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**Franklin County Chapter**  
Ohio Society of Professional Engineers

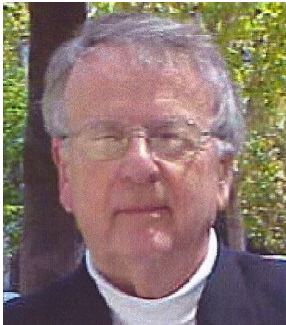
DECEMBER 2012

# Columbus Engineer

**Official Publication of the Franklin County Chapter of the  
Ohio and National Societies of Professional Engineers**

## PRESIDENT'S MESSAGE

By Leon E. Winget, Ph.D., P.E. / FCC President



Happy Holidays to all! We are now in our fourth month of activities for this fiscal year (FY). Time does fly. This FY we are issuing Columbus Engineer (CE) in December. Yes, December is a busy time of the year, but our Chapter activities continue through out the FY.

The Chapter luncheons on October 25 and November 11 were an outstanding success. All PEs received one CPD for each luncheon, which they attended. We had two distinguish speakers; Cyndi Reichardt, a Quality Specialist with over 30 years experience in Quality Assurance and Daniel Rogier, the Managing Director of Transmission East American Electric Power. We do not have a luncheon plan for December.

The Chapter Business Seminar, on October 25, was quite unique and very interesting. The PE's attending the seminar, received four CPD's. Cyndi Reichardt related her experiences with DOD and TSA and promoting Quality Assurance in the government and the evolution of Quality Assurance (QA). QA has evolved greatly over the past three decades. She defined QA and the management responsibility for integrating QA into the business system. Cyndi emphasized that QA was much more than inspection, highlighting the importance of predictive and risk analysis. Successful companies have a dynamic and vibrant QA Management System. Topics that she covered were: an effective QA management system; the basic tools of QA; an introduction to Predictive Analysis; differences and similarities of risk and quality management; and the impact of the "-ilities!" that comes with QA. Although she concentrated on one method, she defined four other QA approaches and some of the differences between the various theories. However, in the time allotted, she could only scratch the surface of the subject. Thank you Cyndi.

Daniel Rogier presented the intensity of and the large area affected by the "Derecho". Derecho is a widespread, long-lived, straight-line windstorm that is associated with fast-moving band of severe storms. All six divisions of East AEP received significant damage. Dan related the efforts required to quickly organize and marshal the necessary resources to restore service in such a large area in an expeditious and safe manner. Nearly 1.4 million (53% of AEP) customers lost power. AEP had to replace 489 poles and repair 424 stations. Thank you Dan.

The slides are available for both presentations mentioned above. If interested, please contact me for an electronic copy at ([jolewin2@sbcglobal.net](mailto:jolewin2@sbcglobal.net)).

The Imagine Engineering Program is now under way. The material has been sent to the elementary schools. The booklet that the professional engineer uses in their presentations has three types of engineers, Electrical, Mechanical and Civil, with a hint of software engineering. The Imagine Engineering Coloring Program, sponsored by the Engineering Foundation of Ohio (EFO), established in 1999, is a statewide education program for second graders. The professional engineer visits the classrooms in January and February to talk with the children about engineers and their every day activities. Sheets are distributed to the teacher, to allow the students to draw and color a picture of an engineering project or an engineer at work. FCC will pick three winners and submit those drawings to the State for the statewide contest. The students who have the top three entries at the state will receive educational prizes. The last year prizes were: first place, a telescope; second place, a microscope; third place, the Math Shark skill building game plus a calculator. Please contact **Devon Seal** ([Devon\\_seal@gspnet.com](mailto:Devon_seal@gspnet.com)) to participate in this very unique program. She will either match you with another engineer, or designate an elementary school for you to visit. Please join us on this fantastic program to introduce our young students to the profession of engineering.

(Presidents Msg. continued on Page 2)

(Presidents Message continued from Page 1)

Our membership drive is continuing. **Ron Eifert** is doing due diligence in defining potential candidates. Wish to join in or have a hot lead, contact **Ron** ([roneifert@aol.com](mailto:roneifert@aol.com)). Any member that signs up a new member, has his dues reduce by \$50 up to a maximum of \$120. Also, to review the full advantage of the membership in the OSPE organization go to the OSPE site:

([ohioengineer.com/index.php/Become-a-Member/Become-a-Member](http://ohioengineer.com/index.php/Become-a-Member/Become-a-Member)).

Contact information for all Chapter officers and Chairs are listed in the September and October CE issues. You may review all CE's, for the past three years, at our web site under Newsletters: ([ohioengineer.com/index.php/Become-a-Member/Franklin-County](http://ohioengineer.com/index.php/Become-a-Member/Franklin-County)).

Until the New Years, have a very fulfilling Holiday with your family and friends; and remember why we celebrate the holidays.


**Isao L. Shoji, CFP<sup>®</sup>, CLTC**  
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## Nominations for OSPE Awards

**Nominations are being accepted for the following five OSPE awards. Contact your local Chapter Awards chairperson, Tina Sutermeister, at 614-718-3795 or email: [tina.sutermeister@alcatel-lucent.com](mailto:tina.sutermeister@alcatel-lucent.com). The deadline for submitting these nominations to OSPE is February 1<sup>st</sup> so, don't hesitate, contact Tina immediately.**

**OSPE Citation** – This is the highest honor that OSPE bestows upon an engineer. This award is presented annually to an Ohio Engineer with distinguished leadership in the engineering profession and in appreciation of selfless devotion to the highest ideals of service to society and to fellow man; and for sustained contributions to the technical and professional aspects of the engineering professions.

**Meritorious Service Award** – This award is presented on the basis of service to OSPE at both, the Chapter and the state levels and for outstanding contributions to the goals and objectives of OSPE. The award recipient shall be an active member in his/her Chapter and the emphasis is placed on continuous meritorious service over a long period of time.

**Outstanding Engineering Student Award** – This award is presented to an engineering student from an ABET-accredited Ohio engineering school based on scholastic achievement, participation in professional, technical, and other activities.

**Outstanding Engineering Educator Award** – This award is presented to a member of the engineering faculty of an ABET-accredited engineering program in an Ohio school and the educator shall have at least 5 years of experience subsequent to graduation from an accredited Engineering school and must be teaching an engineering course during the current term.

**Outstanding Engineering Achievement Award** – This award is presented in recognition for outstanding engineering accomplishments in manufacturing, construction or design, or combinations thereof. The nominated projects must have been completed during the calendar year preceding the award presentation and the nominated projects may be located outside the chapter geographical area.

## Engineer for a Day, 2013

The Chapter will again participate in the “Engineer for a Day” program. The program is directed toward high school students who have an interest in learning about engineering. The program takes place during National Engineers Week in February. The students spend a day as a guest of an engineering company, shadowing a professional engineer, to gain first-hand knowledge of the role of the engineer. This gives the students (high school juniors and seniors) a real world exposure to a possible future career as an engineer. The activities for the day of the program are to help the student learn: what the engineer does; what are the engineering activities of a company (engineering business and products); what fields of engineering disciplines are involved; and what are the challenges the engineer faces on a daily basis. Though these students may be identified by their high school math and science teachers, a first-hand interaction with an engineer in the field could be the primary factor determining the career path these students choose.

The program has enjoyed tremendous support from many companies and organizations including, City of Columbus, Ohio Department of Transportation, American Electric Power, Franklin County Engineer’s Office, MS Consultants, Emerson Network, et al. These companies have been very supportive of the program for the past years and we appreciate and value their continued support in educating the future engineer. It is our strong desire that these companies continue to support us in our

effort to define the future engineer. We are sure the students will not forget these host companies’ efforts to give back to the engineering community. Although, some host companies may pick up their guest students at school and return the students after the event, many companies prefer the student have a means of transportation to and from their host companies.

The schools have been very supportive! They know and identify the students with special math and science skill first, then encourage them along a career path. The students follow up and choose an engineering discipline of their choice. Our special thanks to Hilliard Darby HS, Westerville South HS, Bishop Ready HS, Bishop Watterson HS, Dublin Coffman HS, Columbus Downtown HS, Grove City HS, New Albany HS and others too many to mention. They have continued to provide guest students for the program and their unflinching support is appreciated.

Past experiences have shown that with support from parents, schools, and the host companies we will produce the engineers that our nation needs. These students, as engineers, will be able to compete with other professionals in the larger society. The society needs the students to discover their engineering talent early before other professions entices them. This will make the founding fathers of the engineering profession proud. The more quality engineers we can produce the better will be our society.

From strategy development through design and construction management, Hull’s Civil Engineering team can help.



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## HIGHLIGHT THE PRACTICE DIVISION PEG

This month's highlighted Practice Division is the Professional Engineers in Government (PEG), also now known as Professional Engineers in Government Interest Group. The mission of the PEG Practice Division is to further the mission of the National Society of Engineers by representing engineers in government.

The vision of PEG is to be recognized as the nationwide leader in providing information and activities to government engineers to enhance their productivity and success.

Current major initiatives of PEG include continuing education opportunities at state, regional, and national NSPE conventions; various engineering articles in NSPE's *PE* publication; NSPE PEG e-News published quarterly on the NSPE website; the Federal Engineer of the Year award; Professional Engineer in Government Achievement and Service in the United States (PEGASUS) Award; PEG Management Study Fellowship, an annual \$2500 scholarship for government engineers pursuing a management degree; a possible state/chapter government engineer of the year award; promotion of state/chapter government engineer activities and; on line course – "Owner's Guide to Energy Performance Contracting".

PEG actively promotes the "Order of the Engineer" program as a way of fostering a spirit of pride and responsibility in the engineering profession.

Current Sustaining Sponsors are:

- FedEx
- Red Vector

By becoming a PEG Sustaining Sponsor, you or your organization will enable PEG to:

- Create continuing professional development (CPD) workshops and seminars for government engineers, and help registered engineers meet the CPD requirements of state registration boards.
- Continue the Federal Engineer of the Year Award (FEYA) program and the Management Fellow Scholarship Program for government engineers who want to pursue graduate study in management.
- Promote partnerships with government agencies and engineering technical societies.
- Facilitate the development of more and better products and services for government engineers.
- Support the development of programs to increase the awareness and visibility of the achievements of government engineers.
- Expand programs to help government engineers and their employers deal with the pressures of career mobility, rapid technological change, and ethical responsibilities.

For more information, contact [peg@nspe.org](mailto:peg@nspe.org).

Rich Irwin, PE is the current PEG Trustee for the Franklin County Chapter and the OSPE PEG Trustee. Rich's email address is [rirwin@dot.state.oh.us](mailto:rirwin@dot.state.oh.us). Please contact Rich for information on PEG, or visit the PEG web page <http://www.nspe.org/InterestGroups/PEG/Resources/index.html>

Information is also available in the NSPE PEG e-News.





## DEC. AUXILIARY MEETING

The December meeting is a noon luncheon scheduled for Tuesday, December 11. (note earlier date) at the Scioto Country Club, 2196 Riverside Dr. Program will be a return appearance of the Grandview High School Singers under Andrew Grega, Director of Choral music. Their superb performance would be especially enjoyed by guests. For a reservation call Jean Mitchell, 262-7071. For more information contact Agnes Benedict, 262-7346, or Barbara Fuller, 880-9221

Elizabeth Vaughn will give the invocation and lead the pledge of allegiance. Nancy Roehrs is to be hostess. Past Presidents will be recognized for their service.

The Auxiliary does not meet in January, but we look forward to seeing members and any guests in February, 2013.

## TidbiT

Hang on Sloopy et al; according to the Mayan calendar, the geomagnetic reversal is predicted to occur on December 21, 2012. About 41,000 years ago, a complete and rapid reversal of the geomagnetic field occurred. Magnetic studies of the GFZ German Research Centre for Geosciences on sediment cores from the Black Sea show that during the last ice age, a compass at the Black Sea would have pointed to the south instead of north. Moreover, data obtained by the other studies in the North Atlantic, the South Pacific and Hawaii, has proven that this polarity reversal was a global event. Did the Mayans know something that we did not? Is it about time? Better hang on!

## FCC/OSPE Auxiliary Notes November Meeting

by Agnes Benedict

The Auxiliary to the Franklin County Chapter of the Ohio Society of Professional Engineers, met on November 13, 2012 at the LaScala Restaurant. Seventeen members and eight guests attended the luncheon and Scholarship Fund Raiser.

Raffle tickets were sold and the winners had an opportunity to go to the display table and choose any one of the beautifully wrapped packages. Each member had been asked to bring a package with a value of at least five dollars. Many were of a much higher value. As the packages were brought in, a sealed envelope was attached. Each envelope contained funds from ten cents to ten dollars. The packages and the envelopes were not opened until everyone present had had a turn.

Everyone seemed to enjoy opening their secret package. Many of the people turned over their envelope winnings to the scholarship fund.

There was also a Bake sale and a Trash-to-Treasures table which did a good business. Four larger items were sold separately at the end of the meeting.

We took in almost eleven hundred dollars, which included money taken in that day and donations. This will enable the group to continue some scholarship funding to engineering students at the Ohio State University.

## FCC CHAPTER NOTICE

Joe Bolzenius, Regional MATHCounts coordinator, has changed companies. He now works for Patrick Engineering as Ohio Director of Transportation. His new email is [joseph.bolzenius@hotmail.com](mailto:joseph.bolzenius@hotmail.com)

**Joseph S. Bolzenius, PE, PS, LEED AP**

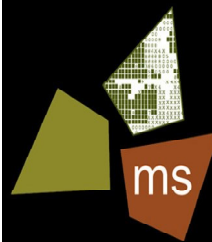
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## **A History of FCC/OSPE – The Invasion and a New Rug**

(This is the seventh issue of the History of Franklin County Chapter, by L.E. Winget, Ph.D., P.E. The content is based on the compilation “A History of FCC”, compiled by Frank Geyer, 1972. Starting with this issue, I will identify the speaker; those not identified are either members of FCC or were not further defined by Mr. Geyer.)

**And Now FY 1949-50** – The world continued to go to heck in a hand-basket. The Soviet Union tested the atomic bomb, breaking the US monopoly. The Nationalist Chinese government escaped to Formosa, establishing the two Chinas. North Korea invaded South Korea. The UN Security Council requested members furnish military assistance to South Korea. The US accepted and sent troops under General MacArthur.

The Chapter elected Col. R.M. Edgar as President. Later in the fiscal year, President Edgar was transferred to Washington DC, as Chief Engineer of Construction for Veterans’ Hospitals. Vice President L.T. Hunziker finished the term. FCC had 436 members. The Chapter had 7 Directors and 17 Committee Chairs. Dinners cost between \$1.50 and \$2.00. The OSPE dues were increased to \$16 per year. Certificates were handed out to newly registered engineers at two of the meetings.

The majority of the dinner meetings were held at the Fort Hayes Officer’s Club. The topics were:

- Films of close-up battle action (Col. E. Taylor)
- Activation orders for the Engineer Brigade
- Geological Cartography (E. Rowell)
- Harnessing the Atom (H.R. Nelson)
- Legislation of Interest to Engineers (G. Marshall)
- Manufacturing Problems in Industry (J.A. Flint)

- TWA – Air Travel (P. Strom)
- Television Network Facilities (E.D. Guernsey, P.E.)

(Miss E. Rowell, OSU Research Foundation. Dr. H.R. Nelson, Battelle Memorial Institute. Honorable George Marshall, Franklin County Representative. J.A. Flint, Vice President Jeffrey Manufacturing Company. P. Strom, District Manager of TWA. )

A Gallop poll indicated that medicine was the most desirable profession with engineering placing second. The Ford Motor Company stated that Ohio had the best system of roadside parks in the US (obviously before the Freeway System).

On the lighter side: CF Kettering stated that engineers must partake of economic horse sense as well as scientific principles. L.N. Alberts, Civil Engineer, who help build the Boston subway, also invented an advanced type brassiere designed on the principle of the suspension bridge. George Shute was once arrested for “scorching” on a tandem bicycle in Boston; he had been sheriff of Hocking County, but retired after the notices on the handle of his gun consumed the whole handle.

OSPE moved the offices to 40 East Gay Street. Seventy-five percent of the members of the Engineers Club of Columbus were members of FCC. A merger of the two clubs was not feasible, as it would require FCC accepting non-registered engineers. Lloyd Chacey and E.E. Sanderson produce a 15-minute radio broadcast for Engineer’s Week. Oh yes, the FCC Board of Directors contributed \$50 for a new rug in Lloyd Chacey’s office.

**FY 1950-51 – Tragedy and Shortages** - The UN Forces reached the 38<sup>th</sup> parallel. Gen. MacArthur crossed the Yalu River and seized Pyongyang. Elements of the 7<sup>th</sup> Marine Division reached Manchuria. Chinese troops entered the war and drove the UN Forces back to the 38<sup>th</sup> parallel. President

Truman replaced MacArthur with Lt. Gen. Ridgeway. The 22<sup>nd</sup> Amendment was passed that limited the President's terms to two terms. WWII was formally concluded with Germany, July 9, 1951.

The Chapter elected C.K. Rose as President and F.C. Redick as Vice President. The Chapter had 6 Directors and 22 Chairs. Floyd Redick had recently been promoted to Lt. Colonel. The Friday noon luncheons were switched to the YMCA, and served by a waitress named Agnes.

Again, most dinner meetings were held at the Fort Hayes Officer's Club. Attendance ran between 60 and 140 engineers and their guests. Meals cost between \$1.75 and \$2.25. The topics were:

- The Professional Engineer's relationship with the Lawyer (J.M. Harter, LLB)
- Engineer's Place in the World Today (C.I. Weaver, 140 in Attendance)
- Industry's Future – Freedom, Straightjacket or Hobble (T.C. Campbell)
- Industrial Relations and the Engineer (W.R. Speer)
- Things to Come – Design Trends in Major Appliances (F.H. McCormick)
- Implications of the Hoover Report (R. Rosencrans)
- Harnessing the Atom (H.R. Nelson)
- Samuel DeVine talked about his FBI War Years Experiences
- NAA and Its Aircraft (G. Gehrken, Chief Engineer)

(T.C. Campbell, Editor of the Iron Age Periodical. W.R. Speer, Industrial Relations Director of Columbus Bolt and Forge Company. F.H. McCormick of Frigidaire Division of General Motors. R. Rosencrans, Executive Director of Ohio Committee

of the Hoover Report. Dr. H.R. Nelson of Battelle Memorial Institute. George Gehrken, Chief Engineer at North American Aviation [and my old boss at NAA and two decades later at ODOE]).

DuPont Corporation took the position that the shortage of technical personnel was one of the most important long-range problems facing the chemical industry. The nation needed over 30,000 engineering graduates each year. DuPont could place 2,000 engineers in jobs that were open at that time.

Some interesting happenings during the year: OSPE recommended that a week in the summer be set aside for Engineer family group recreation. The FCC Executive Committee took steps to incorporate the Chapter as a means of better serving the membership. The Chapter engineers set aside every Friday for a noon luncheon. Mayor Rhodes designated FCC as a source for information for the Columbus Civilian Defense Committee. The Miami & Erie Canal Locks at Lockington were established as a State Park. Wisconsin placed restrictions on trucks over 8,000 pounds, designating times during the day that they could use the highways in the summer months.

On the lighter side: The Ohio Engineer, September 1950, described the Engineer as being underpaid, poorly dressed, ill-spoken creature without whom nothing of material importance could be accomplished today. H. Keough, a sports writer, said "The race is not always to the swift or the battle to the strong, but that is the way to bet." Voltaire said, "Every nation gets the government it deserves." A user of Hadacol said "Three months ago I could not read or write. I took two bottles of Hadacol and now I teach calculus at MIT." Herbert Hoover decided to find a man who was trying to make money and then help him make it. W. Churchill said, "The vice of capitalism is that it represents the unequal sharing of blessings; where as socialism stands for the equal sharing of misery."

**Next: Cuba, Academic, Republicans and Locomotives**

**FIRST CLASS**

OHIO SOCIETY OF  
PROFESSIONAL ENGINEERS  
Franklin County Chapter  
P.O. Box 69  
Reynoldsburg, Ohio 43068

## 2012-2013 CALENDAR

Dec. 11	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Dec. 15	5:00 p.m.	Deadline for January <i>Columbus Engineer</i>
Jan. 8	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Jan. 15	5:00 p.m.	Deadline for February <i>Columbus Engineer</i>
Jan. 17	Noon	<b>Program: Luncheon – TBA</b>
Feb. 12	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Feb. 15	5:00 p.m.	Deadline for March <i>Columbus Engineer</i>
Feb. 16	8:00 a.m.	Local Mathcounts Competition @ Columbus State Community College
Feb. 17-23		National Engineers Week (see <a href="http://www.eweek.org">www.eweek.org</a> )
Feb. <b>20</b>	8:00 – 3:00 p.m.	Engineer for a Day Program
Feb. <b>20</b>	<u>11:30 a.m.</u>	<u>Program: E-Week Luncheon</u>
Mar. 12	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Mar. 9	8:30 a.m. – 3:00 p.m.	State Mathcounts Competition (FCC Volunteers)
Mar. 15	5:00 p.m.	Deadline for April <i>Columbus Engineer</i>
Mar. 16		District Science Day
Mar. 16		Spring Certificate Ceremony (OSPE)
<u>Mar 21</u>	<u>Noon</u>	<u><b>Program: TBA</b></u>