

### June 16

### Message from the Chair

**Greetings and Salutations to all ASEE** Fellows: I hope that many ASEE Fellows are preparing to attend the ASEE Annual Conference in New Orleans. Walt Buchanan and I have been asked by Norman Fortenberry to serve as co-chairs of a committee to recommend activities for the celebration of ASEE's 125th anniversary in 2018. According to Ly le Feisel, this anniversary is called the quasquicentennial. Walt and I are asking members of the ASEE Academy of Fellows to suggest quasquicentennial ideas and/or to serve on the committee. We look forward to seeing those of you who attend the Fellows Breakfast at the ASEE Annual Meeting in New Orleans. We hope to get ideas from those of you who cannot attend. An annotated preliminary list of ideas is provided below to stimulate your thoughts.

### Preliminary List of Ideas for ASEE's Quasquicentennial Celebration in 2018

Norman Fortenberry surveyed what other organizations have done for anniversary celebrations. His list, along with some preliminary comments, are listed below. We present these only to stimulate your imagination. Nothing has been chosen for action as of yet.

• 125<sup>th</sup> Year Honor Roll(s). -- What criteria would we use for the Honor

Roll? This could be good – or it might hurt someone who was left out. We'd need to be careful with this one. Some safe ways to do things along this line might be:

- Create an online list of all past ASEE Boards of Directors
- Encourage the ASEE Sections and Divisions to collect historical information about themselves and place it online

Clearly, this type of activity would involve staff support from ASEE HQ.

- 125<sup>th</sup> Anniversary Fund -- Challenge each ASEE member to calculate / estimate the total number of students that they have taught in their careers and to donate a dollar to ASEE in honor of each student they have taught. This would need a catchy name and some sort of hype, but I think it might fly. We would need a champion to lead this effort. A retired Dean might be a good candidate. He/she would need to be strongly committed and would need staff support at ASEE HQ.
- Give all attendees and exhibitors special ASEE 125<sup>th</sup> Anniversary pin (or coin) -- GREAT if we can find a backer to fund it. This would require someone with good artistic talent for the design.

- Give all attendees commemorative ASEE 125<sup>th</sup> Anniversary booklet – GREAT if we can find a backer to fund it and if it is done well. Again, this would require ASEE HQ staff support.
- 125<sup>th</sup> ASEE Anniversary "History"
   Book -- AIAA did a history of
   aerospace engineering programs on
   the 100<sup>th</sup> anniversary of the Wright
   Brothers first flight. It took a couple
   of years to do, but it was good. This
   one requires good funding and a
   committed "researcher/author"
   with ASEE HQ support. A 125<sup>th</sup>
   anniversary "timeline" would be
   part of the 125<sup>th</sup> anniversary
   "history" book.
- 125<sup>th</sup> ASEE Anniversary Videos Videos are very common on YouTube. A series of 125<sup>th</sup> ASEE Anniversary "Engineering and Society" short public service segments might be a good format. Perhaps organize these into an ASEE timeline series. It would be good to have corporate support for such an endeavor. Maybe this could be used to connect engineering students to ASEE. If we could find a company to back prizes, we could have student groups create these with cash prizes for ASEE student chapters
- ASEE Photo collage Where would it be shown? This would be a waste if it is only shown at ASEE HQ.
- 125<sup>th</sup> anniversary member packages
   What would this consist of ???
- 125 "things" to do in year leading to the celebration) – Interesting – Could we challenge each member do 125 things that benefit ASEE

### **2016 ASEE Fellows**

We will also have the delightful opportunity to welcome 11 new Fellows to our Academy! Congratulations are in order to each of them for their contributions to the field.

Wayne T. Davis University of Tennessee, Knoxville

John K. Estell
Ohio Northern University

Ronald E. Land
Pennsylvania State University, New
Kensington

Teresa L. Larkin American University

Thomas A. Lenox American Society of Civil Engineers

John B. Ochs Lehigh University

Elizabeth A. Parry North Carolina State University

Michael J. Prince Bucknell University

Donna Reese Mississippi State University

Donna M. Riley Virginia Tech

Catharine Skokan
Colorado School of Mines

### News from the Flock – June 2016

I have just completed my 51<sup>st</sup> year of teaching at the U of Texas at Austin. I continue as the director of NASA's Texas Space Grant Consortium. During the past four years, I have also been designing and implementing a (hopefully) sustainable ABET outcomes assessment and continuous improvement system for my department. I continue to teach the "space" capstone design course in our program. I have taught this course almost every semester since 1984. I plan to retire at the end of 2016, so the fall semester will be the last time that I teach the course. I am sure that I will miss it. However, my wife Marsha and I plan to see a lot more of our grandchildren in Mississippi after retirement.

Marsha and I continue the process of recovering from last year's flooding of the lowest room in our house (my office). The floor, which was carpeted, is now polished concrete. The insulation is the plastic foam NASA uses for floats, and the lower paneling is waterproof and comes off with screws. We don't expect another flood, but if it comes, the damage will be considerably less than before and the recovery will be a lot quicker. **Wally Fowler** 

I was privileged to be in a Superbowl commercial in January: <a href="https://www.youtube.com/watch?v=3yHvzVj">https://www.youtube.com/watch?v=3yHvzVj</a> je8. I was named an IEEE Fellow as well. Don't know if this is the kind of thing that is wanted! Laura J. Bottomley

Since the last Newsletter, **Frank Gourley** has coordinated two family reunions and the annual reunion of retired WVU Tech employees. He has successfully resolved his prostate health problem using new treatment methods. He renovated the guest bathroom at his home – a 10-week project, (1) and prepared his former home in Raleigh, 'The Barn', to be put on the market. (2) It sold at year's end. Frank has also been spending lots of time in the wood shop lately. He worked with his two grandsons to complete two 'live-edge' pieces of furniture – a study desk and a dining table (3,4) – and his granddaughter completed a set of bowls, all walnut. His woodwork continues to be shown in the Piedmont Crafts Shop in Winston-Salem, NC. He still enjoys taking photographs - lots of them.

He coordinated a ten-day trip to the Greek Isles for six in October. (5) Other trips included visits to the Air Force Museum in Dayton, OH; Carolina Beach, NC; Boone, NC; Norfork, VA; Raleigh, NC; and a week at Emerald Isle, NC, with friends.







In March we took family on a Caribbean cruise (1) and we also made a trip to Naples, FL. In April, we spent a week in the NW NC mountains with friends on the New River (2). We also started a project to convert part of a large woodshop on the family farm in VA into living space (3). We leave Memorial Day weekend for a month-long 'Western Adventure' road trip with a van full of fellow travelers. I will miss seeing everyone at the Annual Conference, but hope to return next summer. With the help of a computer guru, I have recently been able to re-activate the national on-line <u>Directory of Engineering Technology Institutions and Programs</u>, a long-term project of the ETD and ETC of ASEE (4). You can check it out at etd.wvutech.edu. **Frank Gourley** 

I recently submitted the manuscript for the 6<sup>th</sup> edition of my book, *Applied Strength of Materials*, to CRC Press with publication expected in late 2016. This was the first edition of this book with a co-author. The manuscript for the 6<sup>th</sup> edition of *Machine Elements in Mechanical Design*, with two other co-authors is well underway for Pearson Education. His third book, the 7<sup>th</sup> edition of *Applied Fluid Mechanics*, again with a co-author, was released in 2015, also with Pearson. When all of these editions of the books are complete, Bob's intention is to transfer primary responsibility for following editions to the co-authors so that Bob and his wife, Marge, can be more free to visit family and friends and to travel. Reservations are in place for a lazy, nine-day cruise on the Mississippi River from St. Paul to St. Louis, complete with informative lectures by a 'River-ologist'. We are brushing up on our Mark Twain knowledge in anticipation of our stop at Hannibal, MO. Marge and I will attend the ASEE Conference in New Orleans and we hope to see good friends there. **Bob Mott** 

Although I am slowing down a bit I am still keeping busy. The picture was taken at Payne Field in Everett, WA where ASEE Fellow Ruth Streveler and I were teaching our course, Eng1200, How People Learn Engineering, for The Boeing Company's subject matter experts who teach many courses for their colleagues. Recently, Ruth and I agreed to design and teach a pedagogy course for PhD students at the Skolkovo Institute of Science and Technology (Skoltech) in Moscow, Russia. Skoltech is a new, innovative university that is a collaboration between MIT and several universities in Russia. All PhD students at Skoltech are required to complete a pedagogy course

and a teaching practicum. Skoltech chose our course, Content, Assessment and Pedagogy: An Integrated Engineering Design Approach, for their PhD students.

I also continue to lead the teaching teach for the NSF Innovation Corps for Learning (I-Corps L). Our next course will be July-August, 2016 in Washington, DC. ASEE and especially Dr. Rocio Chavela-Guerra, Director, Education & Career Development, is our logistics partner for the project. Additional information is available at <a href="https://www.asee.org/i-corps-l/about">https://www.asee.org/i-corps-l/about</a>

I look forward to seeing everyone in New Orleans. Karl Smith

### AAES presented Awards to two of the ASEE Fellows National Engineering Award

Presented to:



Sarah A. Rajala, Ph.D. Dean, College of Engineering Iowa State University

For her outstanding leadership at the institutional as well as at national and international levels impacting multiple engineering societies, her innovations in engineering education and assessment, and her tireless efforts to promote diversity in engineering.

### John Fritz Medal Presented to:



H. Vincent Poor, Ph.D., NAE
Dean, School of Engineering & Applied Science, Princeton University

For outstanding contributions to the fields of modern communications and signal processing through their development, application and dissemination.

This year I will be in New Orleans. I am looking forward to meeting you and touching base with other Fellows. I am receiving two awards:

- 1. Isadore T. Davis award
- 2. Archie Higdon Distinguished Mechanics Educator award amesh Agarwal

I took my older granddaughter and four daughters-in-law on an all girls trip to NYC in May. We had a wonderful time, talking, walking, eating gourmet food, seeing shows and museums. We plan to do it again in four or five years when my younger granddaughter Sydney (now 8) can come too.

Last holiday season Tom and I took a warm-up Caribbean cruise just to escape Colorado snows. Our next planned trip is a river cruise along the Elbe River from Prague to Berlin in September. Retirement is great!! **Joan Gosink** 

Thanks for keeping all of the Fellows informed. I recently was appointed as the new President at Washington State University following 7 years as the President at Kansas State University. My new contact information is:

#### Kirk H. Schulz

President
Washington State University
Professor of Chemical Engineering
Kirk.schulz@wsu.edu

I was diagnosed with pancreatic cancer in September 2013. I received chemo in the fall 2013, unsuccessful Whipple surgery in January 2014, chemo in spring 2014, radiation and chemo in summer 2014, and finally my last chemo in Fall 2014. In December 2014, a MRI and CAT scan revealed that I was in remission. All has been good since then, although the side effects has been pretty bad with neuropathy in my feet, feeling weak as a puppy, fatigue easily, and a GI system that doesn't digest fat and is very uncomfortable. Every time I see my oncologist, he says what a miracle as I am his first patient of his that survived; there is only a 3% success rate for my stage 3 cancer. All in all, I feel wonderful to be alive.

Because of the side effects, I retired on January 1, 2016. I will continue to do research and write a few books. **John D. Enderle** 

I am receiving the 2016 ASEE James H. McGraw Award at the annual conference this year. I won't be able to attend the Fellows breakfast as I have personal commitment back in Rochester and have to return home on Tuesday. **Carol Richardson** 

Our last nine months have been devoted largely to the replacement of Dorothy's worn knees with two new titanium beauties. At least their performance is beautiful, compared to the scratchy action of the originals. She is now moving with a great deal more agility and a lot less pain so we are getting back into the travel mode.

My professional activities are somewhat limited these days although I do find myself on the editorial boards of three publications and the board of directors of two foundations. If you are interested in affairs nautical – or affairs educational - you might take a look at one of those foundations at <a href="http://sultanaeducation.org/">http://sultanaeducation.org/</a>. Sultana is a replica of an 18<sup>th</sup> century schooner that sailed the Chesapeake for many years. She is used for educational programs teaching students history, environmental science and even some seamanship.



About my only contact with fellow Fellows is with Jolly Good John Weese who lives on the other side of the Chesapeake in the area known as the western shore (not capitalized) whereas I live on the Eastern Shore (capitalized). While there are cultural differences between the two areas, John and I continue to get along, exchanging books and threatening to visit each other.

We will attend the ASEE Annual Conference this year so I hope to see many of my fellow Fellows at our traditional breakfast. Best regards, **Lyle Feisel** 

We just released a new video that we are very excited about: "Women in Manufacturing" Would some fellows be interested? Here is the news alert below with a YouTube link:

"I Am a Woman with a Career in Manufacturing"

FLATE's NEW "Women in Manufacturing" Video Explores Gender Equality & Diversity in Manufacturing

FLATE, the Florida-based National Science Foundation Regional Center of Excellence, is announcing the release of its recently produced new video highlighting the role of "Women in Manufacturing." The video is an extension of FLATE's role in leading initiatives across Florida that enable and empower women/girls to be excited and engaged in STEM and manufacturing. The "Women in Manufacturing" Video explores a hotly debated, but relevant topic on gender equality and diversity in the manufacturing workforce. The Video is currently posted on FLATE's YouTube Channelhttps://youtu.be/rKW7DslaZAs, and is produced through a collaboration with the Scientific League<<a href="http://www.scientificleague.com/">http://www.scientificleague.com/</a>, a Florida-based multi-media production company that promotes STEM and manufacturing.

The all NEW, Women in Manufacturing Video chronicles the journey of women, from the onset of World War I in 1917, when they entered, or were forced to enter the manufacturing workforce, and transports viewers to the present where women are increasingly a steady part of the manufacturing workforce occupying leadership roles in the global manufacturing marketplace. The Video is a journey in time as it provides a historical perspective on the challenges women have faced, continue to address and/or are beginning to dissipate as more women join the manufacturing workforce changing the status quo and face of the manufacturing industry itself. It even journeys into an imaginary timeline in the future, where in 2050 women could potentially represent 50% of the manufacturing workforce.

The Women in Manufacturing video is a captivating projection of the changing face of the manufacturing workforce. It captures the diverse perspectives of women from a dozen companies across Florida who are currently employed in the manufacturing sector. The video features personal accounts of women, from the factory floor right up to the C suite level, who share their views about their journey/pathway into manufacturing. These women provide first-hand perspectives about their experience not only as engineers, but as technicians and administrators and the richness in the diversity of their individual experiences/successes.

Despite the challenges/set-backs, in the United States, more than three million women have proven that it is possible to face the challenges to become successful in the manufacturing industry. The video showcases how women have succeeded and overcome some of these obstacles through sheer hard-work, competence and perseverance. The Video also highlights the benefits and rewarding aspects of being involved in manufacturing. It sheds light on some of the factors that have motivated women for the last 100 years to be a part of the manufacturing workforce, and how women have found fulfilment in the diversity of skills, knowledge and talent they bring to the workplace.

While women have come a long way, the video drives home a key point that there is still a lot of work to be done in the quest for equality in the workforce. Together we can empower the

next generation of young women who represent the "I Am a Woman with a Career in Manufacturing" mantra that could end the gender inequality of women in manufacturing in America. To view the Women in Manufacturing video head on over to FLATE's YouTube Channel at <a href="https://youtu.be/rKW7DslaZAs">https://youtu.be/rKW7DslaZAs</a>. Later this summer, stay tuned for the DVD version of the Women in Manufacturing video which will include additional interviews and other goodies. You can also access additional resources on FLATE's websites <a href="https://www.madeinflorida.org/">www.madeinflorida.org/</a> and www.fl-ate.org<<a href="http://www.fl-ate.org/">http://www.fl-ate.org</a>, or contact Dr. Marilyn Barger at barger@fl-ate.org<<a href="mailto:barger@fl-ate.org">mailto:barger@fl-ate.org</a>.

"FLATE is a National Science Foundation Regional Center of Excellence, committed to ensuring Florida has a well prepared workforce for advanced and emerging technologies. Created in 2004, FLATE is one of 42 Advanced Technological Education Centers in the United States funded by the National Science Foundation focused on improving science, technology, engineering, and mathematics education and training to meet the needs of American advanced technology industries. For more information visit www.fl-ate.org<a href="http://www.fl-ate.org/">http://www.fl-ate.org/</a>>.

I have been invited to participate in a National Academy of Engineering study of the role of professional societies in engineering education. Our work/report will be completed in early 2017.

See you in New Orleans- Marilyn Barger

#### **Fellows Info at ASEE Website**

Info about the Fellows may be found at the ASEE website -asee.org. At the Home Page, select For Members, Divisions & Groups, and Academy of Fellows. This will take you to the Fellows page. Options here include: List of Fellows (alpha list of Fellows with affiliation, induction year, and some photos), Newly Elected Fellows (w/ photos), Officers, How to Nominate, Meeting Minutes, and Newsletters. On the left side is also a Fellows Contact Info choice which allows you to do an alpha search for an individual you want to contact. Click on the plus (+) sign to see the contact info you need.

- Lucy Morse, Newsletter Editor

## ASEE ACADEMY OF FELLOWS ANNUAL MEETING

Wednesday, June 29, 2016; 8:45-10:15am

New Orleans, LA

**Tentative, Preliminary Agenda** 

Subject to Change with, or without, notice

- 1. Meeting Call to Order
- 2. Moment of Silence
- 3. Remarks: Executive Director, Dr. Norman Fortenberry
- 4. Recognition of ASEE Officers in attendance

- Introduction of Academy of Fellows Officers
- 6. New Fellows Introduction
- 7. Not-So-New Fellows Introduction
- 8. Greetings from Absent Fellows
- 9. Recognition of ASEE Staff
- 10. Remarks: ASEE President
- 11. Remarks: ASEE President-Elect
- 12. Old Business
- 13. New Business
- 14. Announcement for Photos
- 15. Announcement of Next Meeting
- 16. Adjournment

### **Reduced Membership Dues Reminder**

If you are retired, or if you have 'been around' long enough, you might qualify for reduced, or no, membership dues as a **Retired or Life Member**.

For professional members who have retired from full-time employment, dues are \$30/year. Members whose years of age plus years of continuous paid membership in ASEE totals 100 or more, upon application to and approval by the ASEE Board of Directors or the Executive Committee of the Board of Directors, become Life Members and pay no dues. (Dues: \$0.) Life Members pay a nominal registration fee for the Annual Conference. Retired Members receive a 50% discount on registration. All members pay for ticketed events.

Check out the Membership web pages of the ASEE website for additional information and a copy of the one-page application form, or call the ASEE Membership Department for additional information.

# Academy Officers and Editors

Wally Fowler, Chair, fowler@csr.utexas.edu

Mary Anderson-Rowland, Past Chair, mary.anderson@asu.edu

**Tom Roberts,** Secretary, Vice Chair, and Chair Elect, tcr@ksu.edu

**Lucy Morse**, Newsletter Editor, <u>Lucy.Morse@ucf.edu</u>

There is a special registration desk for Fellows at ASEE this year. Check it out.