ORDER OF THE ENGINEER

almanac

\	LETTER FROM THE
	CHAIR1
>	RECOGNITION—DONALD
	RATHBONE 1
	ENGINEERS AND THE

PANDEMIC 2

▶	2021 OUTSTANDING LINK
	AWARDS2
▶	COMMUNICATIONS
	UPDATE3
▶	IN MEMORIAM4
▶	OE BOARD5

Letter from the Chair



Dear Order of the Engineer Community:

I hope this edition of the Order of the Engineer almanac finds you, your family, loved ones, and colleagues safe and healthy. You are all in my thoughts and prayers during the pandemic. The vaccine continues to roll out and immunity is spreading faster than the virus it certainly appears that the end is finally in sight.

Wow, what a year it has been! I want to begin by thanking all Link Coordinators for their tireless efforts to provide ceremonies this year, even as the pandemic continued to wreak havoc on event planning. It is so heartwarming to see the many, many virtual ceremonies over the past two spring seasons that allowed engineers to continue the long-standing tradition of accepting the Obligation.

I also want to give special thanks to Executive Director Paula Ostaff at headquarters for accommodating the needs of our Links throughout the entire pandemic. We all know how awesome Paula is during "normal" times, and I can attest that her creativity and energy only increases when a challenge presents itself.

I am happy to report many positive developments during 2020, our 50th anniversary year, including the launch of our new website and a web-based marketing campaign that reached thousands of engineers via their professional society webpages. Such marketing was a first for us, but also fitting to spread the news that we have been serving the engineering profession for over 50 years! We aim to continue to spread our mission in creative ways so that all engineers are aware of and have the opportunity to sign the Obligation. Our communication committee has increased our focus on social media including a new LinkedIn Group https://www.linkedin.com/groups/12378132/ and a Facebook page https://www.facebook.com/OrderoftheEngineer. Please visit

As our 51st year rolls along, we are patiently waiting to return to our roots at Cleveland State University (Link #1) for a special event to celebrate our *more than* 50 years of upholding devotion to the standards and dignity of the engineering profession. Even if we need to wait until our 52nd year, it is a celebration and journey back to our roots that can only be done in person! Stay tuned for more information.

Sincerely,

Steven Schreiner, Ph.D., P.E. Chair, Board of Governors

Donald E. Rathbone, Ph.D., P.E. Recognized for Service to the Profession

Past Order of the Engineer (OE) Board of Governors Chair Don Rathbone and his wife Lynne were recognized by the Engineers' Foundation of Kansas (EFK) on March 19, 2021 for their significant impact on engineering & STEM nationally and in the State of Kansas.



The celebration featured impassioned messages from Kansas State University (K-State) President Richard Myers, former students, current Dean Matt O'Keefe, Hall of Fame Football Coach Bill Snyder, engineering alumni, esteemed colleagues, politicians, and state and national leaders from the Kansas Board of Regents, the Kansas Board of Technical Professions, Order of the Engineers Executive Director Paula Ostaff and MATHCOUNTS. The full ceremony can be viewed at https://www.utube.com/watch?v=7Vme-Njmby



During the celebration, EFK President Wayne Nelson announced that the Kansas state-wide MATHCOUNTS competition is being named in honor of Don & Lynne Rathbone.

Don graduated from Purdue University as the top student in his class with a B.S. Degree in Electrical Engineering. He earned his Ph.D at the University of Pittsburgh where he met and married Lynne Jordan, his wife for 54 years. Lynne Rathbone (now deceased) was a technical illustrator whose drawings included early nuclear submarines, the first kidney transplant, research results of smoking, and early DNA helix drawings.

Don served twenty-four years as Dean of Engineering at K-State from 1973 to 1997; During that time, enrollment at the college expanded from 1099 to 3100 and research expenditures of less than \$500,000 increased to more than \$10 million. Phase II of the engineering complex was named after him for his fundraising and multiple accomplishments as Dean, including a Life Achievement Award for service to minority students.

Don obtained his license as a professional engineer and served 13 years as a member of the Kansas State Board of Technical Professions. Don established K-State Link #158 in 1996 and served 20+ years on the OE Board of Governors.

Outstanding Link Coordinator Awards

At their spring meeting, the Board of Governors voted unanimously to approve four Outstanding Link Coordinator Award nominees for 2021. The board appreciates their efforts to ensure continued success of ring ceremonies, which help remind inductees of their ethical obligation to serve the public and uphold the standards and dignity of the engineering profession.

Ms. Ronda Girardeau, Administrative Assistant at the University of South Alabama, has served as coordinator for Link #216 for 12 years. USA typically holds fall and spring induction ceremonies. Ms. Girardeau handles all planning, paperwork, ring orders, and communications with students. The dean of engineering, Dr. John Usher, and her nominator Dr. David Hayhurst attribute the continued success of ring ceremonies to her involvement and genuine interest in seeing the program succeed.

Ms. Melissa Brown, Student Affairs Administrative Assistant at the University of Kentucky, has served as coordinator for Link #132 since 2013. Ms. Brown has worked diligently over the years to increase participation by marketing the event and creating an easy process for registration. The link has inducted about 1000 individuals since 2016, including Ms. Brown's successful switch to virtual ceremonies in 2020. When inperson gatherings were allowed, she organized a banquet for their graduates and family members after the ceremony. Her nominator, Dr. Judy Cezeaux, appreciates Ms. Brown's responsiveness and her persistence through the pandemic.

Mr. Roger Lindgren, Ph.D., Professor and Chair of Civil Engineering at the Oregon Institute of Technology, established Link #186 in 2001 and since then has organized annual ring ceremonies every June. Dr. Lindgren makes all the arrangements for the ceremonies, including sizing fingers, ordering rings, preparing certificates, etc. In anticipation of the event each Spring, students eagerly ask about the ceremony before plans have even been made, because of their excitement. As noted by his nominator, Gregory Brands, P.E., "Roger is excitedly looking forward to the next 20 years of the Link!"

Mr. Douglas Taylor, P.E., began holding ceremonies in 2003 for the Fresno Branch of ASCE, Link #195. Ceremonies were held at their annual awards banquet, and for several years he coordinated two ceremonies per year. In his first virtual ceremony, in March 2021, almost 200 individuals participated. His nominator, James Powell, P.E., noted that Mr. Taylor "rallies ASCE members to provide support" and goes the extra mile to ensure the ceremony's success.

Plaques will be given to the award recipients, and their names will be added to OE's website, along with past award recipients https://order-of-the-engineer.org/directories/link-directory/

Engineers and the Pandemic

As the Obligation of the Order states "As an engineer, ...when needed, my skill and knowledge shall be given without reservation for the public good." The events surrounding the ongoing COVID pandemic have provided opportunities for the engineering profession to heed this call. Engineering programs at universities from around the country mobilized their laboratories to produce laser-cut face shields and 3D printed respirators for medical personnel to respond to the shortage of personal protective equipment in the early stages of the pandemic. But engineers also have been evaluating the effects of the pandemic beyond the clinical setting. For example, faculty members at the University of South Florida (home to Link #113) are using big data analysis techniques to evaluate the spread of pandemics using social media posts and information from public health officials. At Northeastern University (home to Link #108), researchers are studying how large networked systems (transportation, supply chains, etc.) can recover from shut downs while minimizing the virus spread. Researchers at Northern Arizona University (home to Link #116) are evaluating the reduction of green house gas emissions that arose during the lock down periods of the pandemic.

The above examples of these contributions are vast and diverse. As the Responsibility, Ethics & Obligation section of our Ceremony Manual states "The engineering environment today is highly sophisticated, highly complex, and is totally demanding of our ingenuity to protect the environment and the public safety, health, and welfare." We salute the engineers who have responded with their talents and abilities to address one of the most complex challenges in history.

We encourage all engineers to continue contributing to the response to the pandemic, and to develop resiliency in our systems for adaptation to future challenges.

Communications Update

The last time we shared updates from the Communications Committee, we asked "have you checked out the new and improved Order of the Engineer website?" With over one hundred thousand views to date, I would say the answer is "yes"!

If you haven't had a chance to check it out yourself, the website (located at <u>order-of-the-engineer.org/</u>) is getting new updates regularly.



We are also ramping up our social media activity, both on Facebook (<u>facebook.com/OrderoftheEngineer/</u>) and Linkedin (<u>linkedin.com/groups/12378132/</u>). This has been an outlet to connect with inductees and links across the country. Our goal is to share current events and better promote the great things going on with the Order of the Engineer.



Congratulations to the FAMU-FSU College of Engineering for hosting a virtual Order of the Engineer induction ceremony last November! FAMU-FSU (Link #254) had 71 people attend the virtual ceremony which welcomed 27 new members to the Order of the Engineer. This was FAMU-FSU's second virtual ceremony in 2020.





As we progress these initiatives, we recommend that Links review the guidelines below and continue to document and share induction ceremony photos as usual.

Social Media Guidelines for Links

Identify a volunteer to take photos throughout each induction ceremony including the audience, inductees, and presenters (you can still take a screenshot, if it's virtual!)

Share induction ceremony photos on Facebook and Linkedin with the tag #OrderoftheEngineer

Consider sharing the best photos directly to the Facebook page and Linkedin group

https://www.facebook.com/OrderoftheEngineer https://www.linkedin.com/groups/12378132/

Social Media posts which are associated with the Order of the Engineer are monitored and should not include content which is unrelated, inappropriate, advertisements, spam, or opinions on topics such as politics, or religion

We look forward to continuing to connect with you. If you have anything to share such as photos, comments, or questions on our communications initiatives, don't hesitate to contact Sarah Straub Jakse (SarEliStraub@gmail.com).

From Executive Director - Paula Ostaff

One year ago in early March 2020, all of our lives changed with the onset of Covid-19. The impact resulted in daily lives of constant challenge and changes. The Order of the Engineer Board and I had no idea how we were going to handle these challenges, especially how students were going to be inducted. We spent a long Saturday working together, creating the "Virtual Ceremony." I am so proud of our Board and to be a part of this amazing organization for 20 plus years. I am proud of the many hardworking Link Coordinators, who even with the protocol changes, still stepped up and made sure the graduates of 2020 were virtually inducted.

This year, we are back stronger than ever.

In Memoriam - Clark Beck, P.E.

Clark Beck was a pioneer in the engineering profession. His journey began at the University of Cincinnati (UC), pursuing a BS in Mechanical Engineering. It was a difficult journey, but Beck persevered, becoming one of the first two African American graduates from the College of Engineering in 1955. He later returned to UC to pursue a MS in Aerospace Engineering in 1969 and received an honorary doctorate from UC in 2003. Beck's career has been multifaceted. He spent much of his career working as a civilian engineer at Wright-Patterson Air Force Base in Dayton, Ohio for 33 years. Following his retirement, he started a second career as an assistant dean in the College of Engineering and Computer Science at Wright State University (WSU). He served as the first African American president of the Engineers Club of Dayton and as president of the Ohio Society of Professional Engineers.

Motivated by the many difficulties he faced personally while earning his own engineering degree, Beck devoted a great deal of time and resources to helping other underrepresented minority and first-generation college students succeed in engineering. While at WSU, he implemented the Wright STEPP program designed to help students in these groups successfully transition to college. He also formed a group with other African-American alumni from UC called the Pioneers with the goal of providing scholarship opportunities to minority students pursuing an engineering degree at UC. He has served on the UC Foundation

Board of Trustees, the philanthropic arm of the university. Beck's service on the OE's National Board of Governors began in 1995 and lasted until 2017. He also held the offices of Secretary and Treasurer. Even late into his retirement, Beck continued to serve the Order, participating in Ring Ceremonies in the Cincinnati and Dayton area and inspiring the next generation of engineers.

Clark Beck has left a lasting impact on the engineering profession as a student, a practicing engineer, an administrator in higher education, and as a member of the Board of Governors for the Order of the Engineer. We thank him for his service to the profession and for the model he set for engineers, young and old alike, for over half a century.

For more information on Clark Beck's life and legacy, please see the following links:

https://magazine.uc.edu/issues/1013/clark_beck.html https://www.uc.edu/news/articles/n20927888/clark-beck-91was-engineering-pioneer-at-uc.html

https://www.wright.edu/retirees-association/article/clarkeugene-beck-sr-91-assistant-dean-college-of-engineering-andcomputer-science

In Memoriam – Walt LeFevre, P.E.

Walt LeFevre set the standard for all engineers to emulate in his lifelong service to the engineering profession. He was past Chairman of the Board of Governors of the Order of the Engineer, an organization that he was devoted to because it emphasized the Obligation that every engineer has to honestly and ethically serve mankind. He was the Past National President of the National Society of Professional Engineers (NSPE), Past National Vice President of the American Society of Civil Engineers (ASCE), former Dean and Civil Engineering Department Head as well as a faculty member for more than forty years at the University of Arkansas, member of the National Accreditation Board for Engineering and Technology (ABET), a delegate to the World Federation of Engineering Organizations and U.S. member of many other delegations to various foreign countries. In 1981, Walt founded the Arkansas Academy of Civil Engineering (AACE) which has provided hundreds of scholarships for Civil Engineering students and support to the department. Through this example, other engineering departments within the College of Engineering have followed the formation of engineering academies.

In 1992, Walt, with the assistance of Congressman John Paul Hammerschmidt, established the Mack Blackwell National Rural Transportation Study Center (MBTC) and served as its Director for several years. MBTC, which is still going strong, has completed over 150 studies on transportation issues benefitting rural America.

As a professor for over forty-five years, he molded the lives of thousands of superb practicing engineers. He is held in the highest esteem by all who have benefited from his professorship. Walt LeFevre is regarded by the national engineering community as the backbone of engineering ethics. He helped produce two films and ethics courses which are used nationally by businesses as well as universities. Additionally he wrote over 200 refereed publications for the engineering industry. His national awards are too numerous to mention, but include Distinguished Service Awards from the American Society of Engineering Education, ASCE, NSPE, NCEES, AAES, Boy Scouts of America and a number of other engineering societies. He was recognized for his service at the University of Arkansas in 1971 by its highest distinction, "University Professor".

NATIONAL BOARD OF GOVERNORS 2020-21



Steven Schreiner, Ph.D., P.E., Chair Provost/Executive Vice President

Manhattan College New York

E-Mail: steve.schreiner@manhattan.edu

Elected 2012

2021

Roch D. Larochelle, P.E., Past Chair

HDR, Inc. New Hampshire

Email: roch.larochelle@hdrinc.com

Elected 2008

2021

David A. Janover, P.E., F. NSPE

Vice Chair City Engineer City of Avondale

Arizona

Email: djanover1@gmail.com Elected 2014

David T. Havhurst, Ph.D.

Treasurer

Professor, College of Arts & Sciences University of Southern Mississippi

Mississippi

Email: David.Hayhurst@usm.edu Elected 2005

Michelle Rambo-Roddenberry, Ph. D. P.E.

Secretary

Associate Dean & Associate Professor

FAMU-FSU Florida

Email: mroddenberry@eng.famu.fsu.edu 2022

Elected 2016

Gregory Bucks, Ph.D.

BOG Rep. to Executive Committee

Associate Professor—Educator University of Cincinnati

Email: gregory.bucks@uc.edu

Elected 2016

2022

Paul N. Hale, Jr., Ph.D., P.E., Professor Emeritus

College of Engineering & Science Louisiana Tech University

Louisiana

Email: phale@latech.edu

Elected 2005 2021 Kenneth L. McGowan, P.E., F.NSPE

HDR, Inc. Washington

Email: kenneth.mcgowan@hdrinc.com

kenmcgowan.pe@gmail.com Elected 2003

J. Derald Morgan, Ph.D., P.E.

Retired Missouri

Email: jderaldmorgan@hotmail.com

Elected 1993

Monte Phillips, Ph.D., P.E.

Retired Minnesota

Email: mlphillips@unitelc.com

Elected 1998

Tom C. Roberts, PE, F.NSPE, F.ASEE

Kansas State University

Kansas

Email: tcr@ksu.edu Elected 2016

2022

James B. Powell, P.E.

California

Email: cashmere529@mac.com 2023

Elected 2017

Sarah E. Straub Jakse

ExxonMobil Chemical Company

Texas

Email: SarEliStraub@gmail.com

Elected 2018

2021

Gregory F. Brands, P.E., F. NSPE

Idaho

Email: gregoryfbrands@gmail.com

Elected 2018

2021

Amanda M. Petrella, P.E. Geopier Foundation Company

Georgia

Email: MPetrella@geopier.com

Elected 2019

Judy L. Cezeaux, Ph.D.

Dean of Engineering & Applied Sciences

Arkansas Tech University

Arkansas

Email: jcezeaux@atu.edu

Elected 2019

2022

L. Robert Smith, P.E., F.ASCE, F.NSPE

Forensic & Consulting Engineer

Rhode Island

Email: lrsmith.pe@cox.net

Elected 2019 2022

Julie Drzymalski, Ph.D Temple University

Pennsylvania

E-Mail: julie.drzymalski@temple.edu

Elected 2020

Mark Muszynski, Ph.D, P.E.

Associate Professor of Civil Engineering

Gonzaga University

Washington

E-mail: muszynski@gonzaga.edu

Elected 2020

2023

2023

Erin Gates, P.E.

BenchMark Engineers, PC

Wyoming

E-Mail: emgates@gmail.com

Elected 2020

Paula Ostaff

Executive Director

The Order of the Engineer, Inc.

PO Box 25473

Scottsdale, AZ 85255-0107

Office: 480-513-3640 or

866-ENG-RING (866-364-7464)

Fax: 480-585-6418

E-mail: orderofeng@gmail.com

Kris McGowan, almanac Editor

E-Mail: k2mcgowan@comcast.net

Web Address:

www.order-of-the-engineer.com

Webmaster: Asenka