

BUADKUIKES

A Monthly Newsletter for Members of the
Treasure Coast Chapter of the Florida Engineering Society

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PRESIDENT'S MESSAGE

David P. Andre, P.E.

A few weeks ago, I had the opportunity to attend the 84th Annual Meeting of the Transportation Research Board in Washington D.C. Actually, the reason for my being at the conference was to attend the US Department of Transportation Outstanding Student of the Year Awards ceremony. Now, before I make myself sound important, I have to mention that I attended in a show of support for an engineer-friend of mine and coworker of my wife, Joanne Keller with Miller Sellen Conner and Walsh. There were 30 students representing colleges from M.I.T. to Berkley, and everywhere in between, who were being recognized for their masters' theses.

Anyway, after listening to the students' names being called along with the title of their respective thesis as well as various scholastic honors, I came to the conclusion that engineers are smart. Now, I know what you're thinking: "of course we're smart". But, I'm talking about a rare sort of intelligence, the variety of which can produce published papers entitled:

"Post-Hoc Quantile Test for One-way ANOVA Using Double Bootstrap Method"

"Incorporating the Effect of Exiting Vehicles in Critical Gap Estimation at U.S. Roundabouts"

"3D Finite Element Analysis of TDR Cable-Grout-Soil Mass Interaction During Localized Shearing"

I could go on, but I think you get the point. These students-turned-recent-professionals possess an intelligence that far surpasses the ability to memorize and recall case law; plan out crafty tax strategies; or even diagnose an illness. It's events like this that confirm my faith in the next generation of engineers. The accomplishments of these students and others like them should be celebrated by the engineering community as a whole.

Now, if we can only convince more of these bright minds to move to the Treasure Coast.

Incidentally, Joanne (a recent UCF grad) was invited to present her thesis (entitled "Analysis of Type and Severity of Traffic Crashes at Signalized Intersections Using Tree-Based Regression and Ordered Probit Models") at a poster session at the conference. Congrats again, Joanne!

Calendar of Events for Upcoming Months

February 1-3	Work Zone Traffic Control, Palm Beach
February 3	Florida Building Code, Palm Beach
February 12	Martin County Regional Science Fair
February 17	Better Project Management,
February 17	Site Permitting in the Orlando Area, Orlando
February 17	Professionalism, Ethics and the Law, Miami
February 19	Treasure Coast Chapter MATHCOUNTS competition
February 25	Treasure Coast Chapter E-Week Banquet
February 28	PE LICENSES EXPIRE **DON'T FORGET TO RENEW YOUR LICENSE**
March 10-11	State MathCounts Competition in Orlando
April 6-7	2005 FES/FICE Legislative Forum

February Meeting at a Glance...

What: E-Week Dinner and Awards Banquet

Where: Ballantree Golf and Yacht Club

When: February 25th

Cocktail Hour 6:00 pm Buffet Dinner 7:00 pm

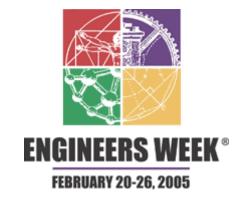
Cost: \$40.00/person

RSVP: dandre@ardaman.com

FEBRUARY MEETING SUMMARY

This year's E-Week celebration will include our annual E-Week Dinner and Awards Banquet with guest speaker Lucille Murtough. Ms. Murtough is a local historian with special interest in Native American Indians who used to occupy the Treasure Coast Area. The E-Week Banquet will be held on Friday, February 25th at Ballantrae Golf and Yacht Club beginning with a 6:00 pm cocktail hour and 7:00 pm buffet dinner. Dress is business formal. The cost is \$40/person. Please RSVP to David Andre at dandre@ardaman.com or by calling (772) 878-0072 no later than February 18th.





National Engineers Week was founded in 1951 by the National Society of Professional Engineers. It is always celebrated at the time of George Washington's birthday. Our nation's first President was a military engineer and land surveyor.

Since 1951, beginning with President Truman, U.S. Presidents have sent special messages of appreciation to the engineering profession in recognition of the week.

At its beginning, National Engineers Week included a few scattered government proclamations, dinners, and speeches. It has since grown to involve tens of thousands of engineers in a variety of community outreach activities, such as technology and education exhibits at shopping malls, to presentations of student scholarships.

Currently there are hundreds of engineering societies, corporations and businesses, government agencies, and universities nationwide that participate.

Engineer's Week is dedicated to raising public awareness of engineers' positive contributions to the quality of life. It promotes recognition among parents, teachers and students of the importance of a technical education and a high level of math, science, and technology literacy, and motivates youth to pursue engineering careers in order to provide a diverse and vigorous engineering workforce. For more information go on National Engineers Week go to www.eweek.org.

40 WAYS ONE ENGINEER CAN MAKE A DIFFERENCE

One person can make a difference in the engineering profession and in National Engineers Week. Here are 40 ways to try.

- 1. Check the National Engineers Week Internet site <u>www.eweek.org</u> -weekly to find out what's new and what activities have been added to the "<u>Scheduled Events Forum</u>."
- 2. <u>Contact a teacher</u> or principal to speak at a local elementary, middle or high school and provide <u>hands-on experiments</u> relevant to engineering and careers.
- 3. Introduce a Girl to Engineering! Use the free EWEEK "Introduce a Girl to Engineering Day" kit or place a public service announcement in your local movie theater.
- 4. Volunteer to help a local middle school participating in the National Engineers Week Future City CompetitionTM. Or, you can help sponsor a prize or judge a local contest. You may even win a trip to Washington, D.C.! Visit www.futurecity.org
- 5. From Jeremy Hubers: Get involved with a volunteer organization such as Habitat for Humanity and represent your engineering chapter with a volunteering spirit.
- 6. Visit Internet sites of your <u>professional and technical organizations</u> to see what they are doing for Engineers Week. If they don't show anything, help create ideas and suggest they link to www.eweek.org!
- 7. Enter news of your local activities on the www.eweek.org database and enter your name as a local contact
- 8. In 2003 the nation celebrates the 100th anniversary of powered, piloted flight. Check out Celebrating the Evolution of Flight.
- 9. <u>Suggest an interesting engineering sight</u> or landmark in your community to National Engineers Week headquarters. Suggestions must be accessible to the public.
- 10. Contact the Junior Engineering Technical Society (<u>www.jets.org</u>) to request guidance brochures for various engineering disciplines and explore high school programs.
- 11. Open your college engineering lab for public tours.
- 12. Help kids ages 6-12 **ZOOM Into Engineering** with a <u>toolkit</u> developed by WGBH television specifically for National Engineers Week volunteers
- 13. Present a demonstration for high school science and math clubs.
- 14. Create special exhibits in public spaces at your office.
- 15. Contact your employer's internal communications staff and let them know when Engineers Week will occur. Present ideas for ways to celebrate the company's achievements.
- 16. Visit www.discoverengineering.org and promote this site to middle school students.
- 17. Contact a middle or high school and offer to have a student shadow you on the job.
- 18. Write a letter to your local newspaper editor letting him/her know about the importance of engineering to your community.
- 19. Plan a special recognition luncheon in your office and invite the CEO or chief technical officer to participate.
- 20. Order Engineers Week materials that can help with your programs.
- 21. Visit www.greatachievements.org for useful information about great engineering achievements of the past 100 years.
- 22. Donate mystery books with an engineering background, children's books, posters and bookmarks to a local public or school library for an Engineers Week "corner."
- 23. (see samples)
- 24. Visit www.nae.edu/awards to learn about the Charles Stark Draper Prize, the "Nobel Prize" of engineering.
- 25. Organize an extracurricular program for young students, such as a tour or competition. Build spaghetti bridges, race boats or design and build Rube Goldberg-like machines.
- 26. Contact a local speakers bureau (try the Chamber of Commerce) and offer to speak before local civic and business groups.
- 27. Develop and maintain a directory of engineering societies or company engineers willing to visit schools, and let schools know this list is available.
- 28. Organize an Engineers Week Committee with your office or professional society chapter.
- 29. Organize a walking or bus tour of interesting engineering achievements in the community.
- 30. Sponsor a workshop to help teachers understand what engineers do.
- 31. Host a program at a local Boys & Girls Club.
- 32. Participate in an engineering fair at a local college. Many engineering schools host such fairs during Engineers Week.
- 33. Enter a contest here.
- 34. Suggest a contest to eweek@nspe.org.
- 35. Place Engineers Week tent cards on tables in the company cafeteria.
- 36. Offer to create an Engineers Week Internet site for a local committee.
- 37. Order Engineers Week notecards for informal correspondence.
- 38. Volunteer to serve as a judge for a school science or technology fair.
- 39. Wear an Engineers Week t-shirt or cap.
- 40. Send an Engineers Week modem cord winder or water bottle to clients or your children's teachers.



MATHCOUNTS® is a national math enrichment, coaching and competition program that promotes middle school mathematics achievement through grassroots involvement in every U.S. state and territory. With over 21 years experience, MATHCOUNTS is one of the most successful education partnerships involving volunteers, educators, industry sponsors, and students.

After several months of coaching, participating schools select students to compete individually or as part of a team in one of the more than 500 written and oral competitions held nationwide and in U.S. schools overseas. Winners at the local level proceed to state competitions, where the top 4 Mathletes® and top coach earn the right to represent their state or territory at the national level. At all levels, MATHCOUNTS challenges students' math skills, develops their self-confidence and rewards them for their achievements.

The Treasure Coast Chapter competition will be held on Saturday, February 19, 2005 at the Indian River Community College campus in Fort Pierce. **VOLUNTEERS ARE NEEDED FOR THE DAY OF THE COMPETITION.** Volunteer duties include check in, test grading, and proctoring. This is a fun way to get involved and assist with one of our chapter's most important annual events. Times very depending on volunteer duties; however typically volunteers arrive around 7 am and finish around 2 pm.

Please contact Allen Bottorff at <u>Allen-B@lfbh.com</u> or Jesse Markle at <u>Jesse-M@lbfh.com</u> to volunteer or for more information.

FELLOW NOMINATIONS

If you or an engineer in the Treasure Coast Chapter that you know meet the following criteria, that person is eligible for the status of FES Fellow. Please contact David Andre at dandre@ardaman.com or 772-878-0072 to nominate someone for consideration.

BASIC CRITERIA

- 1. FES Charter Article IV. Section 2.a ..."A Fellow Member shall be a professional engineer of recognized high character who has distinguished engineering, and/or scientific attainments and who shall be elected Fellow only by unanimous vote of the Board."
- 2. Candidate shall:
- A. Have been practicing the profession of engineering for 20 years.
- B. Have been a member of FES for 10 years, or a member of NSPE for 15 years with at least five years of service in FES.
- C. Be a Professional Engineer member of FES.
- D. Have a conspicuous record of achievement in professional affairs, including substantial interest and active work in FES at the state, chapter, or national level.
- 3. Candidate's professional integrity shall be beyond question.
- 4. Candidate's professional reputation shall be more than local in character.
- 5. Candidate shall have consistently worked for the professional and technical interest of the engineering profession.
- 6. Candidate shall have been active in carrying out his civic, community, and public responsibilities.
- 7. The Board shall endeavor to limit the Fellow members to no more than 5% of the corporate membership.

2005 MARTIN COUNTY REGIONAL SCIENCE FAIR

JUDGES NEEDED

The organizers of this year's Martin County Regional Science Fair are looking for judges in the sciences and engineering fields. The fair serves students from Martin County in grades 3-12, so a wide range of judges are needed. The fair takes place on Saturday, Feb 12, 2005 at the Treasure Coast Square Mall (located on US1 in Jensen Beach). Judges would need to arrive by 8:00AM, and they are finished by early afternoon. The best middle and high school projects will continue on to the Florida State Science Fair, with possible advancement to the Discovery Young Scientist Challenge (Middle School) and the International Science & Engineering Fair (High School).

Anyone interested in judging can register online at www.ladystuart.com/sciencefair/main.htm. For more information, please contact Richard Soviero at rsoviero@adelphia.net.

SPONSORS NEEDED!

The Martin County Regional Science Fair also would also greatly appreciate any corporate sponsorships. Thanks for any help that you can provide!

To become a sponsor, please contact the Martin County Regional Science Fair Director, Ms. Linda Stitely at stitell@martin.k12.fl.us.

DON'T LET YOUR PE LICENSE EXPIRE

PE License Renewal Requirements

In order to renew their PE licenses, Professional Engineers in Florida must earn a total of 8 PDHs during each renewal cycle. The current renewal cycle ends February 28, 2005.

Course Categories

4 PDHs of continuing education credit are required in each of two categories.

- 1. The Laws and Rules that govern the practice of engineering in Florida. (61G15 Florida Administrative Code Chapter 471 of the Florida Statutes)
- 2. Area(s) of Technical Practice

What is a PDH?

1 PDH = 50 minutes in the classroom

The Florida Engineering Society's

On-Line Laws and Rules Course

FES Members \$99 / Non-members \$149 4 PDH's in the area of Laws and Rules

This course can be accessed at:

http://www.fleng.org/tests.cfm?c id=1

Course Overview

This course covers Chapter 471, Florida State Statutes (Engineers Registration Law), and Chapter 61G15, Florida Administrative Code (Rules of the Florida Board of Professional Engineers). By completing this course, you will meet your licensure renewal requirement of four Professional Development Hours in the Laws and Rules.

It is estimated that an individual will spend approximately three hours reading and reviewing the Laws and Rules in preparation for the test and one hour completing the test. Total course time: four hours.

Continuing Education Made Easy

Did you know you can meet your 8 hours of continuing education credit from the convenience of your home or office? FES offers on-line and correspondence courses to help ease the renewal process. Courses available on-line and through correspondence include the laws and rules and project management. Laws and rules course meets the 4 hours of laws and rules credit. The project management course meets the 4 hours of technical credit need to renew your licensure. Courses are offered at the low rate of \$99 each for members. Take advantage of this offer today. The FBPE renewal deadline is February 28, 2005. Register for seminars at www.fleng.org.

The Florida Engineering Society's

Project Management Course

FES Members \$125 / Non-members \$225 4 PDH's of Technical Credit

This course can be accessed at:

http://www.fleng.org/tests.cfm?c id=2

Course Overview

Project Management involves a broad and diverse range of functional duties and responsibilities that require a comprehensive array of knowledge, skills and competencies. The purpose of this course is to present selected "Best practices" that can be practically applied to foundational PM activities common to virtually all projects. By applying these "best PM practices" you can improve your personal performance and enhance the probability of achieving successful project outcomes.

It is estimated that an individual will spend approximately three hours reading and reviewing the Project Management manual in preparation for the test and one hour completing the test. Total course time: four hours.

Membersh-p Zeys

Are you getting back for giving back to FES?

This year reward yourself with FREE incentive prizes from FES. Each time you give back to FES through a new member sponsorship, you will receive a prize. Prizes vary from FES Bucks (to use like cash at FES events), to free membership dues at the state and national level, to a top prize of a two night stay at the Marco Island Marriott. A complete list of membership incentive prizes is available at www.fleng.org along with FES membership application. For additional information about sponsoring new members, contact Kate Robinson, Director of Membership Recruitment at 850-224-7121 or krobinson@fleng.org.

FES COMMITTEE OPPORTUNITIES

WE STILL NEED VOLUNTEERS for many State Committees. Below is a list of the committees that are available, with a brief explanation of the duties. For further details on a specific committee, please see the Florida Engineering Society website. If you are interested in volunteering for any of these committees, please contact David Andre at 772-878-0072 or dandre@ardaman.com.

Energy Committee

Study and make recommendations to the Commission on Legislative and Government Relations of the Florida Engineering Society with respect to energy matters affecting the public and the profession. Prepare studies and make recommendations to the Commission on energy policies or positions that would be appropriate for the Society to adopt and promote. Monitor the activities of the Public Service Commission and other state agencies or legislative groups with an energy interest to insure that sound engineering knowledge and practice are employed in protecting the public's interest and in making regulations that will impact on the public. Coordinate with the National Society of Professional Engineers in its energy-related activities and represent the Florida viewpoint in their deliberations when appropriate.

Communications Advisory Committee

The objectives of this committee shall be to focus on opportunities for FES to improve its internal and external public relations efforts through effective use of communications. Review past and current issues of the JOURNAL of the Florida Engineering Society. Provide comments and suggestions on past and current issues. Recommend topics of interest. Write occasional articles in their areas of interest.

Charter and Bylaws Committee

Maintain a continuing study of the Society's Charter and Bylaws and make recommendations to the Board for revisions. Review proposed amendments to the Charter and Bylaws and make recommendations to the Board on the manner in which they shall be incorporated in the wordage of the Charter and Bylaws. Serve in an advisory capacity in interpreting the provisions of the Charter and Bylaws. Review and make recommendations to the Board on all new Chapter Charters and Bylaws and all proposed make amendments thereto. Review and recommendations to the Board with respect to the maintenance of a model Chapter Charter and Bylaws.

Constructed Environment Committee

Study and make recommendations to the Board with respect to matters relating to the constructed environment. In that regard, prepare committee shall studies and make recommendations to the commission on legislation, administrative rules, or governmental policies on matters relating to the constructed environment that would be appropriate for the Society to adopt and promote. The committee shall establish liaison with the Florida Association of the American Institute of Architects, the Florida Home Builders Association, and other such professional societies, trade associations, or technical societies on issues of common interest. The committee may sponsor educational workshops or seminars for members of the Society, the profession, and the industry to discuss and develop laws, regulations, and procedures which will protect the public interest and allow maximum professional creativity.

Annual Meeting Steering Committee

Review hotel proposals for the annual meeting and recommend a site to the Board of Directors. Approve a theme which is topical and of interest to the entire profession, and which shall convey the major emphasis of the meeting to the membership and the public. Approve a meeting budget. Approve the program format and advise staff on potential speakers.

Commission on Legislative & Government

The purpose of the commission is to provide the Florida Engineering Society with maximum participation in and proper coordination of its legislative and government relations program. Responsibilities of the commission include periodic review of the efforts of the committees within the Division of Public Affairs and the development of recommendations to the FES Board as to proposed positions on legislative and government relations issues and priorities for accomplishment.



Quote of the Month

An engineer is someone who is good with figures, but doesn't have the personality of an accountant.

- An Arts graduate's view of engineers





Classifieds

Did you know that the Treasure Coast Chapter will publish POSITIONS WANTED and HELP WANTED notices for its members at no cost?! Please email your advertisements to Teri Andre at teri.andre@mscwinc.com.

(Sorry, but this offer does not apply to employment agencies working for a fee.)



http://old.fleng.org/treasurecoast/index.htm

Our Chapter's new "Web Master" is Jeremy McBryan, P.E. with PBS&J in West Palm Beach. His help is greatly appreciated. Thank you, Jeremy! Please email any website suggestions to Teri Andre at teri.andre@mscwinc.com.

For Members Only - If you would like a link to your company's web page added to our web site, please e-mail Teri Andre at teri.andre@mscwinc.com or call (772)219-4003.



Newsletter – If you have any questions/comments, or if you would like something included in the monthly publication - please feel free to contact Teri Andre, P.E. at teri.andre@mscwinc.com, or by telephone at (772) 219-4003.

2004 - 2005 Treasure Coast Chapter Board Members

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TREASURE COAST CHAPTER

Chartered 1987

FLORIDA ENGINEERING SOCIETY

Affiliated with

NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS
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