The Engineers’ Council
63rd Honors and Awards Banquet

Engineers:
Inspiring Wonder
National Engineers Week Committees

~ BANQUET COMMITTEE ~
Marek Barylak, Kenneth Davis, Sonja Domazet,
Paul Gill, Stephen Guine, Kevin Knudsen, Paul Landry,
Susan Marcus, Eli G. Stiny, Robert B. Tarn, Jackie Zev

~ HONORS & AWARDS COMMITTEE ~
Marek Barylak, Kenneth Davis, Sonja Domazet,
Paul Gill, Stephen Guine, Kevin Knudsen,
Paul Landry, Robert B. Tarn

~ AWARDS ASSEMBLY ~
Marek Barylak, Larry Dalton, Ken Davis,
Sonja Domazet, Paul Gill, Rudy Montalvo,
Eli G. Stiny, Robert B. Tarn, Jackie Zev

~ HOSTESSES ~
Olivia Landry, Noelle Saccaccio, Hoda Storage

~ SOUVENIR PROGRAM GRAPHICS & DESIGN ~
Paul Landry

~ AWARD GRAPHICS & COVER PAGE~
Mike Matte

~ AUDIO / VIDEO ~
PSAV Audio Visuals, Christopher Landry

~ PHOTOGRAPHERS~
Daniel Perales, Gene Yano

~ BANQUET SETUP  / AWARDS DISTRIBUTION ~
Julia M. Barylak, Mahsa Hatam

~ MATHCOUNTS ~
Jerry Kraim, Eli G. Stiny

Engineers’ Council Past Presidents

<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
<th>Year</th>
<th>Name</th>
<th>Year</th>
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<tbody>
<tr>
<td>1980</td>
<td>Clifford B. Shiepe, PE</td>
<td>1993</td>
<td>Lloyd W. Higginbotham, FIAE</td>
<td>2006</td>
<td>Paul F. Landry</td>
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<td>1981</td>
<td>Clifford B. Shiepe, PE</td>
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<td>Lloyd W. Higginbotham, FIAE</td>
<td>2007</td>
<td>Paul F. Landry</td>
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<td>Patrick Berbon</td>
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<td>Clifford Terry</td>
<td>1997</td>
<td>Lloyd W. Higginbotham, FIAE</td>
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<td>Dr. Charles H. Volk</td>
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<td>1985</td>
<td>Roland V. Roggero</td>
<td>1998</td>
<td>Lloyd W. Higginbotham, FIAE</td>
<td>2011</td>
<td>Kenneth G. Davis</td>
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<td>1986</td>
<td>James P. Ritchey</td>
<td>1999</td>
<td>Lloyd W. Higginbotham, FIAE</td>
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<td>Kenneth G. Davis</td>
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<td>1987</td>
<td>James P. Ritchey</td>
<td>2000</td>
<td>Lloyd W. Higginbotham, FIAE</td>
<td>2013</td>
<td>Sonja Domazet</td>
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<td>1988</td>
<td>Harlan L. Russ</td>
<td>2001</td>
<td>Lloyd W. Higginbotham, FIAE</td>
<td>2014</td>
<td>Sonja Domazet</td>
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<td>1989</td>
<td>Dr. A. F. Ratcliffe</td>
<td>2002</td>
<td>Lloyd W. Higginbotham, FIAE</td>
<td>2015</td>
<td>Sonja Domazet</td>
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<td>1990</td>
<td>Dr. A. F. Ratcliffe</td>
<td>2003</td>
<td>Robert B. Tarn</td>
<td>2016</td>
<td>Sonja Domazet</td>
</tr>
</tbody>
</table>
Welcome & Introductions – 6:00 p.m.

Master of Ceremonies
Stephen Guine

Dinner

Presentation of Awards – 7:00 p.m.

Council President
Sonja Domazet

Presenters
Marek Barylak, Ph.D.
Ken Davis
Paul Gill
Edward Gerding
Chris Hernandez
Kevin Knudsen
Azad M. Madni, Ph.D.
Rudy Montalvo
George A. Pavlath, Ph.D.
Eli G. Stiny
Jerry Tarnacki
Rob Weiss
Jackie Zev, Ph.D.

Closing
Sonja Domazet
The Engineers’ Council
Board of Directors

President
Sonja Domazet

Vice President
Stephen Guine

Treasurer
Marek Z. Barylak, Ph.D.

Secretary
Eli G. Stiny

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

Directors-at-Large
Larry Dalton, Paul Gill, Jerry Kraim, Rudy Montalvo, Jackie Zev, Ph.D.
FUTURE TECHNOLOGY LEADERS
AWARDS

Alexander Jozefov
Aerojet Rocketdyne
Los Angeles, California

For RS-25 Nozzle Affordability improvements and the Advancement of Aerojet Rocketdyne's Structured Light Inspection process capability

Dr. Peter L. Bishay
California State University, Northridge
Northridge, California

For outstanding leadership of new research-based senior design projects, and excellent contribution to the fields of computational mechanics and composite materials

Benjamin A. Sigal
Lockheed Martin Aeronautics
Palmdale, California

For leading the subsystem and flight test instrumentation layout on a volume constrained flight demonstration system

Dr. Michael T. Barako
Northrop Grumman Aerospace Systems
Redondo Beach, California

For complimentary contributions to engineering education and unique leadership role in transitioning basic nanoscale science into practical engineering technologies

Victor E. Akel
Northrop Grumman Mission Systems
Woodland Hills, California

For outstanding contributions in the advancement of inertial navigation systems, technical leadership, the novel use of advanced additive manufacturing and STEM outreach

Victor A. Medina
The Boeing Company
Long Beach, California

For significant contributions to the 737 MAX and 777X Airplane Development Programs in completing multiple critical engine nacelle analyses
# FUTURE TECHNOLOGY LEADER AWARDS

<table>
<thead>
<tr>
<th>Award Recipient</th>
<th>Company</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chris M. Barlog</strong></td>
<td>Aerojet Rocketdyne</td>
<td>Los Angeles, California</td>
</tr>
<tr>
<td><strong>Ryan S. Godfrey</strong></td>
<td>Lockheed Martin Aeronautics</td>
<td>Palmdale, California</td>
</tr>
<tr>
<td><strong>Dr. Katherine T. Fountaine</strong></td>
<td>Northrop Grumman Aerospace Systems</td>
<td>Redondo Beach, California</td>
</tr>
<tr>
<td><strong>Megan Ford</strong></td>
<td>Northrop Grumman Mission Systems</td>
<td>Woodland Hills, California</td>
</tr>
<tr>
<td><strong>Michael Bass</strong></td>
<td>The Boeing Company</td>
<td>Saint Louis, Missouri</td>
</tr>
<tr>
<td><strong>Dr. Charles M. Cai</strong></td>
<td>University of California, Riverside</td>
<td>Riverside, California</td>
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</tbody>
</table>

**Chris M. Barlog**
For exceptional support to RS-68 booster engine test operations as well as space propulsion program NEXT-C.

**Ryan S. Godfrey**
For technical leadership in aircraft conceptual design and for training future pilots.

**Dr. Katherine T. Fountaine**
For leadership in the academic and industrial community with focus in nanophotonics including thermal control, energy harvesting and light scattering.

**Megan Ford**
For the demonstration of technical leadership and mentorship in applying model based engineering to the avionics system.

**Michael Bass**
For contributions to the development of innovative shape memory alloy actuators for aerospace vehicles.

**Dr. Charles M. Cai**
For outstanding early-career contributions to a diverse engineering workforce and a clean, sustainable future.
# Future Technology Leaders Awards

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Nacer E. Chahat</td>
<td>Jet Propulsion Laboratory</td>
<td>Pasadena, California</td>
<td>For novel antenna innovations that are enabling small spacecraft NASA missions and commercial enterprise operating in extreme thermal, radiation, high power and electrostatic discharge environments.</td>
</tr>
<tr>
<td>Dewey M. Williams</td>
<td>Lockheed Martin Aeronautics</td>
<td>Fort Worth, Texas</td>
<td>For rapidly ascending as a future leader in aircraft mission systems development through a unique balance of hardware and software expertise, with enthusiasm and an innovative outlook.</td>
</tr>
<tr>
<td>Dr. Myeonglok Seol</td>
<td>NASA Ames Research Center</td>
<td>Moffet Field, California</td>
<td>For innovative contributions in the development of triboelectric power generation for space missions and societal applications.</td>
</tr>
<tr>
<td>Christopher Unice</td>
<td>Department of the Air Force</td>
<td>Edwards, California</td>
<td>For demonstrating future technology leadership through his innovative efforts in testing and maintaining the Combat Air Force’s F-22 lethality.</td>
</tr>
<tr>
<td>Dr. Caryn Bullard</td>
<td>Northrop Grumman Mission Systems</td>
<td>Woodland Hills, California</td>
<td>In recognition of substantial technical innovations, mentoring, and leadership.</td>
</tr>
<tr>
<td>Mike D'Olio</td>
<td>The Boeing Company</td>
<td>Philadelphia, Pennsylvania</td>
<td>In recognition of outstanding leadership and contributions in the field of Immersive Development resulting in the Boeing Extended Reality Team’s successful deployment of technology across multiple platforms.</td>
</tr>
</tbody>
</table>
OUTSTANDING ENGINEERING ACHIEVEMENT MERIT AWARDS

**Dr. Bingbing Li**  
California State University, Northridge  
Northridge, California

For outstanding research accomplishments in sustainable and additive manufacturing and dedicated contributions to education, mentorship, supervision, service, innovation and global partnerships in manufacturing engineering

**Jason Laridon**  
The Boeing Company  
Tukwila, Washington

For significant achievement of designing solutions to multiple safety issues which could have resulted in significant injuries to employees supporting Structural Testing

**Kamal Joshi**  
Northrop Grumman Mission Systems  
Woodland Hills, California

For outstanding contributions in modular, scalable system architecture for the next generation navigation systems, and knowledge sharing with the future generation of navigation systems engineers

**Chad M. Carrie**  
Lockheed Martin Aeronautics  
Fort Worth, Texas

For designing the hardware architecture and leading the development of the E-OSA Mission Computer (EMC2), the “Einstein Box” - an evolution in secure mission computer technology

**Munir Merchant**  
Aerojet Rocketdyne  
Los Angeles, California

For leadership in Structural Dynamics and continued valuable contributions to product design and anomaly investigations
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

Thin Haul Hybrid Electric Aircraft Team

The Boeing Company
Long Beach, California

RS-25 Engine: Main Injector Inertia Welding Process Development and Improvements

Aerojet Rocketdyne
Los Angeles, California

Team Members

Marty Bradley
Mark Liffring
Hubert Wong

Team Members

Heath Cheung
Kent Majewski
Earl Noteboom

Accepting the Project Award

Kevin Lutke

Accepting the Project Award

Mohamed G. Elnaggar

Description of Project:

For advancement of design, analysis and capability in the area of electric propulsion for aviation

Description of Project:

In recognition of outstanding achievement in successfully restarting and significantly improving the RS-25 Main Injector inertia welding process through innovative engineering applications to improve quality and reduce costs
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

Quiet Supersonic Technology

Lockheed Martin Aeronautics
Palmdale, California

Description of Project:
In recognition of the successful completion of the Quiet Supersonic Technology X-plane Preliminary Design Review, an important step towards a future where environmentally responsible commercial superonic flights are a reality.

Team Members
Robert Barksdale
Tony Delagarza
Kevin Harbuck
Melissa Lind
Jason Oubre
Mike Rankin
Steve Singer

Accepting the Project Award
Michael Buonanno

Full-Scale Static Cost Savings

The Boeing Company
Everett, Washington

Description of Project:
For the identification and the implementation of engineering improvements that resulted in significant cost savings on a full-scale static test program.

Team Members
Andrew Hickson
Micah Lambeth
Trent Mathias
Lee McNeil
Alessandro Vieira

Accepting the Project Award
Timothy L. Shoemaker
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

Advanced Messaging Terminal (AMT)

Northrop Grumman Mission Systems
Woodland Hills, California

Team Members
Jaime Bernal
Mary Daniels
Tin Duong
Kenny Lieu
Scott Schnetzler
Lisle Sherwin

Accepting the Project Award
Long T. Nguyen

Description of Project:
In recognition of excellence in AMT engineering project to bridge DoD and IC enterprise messaging with tactical edge

TX Firm Concept to First Flight in 36 Month

The Boeing Company
Berkley, Missouri

Team Members
Nan Bond
Joe Haudrich
Tim Wilson

Accepting the Project Award
Paul Niewald

Description of Project:
In recognition of the Boeing T-X engineering team for taking its design – for an all new purpose-built advanced pilot training system for the USAF – from firm concept to first flight in just 36 months
Aerojet Rocketdyne

Congratulates all 2018 National Engineers Week Honorees.

We are enabling a new reach into deep space and defending our Nation’s freedom.

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

To

James Paulsen
Vice President, NASA Programs
Aerojet Rocketdyne
Rancho Cordova, California

Presented by

Jerry Tarnacki
Senior Vice President, Space
Aerojet Rocketdyne
Los Angeles, California

For career-long dedication and outstanding leadership in development and deployment of the Space Shuttle Main Engine (SSME). For technical leadership as the chief engineer of Aerojet Rocketdyne Propulsion & Power business unit responsible for engineering and test efforts in liquid rocket propulsion and space power systems. For leadership in our nation’s critical space programs including NASA Exploration, Commercial Crew, In-Space Propulsion and Power, Large Liquid Engine Development and Advanced Propulsion. For leadership in Aerojet Rocketdyne’s RS-25 liquid rocket engine program in support of the Space Launch System (SLS) to facilitate future U.S. space exploration and presence.

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, in 1930, he moved his research to Roswell, New Mexico. There he built and tested liquid propulsion rockets which successfully achieved high altitude flights and demonstrated fin-stabilized flight control. He filed dozens of related patents, including gyroscopic guidance systems and multistage rockets. Dr. Goddard’s developments spawned the rocket industry that put the Americans into space and the humans on the Moon. His legacy lives today in those who followed his pioneering work.

Past Recipients

2007 Byron K. Wood
2008 Maynard “Joe” Stangeland
2009 Paul F. Seitz
2011 John B. Plowden
2012 James Maser
2014 Dr. Munir M. Sindir
2016 Steven A. Bouley, Jeffrey Kincaid
2017 Dr. Marvin F. Young
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

Replacement Heads-up Display Lab Test

The Boeing Company
Long Beach, California

Team Members
Greg Fields
Trung Le
In Yu

Accepting the Project Award
Joe Schottmiller

Description of Project:
In recognition of innovative technical approach to integrating and qualifying new test racks and lab platforms for the next generation of heads up displays for heavy airlifter cargo fixed wing aircraft

THAAD VDA Delivery Team

Aerojet Rocketdyne
Los Angeles, California

Team Members
Patrick Buckley
Kenneth Christie
Glenn Davis-Jr
Annie Dergrigorian
Haik Kafadarian
Terry Riffle

Accepting the Project Award
Felicia Li

Description of Project:
For successfully achieving critical deliveries while managing the Special Test Equipment upgrades, developing 2nd source suppliers, managing anomalies, and completing all schedule milestones
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

MQ-25 Configuration Team

Lockheed Martin Aeronautics
Palmdale, California

Team Members
Kevin Cloonan
Ken Hajic
Dave Nelson
Marc Stelmack
Don Williams

Accepting the Project Award
Hossein Aminpour

Description of Project:
For rapidly working across disciplines to optimize an outstanding concept for the Navy’s first operational carrier-based unmanned air system

FMS Red Team Royal Stout

Northrop Grumman Aerospace Systems
Redondo Beach, California

Team Members
Rudolf Bartens
Jimmy Choi
George Harpole
Lance Loi
Nabil Massarweh

Accepting the Project Award
Jeff D. Earnest

Description of Project:
In recognition of the FMS Red Team Royal Stout for developing innovative solution to a program show stopper
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

Massive MIMO Platform and Cloud Edge Deep Learning AI Engine

RF DSP Inc.
Irvine, California

Team Members
Jason Brent
Boyu Li
Chris Young
Dengkui Zhu

Accepting the Project Award
Ping Liang

Description of Project:
For outstanding accomplishments in advancing the state-of-the-art of massive MIMO development and of cloud edge deep learning AI engine

Remote Launch

The Boeing Company
El Segundo, California

Team Members
Tim Bentley
Subash Fernando
Dave Luther

Accepting the Project Award
Sara Bennett

Description of Project:
In recognition of outstanding drive to enable the control and testing of a satellite from thousands of miles away with first pass success
Dr. Michael S. Larsen  
Northrop Grumman Mission Systems  
Woodland Hills, California  
For Significant Advances in Quantum Sensing Leading to Advanced Navigation Solutions

Jason Flattery  
Department of the Air Force  
Edwards, California  
For demonstrating outstanding engineering achievement through his F-22 developmental testing and signature management efforts, ensuring the fleet is combat ready

Tyler J. Hedges  
Lockheed Martin Aeronautics  
Fort Worth, Texas  
In recognition of being an innovative visionary behind the E-OSA Mission Computer (EMC2), the “Einstein Box” – an evolution in mission computer technology enabling aircraft to demonstrate 6th Gen Core Processing

Dr. Maryam Tabibzadeh  
California State University, Northridge  
Northridge, California  
For continued and extensive contributions to research and education in the field of engineering management

Ronald Morales  
The Boeing Company  
Long Beach, California  
For outstanding performance and tremendous contributions in Thermoplastic Material Substitution/Value Engineering projects
<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>City, State</th>
</tr>
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<tbody>
<tr>
<td>Arturo Tolentino</td>
<td>Aerojet Rocketdyne</td>
<td>Redmond, Washington</td>
</tr>
<tr>
<td>Dr. Kourosh Sedghi Sigarchi</td>
<td>California State University, Northridge</td>
<td>Northridge, California</td>
</tr>
<tr>
<td>Dr. Vesna Radisic</td>
<td>Northrop Grumman Aerospace Systems</td>
<td>Redondo Beach, California</td>
</tr>
</tbody>
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**DISTINGUISHED ACHIEVEMENT AWARDS**

- **Arturo Tolentino**
  - **Aerojet Rocketdyne**
  - **Redmond, Washington**
  - For supporting the development of numerous propulsion system and valve component products in the area of in-space and defense propulsion systems

- **Dr. Kourosh Sedghi Sigarchi**
  - **California State University, Northridge**
  - **Northridge, California**
  - For efforts in motivating and inspiring his students with hands-on learning, research and industry type projects

- **Dr. Vesna Radisic**
  - **Northrop Grumman Aerospace Systems**
  - **Redondo Beach, California**
  - For contributions to engineered RF materials, monolithic integrated circuits and sub-millimeter wave amplifiers and sources
DISTINGUISHED ACHIEVEMENT AWARDS

Enrique J. Lavernia
University of California, Irvine
Irvine, California

For distinguished excellence in mentoring and developing engineering students, innovative and award winning teaching, outstanding research and technology development, and sustained service to the profession.

Jonathon W. Gabrys
The Boeing Company
Philadelphia, Pennsylvania

In recognition of outstanding technical accomplishments on multiple programs, inspiring leadership, and endless pursuit of innovation to set the technology direction and vision for future growth.

Dr. Joseph Kunc
University of Southern California
Los Angeles, California

For outstanding and sustained contributions to advancing the field of astronautics engineering education.
WHEN OPPORTUNITY KNOCKS,
THEY’LL BE READY TO ANSWER.

AT LOCKHEED MARTIN,
WE’RE ENGINEERING A BETTER TOMORROW.

When we envision the future, we see a world of never-ending possibility. But that future will never be realized unless we prepare today’s students for tomorrow’s challenges. That’s why it is so vitally important for educators, parents and companies like ours to encourage young people to study science, technology, engineering and math.

Learn more at lockheedmartin.com/community
Kelly Johnson designed and built aircraft based on national need, using technological advancements to develop aircraft uniquely suited to warfighter requirements. In support of the warfighter, USAF Gen (Ret.) John D.W. Corley has been instrumental in translating operational requirements to systems requirements. His leadership was pivotal in applying technology developments to meet operational capabilities quickly, quietly and with quality. Continuing Kelly’s legacy, Mr. Corley has dedicated his nearly 40 year career making engineering dreams become a reality and helping others achieve their aspirations. As a key member of the United States Air Force Academy’s Falcon Foundation, he has created a path for others to follow behind him.

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>
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<tr>
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<th>Recipient</th>
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<tr>
<td>1992</td>
<td>Clarence L. “Kelly” Johnson (Posth.)</td>
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<td>1995</td>
<td>Ben R. Rich (Posthumously)</td>
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<td>1999</td>
<td>Natalie W. Crawford</td>
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<td>2000</td>
<td>Burt Rutan</td>
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<td>2001</td>
<td>Sherman N. Mullin</td>
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<tr>
<td>2004</td>
<td>Lt. Gen. Harold W. Blot, USMC (ret.)</td>
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<td>2005</td>
<td>Dain M. Hancock, LMAC</td>
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<td>2006</td>
<td>Dr. Anthony J. Tether, DARPA</td>
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<td>2007</td>
<td>Richard Heppe, LMAC</td>
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<tr>
<td>2008</td>
<td>Gen. Gregory “Speedy” S. Martin (ret.)</td>
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<tr>
<td>2009</td>
<td>Abraham Karetn</td>
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<td>2010</td>
<td>Thomas J. Cassidy, Jr.</td>
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<td>2011</td>
<td>Frank J Cappuccio</td>
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<td>2012</td>
<td>James E. Cartwright</td>
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<td>2013</td>
<td>Dr. Stephen Walker</td>
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<tr>
<td>2014</td>
<td>Dr. Leyland Nicolai</td>
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<td>2015</td>
<td>David Hamilton</td>
</tr>
<tr>
<td>2016</td>
<td>C. Douglas Ebersole</td>
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<tr>
<td>2017</td>
<td>Dr. George Ka‘iliwai II</td>
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</tbody>
</table>
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

PDC Extended Reality Team

The Boeing Company
Philadelphia, Pennsylvania

Team Members
- Michael D'Olio
- Keith Grauer
- Jimmy Hoac
- Daniel Kraynik
- Alexander McCraw
- Sheevangi Pathak
- George Tamasi

Accepting the Project Award
Jonathon Gabrys

Description of Project:
For outstanding innovation and drive in applying Augmented Reality and Virtual Reality, to help Boeing deliver products that meet the highest technical and quality standards, while reducing program costs.

Compact Additively Manufactured Innovative Electric Motor

NASA Glenn Research Center
Cleveland, Ohio

Team Members
- Chun-Hua Chuang
- Steven Geng
- Samual Hocker
- Kurt Papatthakis
- Michael Ricci
- Christopher Stelter
- Valerie Wiesner

Accepting the Project Award
Michael Charles Halbig

Description of Project:
For distinguished accomplishments in the CAMIEM sub-project in utilizing additive manufacturing processes to enable new component designs to achieve electric motors with considerably higher power densities and efficiencies.
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

Software Defined GNSS Receiver Architecture

Northrop Grumman Mission Systems
Woodland Hills, California

Team Members
Patrick Chiu
Todd Khacherian
Taylor Schluter

Accepting the Project Award
Mathew Cosgrove

Description of Project:
For research and development of various facets of a Software Defined Receiver product used for advanced navigation

CCTS HPLV Qual Anomoly Tiger

Team lead
The Boeing Company
El Segundo, California

Team Members
Russell Morrison
Lawrence Pagel
Creed Reilly

Accepting the Project Award
Dane Johoske

Description of Project:
For high energy and successful root cause determination and implementation of corrective actions that successfully supported critical path production on a program critical to Boeing and its NASA customer
<table>
<thead>
<tr>
<th><strong>DISTINGUISHED ACHIEVEMENT AWARDS</strong></th>
</tr>
</thead>
</table>
| **Dr. Nhut Tan Ho**  
California State University, Northridge  
Northridge, California |
| In recognition of more than 12 years of student engagement by providing encouragement to students and starting future engineers in their development of a passion for research |
| **Floyd Shelby**  
Aerojet Rocketdyne  
Los Angeles, California |
| For advancing the state-of-the-art in space electronics and avionics contributing to the success of our nation's civilian and defense space programs |
| **Dr. Abeer Alwan**  
University of California, Los Angeles  
Los Angeles, California |
| For strong commitment and dedication to engineering education at both the undergraduate and graduate levels |
| **Dr. Ayesha Madni**  
University of Southern California  
Los Angeles, California |
| For fundamental contributions to STEM educational simulations using game-based approaches |
# Distinguished Achievement Awards

<table>
<thead>
<tr>
<th>Name</th>
<th>Company/Location</th>
<th>Award Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greg A. Salvagni</td>
<td>Northrop Grumman Mission Systems, Woodland Hills, California</td>
<td>For distinguished contributions in the architecture, design, integration, and test of inertial and GPS-inertial navigation systems and for longstanding excellence in LN-100 systems engineering leadership.</td>
</tr>
<tr>
<td>Kazem Kazerounian</td>
<td>University of Connecticut, Storrs, Connecticut</td>
<td>For significant contributions to engineering education, research, and industry/university engagement that respond to global trends in technology and industry promoting innovation and entrepreneurship and advancing socially mindful engineering practices.</td>
</tr>
<tr>
<td>Dr. Matthew J. Barth</td>
<td>University of California Riverside, Riverside, California</td>
<td>In recognition of pioneering work in energy and emissions modeling, and their unique application in environmentally friendly intelligent transportation systems.</td>
</tr>
<tr>
<td>Year</td>
<td>Recipient Name</td>
<td>Year</td>
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<tr>
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</tr>
<tr>
<td>1959</td>
<td>Roy E. Marquardt</td>
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<td>1960</td>
<td>Richard Bradshaw</td>
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<td>1963</td>
<td>George T. Harness</td>
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<td>1964</td>
<td>Ralph Balent</td>
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<td>1965</td>
<td>Clarence L. Johnson</td>
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<td>Steven J. Domokos</td>
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<td>1967</td>
<td>James A. Broadston</td>
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<td>1968</td>
<td>Dr. Arnold M. Levine</td>
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<td>1969</td>
<td>Willis M. Hawkins</td>
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<td>1970</td>
<td>Ralph A. Lamm</td>
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<td>1971</td>
<td>Arthur A. Daush, Jr.</td>
<td>2001</td>
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<td>1972</td>
<td>Dr. R.N. Ghose</td>
<td>2002</td>
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<td>1974</td>
<td>Elliott H. Green</td>
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<td>1975</td>
<td>Mathew C. Ek</td>
<td>2005</td>
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<td>1976</td>
<td>Sam F. Iacobellis</td>
<td>2006</td>
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<td>Lon L. Sanders</td>
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<td>1978</td>
<td>Norman J. Ryker</td>
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<td>Donald C. Tillman</td>
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<td>1980</td>
<td>Dominick J. Sanchini</td>
<td>2010</td>
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<td>1982</td>
<td>Dr. Paul B. MacCready</td>
<td>2012</td>
</tr>
<tr>
<td>1983</td>
<td>Charles G. Fargo</td>
<td>2013</td>
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<tr>
<td>1984</td>
<td>Dr. Malcom Currie</td>
<td>2014</td>
</tr>
<tr>
<td>1985</td>
<td>Phillip V. King</td>
<td>2015</td>
</tr>
<tr>
<td>1986</td>
<td>Sophia K. Ashley</td>
<td>2016</td>
</tr>
<tr>
<td>1987</td>
<td>Dr. Rodney A. Boudreaux</td>
<td>2017</td>
</tr>
<tr>
<td>1988</td>
<td>George J. Hallinan</td>
<td></td>
</tr>
</tbody>
</table>
Engineer of the Year Award
and
Peter Recchia Omni Award

To

Dr. Dale E. Burton
Sector Vice President
Northrop Grumman Aerospace Systems
Melbourne, Florida

Presented by

Dr. George A. Pavlath
Northrop Grumman Fellow
Northrop Grumman Mission Systems
Woodland Hills California

Dr. Burton leads strategic initiatives to ensure operational performance for the sector’s fielded systems, and provides a sector focus for development and operational demonstrations to meet customers’ mission objectives. He is an expert in battle management, command and control and advanced intelligence, surveillance and reconnaissance systems. He has devoted much of his effort to developing and improving the capabilities of Air Force’s E-8C Joint STARS airborne ground surveillance, targeting and battle management system—a capability that has been essential to protecting American troops on the ground, in the air and on the sea. Since September 11, 2001, the high-demand, low-density system has been deployed non-stop in support of all major U.S. operations. The “eyes in the sky for boots on the ground” flown more than 130,000 combat mission hours in support of U.S. Central Command and has consistently supported U.S. Combatant Commanders worldwide. He has been a role model and technical mentor to Northrop Grumman engineers over his distinguished career. His professional expertise and his personal leadership fostered strong customer intimacy with military leadership for over 30 years. Over the course of his career, his expertise has been widely shared across Northrop Grumman to the betterment of our own team to help us deliver on our performance commitments. His lasting legacy has also created new value for our customers, employees and shareholders worldwide.

Peter Recchia Omni Award

The movies have their Oscars, the television industry has its Emmy, and The Engineers’ Council presents, for the 43rd 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.”
Hello from the International Space Station!

I am Flight Engineer, Mark Vande Hei of Expeditions 53 and 54.

Congratulations to all of you on this 67th observance of National Engineers Week. We join with you in celebration of all of the engineers making a difference in the world, both through projects and bringing engineering to life for kids, educators and parents. We also salute all of the volunteers from engineering societies and professional organizations across our great nation stimulating interest in math and science among our youth.

NASA is an engineering organization. We live and work in the most complex engineering project ever designed and built, and our lives depend on all the engineers who made this home possible. The criticality of your work on your engineering projects cannot be overstated – if you don’t do your job, then people get hurt. So for the engineers living and working in America every day, we appreciate what you do 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.

NASA and our international partners are also working hard preparing to explore the solar system. So for the future engineers of America, we need your help to get there. So study hard, aim high and keep the dream alive!
Thank You, Engineers’ Week Participants
Celebrating the life and contributions of our dear friend:

2001 John Guarrera Award
2008 William B. Johnson International Inter-Professional Founders Award
2011-2016 Engineers’ Council Board of Directors
2013 Vice President, Engineer’s Council

Dr. Sharlene Katz, Ph.D., P.E.

Your time with us has made us better
John J. Guarrera
Engineering Educator of the Year Award

To
Dr. Cengiz S. Ozkan
Professor
University of California, Riverside

Presented by
Dr. Azad M. Madni
Professor, Astronautics
Director, Systems Architecting and Engineering Program
University of Southern California

For pioneering engineering innovation and ground-breaking developments in energy storage materials and technologies; exceptional service in graduate mentoring; extraordinary visibility; and, outstanding contributions to technology transfer to industry.

The Engineering Educator of the Year Award is given in recognition of significant achievements by a 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.”

<table>
<thead>
<tr>
<th>Past Recipients</th>
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</thead>
<tbody>
<tr>
<td>1982 Dr. Alfonso F. Ratcliffe</td>
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<tr>
<td>1983 Dr. Robert Y. Wong</td>
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<tr>
<td>1984 Dr. Edmond S. Gillespie</td>
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<tr>
<td>1985 Dr. Thelma Estrin</td>
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<tr>
<td>1986 Dr. Gregg W. Dixon</td>
</tr>
<tr>
<td>1987 Dr. Michael A. Melkanoff, P.E.</td>
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<tr>
<td>1988 Dr. Diane Schwartz</td>
</tr>
<tr>
<td>1989 Dr. Larry Lichten</td>
</tr>
<tr>
<td>1991 Dr. B. J. Shell</td>
</tr>
<tr>
<td>1992 Dr. Mihran S. Agbabian</td>
</tr>
<tr>
<td>1993 Dr. Michael Hassul</td>
</tr>
<tr>
<td>1994 Dr. John W. Adams</td>
</tr>
</tbody>
</table>
DISTINGUISHED ACHIEVEMENT AWARDS

Villy Angelico  
The Boeing Company  
El Segundo, California

In recognition of distinguished technical and leadership contributions to the aerospace and defense industries, as well as an unwavering commitment to diversity, inclusion and inspiring the next generation of engineers.

Dr. Xiaojun (Ashley) Geng  
California State University, Northridge  
Northridge, California

In recognition of a distinguished career as an educator, researcher and scholar, and for inspiring leadership and support of student projects and research.

William Munsch  
Aerojet Rocketdyne  
Los Angeles, California

For engineering leadership in the development and deployment of missile defense systems critical to our nation's defense and security.
### DISTINGUISHED ACHIEVEMENT AWARDS

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution/Company</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dr. Subramanian Srikanteswara Iyer</strong></td>
<td>University of California, Los Angeles</td>
<td>Los Angeles, California</td>
<td>For sustained contributions in the area of Semiconductor Technology and the development of Heterogeneous Integration technologies and methodologies.</td>
</tr>
<tr>
<td><strong>Juergen Flamm</strong></td>
<td>Northrop Grumman Mission Systems</td>
<td>Woodland Hills, California</td>
<td>In recognition of distinguished technical achievements and leadership in development of inertial measurement instruments and inertial navigation systems for space, military, and commercial applications, and dedication to STEM and mentoring future generations of engineers.</td>
</tr>
<tr>
<td><strong>Dr. Frank Vahid</strong></td>
<td>University of California Riverside</td>
<td>Riverside, California</td>
<td>For outstanding and pioneering achievements in developing interactive textbooks and content for teaching computer science and engineering, and for a career-long commitment to inclusiveness.</td>
</tr>
</tbody>
</table>
# OUTSTANDING ENGINEERING ACHIEVEMENT MERIT AWARDS

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Location</th>
<th>Awards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joseph Brinker</td>
<td>The Boeing Company</td>
<td>St. Louis Missouri</td>
<td>For pioneering solutions to challenging problems in the areas of automated route planning, multi-ship task allocation for collaborative mission execution, dynamic resource management, and autonomy</td>
</tr>
<tr>
<td>Dr. Paul Bogdan</td>
<td>University of Southern California</td>
<td>Los Angeles, California</td>
<td>For fundamental contributions to the design of cyber-physical systems and design methodologies for many core platforms</td>
</tr>
<tr>
<td>Dr. Li Liu</td>
<td>California State University, Northridge</td>
<td>Northridge, California</td>
<td>For serving and supporting the special needs community development with passionate dedication to enabling accessibility of computer technologies and scholarly activities to improve computer accessibility</td>
</tr>
<tr>
<td>Ivan Cheng</td>
<td>Department of the Air Force</td>
<td>Edwards, California</td>
<td>For outstanding engineering accomplishments in developmental test and evaluation of tactical data links for the United States and partner nations and dedicated contributions to mentorship, recruiting and innovation.</td>
</tr>
<tr>
<td>Dr. William H. Grover</td>
<td>University of California, Riverside</td>
<td>Riverside, California</td>
<td>For developing resources for increasing undergraduate student involvement in engineering research and supporting the integration of engineering practices into K-12 science classes</td>
</tr>
</tbody>
</table>

*February 24, 2018 - The 63rd Annual Honors and Awards Banquet*
**DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS**

**Drake Team Execution of a Quick-Reaction Capability Program**

The Boeing Company  
Kent, Washington

**Team Members**

Nathan Foote  
Joel Gronsky  
Don Tong

**Accepting the Project Award**

Kimberly J. Hicks

**Description of Project:**

For significant achievement in building, integrating, and testing several hardware items and successfully delivering on schedule from a clean-sheet design to delivery in 13 months, including a full qualification test program

**AR1 Engine Critical Design Review**

Aerojet Rocketdyne  
Los Angeles, California

**Team Members**

Steven Bennett  
Curtis Davis  
Mark Emanuel  
Wesley Goodin  
Sergio Inghilterra  
Brent Kearney  
Julia Murray

**Accepting the Project Award**

Vernon Gregoire

**Description of Project:**

For successfully accomplishing the AR1 Critical Design Review under very challenging schedule and affordability goals
# Distinguished Engineering Project Achievement Awards

## NASA Glenn Wind Tunnel Blockage Test

**Lockheed Martin Aeronautics**  
**Palmdale, California**

**Team Members**  
William Nolan  
David Pehrson  
John Richey  
Ariane Walker-Horn

**Accepting the Project Award**  
Sevan Megerian

**Description of Project:**  
For successful demonstration of supersonic wind tunnel start with the largest blockage model ever tested at the NASA Glenn 10’ x 10’ Supersonic Wind Tunnel

## Operationalize Global Strategy

**The Boeing Company**  
**St. Louis, Missouri**

**Team Members**  
Christopher Ford  
Taylor Hoover  
Larry Lamb

**Accepting the Project Award**  
Ken Chester

**Description of Project:**  
For developing and deploying a solid global engineering strategy that drives sustained competitive advantage and maintains protection of Boeing’s technical capabilities
F-15 Nose Barrel Redesign

The Boeing Company
St. Louis, Missouri

Team Members
Shannon Arnold
Ahn Lam
Tim Mitchell
Ashley Ringer
Cory Schollman

Accepting the Project Award
Timothy Mitchell

Description of Project:
For overcoming numerous obstacles to create a baseline for the implementation of FSDA on existing production platforms throughout Boeing
IGNITING THE FUTURE.

The next big thing is out there. At Boeing, we believe that visionaries are the ones who will find it. We are proud to partner with those who aren’t afraid to chase the impossible and make it reality.
The Boeing Company

Leadership in Engineering Award

To

Kristin A. Robertson
Vice President, Division Chief Engineer,
Strike, Surveillance and Mobility
The Boeing Company
St. Louis, Missouri

Presented by

Edward Gerding
Vice President and Senior Chief Engineer of BDS
Engineering Structures and Mechanical Systems
The Boeing Company
St. Louis, Missouri

In recognition of distinguished technical and leadership contributions to the aerospace and defense industries, as well as an unwavering commitment to diversity, inclusion and inspiring the next generation of engineers

The Boeing Award for Leadership in Engineering was inaugurated in Boeing’s centennial year to recognize those who exhibit the same pioneering spirit and leadership vision of the founders of Boeing’s heritage businesses that propelled Boeing through its first 100 years: William Boeing, James McDonnell, Donald Douglas, Howard Hughes and Dutch Kindelberger. The award recognizes those leaders who exemplify the vision, drive and determination to shape technology and the aerospace industry in a way that will continue to advance the art of Engineering into the next 100 years. Those recognized have made major contributions to the field of engineering, leadership of engineering programs, or other significant contributions to the engineering profession while demonstrating an ability to inspire others to make significant and major engineering contributions. The award recipients consistently model and demonstrate The Boeing Engineering Code ideals and exhibit outstanding engineering discipline and excellence and are recognized engineering leaders.

Past Recipients

2016  Dr. John J. Tracy
2017  Dr. Robert H. Liebeck
THE ENGINEERS’ COUNCIL

Sherman Oaks, California

The Engineers’ Council was founded in 1955 as the “San Fernando Valley Engineers’ Council” through the 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.

A few years before, Congress had established National Engineers Week to recognize the valuable contributions of engineers to the country. In the years after its founding, the San Fernando Valley Engineers Council’s annual joint meeting of its member societies grew into the largest annual honors and awards banquet celebrating National Engineers Week.

This banquet raises funds for high school and college scholarships along with activities to attract young people to the engineering field. The banquet also honors professionals whose accomplishments warrant recognition by their peers.

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

1969 saw Ed Reineke selected as the first Honorary Engineer of the Year. Since then, a long list of nationally renowned individuals has proudly received this award.

The Peter Recchia Omni Award was created in 1973. This perpetual trophy is named for Mr. Peter Recchia, a great supporter of engineering in our community and designer of the trophy which 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 individual who, with the general’s concurrence, has attained historically outstanding achievement in the field of aeronautical flight test and engineering.

In February 1992, 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. In 2006 and 2007, the council developed the Jack Northrop and Robert H. Goddard awards in cooperation with Northrop Grumman Integrated Systems and Pratt & Whitney Rocketdyne.

In 2016, the Boeing Engineering Leadership Award was developed to recognize those who continue the pioneering spirit of aerospace industry founders, by applying the kind of engineering excellence that will propel Boeing into its second century. The recipient recognized has made major contributions to the field of engineering, leadership of engineering programs, or other significant contributions to the engineering profession and has demonstrated an ability to inspire others to make similar contributions.

In 2016, the Council has also added the Future Technology Leader awards. With these awards, the Engineers’ Council recognizes early career professionals who have achieved significant accomplishments in a particular area of engineering activity within the first five years of their career.

Through the years, the Engineers’ Council has presented thousands of awards recognizing the excellence demonstrated by individuals in our community and throughout the world in the fields of engineering, education, special fields of work, and public service. At the same time, scholarships and other charitable activities have continually inspired and attracted those new engineers who will go on to exceed the work of those engineers who have come before them.
Honors and Awards Banquet held in West Palm Beach, Florida
Thursday, 22 February 2018
In collaboration between The Engineers’ Council and the Business Development Board (BDB)

Congratulations
Keynote Speaker and
Recipient of Honorary Engineer of the Year Award
Dr. Alan Epstein Pratt & Whitney

Distinguished Engineering Achievement
Alan Davis Aerojet Rocketdyne
Jay Doernbach Agilis
Doug Davis Northrop Grumman
Gonzalo Martinez Pratt & Whitney

Distinguished Engineering Educator
Bassem Alhalabi Florida Atlantic University
Sundararaj Iyengar Florida International University
Elizabeth Horvath Palm Beach State College

STEM Educator
Kevin Simmons The Weiss School
Waseem Asghar Florida Atlantic University

Future Technology Leader
John Barker Aerojet Rocketdyne
Justin Sabourin Aerojet Rocketdyne
Mary Mead Agilis
Michelle Garcell Agilis
Jacob Bates Belcan, LLC
Braxton Woodward Belcan, LLC
James Woodard BRPH
Lauren Toth Northrop Grumman

Distinguished Engineering Project
Chemical Solutions Control Team Aerojet Rocketdyne
RL10 Sustainment and Modernization Team Aerojet Rocketdyne
Engineering Design of Indoor Radar Range Belcan, LLC
Kong BRPH
Support Service Centers for FPL BRPH
Adaptive Engine Transition Exhaust Nozzle Pratt & Whitney
E-2D Wet Outer Wing Panel Fuel System Eng Northrop Grumman
Canadian Maritime Helicopter Program-Sea Trials Sikorsky a LM Company
## 2017 High School Scholarships

<table>
<thead>
<tr>
<th>Da Vinci Science High School</th>
<th>Palm Desert High School</th>
<th>West High School, Torrance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ana Alba</td>
<td>Riley Arnson</td>
<td>Siting Cao</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Industrial &amp; Systems Engineering</td>
<td>Chemical Engineering</td>
</tr>
<tr>
<td>University of Wisconsin, Madison</td>
<td>University of Southern California</td>
<td>California Institute of Technology</td>
</tr>
<tr>
<td>Granada Hills Charter High School</td>
<td>Chaminade College Preparatory</td>
<td>Taft High School</td>
</tr>
<tr>
<td>Sarah Cooper</td>
<td>Marcella Diamond</td>
<td>Nickan Fayyazi</td>
</tr>
<tr>
<td>Cornell University</td>
<td>UC Berkeley</td>
<td>UC Berkeley</td>
</tr>
<tr>
<td>El Camino Real High School</td>
<td>Redondo Union High School</td>
<td>Knight High School</td>
</tr>
<tr>
<td>Amit Golan</td>
<td>Alysa Kataoka</td>
<td>Robert Lorenzo</td>
</tr>
<tr>
<td>Electrical Engineering</td>
<td>Biomedical Engineering</td>
<td>Civil Engineering</td>
</tr>
<tr>
<td>UC Los Angeles</td>
<td>UC Los Angeles</td>
<td>UC Irvine</td>
</tr>
<tr>
<td>Narbonne Sr. High School</td>
<td>Reseda High School</td>
<td>Canoga Park High School</td>
</tr>
<tr>
<td>Alexis Nauden</td>
<td>Ashley Urrutia</td>
<td>Laura Vahos</td>
</tr>
<tr>
<td>Computer Engineering</td>
<td>Biomedical Engineering</td>
<td>Environmental Engineering</td>
</tr>
<tr>
<td>Northwestern University</td>
<td>UC Irvine</td>
<td>Cal State University Northridge</td>
</tr>
</tbody>
</table>
## OUTSTANDING ENGINEERING ACHIEVEMENT MERIT AWARDS

| **Hubert Wong**  
The Boeing Company  
Long Beach, California | **Daniel Rampacek**  
Northrop Grumman Mission Systems  
Woodland Hills, California |
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<tbody>
<tr>
<td>For advancing the state of the art in conceptual aircraft design, particularly in the areas of supersonic wind tunnel test and electric aircraft design and analysis</td>
<td>For outstanding contributions to design, development, and sustainment of electronic sub-systems for inertial navigation and avionic products</td>
</tr>
</tbody>
</table>
| **Lt. Col. Kristina L. Richardson**  
United States Army | **Rosalind Lewis**  
The Aerospace Corporation  
California |
| For outstanding service to the US Army through the application of systems engineering principles and practices in transforming 25th Combat Aviation Brigade processes | For significant contributions to space systems acquisition and engineering through strategy development, cost modeling, and risk analysis |
| **Mark Giacalone**  
The Boeing Company  
Long Beach, California |
| In recognition of excellence and ingenuity in the design and development of Network Architecture and Central Computing Systems in the Lab environment and its integration in commercial and military platforms |
Northrop Grumman celebrates National Engineers Week.

Our engineers push the envelope of the possible. Their game-changing innovations protect our nation’s freedom and advance human discovery. We salute them. Be part of what we do.

THE VALUE OF PERFORMANCE.

© 2018 Northrop Grumman Corporation
careers.northropgrumman.com
Jack Northrop
Spirit of Innovation Award

To
Aaron R. Munger
Northrop Grumman Fellow
Northrop Grumman Aerospace Systems
Redondo Beach, California

Presented by
Chris Hernandez
Vice President, Research, Technology and Engineering
Northrop Grumman Aerospace Systems
Redondo Beach, California

Aaron is a well-respected engineer, an exceptional leader and mentor to next generation engineers in Northrop Grumman’s team of more than 22,000 Aerospace Systems professionals. He is highly regarded across Northrop Grumman’s military and civilian customer base for his business acumen and his ongoing contributions to advancing the fields of technology and design.

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>Year</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>Douglas E. Wood</td>
</tr>
<tr>
<td>2007</td>
<td>Paul Marchisotto (posth.)</td>
</tr>
<tr>
<td>2008</td>
<td>Charles Tomita</td>
</tr>
<tr>
<td>2009</td>
<td>Douglas L. Fronius</td>
</tr>
<tr>
<td>2010</td>
<td>Dr. John M. Papazian (posth.)</td>
</tr>
<tr>
<td>2011</td>
<td>Clayton K. S. Kau</td>
</tr>
<tr>
<td>2012</td>
<td>Daniel Rihn</td>
</tr>
<tr>
<td>2013</td>
<td>Allen A. Arata</td>
</tr>
<tr>
<td>2014</td>
<td>Louie Chavez</td>
</tr>
<tr>
<td>2015</td>
<td>Stuart Linsky</td>
</tr>
<tr>
<td>2016</td>
<td>Chris Hernandez</td>
</tr>
<tr>
<td>2017</td>
<td>Stephen M. Sullivan</td>
</tr>
</tbody>
</table>
2017 Charitable Giving

CSUN scholarship to Nathan Boyd

Andrea Garcia

Walter Reed Middle School
North Hollywood, CA
OUTSTANDING ENGINEERING ACHIEVEMENT MERIT AWARDS

**Dr. Eamonn Keogh**  
University of California, Riverside  
Riverside, California

For contributions in establishing the new science of computational entomology, which has the potential to help improve food security and prevent insect vectored pandemics

**Teresa Upperman**  
Department of the Air Force  
Edwards, California

For demonstrating distinguished engineering achievement through her leadership and technical expertise in F-35 System Development Demonstration testing and completion

**Jesus Gomez**  
The Boeing Company  
El Segundo, California

In recognition of outstanding leadership as the Lead Test & Evaluation Engineer for the 702 product line and key contributions to the successful deliveries of multiple spacecraft

**Dr. Bradley Jackson**  
California State University, Northridge  
Northridge, California

For outstanding contributions to the fields of Electronics, Microwaves, and Antennae, and for meritorious contributions to electronics courses and laboratories improvements

**Francisco Palacios**  
The Boeing Company  
Long Beach, California

For advancing the state of the art in computational fluid dynamics (CFD), particularly with unstructured grids, and applying it to conceptual aircraft design
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

RS-25 Additive Manufacturing First Hot Fire Test of POGO Suppression Accumulator Team

Aerojet Rocketdyne
Los Angeles, California

Team Members
Michael Alber
Steven Brannon
Ramsey Eldib
Alan Fung
Timothy Welch

Accepting the Project Award

Description of Project:
For developing and demonstrating 3-D printed POGO assembly to significantly improve RS-25 affordability

Next Generation Naval Surface & Subsurface Inertial Navigator

Northrop Grumman Mission Systems
Woodland Hills, California

Team Members
Jonathan Guinta
Steven Kim
Stephan Lovstedt
Daniel Lyons
Robert Pawelka
Stephen Silver
Daniel Tazartes
Gregory Zimmerman

Accepting the Project Award

Description of Project:
For outstanding performance in meeting all technical requirements on schedule and under budget in the development of the inertial sensor assembly for the next generation naval inertial navigator
DISTINGUISHED ENGINEERING PROJECT ACHIEVEMENT AWARDS

Boeing CST-100 Starliner GN&C System Development

The Boeing Company
Houston, Texas

Team Members
Glenn Cagle
Greg Clubb
Steven Everett

Accepting the Project Award
Stephen Jayne

Description of Project:
In recognition of the Boeing CST-100 Starliner team for its work in the advancement of manned spacecraft Guidance, Navigation and Control systems

Detailed Design Including Design for Manufacturing of a High Speed System

Lockheed Martin Aeronautics
Palmdale, California

Team Members
Weston Burke
Ted Dopler
Ryan Wittman
William Zivic

Accepting the Project Award
Adam Belles

Description of Project:
For the innovative detail design of a complex high speed glide system
Special Thanks To:

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Celebration of National Engineers Week
February 18-24, 2018