Spring 2014 ASEE Engineering Economy Division Newsletter

Welcome! This is the Spring 2014 issue of the newsletter for the Engineering Economy Division of the American Society for Engineering Education. In this issue, you will find information about the 2014 ASEE Annual Conference in Indianapolis, Indiana, the June 2013 Meeting Minutes, call for officers, and other EED news. If you have any items you would like to include in the Fall 2014 issue of the newsletter, please contact the newsletter editor, Joe Wilck at joe.wilck@gmail.com.

In this issue:

- 2013-2014 ASEE EE Division Officers
- Call for Officers
- Annual ASEE Conference & Exposition to be held in Indianapolis, Indiana on June 15-18, 2014
- EE Division Sessions at the Annual ASEE Conference & Exposition
- Engineering Economy Division Annual Business Meeting Minutes

2013-2014 Division Officers

Chair

Neal Lewis University of Bridgeport Technology Management 221 University Ave. Bridgeport, CT 06604 (203) 576-4569 lewisn@bridgeport.edu

Secretary/Treasurer

Erick Jones University of Texas Industrial Engineering 500 West First Street Arlington, TX 76019 817-272-7592 ecjones@uta.edu

Chair Elect and 2014 Program Chair

Karen M. Bursic University of Pittsburgh Industrial Engineering 1048 Benedum Engineering Hall Pittsburgh, PA 15261 412-624-9837 kbursic@pitt.edu

Newsletter Editor

Joe Wilck
East Carolina University
Department of Engineering
204 Slay Hall, Mailstop 117
Greenville, NC 27858
252-737-1930
joe.wilck@gmail.com

Officers Wanted!

If you are interested in gaining some leadership experience by becoming more involved in the Engineering Economy Division please contact the officers listed above or attend our Business Meeting at the conference (scheduled for Mon. June 16, 2014 12:30 PM to 2:00 PM; JW Marriott Hotel, JW Marriott - 202).

ASEE in Indianapolis for the 121st Annual Conference & Exposition

Join us for the 121st Annual Conference & Exposition!

June 15 - 18, 2014 Indianapolis, Indiana

Conference Overview

The ASEE Annual Conference and Exposition is the only conference dedicated to all disciplines of engineering education. It is committed to fostering the exchange of ideas, enhancing teaching methods and curriculum, and providing prime networking opportunities for engineering and technology education stakeholders such as deans, faculty members and industry and government representatives.

The ASEE Annual Conference & Exposition hosts over 400 technical sessions, with peer-reviewed papers spanning all disciplines of engineering education. Attendees include deans, faculty and researchers, students, retirees, industry representatives, K-12 teachers and more. Distinguished lectures are held on Wednesday, and there are two Main Plenaries, one that features the Conference Best Papers. There are also a variety of division award receptions and banquets.

Highlights include the "Greet the Stars" orientation for new ASEE members and first-time conference attendees, the ASEE Division Mixer, and the "Focus on Exhibits" Welcome Reception, Brunch, Lemonade Social and Closing Lunch. The 2014 conference will be in Indianapolis, Indiana at the Indiana Convention Center & Lucas Oil Stadium Center (ICCLOS) and the JW Marriott Indianapolis. We look forward to welcoming you there.

The annual Engineering Economy Division Awards Banquet (held jointly with Engineering Management Division, Industrial Engineering Division, and the Systems Engineering Division) is the division's social highpoint of the year. We look forward to welcoming you in Indianapolis!

Engineering Economy Division (EED) Sessions: *Business Meeting:*

M431; Engineering Economy Division Business Meeting Mon. June 16, 2014 12:30 PM to 2:00 PM JW Marriott Hotel, JW Marriott - 202

Technical Sessions:

M131; Innovations in Teaching Engineering Economy

Mon. June 16, 2014 7:00 AM to 8:30 AM

Indiana Convention Center, ICC- Room 111

Moderated by: Dr. Erick Jones P.E.

- 1. "Engineering Economics Jeopardy!" Mobile App Development Process and Student Satisfaction; Prof. Weihang Zhu (Lamar University), Dr. Alberto Marquez (Lamar University), and Prof. Julia H. Yoo (Lamar University)
- 2. Teaching Time Value of Money: A Few Winning Strategies from the Front Lines; Dr. Gillian M. Nicholls (University of Alabama, Huntsville), Dr. Neal Lewis (University of Bridgeport), and Dr. Ted Eschenbach P.E. (University of Alaska Anchorage)
- 3. The Use of Videos as a Tool to Reinforce Engineering Economy Course Topics: Lessons Learned; Mr. Billy Gray (Tarleton State University), Dr. Gloria Margarita Fragoso-Diaz (Tarleton State University), and Dr. Erick Jones (University of Texas, Arlington)
- 4. Relationship of Final Grade and Use of On Line Course Materials for an Engineering Economics Course; Dr. Paul J. Kauffmann P.E. (East Carolina University) and Dr. Joseph Wilck IV (East Carolina University)

M531; Integrating Engineering Economy into Curricula

Mon. June 16, 2014 2:15 PM to 3:45 PM

Indiana Convention Center, ICC- Room 111

Moderated by: Dr. Joseph Wilck P.E.

- 1. Engineering Economics as a General Education Course to Expand Quantitative and Financial Literacy; Dr. Joseph Wilck IV (East Carolina University), Dr. Paul C. Lynch (The Pennsylvania State University, University Park, PA), and Dr. Paul J. Kauffmann P.E. (East Carolina University)
- 2. A Cross-Discipline, Project-Based Approach to Teaching Engineering Economy; Dr. Heath J. LeBlanc (Ohio Northern University) and Dr. Bryan O'Neil Boulanger (Ohio Northern University)
- 3. Integrating Economic Analysis into Capstone Design; Dr. Gene Dixon (East Carolina University) and Dr. Joseph Wilck IV (East Carolina University)
- 4. Case Study Application of After Tax Analysis to a Renewable Energy Project; Mrs. Christina Jauregui Barboza (Stevens Institute of Technology (SSE)

Interdivisional Session:

M548; Interdivisional Town Hall Meeting

Mon. June 16, 2014 2:15 PM to 3:45 PM

JW Marriott Hotel, JW Marriott - Grand Ballroom 1

The chosen topic for this year is: "Why is change so difficult to sustain in engineering education?"

Joint Divisions Dinner (Social) [\$55.00 in advance on conference website; \$65.00 on site]:

T736; Joint EMD/ EED/ IED/ SED Dinner

Tue. June 17, 2014 7:00 PM to 9:00 PM

Location: Weber Grill (10 W Illinois St, Indianapolis, IN 46204; *Adjacent to Embassy Suites*)

ASEE Engineering Economy Division Annual Business Meeting Minutes

Atlanta, GA; June 24, 2013, as part of the 2013 ASEE Annual Conference

- **1. Welcome and Call to Order.** The meeting was called to order by Division Chair Gene Dixon at 12:30 PM. Several handouts were distributed.
- **2. Introductions and Attendance**. The following people were present:

	1	
Kate Abel	Stevens Institute of Tech.	kathryn.Abel@stevens.edu
Stephanie Adams	ASEE PIC 1 outgoing chair	sgadams@vt.edu
Tom Boucher	Rutgers University	tboucher@rci.rutgers.edu
Karen Bursic	Univ. of Pittsburgh	kbursic@pitt.edu
Gene Dixon	East Carolina University	dixone@ecu.edu
Ted Eschenbach	TGE Consulting	tede1@ak.net
Jane Fraser	Colorado State U – Pueblo	jane.fraser@colostate-pueblo.edu
Paul Kauffmann	East Carolina University	kauffmannp@ecu.edu
Jerome Lavelle	North Carolina State Univ.	jerome_lavelle@ncsu.edu
Neal Lewis	Univ. of Bridgeport	lewisn@bridgeport.edu
Salvatore Marsico	Penn State Wilkes-Barre	sam4@psu.edu
Jessica Matson	Tennessee Tech University	jmatson@tntech.edu
Adrienne Minerick	ASEE PIC 1 incoming chair	minerick@mtu.edu
Kim LaScola Needy	Univ. of Arkansas	kneedy@uark.edu
Jani Pallis	Univ. of Bridgeport	jpallis@bridgeport.edu
Jerry Thuesen	Georgia Tech	gthuesen@isye.gatech.edu
John M. Usher	Mississippi State University	usher@ise.msstate.edu
Ed Wheeler	Univ. of Tennessee - Martin	ewheeler@utm.edu
Joe Wilck	East Carolina University	wilckj@ecu.edu
Weihang Zhu	Lamar University	weihang.zhu@lamar.edu

- **3. Division Mixer** went well again this year...two books were given away (winners were Darrin Rothe and Bob Chin).
- **4. Review & Approval of the 2012 Business Meeting Minutes**. A motion was made by Jerome Lavelle and seconded by Neal Lewis to approve the 2012 minutes (published in the spring 2013 newsletter). Approved.

Officer Reports

5. Chair's report. Gene Dixon reported on current membership counts. While we are down from highs in the early 2000s, we are currently trendy slightly up. EED continues to have about 1% of the total ASEE membership

- 6. **Program Chair's report.** Neal Lewis reported that 5 papers are being presented this year, down from recent years. The Best Paper was awarded to Lizabeth Schlemer of Cal Poly for "Project Based Learning in Engineering Economics: Teaching Advanced Topics Using a Stock Price Prediction Model". Award check has already been processed and a plaque will be presented at the Awards Banquet. Kim Needy asked if the division would be in danger of losing slots for presentations next year. While Neal Lewis indicated that wouldn't be likely since it's based on abstracts submitted, we do need more submissions for next year. Karen Bursic will look into additional cooperation with EM, IE, and Systems Divisions and other ways of increasing our submissions.
- 7. **Treasurer's report.** Karen Bursic reported on our current financial status. <u>See attached Report in the appendix to these minutes.</u> Jane Fraser made a motion to approve. Kim Needy seconded. Report Approved.
- **8.** Newsletter Editor's report. In Eric Jones' absence, Gene Dixon reported that the spring newsletter that included division events for the conference was sent out recently. We will look for the new newsletter editor to create both a fall and spring newsletter in the upcoming year.

Committee Reports

- **9. Grant Award report.** Jane Fraser reported that the winner of the Grant award for Best Paper in The Engineering Economist volume 57 is the paper "The Equitable Financing of Growth: A Proportionate Share Methodology for Calculating Individual Development Impact Fees" *The Engineering Economist*, volume 57, number 3, pages 141-156, by Arthur T. Cox and Richard A. Followill. The authors are from the University of Northern Iowa. Neither were able to attend the conference but awards checks have already been processed and a plaque will be mailed.
- **10. Eugene L. Grant Award fund report.** Jerry Thuesen has resigned as a Grant Award Fund Manager. The fund requires 2 trustees and continuity is important. Jerry recommends Tom Boucher (given his role as Editor of *The Engineering Economist*) and that Joe Hartmann continues in this role. Tom agreed and will confirm Joe.

It was noted that we have used the BASS account for several years now to pay the Grant Award in order to allow that account to grow. Officers agreed that we should continue to pay the Grant Award from the BASS account. Neal Lewis motioned to approve, Tom Boucher seconded and action was approved.

PIC 1 Chair Report

Outgoing PIC 1 Chair Stephanie Adams and newly elected PIC 1 Chair Adrienne Minerick arrived at our meeting to give the PIC 1 Chair's report.

A fee of \$250 has been established to publish in the on line journal, *Advances in Engineering Education*. This is to help offset costs of on line publishing.

ASEE finances are better this year than they have been...smaller losses.

ASEE is looking for volunteers for a Long Range Planning Committee...anyone can volunteer.

ASEE acknowledged that there were some problems with the paper deadlines for the conference this year and a workable timeline is being worked out at the PIC chairs meeting. Kim Needy mentioned the confusion in being told your paper was accepted then later receiving an email about final re-submission date. Neal Lewis also indicated some confusion. Karen Bursic mentioned that at the incoming program chairs meeting, Wayne Davis (ASEE meetings manager) mentioned they were looking into this issue.

Stephanie Adams asked if we had any issues with the timing of best paper selections. Neal indicated we did not but could see how it might be a problem for divisions with a larger number of papers.

Jane Fraser asked Stephanie Adams about Norman Fortenberry's comment at the plenary regarding lawsuits. These were with respect to former employees on personnel issues and there was some cost to ASEE for lawyers, etc.

Adrienne Minerick introduced herself and her background with ASEE. She indicates she will listen to our concerns and follow up.

Ted Eschenbach asked why we cannot get copies of the proceedings on a flash drive instead of a CD which is typically not accessible during the conference. Stephanie Adams indicated that the proceedings are available on line during the conference.

Gene Dixon inquired about funds for divisional promotions and special activities. Is it OK to spend this on food? Neal Lewis will follow up.

Committee Reports continued.

- **11. The Engineering Economist**. Tom Boucher first thanked Joe Hartmann for making his transition into the Editor position easier; he particularly wanted to thank the staff at Taylor and Francis. He is getting up to speed. He then reported the following:
 - a. New area editors were added this year in Risk Management.
 - b. Expect to see a more area editor additions and changes going forward as we need more support in key areas; would like to get one or more civil engineers for an "Infrastructure Economics" area.
 - c. Current submissions are up and the acceptance rate is down. Tom doesn't see a need for more than 4 issues/year as of yet.

- d. The journal is receiving a healthy rate of submissions and the number of papers currently in review is reasonably good.
- e. Circulation is up:

	2012	2011
Core Subscriptions	170	182
On-line Sales Agreements	1854	1799
Society Subscriptions (IIE)	138	112

- f. From 2011 to 2012 TEE has increased the number of full text downloads by 45%. The 2012 number was 7798; 2011 was 5353.
- g. The 2012 Impact Factor was .371
- h. Julia Sikora, Marketing Manager for T&F is promoting the journal visibility through email campaigns. In February 2013 she emailed 4165 individuals to announce the new editor and gave 30 day free access to the three most downloaded articles in 2012.
- i. The editor's goal is to raise the visibility of the journal as much as possible and attract researchers from related areas in engineering who have not published with TEE before.
- j. Potential special issue topics include: engineering economics in reliability, replacement, and maintenance; engineering economics in sustainable systems.

12. Nominations/Elections

- Neal Lewis will move to the Division Chair position
- Karen Bursic will move to the Program Chair / Chair Elect position
- Erick Jones will move to the Secretary/ Treasurer position.

The following were nominated and elected by voice vote to the indicated positions:

- Newsletter editor: Joe Wilck of East Carolina University
- Grant Award Committee: Jane Fraser, Janis Terpenny, and Neal Lewis all have 2013 ending dates for their terms and all were re-elected.
- The Engineering Economist Board: Jerome Lavelle whose term was ending was reelected.

Old Business

13. NCEES changes – The National Council of Examiners for Engineering and Surveying (NCEES) resisted Fundamentals of Engineering (FE) changes that were proposed by the EED membership several years ago; NCEES's experts did not think change was warranted; EED minimally endorsed including the mathematical expressions defining each factor including summations of series where appropriate and in table of current FE Handbook formulas. John Ristroph now recommends requesting any EED members who are past or present members of NCEES experts to write individual letters endorsing EED proposed changes with copies to EED. There was considerable discussion regarding this issue and it appeared that most present at this meeting felt that these recommendations are no longer the direction we want to go. Neal Lewis, Ted Eschenbach, Karen Bursic, and others all

disagreed that we should revert to having basic mathematical expressions and that practicing engineers are going to use financial calculators and tables and should be tested on their ability to do so, not on abilities to use summations of series and the like. Although the members present do not necessarily endorse the new computer testing, they don't believe that making these previously proposed changes will fix any current issues. Paul Kauffmann made a motion to not pursue these changes at this time, Karen Bursic seconded it and that motion was approved.

Also note – There were presentations at the conference all day on Tuesday to demonstrate the new on line testing.

Follow up: There continues to be email exchange between Gene Dixon, Ted Eschenbach, Karen Bursic, Neal Lewis, Erick Jones, and John Ristroph. John strongly believes we should continue to pursue the changes because the EED membership voted 75% to 25% to do so four years ago. However it appears that the remainder of us, including Ted Eschenbach who has been serving on the IE committee for the FE exam, do not believe the suggested changes should now be made given the move to computer testing. Ted also indicated that the time constraints of the current set up of the exam would simply not allow students to use these mathematical expressions. John remains in disagreement.

14. National Engineering Economy Teaching Excellence Award. Gene Dixon will serve as chair of this committee and would like to add Karen Bursic to the committee since as past chair she will serve as chair the next go around (the award is given every 2 years). Some recommendations from the previous committee include: More nominees; Focused nominations; Design publicity, call for nominations, creativity; Distributed to EE instructors, department chairs, reach emeriti, faculty alumni; Distributed to EED members, ASEE & IIE, TEE, IEJ; Econ text publishers. Gene is happy to take additional recommendations.

New Business

15. Call for Papers for 2014 conference to be held in Indianapolis – Karen Bursic distributed a draft, input welcome.

16. Announcements

Our joint EED, EM, IE, and Systems Division banquet will be held Tuesday evening at McCormick and Schmick's attached to the Omni.

The Engineering Management Division program is listed incorrectly on the boards around the conference site but is correct in the on line program.

17. The meeting was adjourned at 1:45 pm.

Minutes recorded by Karen Bursic

<u>APPENDIX:</u> Engineering Economy Division Current as of June 12, 2013

Treasurer's Report

We have four accounts. The "Local-EconDiv" Grant Award account (for the annual Best Paper in *The Engineering Economist* Award) is managed separately. The three managed by the Treasurer are: the BASS (Bank and Accounting Services System) account, the Operating Account, and the Best Paper Account (for the Best Conference Paper). The BASS account is our primary account for various activities. The Operating account is funded by our allocation of ASEE dues (based on membership numbers) and is a "use it or lose it" account from year to year with balances returning to ASEE national.

Operating Account #322

Balance as of June 30, 2012: \$0 Income: \$129

Expenses \$66.95 (plaque for best conference paper)

Balance as of May 31, 2013: \$62.05

BASS Account #222

Balance as of June 30, 2012: \$11,267.35

Income: \$3,883.04 (includes TEE royalties)

Expenses: \$1,000.00 (Grant Award)

Balance as of May 31, 2013: \$14,150.39

Local-EconDiv #422 (Grant Award)

Balance as of June 30, 2012: \$31,229.61

No activity

Balance as of May 31, 2013 \$31,875.80

The EED Treasurer receives quarterly reports on the above three accounts.

Best Paper #122 (Best Conference Paper)

Balance as of June 7, 2012: \$70,840.18 Expenses: \$1,000.00 Balance as of June 12, 2013: \$74,212.08

I defer to Jerry Thuesen for a more detailed report on the Grant Award account. However note that based on decisions made at annual meetings, the Grant Award has been paid from the BASS account for the past several years. A decision will need to be made this year as to whether to continue to do so. The Conference Best Paper is always paid from the BASS account and funds must then be transferred from the Best Paper account since there is no check writing ability from that account.

Karen M. Bursic

Engineering Economy Division Treasurer

June 12, 2013