

**External Tank (ET) Product Support** Team, Kennedy Space Center Operations of Lockheed Martin Space Demonstration and Science Experi- Systems Company - Exemplary demonstrated commitment to mission success and operational excellence during ET-137 / STS-133 repair for flight.

> **GENIE** (Guidance Embedded Navigator Integration Enviornment) Team of Draper Laboratory - Rapid development, integration and flight test of the GENIE flight system to demonstrate autonomous guidance and navigation technologies for precision landing.

Hardware Software Integration of The Boeing Company - Exemplary hardware/software integration and preflight testing of the Japan Aerospace Exploration Agency H-II Transfer Vehicle and the European Space Agency Automated Transfer Vehicle-2.

Hypersonic Combined Test Force of the United States Air Force - Significant contributions to future spaceflight by the Hypersonic Combined Test Force in flight testing the X-51A Scramjet and X-37 orbital test vehicles.

Insulation Development Team of **ATK** - Exceptional performance in the development of a new insulation liner system for the Ares 5-segment rocket motorInternational Docking System Standard Team of NASA Johnson Space Center - Exceptional achievement in the development of the International Docking System Standard.



Space Shuttle Atlantis photographed by the Mir 21 crew during STS-76, commanded by Kevin Chilton in March 1996. (NASA photo)

International Space Station (ISS) Active System Thermal Resources and Operations team of The Boeing **Company** - Outstanding team effort supporting recovery from the external active thermal control system loop A pump failure on ISS.

**ISS Program Science Office of ERC.** Inc - Outstanding initiative, scientific knowledge and technical skills exhibited by the International Space Station Program Science Team in maintaining and tracking ISS results and sharing the information with the world through the NASA.gov web portal.

cont. next page

cont. from previous page

50 percent of the ISS.

APAT NATIONA,

CEACHIEVE

FOR

International X-Ray Observatory Minotaur IV Launch Vehicle Devel- Orion Attitude Control Motor Team of - Outstanding teamwork furthering and launch of a new medium lift ve- solid rocket motor ever flown. telescope flight mirror assembly tech- hicle with near flawless results, giving nologies necessary to meet the science the nation a new responsive launch ca- Orion Crew Radiation Analysis Team requirements of the International X-ray pability. Observatory.

**Team Category Continued** \*\*\*\* **2011 RNASA STELLAR AWARD NOMINEES** 

achieving all test objectives.

NASA flight hardware and programs. space exploration analog studies.

and operational execution of a five-stration of a new low cost and flexible tion Exo-low-Earth-orbit missions.

segment solid rocket motor static test, launch configuration of the Minotaur IV launch vehicle.

ISS Pump Mod- Materials and Processes Technical National Space Biomedical Research ule Recovery Team Information System (MAPTIS-II) Institute (NSBRI) Mars 500 Research of NASA Johnson Development Team of NASA Mar- Team of University of Pennsylvania Space Center - Excep- shall Space Flight Center - Excep- School of Medicine - Pioneering new tional service in the rapid tional contributions to the design and approaches to U.S. and international development and execution of development of a new generation of research collaborations by the NSBRI three complex spacewalks that re- the MAPTIS-II database that will Mars 500 Research Team, advancing covered from the loss of cooling to provide materials information for all knowledge using unprecedented human

Development Team of Stinger Ghaf- opment Team of the United States ATK - Outstanding technical excellence farian Technologies, Inc. (SGT) Air Force - Successful development in the development of the most complex

of Lockheed Martin - Outstanding efforts by the Orion Crew Radiation Anal-Minotaur IV Launch Vehicle Team ysis Team to develop innovative software Large Rocket Motor Static Test of Orbital Sciences Corporation - tools that improve crew safety, reduce Team of ATK - Exceptional technical Successful development and demon- vehicle weight and allow for long dura-



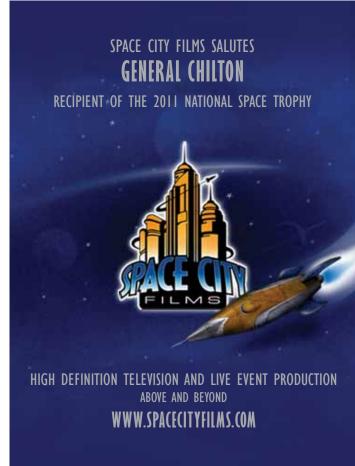
Orion Launch Abort System Inte- Orion Pad Abort 1 Guidance, Navi- Space Shuttle I-Load Integration grated Product Team of Lockheed gation & Control (GN&C) Team of Team of The Boeing Company - Out-Martin Space Systems Company Lockheed Martin Exploration & Sci- standing teamwork to ensure consisten-- Outstanding teamwork, leadership ence - Outstanding GN&C efforts in and technical excellence in the devel- developing high-fidelity modeling and Flight Software including exceptional opment of the state-of-the-art Orion simulation tools, creating a validation dedication to the integration of errorlaunch abort system culminating in the process adopted as an Orion project flawless Pad Abort 1 flight test.

Orion Launch Abort System Team supporting hardware testing that helped of Orbital Sciences Corporation - ensure an immensely successful Pad Exceptional dedication and technical excellence resulting in the successful ed States in more than 45 years.

launch abort system.



design, development and test of the Regenerative Enivronmental Confirst full-scale abort system in the Unit- trol and Life Support (ECLS) Team of The Boeing Company - Leadership and technical excellence by the Regen-Orion Pad Abort 1 Flight Test Team erative ECLS Team resulting in the first of NASA Johnson Space Center - Ex- on-orbit implementation of the fully retraordinary performance in the conduct generative ECLS system in the USOS of the first full-scale integrated flight- (United States On-Orbit Segment) entest of the next generation crew escape abling six-person ISS crew capability necessary for full station utilization.





2010 Stellar Awards Winners in the Team Category. L to R: Astronaut Megan McArthur (presenting), Ess, Romero, Oliva, Zimpfer, Patz, Ballard, Hess, and Foreman (presenting). (NASA, 2010)

### **Team Category Continued** \*\*\*\* **2011 RNASA STELLAR AWARD NOMINEES**

standard, developing test procedures for the Orion launch abort aystem, and

> **Russian** Vehicle Departure Corridor Analysis Team of ARES in the emphasis on preservation of service life of ISS critical components.

Re-Sabatier action System Team of Hamilton Sundstrand on-orbit of the Sabatier system using a unique business model and technology that converts waste gases into water to help sustain NASA's space station crew.

cy in the quality of the Space Shuttle free Space Shuttle I-Loads.

Space Shuttle Main Engine (SSME) **Operational Simulation Team of** Pratt & Whitney Rocketdyne - Innovative and proactive approaches in the SSME operational simulation project to enhance the assessment skills of the flight and test analysis teams with realistic and challenging anomaly scenarios.

Space Shuttle Probabilistic Risk Assessment (SPRA) Team of NASA Johnson Space Center - Outstanding work by the SPRA Team, providing an essential resource for managing Space Shuttle Program risks.

**Space Situational Awareness Branch** of the United States Air Force - Exceptional contribution to the furthering **Corporation** - of national space surveillance capabil-Team excellence ity using state-of-the-art technology.

> Spitzer Space Telescope Project Team of NASA Jet Propulsion Laboratory - Outstanding innovation, dedication, and technical excellence by the Spitzer Space Telescope Project Team enabling both engineering and scientific firsts from which the next generation of astrophysics missions will benefit.

Successful deliv- X-37B Recovery Team of The Boeery and activation ing Company - Successful execution of the deorbit, landing and safing of the unmanned autonomous X-37B at Vandenberg Air Force Base on 3 December 2010 by the X-37B Recovery Team.

SBACE ACHIEVEN cont. from page 4

NATIONA

ROTARL

#### Father, Award Winner

the Air Force in March 2011. He and his wife Cathy, now a Air Force Com-Brigadier General at the Air Force mendation Med-Reserves at the USAF Academy, al, three NASA bought a house in Colorado Springs Space and "plan to stay there," he said. Medals, NASA Chilton intends "to focus on spend- Exceptional ing more time with family." Two Service Medal, of his four daughters are in high NASA Outstandschool. One daughter is a freshman ing Leadership at the University of Nebraska, and Medal, NASA the oldest is a junior at the Air Force "Top Academy-following in her moth- Flight er's footsteps by studying physics. Award "Eventually, I'll find work where my (1991), background will contribute," Chilton said. "I like learning new things."

with numerous awards including; the Award, and 1984 Liethen-Tittle Award first inductee of the Strategic Order for top graduate, USAF Test Pilot School. of the Sword and Shield, the Distinguished Service Medal with oak leaf Medal with two oak leaf clusters,

cluster, Distinguished Flying Cross, Defense Meritorious Service Medal, Meritorious Ser-Chilton retired from vice Medal with oak leaf cluster, Flight Fox" Safety Winner Gug-Fel-(1991),

genheim

low,



**Kevin P. Chilton** \*\*\*\*

**2011 NATIONAL SPACE TROPHY WINNER** 

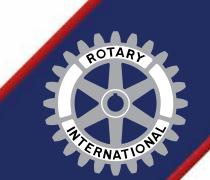
Gen. Chilton at Kings Bay (Photo by Mass Communication Specialist 1st Class(SW) James Kimber, 1-19-11)

Commander's Trophy, Undergraduate Pilot Training, 1982 Chilton has been recognized Secretary of the Air Force Leadership The RNASA Foundation is

cluster, Defense Superior Service proud to further recognize the outstanding accomplishments of General Chilton with the 2011 National Space Trophy.



Brig. Gen. Cathy Chilton (USAF photo)



# ManTech

International Corporation.

- 2010 NASA Goddard Space Flight Center Contractor Excellence Award
- Top 10 best employer for veterans - Military Times EDGE magazine
- Top 10 military friendly employers - G.I. Jobs magazine
- 100 fastest growing companies - FORTUNE® magazine

• Top 100 IT companies in the world - BusinessWeek magazine

#### www.mantech.com

An Equal Opportunity/Affirmative Action Employer.

The employees of ManTech International Corporation would like to congratulate the 2011 National Space Award winner and nominees. As we celebrate the legacy of America's symbol of technological excellence, the Space Shuttle, we honor you for your dedication and contribution to our nation's space program.

ManTech is a trusted provider of safety and mission assurance, launch range safety and operations, and SE&I for NASA and the U.S. Air Force.

Thank you for your contributions to America's success in space.





Gen. Chilton visits Minot AFB (USAF photo by Staff Sgt. Keith Ballard, 11-30-10)

### **Celebrating legacy, honoring achievements**



# JACOBS

1

0

• Congratulates the Recipient of the

2011 National Space Trophy General Kevin P. Chilton, USAF (Ret.) and

and Former Astronaut (1987-1998)

in.

MASA Income

C

Ð

Inited States