57th Honors and Awards Banquet
Saturday February 25, 2012

In Celebration of National Engineers Week

"7,000,000,000 People
Seven Billion Dreams
Engineers Turn Dreams Into Reality"

February 19 - 25, 2012
National Engineers Week Committees

~ BANQUET COMMITTEE ~
Kenneth Davis, Sonja Domazet, Stephen Guine, William Johnson,
Paul Landry, R. Freeman Straub, Robert Tarn, Charles Volk,
Nicholas Koumvykalis, Sharlene Katz

~ HONORS & AWARDS COMMITTEE ~
Marek Barylak, Kenneth Davis, Stephen Guine, Paul Landry,
Charles Olsefsky, R. Freeman Straub, Robert B. Tarn, Sharlene Katz

~ AWARD PRESENTERS ~
Kenneth Davis, Sonja Domazet, Stephen Guine, William Johnson,
Robert Tarn, Charles Volk, Sharlene Katz

~ AWARDS ASSEMBLY ~
Marek Barylak, Larry Dalton, Kenneth Davis, Sonja Domazet, William Johnson,
Sharlene Katz, Charles Olsefsky, R. Freeman Straub, Charles Volk

~ HOSTESSES ~
Mary Clare Jensen, Mickey Knobloch, Olivia Landry, Maria Tarn

~ SOUVENIR PROGRAM GRAPHICS ~
LM Skunk Works, Robert Grant, Julie Romig

~ AWARD GRAPHICS ~
Mike Matte

~ AUDIO / VIDEO ~
Swank Audio Visuals, Carlos Guerra

~ BANQUET SETUP / AWARDS DISTRIBUTION ~
Margo Guerra

~ MATH COUNTS ~
Jerry Kraim

~ LA COUNTY SCIENCE BOWL ~
Larry Dalton

~ FIRST ROBOTICS ~
R. Freeman Straub
2012 National Engineers Week

Guest Speaker
Bran Ferren
Co-Founder & Chief Creative Officer
Applied Minds

Engineer of the Year
James S. Paulsen
Vice President & Program Manager
Pratt & Whitney Rocketdyne

Engineering Educator of the Year
Dr. S. K. Ramesh
Dean of the College of Engineering and Computer Science
California State University Northridge

57th Honors and Awards Banquet
The Engineers’ Council was founded in 1955 as the “San Fernando Valley Engineers’ Council” through the joint efforts of the California Society of Professional Engineers, the American Institute of Plant Engineers, the Society of Manufacturing Engineers, and the Institute of Electrical and Electronics Engineers. National Engineers Week, a national week of recognition of the engineering profession, has been celebrated since 1951.

Over the years, the Council’s activities have grown from a joint meeting of these societies into the largest Annual Honors & Awards Banquet celebrating National Engineers Week. These banquets honor deserving professionals whose accomplishments warrant recognition by their peers.

The 1959 banquet was special. The first Engineer of the Year Award was given to Roy E. Marquardt, one of the most respected engineers in the San Fernando Valley. His accomplishments and technical innovations became a benchmark to measure all future candidates for this most prestigious honor.

The next milestone for the Council was in 1969 when the first Honorary Engineer of the Year, Ed Reineke, was selected. Since then, a host of nationally renowned individuals has proudly received this award.

The Peter Recchia Omni Award was added to the list of major awards in 1973. This award is named for Mr. Peter Recchia, a great supporter of engineering in our community and designer of the award. This perpetual trophy is presented annually to the Engineer of the Year.

In 1987, Brigadier General Charles E. “Chuck” Yeager lent his name to the San Fernando Valley Engineers’ Council, which has since annually presented the Brigadier General Charles E. “Chuck” Yeager International Aeronautical Achievements Award to the individuals who, with the general’s concurrence, have attained historically outstanding achievements in the field of aeronautical flight test and engineering.

In February 1993, the Advanced Development Programs of Lockheed Martin Aeronautics Company granted The Engineers’ Council the privilege of using both service marks “Skunk Works” and the stylized “Skunk” in our Clarence L. “Kelly” Johnson Skunk Works Award, and in 2006 and 2007 we developed our Jack Northrop and Robert H. Goddard awards in cooperation with Northrop Grumman Integrated Systems and Pratt & Whitney Rocketdyne.

Through the years, The Engineers’ Council has presented thousands of awards recognizing outstanding contributions by individuals in our community and throughout the world in the fields of engineering, education, special fields of work, and public service.

Proceeds from The Engineers’ Council Honors & Awards Banquet are used to fund scholarship, high school mentoring, and middle-school math and science educational enrichment programs.
The 57th Honors and Awards Banquet

The Engineers’ Council
Sherman Oaks, California

57th Annual
Honors & Awards Banquet

Saturday, February 25, 2012

Welcome & Introductions – 6:00 p. m.
Council President
Kenneth G. Davis

Dinner

Presentation of Awards - 7:00 p.m.

Master of Ceremonies
Charles H. Volk, Ph.D

Presenters
Kenneth G. Davis
Sonja Domazet
Stephen Guine
William J. Johnson
Sharlene Katz, Ph.D.
Robert B. Tarn
Charles Volk, Ph.D.

Closing
MESSENGER Inertial Reference Unit

Northrop Grumman Navigation Systems Division
Woodland Hills, California

Team Members
James Campanile
Jose Mancilla
Peter Lee
David Rozelle
William Joseph
Miguel Ochoa
Ryan Savaya

Accepting the Project Award
Edward Lukas
Project Leader

Global Aerospace Centre for Icing & Environmental Research (GLACIER)

Pratt & Whitney
East Hartford, Connecticut

Accepting the Project Award
Martin G. Shenkle
Project Leader

Global Hawk 25KVA Generator Team

Northrop Grumman Aerospace Systems
San Diego, California

Team Members
Keith Cleek
Ryan Moriarty
Shannon Ward

Accepting the Project Award
Don Casinger
Project Leader
The 57th Honors and Awards Banquet

DISTINGUISHED ENGINEERING PROJECT
ACHIEVEMENT AWARDS

Multi Flutter Mode Control (MFMC)
Lockheed Martin Aeronautics
Palmdale, California

Team Members:
Christopher Atkinson  Edward Burnett  Howard Lee
Dr. Brian Holm-Hansen  Brian Sibbitt

Accepting the Project Award
Jeff Beranek
Project Leader

X-47B Unmanned Combat Air System (UCAS) First Flight
Northrop Grumman Aerospace Systems
El Segundo, California

Team Members:
Gary Boal  John Kent  Craig Turner

Accepting the Project Award
Philip W. Saunders
Project Leader

Control Room Test Simulator
Pratt & Whitney
East Hartford, Connecticut

Accepting the Project Award
Martin G. Shenkle
Project Leader
LAPC VEX Robotics Teams
OUTSTANDING ENGINEERING
ACHIEVEMENT MERIT AWARDS

Bonnie L. Boyce
Pratt & Whitney Rocketdyne
Canoga Park, California
For outstanding engineering achievements on the Space Shuttle Main Engine, RS-68 and X-33 rocket propulsion programs

Philip W. Saunders
Northrop Grumman Aerospace Systems
El Segundo, California
In recognition of groundbreaking work in the development of flight control systems for tailless flying wing aircraft, and in the design, development and certification of revolutionary unmanned aircraft

William C. Byers
Lockheed Martin
Aeronautics Company
Palmdale, California
In recognition of expertise in radio frequency signature integration and for advancing the state of the art in the development and application of highly survivable technologies for manned and unmanned vehicle systems at Lockheed Martin Aeronautics

Dr. Natarajan D. Bhaskar
The Aerospace Corporation
El Segundo, California
In recognition of the relentless pursuit of excellence to deliver a “one of a kind” space sensor capability for the Missile Defense Agency

Mike J. Carlson
Pratt & Whitney Rocketdyne
Canoga Park, California
In recognition of dedication and technical excellence in the area of Space Shuttle Main Engine systems and Space Shuttle launch support, resulting in significant enhancements toward the success and safety of human space flight

Sami Maalouf
California State University
Northridge
Northridge, California
For outstanding contributions to optimization methods for urban storm water management and excellence in teaching a wide range of courses in civil engineering
The 57th Honors and Awards Banquet

THE VALUE OF HIGH TECHNOLOGY WITH A HUMAN TOUCH.

Congratulations Engineers Council Award Recipients:

Jack Northrop Spirit of Innovation Award:
Dan Rihn, director, Advanced Programs and Technologies

Outstanding Engineering Achievement Merit Award:
Philip W. Saunders, director, Advanced Programs and Technologies

Distinguished Engineering Achievement Award:
Michael Curtin, Technical Fellow, Electronics & Payloads

Distinguished Engineering Project Achievement Awards:
- Global Hawk Block 40 Flight Test Team
- Global Hawk Block 40 Lab Integration Team
- Global Hawk Command and Control DGPS Team
- Global Hawk Flight Control Actuator Team
- Global Hawk Mission Plan Validation Team
- Global Hawk Block 20 Durability and Damage Tolerance
- Global Hawk Periodic Non-Destructive Inspection Program Development and Initiation
- Global Hawk 25KVA Generator Team
- X-47B Unmanned Combat Air System (UCAS) First Flight

THE VALUE OF PERFORMANCE.

NORTHROP GRUMMAN

www.northropgrumman.com
The 57th Honors and Awards Banquet

Jack Northrop
Spirit of Innovation Award

To

Daniel Rihn
Engineering Director
Northrop Grumman Aerospace Systems
Redondo Beach, California

Presented by

Frank Flores
Vice President of Engineering
Northrop Grumman Aerospace Systems
El Segundo, California

"For outstanding contribution to the engineering profession and application of engineering to meet the nation's needs"

The Jack Northrop Spirit of Innovation Award commemorates the vision, perseverance and engineering prowess reminiscent of aviation pioneer Jack Northrop, whose achievements and techniques broke the barriers of traditional aircraft design. The Engineers’ Council bestows this award in honor of the individual technical contributions that inspire innovation and advance the progress of the industry.

Past Recipients

<table>
<thead>
<tr>
<th>Past Recipient</th>
<th>Year</th>
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<tbody>
<tr>
<td>Douglas E. Wood</td>
<td>2006</td>
</tr>
<tr>
<td>Charles Tomita</td>
<td>2008</td>
</tr>
<tr>
<td>Dr. John M. Papazian (posth.)</td>
<td>2010</td>
</tr>
<tr>
<td>Paul Marchisotto (posth.)</td>
<td>2007</td>
</tr>
<tr>
<td>Douglas L. Fronius</td>
<td>2009</td>
</tr>
<tr>
<td>Clayton K. S. Kau</td>
<td>2011</td>
</tr>
</tbody>
</table>
OUTSTANDING ENGINEERING ACHIEVEMENT MERIT AWARDS

Felicia Li
Pratt & Whitney Rocketdyne
Canoga Park, California

In recognition of exceptional work performance supporting the successful fabrication, anomaly resolution and flight integration of the RS-68 engine control system for the Delta IV launch vehicle.

Luke M. Hartwig
Lockheed Martin Aeronautics Company
Palmdale, California

In recognition of technical excellence and leadership of the Wing Blade Probability of Failure evaluation, which has contributed to Lockheed Martin’s success at maintaining U-2 fleet flight worthiness.

David Hicks
Los Angeles Unified School District
Sun Valley, California

For outstanding contributions made for the encouragement of high school students in their pursuit of science, technology, engineering and mathematics knowledge, resulting from in class and after hours teaching.

Dr. Ronald W. Mehler
California State University
Northridge
Northridge, California

In recognition of dedication and excellence as a researcher, designer, educator, mentor and motivator and as a professor of Electrical and Computer Engineering.

Rick Carter
Pratt & Whitney Rocketdyne
Canoga Park, California

For advancing the knowledge and application of Controls and Diagnostic Systems on aircraft and rocket engines at Pratt & Whitney Rocketdyne.

Robert W. Kempel
The Engineer's Office
Lancaster, California

For seminal work in establishing the historical record of the "Race to Mach 1," and for publishing his results for the record of the aerospace history.
Bran Ferren is Co-Founder and Chief Creative Officer of Applied Minds, which invents and prototypes high technology products and innovative business concepts for the aerospace, defense, intelligence, automotive, architecture, computing, and consumer products sectors. He is former President of Research & Development and Creative Technology for The Walt Disney Company where he was responsible for advanced technology and innovation projects, company wide. He works primarily as lead concept designer, systems engineer, and technologist, and is named inventor on approximately 300 current and pending US patents.

He is an Oscar-nominated film visual effects designer and an award-winning Broadway special effects, lighting, and sound designer. Other conceptual design work includes World’s Fairs, theme parks, music tours, buildings, interiors, command centers, special purpose vehicles, and exhibits. Design engineering and technical clients include The Walt Disney Company, Northrop Grumman, Lockheed Martin, General Motors, IBM, Warner Communications, Sony, Herman Miller, and Intel Corporation.

Bran has been a senior advisory board member or consultant for science, advanced technology, and innovation to several U.S. Government and military agencies and the US Senate. Current/recent clients also include the Library of Congress, Smithsonian American Art Museum. His work has been exhibited at the Museum of Modern Art in New York City, and he is a winner of the Wally Russell award for lifetime achievement in Lighting Design, and the Kilby Award for contributions to society.
Global Hawk Periodic Non-Destructive Inspection Program Development and Initiation

Northrop Grumman Aerospace Systems
San Diego, California

Team Members
Steve Cole  Jim McDaniel  Delmer Williamson

Accepting the Project Award
Paul A. Ackerman  Project Leader

CAMS Mk. II/Iia Simulator

Northrop Grumman Aerospace Systems
San Diego, California

Team Members
Sharon Cuff  Robert Dix  Paula Peacock
Mark Nguyen  Peter Vanecek  Tim Wagner

Accepting the Project Award
J. Carlos Galdamez  Project Leader

Non-Flow-Through Fuel Cell Power System

NASA Glenn Research Center
Cleveland, Ohio

Team Members
Ken Burke  Christopher Callahan  Ian Jakupca
James McElroy  Al Meyer  William Smith

Accepting the Project Award
Mark A. Hoberecht  Team Leader
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

J-2X Engine Test Team
Pratt & Whitney Rocketdyne
Canoga Park, California

Team Members
Tom Martin
Ray Shiir
Brian Sproles
Jim Tellier
Danny Woo
Cathy Martinez-Menne
Brian Wygle

Accepting the Project Award
Mark A. Emanuel
Project Leader

Global Hawk Mission Plan Validation Team
Northrop Grumman Aerospace Systems
San Diego, California

Team Members
Chris Hoang
John Leavitt
Jesus Medrano

Accepting the Project Award
Christopher Covell
Project Leader
The 57th Honors and Awards Banquet

The Engineers’ Council
Sherman Oaks, California

Congratulations
2012 National Engineers’ Week Honorees

Thank You Engineers Week Participants

Air Force Flight Test Center
Edwards Air Force Base
ASQ San Fernando Valley
The Boeing Company
CSUN College of Engineering & Computer Science
Northrop Grumman Aerospace Systems
Northrop Grumman Navigation Systems Division

General Chuck Yeager Foundation
Hamilton Sundstrand/Pomona
IEEE San Fernando Valley
Jet Propulsion Laboratory/NASA
Lockheed Martin Aeronautics Company Palmdale
Pratt & Whitney Rocketdyne
SME San Fernando Valley

Your participation enables us to further our mission, to promote science and engineering careers, provide educational enrichment in science and engineering, and recognize student achievement in the art and science of engineering for the general welfare of humankind.

In the year 2011, the Engineers’ Council contributed to its educational and charitable programs, which included the following:

Scholarships
CSUN Foundation Scholarship Fund scholarships to graduating seniors from Canoga Park, Chaminade, William Howard Taft, El Camino Real, Granada Hills, James Monroe and Palmdale High Schools

Educational Enrichment
Major Sponsor of LADWP / LAUSD Science Bowl
Sponsor of CSPE MATHCOUNTS competition at CSUN
Sponsor of LA County Science Fair
El Camino Real & Chaminade, and L.A. Pierce College Robotics Teams
VEX Los Angeles Regional Robotics Championship Volunteers
Antelope Valley Super Science Saturday

Engineering Education
Engineers Week Systems & Software Engineering, Biotechnology, and Clean Fuel/Alternative Energy Conference
Image above: Pictured on the front row are NASA astronaut Dan Burbank, commander; and Russian cosmonaut Oleg Kononenko, flight engineer. Pictured from the left (back row) are Russian cosmonauts Anton Shkaplerov and Anatoly Ivanishin; along with European Space Agency astronaut Andre Kuipers and NASA astronaut Don Pettit, all flight engineers.

Photo credit: NASA and International Space Station partners

Astronaut Dan Burbank, Commander of Expedition 30

“Hi, my name is Dan Burbank, Commander of Expedition 30 aboard the International Space Station. “I’d like to congratulate all of you on this 61st observance of National Engineers Week. This week, activities run by volunteers from engineering societies and professional organizations all across our nation are stimulating interest among our youth in science, technology, engineering and math. They will one day be the critical contribution to the pool of engineering and scientific talent that our nation needs to meet the future. These activities include science fairs, mentoring, educational outreach, and student design competitions. “In many areas recognition of engineering professionals is occurring at celebrations that highlight their many contributions to making our world a better place. We appreciate what you do every day to keep us safe up here, to keep our families secure at home, to contribute to the economic vitality of our nation, and to make technological progress for the benefit of all people on Earth. “Again, congratulations to you all, and best wishes from the International Space Station.”
PAST RECIPIENTS
OF THE ENGINEER OF THE YEAR AWARD

1959  Roy E. Marquardt  1986  Sophia K. Ashley
1960  Richard Bradshaw  1987  Dr. Rodney A. Boudreaux
1961  Milford G. Childers  1988  George J. Hallinan
1962  Paul R. Vogt  1989  Paul H. Lane
1963  George T. Harness  1990  William F. Ezell
1964  Ralph Balent  1991  Edward G. Linhart
1965  Clarence L. Johnson  1992  Sherman N. Mullin
1966  Steven J. Domokos  1993  Robert D. Paster
1967  James A. Broadston  1994  Byron K. Wood
1968  Dr. Arnold M. Levine  1995  Jack S. Gordon
1969  Willis M. Hawkins  1996  Ernest Schaeffer
1970  Ralph A. Lamm  1997  Paul B. Smith
1972  Dr. R.N. Ghose  1999  Robert Goetz
1973  John J. Guarerra  2000  Dr. Michael E. Polites
1974  Elliott H. Green  2001  Dr. Charles Volk
1975  Mathew C. Ek  2002  Maynard L. “Joe” Stangeland
1977  Lon L. Sanders  2004  Norman S. Sakamoto
1979  Donald C. Tillman  2006  John B. Plowden
1980  Dominick J. Sanchini  2007  Thomas W. Blakely
1982  Dr. Paul B. MacCready  2009  Frank Flores
1983  Charles G. Fargo  2010  Daniel A. Tazartes
1984  Dr. Malcom Currie  2011  Eric D. Knutson
1985  Phillip V. King
To
James S. Paulsen
Vice President & Program Manager
Pratt & Whitney Rocketdyne
Canoga Park, California

Presented by
Eric D. Knutson
Director of Advanced Projects
Lockheed Martin Aeronautics Company
Palmdale, California

Mr. James S. Paulsen is recognized for his long-term commitment and contributions to Pratt & Whitney Rocketdyne, the aerospace industry, and our nation’s space program, and for his leadership of the extraordinarily successful Space Shuttle Main Engine program for Pratt & Whitney Rocketdyne, which lofted the Space Shuttle with 100% mission success for 135 NASA missions to space.

PETER RECCHIA OMNI AWARD
The movies have their Oscars, the television industry has its Emmy, and The Engineers’ Council presents, for the fortieth time, its Engineering Omni Award. This award was first presented in 1973 to the Engineer of the Year, San Fernando Valley. Since then, each succeeding Engineer of the Year has been awarded this beautiful, original trophy conceived, designed, and produced by Peter Recchia, PE, SME, AIEE. Mr. Recchia was a dedicated supporter of the engineering community and when he passed away, the Engineering Omni Award was renamed in his honor, “The Peter Recchia Omni Award.”
The 57th Honors and Awards Banquet

The Engineers’ Council
Board of Directors

President
Kenneth G. Davis

Vice President
Sonja Domazet

Treasurer
Charles H. Volk Ph.D.

Secretary
Stephen Guine

Trustees: Robert J. Budica Ph.D., Paul F. Landry, A. F. Ratcliffe Ph.D., Robert B. Tarn, Charles H. Volk Ph.D

**OUTSTANDING ENGINEERING ACHIEVEMENT MERIT AWARDS**

**Brian J. Pechi**  
Pratt & Whitney Rocketdyne  
Canoga Park, California  

*For exceptional materials and processing design and product support for Pratt & Whitney Rocketdyne engine programs*

**Barbara J. Lee**  
Lockheed Martin Aeronautics Company  
Palmdale, California  

*In recognition of success as the lead flight test engineer for U-2 Electronic Warfare Testing, coordinating the work of numerous team members, associate contractors and customers to deliver on schedule, world class products*

**Nathan L. Cook**  
US Air Force Test Pilot School  
Edwards Air Force Base  

*In recognition of outstanding performance as an engineer, educator, mentor and leader, ensuring the highest level of success from graduates of the US Air Force Test Pilot School*

**Humphrey Price**  
Jet Propulsion Laboratory  
Pasadena, California  

*For contributions to the Gravity Recovery and Interior Laboratory (GRAIL) as the project systems engineer responsible for the overall system design*

**Dr. Abhijit Mukherjee**  
California State University  
Northridge  
Northridge, California  

*For excellence in teaching and research and advancing the state of the art in low temperature fuel cells through the study of water removal mechanisms in aphids*

**Joe K. Eng**  
Pratt & Whitney Rocketdyne  
Canoga Park, California  

*For technical excellence, leadership, and outstanding contributions toward the development of robust engineering processes and the advancement of the state of the art in System Interconnects for rocket propulsion*
DISTINGUISHED ENGINEERING
ACHIEVEMENT AND ENGINEERING
EDUCATOR AWARDS

John P. Hansen
Pratt & Whitney Rocketdyne
West Palm Beach, Florida

In recognition of initiative and leadership in driving forward Pratt & Whitney technical leadership in jet engine and rocket engine propulsion technology and ensuring 100% mission success of the RD-180 engine

Theresa M. Rockey
Northrop Grumman Navigation Systems Division
Woodland Hills, California

For outstanding contributions to the field of navigation including inertial instruments, inertial and inertial/GPS navigation systems and for excellence in customer support leading to enhanced mission capabilities

Riley M. Duren
Jet Propulsion Laboratory
Pasadena, California

For significant contributions to the discipline of systems engineering at the Jet Propulsion Laboratory and for its application to scientific space missions and issues of national and global impact

Dr. Ali Amini
California State University Northridge
Northridge, California

For outstanding contributions as an electrical engineering educator, with inspiring leadership and a commitment to student success as the Electrical and Computer Engineering Department Chair at California State University Northridge
Dr. Ranga Narayanan
University of Florida
Gainesville, Florida

In recognition of exceptional work directing the nation's largest program for the internationalization of education and research in fluid mechanics and for his consistent dedication to K-12 outreach

James R. Maus
Pratt & Whitney Rocketdyne
West Palm Beach, Florida

For leadership contributions to the success of Pratt & Whitney Rocketdyne RL10, RS-68, RS-27, RD-180 and hypersonic programs including 100% mission success of 52 Atlas V, Delta II and Delta IV launches

Dr. Mrityunjay Singh
Ohio Aerospace Institute
Cleveland, Ohio

For the pioneering and seminal contributions and global leadership in the field of science, engineering and applications of advanced ceramic and composite materials and technologies
BETWEEN DREAM AND ACHIEVEMENTS,
THERE IS ONE IMPORTANT WORD: HOW

To shape the future, you must shape young minds. We're proud to support a host of programs aimed at educating the next generation of engineers, scientists, and mathematicians. Ensuring the technological future of our country is all a question of how. And it is the how that makes all the difference.

lockheedmartin.com/how

We never forget who we're working for®
The Kelly Johnson Skunk Works Award was established to honor and to perpetuate Kelly Johnson’s qualities, accomplishments and standards as a model of excellence that coming generations of engineers can aspire to as they pioneer progress into the future. General Cartwright embodies the spirit of innovation and accomplishment that defined Kelly Johnson, and there have been few who truly can be said to have followed his mantra, ‘Be Quick, Be Quiet, And Be On Time.’ Well, perhaps not so quiet, but General Cartwright has been a relentless advocate for many revolutionary advancements in capabilities for the war fighter we see today, and as such, has contributed significantly to our national security, and a safe future for all of us.

Clarence L. “Kelly” Johnson’s achievements captured every major aviation design award and made him an aerospace legend, but he may be best known for organizing the Lockheed Skunk Works in 1943. Kelly played a leading role in the design of more than forty aircraft and he received more than forty aircraft design awards and honors, including two Collier Trophies, two Theodore von Kármán awards, the Wright Brothers Memorial Trophy, two Sylvanus Albert Reed Awards, and the Daniel Guggenheim Medal. In 1964, President Lyndon Johnson presented him with the nation’s highest civilian honor, the Medal of Freedom. President Ronald Reagan honored Kelly Johnson with the National Society Medal in 1983 and the National Medal of Technology in 1988. Kelly was enshrined in the Aviation Hall of Fame in 1974.

“The Skunk Works is a concentration of a few good people solving problems far in advance – and at a fraction of the cost – by applying the simplest, most straightforward methods possible to develop and produce new products.” — **Kelly Johnson**

## Past Recipients

<table>
<thead>
<tr>
<th>Award Year</th>
<th>Recipient</th>
<th>Awarded To</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992</td>
<td>Clarence L. “Kelly” Johnson (Posth.)</td>
<td>Natalie W. Crawford</td>
</tr>
<tr>
<td>1999</td>
<td>Dr. Anthony J. Tether, DARPA</td>
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<tr>
<td>2000</td>
<td>Richard Heppe, LMAC</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>Gen. Gregory “Speedy” S. Martin (ret.)</td>
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<tr>
<td>2002</td>
<td>Abraham Karem</td>
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<tr>
<td>2003</td>
<td>Thomas J. Cassidy, Jr.</td>
<td></td>
</tr>
<tr>
<td>2004</td>
<td>Frank J Cappuccio</td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>Palmdale, California</td>
<td></td>
</tr>
</tbody>
</table>
DISTINGUISHED ENGINEERING
ACHIEVEMENT AND ENGINEERING
EDUCATOR AWARDS

Alan M. Sutton
US Air Force Research Laboratory
Edwards Air Force Base, California

In recognition of outstanding leadership of the AFRL Upper Stage Engine Technology (USET) program’s successful test campaign of the next generation liquid-hydrogen turbopump at Edwards Air Force Base.

Dr. Luis C. Rabelo
University of Central Florida
Orlando, Florida

In recognition of his scientific achievements, his outstanding contribution to student engineering activities, his service as a role model to his students and for being a national leader in modeling and simulation education.

Stephen H. James
Pratt & Whitney Rocketdyne
Canoga Park, California

For contributions in the development, advancement, and implementation of non-destructive testing technology applications for new space propulsion and rocket engine systems.

Jonathan A. Lincoln
Northrop Grumman Navigation Systems Division
Woodland Hills, California

For distinguished contributions to the development, analysis and design of INS/GPS systems, software, algorithms, and Kalman filters achieving superior performance and enabling new applications.
Michael Curtin
Northrop Grumman Aerospace Systems
Melbourne, Florida

For consistent achievement in radio frequency communications design and implementation, mentoring and community service

Dr. Ichiro Hashimoto
California State University Northridge
Northridge, California

In recognition of an exceptional career as an educator, faculty leader and mentor in electrical and computer engineering and for his significant contribution to the development of the electrical engineering curriculum at California State University Northridge

James E. Haynes
Highland High School
Palmdale, California

In recognition of a dedicated career as a physics instructor who, while working in collaboration with local industry, has created, resourced and managed a multidisciplinary engineering program at Highland High School
General Chuck Yeager Foundation

P.O. Box 579
Penn Valley, CA 95946

Mission Statement
The General Chuck Yeager Foundation is dedicated to the enhancement and enrichment of young people's lives through programs that are focused on the principals that Chuck Yeager has exemplified. These include the thirst for knowledge in scientific fields including aviation, perpetuating the idea of honor and dedication to serve one's fellow man and one's country, and preserving the ideals and image of an American hero.

www.chuckyeager.com

San Fernando Valley Section
The Global Voice of Quality

The San Fernando Valley Section (0706) of the American Society for Quality (ASQ) would like to acknowledge the key role of Quality Engineers in industry.

By making quality a global priority, an organizational imperative, and a personal ethic, the American Society for Quality becomes the community for everyone who seeks quality concepts, technology, and tools to improve themselves and their world.

Congratulations to the 2012 National Engineers Week Honorees.

The 2011-12 ASQ Section 0706 Board,  
Ernesto Zepeda, Section Chair

www.asq.org  ASQ San Fernando Valley Section 706 group | LinkedIn
The 57th Honors and Awards Banquet

Brigadier General Charles E. “Chuck” Yeager
International Aeronautical Achievement Award

To

Dr. Robert H. Liebeck
Senior Technical Fellow
The Boeing Company
Huntington Beach, California

Presented by

Colonel Dawn M. Dunlop
412 Test Wing Commander
Edwards Air Force Base, California

"In recognition of your leadership in advanced lifting body design, contributions to the art and science of airfoil design, and advancement of aeronautics through engineering in higher education."

During World War II, General Yeager distinguished himself in aerial combat over France and Germany by shooting down 13 enemy aircraft. He was shot down over German-occupied France but managed to escape capture with the help of the French Maquis. His subsequent assignments included test pilot of the Nation’s first research rocket aircraft, in which he became the first person to fly faster than the speed of sound on October 14, 1947, Commander of the 417th Fighter Squadron, Aerospace Research Pilot School, 405th Fighter Wing in South Vietnam, 4th Tactical Fighter Wing in Korea, and Vice Commander of the Seventeenth Air Force after promotion to Brigadier General. He has flown 341 types of aircraft during his career and has more than 11,000 hours of flight time. His military decorations and awards include The Distinguished Service Medal with one oak leaf cluster, The Silver Star with one oak leaf cluster, The Legion of Merit with one oak leaf cluster, The Distinguished Flying Cross with two oak leaf clusters, The Bronze Star Medal with “V” device, The Purple Heart, Distinguished Unit Citation Emblem with one oak leaf cluster, and the Air Force Outstanding Unit Award Ribbon.

Selection of recipients for this distinguished award reflects a lifetime career of dedication to the progress of aerospace technology.

Past Recipients

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</thead>
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DISTINGUISHED ENGINEERING PROJECT

ACHIEVEMENT AWARDS

Aquarius Project
Jet Propulsion Laboratory
Pasadena, California

Team Members
Dr. Dankai Liu                Dalia A. McWatters
Dr. Jeffrey R. Piepmeier    Dr. Yuhsyen Shen
Dr. Simon A. Collins         Dr. Michael W. Spencer
Dr. Simon H. Yueh            Fernando A. Peilerano

Accepting the Project Award
Amit Sen
Project Leader

Global Hawk Block 40 Flight Test Team
Northrop Grumman Aerospace Systems
San Diego, California

Team Members
Jim Anderson                   Joe Lee                   Tom Wayne

Accepting the Project Award
Dan R. Gerdes
Project Leader

N+2 Low Boom Supersonics Validation Team
Lockheed Martin Aeronautics
Palmdale, California

Team Members
Mike Buonanno                  Sonny Chai                Bob Langberg
Victor Lyman                   John Morgenstern          Frank Marconi
David Pehrson                  Marc Stelmack

Accepting the Project Award
Nicole Norstrud
Project Leader
LN-270 Static Heading Accuracy Improvement
Northrop Grumman Navigation Systems Division
Woodland Hills, California

Team Members
Reza Ahmadi          Tony Kwok            Yueh-Chung Lai
Yumi Yoshida         Linn Zien

Accepting the Project Award
Karen E. Olin
Project Leader

Global Hawk Block 20 Durability and Damage Tolerance Analysis
Northrop Grumman Aerospace Systems
San Diego, California

Team Members
Reza Karkehabadi    Robert Ma          Nevin Swearengen

Accepting the Project Award
Paul A. Ackerman
Project Leader
Super Science Saturday
High School Student Leaders

Conducting STEM Activity Booths at SSS
OUTSTANDING ENGINEERING ACHIEVEMENT MERIT AWARDS

Steven P. Ravenscroft
Lockheed Martin Aeronautics Company
Palmdale, California

For exceptional leadership, design expertise and tireless efforts resulting in outstanding contributions toward the engineering design of advanced survivability systems for military air vehicles

Floyd E. Shelby
Pratt & Whitney Rocketdyne
Canoga Park, California

For leading, developing and providing the expertise, people, processes, and tools in ensuring the quality, consistency, and cost effectiveness of world class electronics designs, control subsystems and automated test support equipment for Pratt & Whitney Rocketdyne programs

Dr. Marc D. Rayman
Jet Propulsion Laboratory
Pasadena, California

For exceptional contributions, leading to major new scientific discoveries, as the mission director of the Dawn Mission, the first to orbit the body Vesta in the main asteroid belt

Dr. Ani Nahapetian
California State University
Northridge
Northridge, California

For excellence in teaching and outstanding research contributions in the areas of hardware security, wireless health systems and algorithms for reconfigurable computing

Warren D. Williamson
Lockheed Martin Aeronautics Company
Palmdale, California

For outstanding technical accomplishments in evaluation and analysis, across multiple engineering disciplines, which enabled the continuation of mission critical electronic systems for the U-2 aircraft fleet
CONGRATULATIONS TO THE 2012 HONOREES!

COLLEGE OF ENGINEERING & COMPUTER SCIENCE

John J. Guarrera Engineering Educator of the Year Award
S. K. Ramesh

Distinguished Engineering Educator Award
Ali Amini
Ichiro Hashimoto

Outstanding Engineering Achievement Merit Award
Sami Maalouf
Ronald W. Meherer
Abhijit Mukherjee
Ani Nahapetian
George Youssef

The Engineers’ Council Technical Conference
Friday April 20th 2012
8am - 5pm

at
California State University, Northridge
18111 Nordhoff Street
Northridge, CA 91330

Contact Sonja Domazet at
Sonja.Domazet@engineerscouncil.org
John J. Guarrera

Engineering Educator of the Year Award

To

Dr. S. K. Ramesh
Dean
College of Engineering and Computer Science
California State University
Northridge, California

Presented by

Dr. Sharlene Katz
Professor
Department of Electrical and Computer Engineering
California State University
Northridge, California

The Engineering Educator of the Year Award is given in recognition of significant achievements by the professor in the successful involvement of students in learning, research and in the application of science and mathematics to the solution of problems in engineering design or theory.

Recognition of a top educator began in 1982, with the “Education Achievements Award.” In 1985, the top educator award was renamed the “Distinguished Education Achievements Award”, which became the “Distinguished Engineering Education Achievements Award” in 1987. At the National Engineers Week Banquet of 1991, the award became the “Engineering Educator of the Year Award”.

In honor of The Engineers’ Council founding member, this award bestowed upon the top educator was renamed in 2007 the “John J. Guarrera Engineering Educator of the Year Award.”

Dr. Alfonso F. Ratcliffe 1982  Dr. John W. Adams 1994  Dr. Mihrri Ozkan 2006
Dr. Robert Y. Wong 1983  Dr. Sembian R. Rengarajan 1995  Dr. Diane Schwartz 2007
Dr. Edmond S. Gillespie 1984  Dr. Roger De Julio 1996  Dr. Behzad Bavarian 2008
Dr. Thelma Estrin 1985  Dr. Martin S. Roden 1997  Dr. Chi-Tsen Lin 2009
Dr. Gregg W. Dixon 1986  Dr. Ramin Roosta 1998  Dr. Hamid Johari 2010
Dr. Michael A. Melkanoff, P.E. 1987  Dr. Helen A. Ryacioutaki-Boussalis 2000  Dr Melvin A. Breuer 2011
Dr. Diane Schwartz 1988  Dr. Sharlene Katz 2001
Dr. Larry Lichten 1989  Dr. Stewart Prince 2002
Dr. B. J. Shell 1991  Dr. Nagwa Bekir 2003
Dr. Mihran S. Agbabian 1992  Tarek A. Shraibati 2004
Dr. Michael Hassul 1993  Dr. Robert G. Ryan 2005
OUTSTANDING ENGINEERING ACHIEVEMENT MERIT AWARDS

Wayne Tuttle
Hamilton Sundstrand
Long Beach, California

For outstanding dedication, technical excellence and contribution to welding technology, successfully developing a laser-based long seam weld system with no thermal distortion in support of the commercialization of space

Daniel J. Ruhkala
Pratt & Whitney Rocketdyne
Canoga Park, California

For critical leadership and technical contributions which have permitted first-time through development and production attitude control propulsion systems

David M. Durham
Jet Propulsion Laboratory
Pasadena, California

For the outstanding leadership of the Project Systems Engineering Team which contributed to the successful launch and operation of the Aquarius mission, currently measuring sea surface salinity

Dr. George Youssef
California State University
Northridge
Northridge, California

For outstanding teaching and mentoring of students and contributions to advanced materials research to better understand the dynamic properties of Polyurea elastomer

Nana K. Danquah
Pratt & Whitney Rocketdyne
Canoga Park, California

In recognition for dedication and a commitment to excellence in support of Pratt & Whitney Rocketdyne engine systems design work for the Space Shuttle Main Engine, RS-68 and J-2X programs

Chris T. Rodela
Lockheed Martin Aeronautics Company
Palmdale, California

In recognition of outstanding performance in evaluation and analysis, across multiple engineering disciplines, which enabled the continuation of mission critical electronic systems for the U-2 aircraft fleet
AIAA, ASME and The Engineers’ Council

National Engineers Week Banquet

Saturday, 10 March 2012 @ 5:30 PM
Hilton Garden Inn Palm Beach Gardens, Palm Beach, Florida

Featured Speaker:

Robert D. Cabana
Director of Kennedy Space Flight Center, Florida

This event is being sponsored by the local Palm Beach Sections of the American Institute of Aeronautics and Astronautics and American Society of Mechanical Engineers in collaboration with The Engineers’ Council and with major support of Pratt & Whitney Rocketdyne.

The Engineers’ Council and AIAA/ASME service awards will be presented following the Featured Speaker presentation.
Pratt & Whitney Rocketdyne congratulates the 2012 National Engineers Week Honorees

Pratt & Whitney Rocketdyne

www.PrattWhitneyRocketdyne.com
Robert H. Goddard
Space Propulsion Pioneer Award

To
James G. Maser
President
Pratt & Whitney Rocketdyne
Canoga Park, California

Presented by
Byron K. Wood
President (retired)
Pratt & Whitney Rocketdyne
Canoga Park, California

For 27 years of aerospace system design, structural engineering, and development leadership of the world’s premier launch, defense, and energy systems which have sustained our U.S. space industrial base, protected our national security, and retained our position as the world leader in human space flight and space exploration

This award is given in honor of the founder of modern rocketry, Dr. Robert H. Goddard. Dr. Goddard was a physicist of great insight who envisioned the exploration of space and had a genius for invention. In childhood, Robert Goddard was intrigued by the chemical energy of pyrotechnic devices, and dreamed of harnessing their energy to produce propulsive power. In 1912, Dr. Goddard developed the mathematical theory of rocket propulsion as a research fellow at Princeton University, and at Clark University in 1915, proved experimentally that rockets could produce thrust in a vacuum in order to dispel the doubts of a less enlightened scientific community. A modest researcher who eschewed the public eye, he moved his research to Roswell, New Mexico, in 1930, where he built and tested liquid propulsion rockets which successfully achieved high altitude flights and demonstrated fin-stabilized flight control, and filed dozens of related patents, including gyroscopic guidance systems and multistage rockets. Dr. Goddard’s developments spawned the rocket industry that put the first Americans into space and the first humans on the Moon, and his legacy lives today in those who followed his pioneering work.

Past recipients
Global Hawk Block 40 Lab Integration Team
Northrop Grumman Aerospace Systems
San Diego, California

Team Members
Yue Chiong  Steve Jacobson  Mike Walter

Accepting the Project Award
Scott H. Peckham
Project Leader

Boeing Huntington Beach Lab Test Team
The Boeing Company
Huntington Beach, California

Team Members
Cindy Belliveau  Tony Buono  C. C. Lee
Ali Mandvi  Chhour Thong  Alan Watts

Accepting the Project Award
J. Pat Rogers
Project Leader

Dawn Flight Team
Jet Propulsion Laboratory
Pasadena, California

Team Members
Dr. Carol A. Raymond  Dr. Marc D. Rayman
Dr. Christopher T. Russell

Accepting the Project Award
Robert A. Mase
Project Leader
DISTINGUISHED ENGINEERING PROJECT
ACHIEVEMENT AWARDS

PWR Thruster Test Team
Pratt & Whitney Rocketdyne
Canoga Park, California

Team Members
Larry Coady
Hadi Darejeh
Charles Heinrich
James McKinnon
Sarah Sheviakov
Eric Stangeland
Kenneth Slusser
Daniel Trygstad
Thomas Walczuk
Jody Wali

Accepting the Project Award
Jennifer L. Ebert
Project Leader

Global Hawk Command and Control
DGPS Team
Northrop Grumman Aerospace Systems
San Diego, California

Team Members
Kris Chopper
John Leung
John Roths

Accepting the Project Award
Fred W. Strack
Project Leader
MATHCOUNTS 2012

MATHCOUNTS is a National Mathematics Competition sponsored by the National Society of Professional Engineers. The competition is for students from the seventh and eighth grades. A school sends a team of four students and as many as four alternates to the local competition. The team coach is a teacher-volunteer from that school. MATHCOUNTS is an extra-curricular activity for the students and the coach. Study guides and teaching materials are provided to participating schools by the National Society of Professional Engineers.

The team winning the local competition participates in the state competition. A team of very bright students, from individuals competing in the state competition are chosen to represent the state in the national competition in Washington, D.C. This is the 21st year for the NSPE MATHCOUNTS PROGRAM.

Local MATHCOUNTS competition is supported by the Southern Chapters Council of the California Society of Professional Engineers (CSPE). Support at the State and National level for the NSPE MATHCOUNTS competition is by major corporations and local businesses.

THE ENGINEERS’ COUNCIL, SHERMAN OAKS, CALIFORNIA RECOGNIZES AND CONGRATULATES THE AWARD WINNERS OF THE 2012 COMPETITION

EAGLE ENGINEERING
“We build for a better tomorrow.”

2011 Awards

• Los Angeles Regional VEX Excellence Award
• FIRST Judges Award – Manchester New Hampshire Regional
• VEX Tournament Finalist
• FIRST Los Angeles Regional Chairman’s Award
• Finalist – World Championship Robotics Essay Challenge
• VEX World Championship Divisional Excellence Award
• VEX EMC Las Vegas Tournament Champion Award

2012 Corporate Sponsors

• Pratt & Whitney Rocketdyne
• Raytheon
• PTC
• Tyco Electronics
• Lowery Digital
• Jostens

For information about the Eagle Engineering FIRST and VEX Robotics Teams at Chaminade College Preparatory High School, contact Nancy McIntyre, Robotics Program Directory: nm McIntyre@chaminade.org (phone 818-347-8300).
In recognition of Randy’s courageous leadership, excellent technical ability, outstanding business acumen and exemplary customer focus. Randy’s passion and his efforts have significantly contributed to program success while preparing the Test community for a strong future.

In 1955 Bill Johnson was one of the founders of the Engineers’ Council. Bill had an untiring commitment to form and build the Council into a unified and effective body representing all facets of the engineering and scientific community. His standards and professional aura were to emulate perfection and elegance.

He was laying the groundwork for the younger generation to participate and enjoy the future in leading and influencing the developing international engineering community. Bill was considered the backbone of the Council. He chose giving recognition to outstanding people as a means of providing a model of excellence.

The William B. Johnson International Inter-Professional Founders Award was established by The Engineers’ Council to perpetuate the image and memories of Bill – his leadership, methods, fortitude, standards, efforts and achievements with compassion for others while focusing on bettering the engineering community. Selection of recipients for this award reflects his image.

Past recipients

<table>
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<tr>
<td>Roland V. Roggero</td>
<td>1993</td>
<td>James S. Paulsen</td>
<td>2000</td>
<td>Dr. Sharlene Katz</td>
<td>2008</td>
</tr>
</tbody>
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Machining Modeling

Pratt & Whitney
East Hartford, Connecticut

Team Members
Donald B. Caldwell, Jr.  Edward Marchitto  John P. Rizzo, Jr.
Walter F. Serafin        Mark A. Wise

Accepting the Project Award
Krzysztof Barnat
Project Leader

Global Hawk Flight Control Actuator Team

Northrop Grumman Aerospace Systems
San Diego, California

Team Members
Grace Bohn                          Gio Giglio                          Keith Sinclair

Accepting the Project Award
Don Casinger
Project Leader

Space Shuttle Main Engine Flight Support Team

Pratt & Whitney Rocketdyne
Canoga Park, California

Team Members
Michael Adams  Sonia Baler  Neal Bloom
William "Mitch" Brown  Mike Carlson  Helen Lewin
Elizabeth Chilcoat  Al Daumann Jr  John Flanagin
Arthur Hill        Scott Kittinger  Scott Ward
Hsou-Tao Yu       Richard Dean Patmor
Marguerite Morgan-Cargo  Joost Ouwersloot

Accepting the Project Award
Kenneth C. Kan
Project Leader
The 57th Honors and Awards Banquet

DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

The Skunk's Den

Lockheed Martin Aeronautics
Palmdale, California

Team Members
Dave Allen  Elena Andrade  Dave Bartos
Wayne Begnaud  Melissa Dalton  Joel Derrick
Jorge Gudino  Jared Knutzon  Bryan Walter
Bob Neimeyer  Maggie Macfarlane

Accepting the Project Award
Marc E. O'Brien
Project Leader

NG NSD Process CMMI Level 3 Recertification

Northrop Grumman Navigation Systems Division
Woodland Hills, California

Team Members
Rita Abraham  Dennis Creed  Patricia Dousette
Minh Du  Aiko Hayashida  Amanda Cueto-Moll

Accepting the Project Award
Misak Zetilyan
Project Leader
OUTSTANDING ENGINEERING ACHIEVEMENT MERIT AWARDS

Scott C. Connell
Pratt & Whitney
Rocketdyne
Thousand Oaks, California
For dedication and leadership of the J-2X Systems Development Team and achieving the first test of the J-2X rocket engine

Robert C. Griffith
Northrop Grumman
Navigation Systems Division
Woodland Hills, California
In recognition of innovation, dedication, contributions and achievement in furthering the development of inertial instruments and sensors

Corry S. Johnson
Pratt & Whitney Rocketdyne
Jupiter, Florida
For leadership and execution in the design and demonstration of a robust and high performing combustor for dual mode ramjets

Stephen M. Waldo
Lockheed Martin Aeronautics Company
Palmdale, California
In recognition of excellence as lead flight test engineer for U-2 post depot maintenance, working with numerous teammates, associate contractors and customers, to deliver world class products on or ahead of schedule

Ron Urquidi
Pratt & Whitney Rocketdyne
Canoga Park, California
For technical excellence, exceptional leadership and contributions toward the development and advancement of System Interconnects for large rockets from the F-1 to the J-2X
Special Thanks To:

~ California State University Northridge for hosting Awards Assembly Committee.

~ Lockheed Martin Aeronautics Company Skunk Works for assistance with the cost of audio/video and the graphic development of the Souvenir Program.

~ Northrop Grumman Aerospace Systems for the cost for a professional photographer.

~ Pratt & Whitney Rocketdyne for printing of the Souvenir Program and award certificate artwork and printing.
The Engineers' Council

Sheraton Universal
Universal City, California

Souvenir Program