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PRESIDENT'S MESSAGE

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



G'd Day Franklin County Engineers, as they would say in Australia. The relationship with Australia will become evident in the article on the birth of "Quality Assurance", as an engineering tool. In the President's Message this month, I will cover three

topics: 1- the upcoming Quality Assurance Seminar: 2 - Imagine Engineering Program: 3 - the upcoming FCC-OSPE membership drive.

For the past nine years FCC-OSPE has offered a "Business Communications Seminar" for its members. This year will be slightly different, as our topic will be more specific to operating a successful "engineering business." All engineers, who attend the luncheon will receive one CPD, and those attending the seminar, will receive four CPD's. We have a very unique and interesting seminar this October and I hope you can make. We have a Quality Specialist, Cyndi Reichardt, coming "all the way" from Washington DC as our guest to run our fall training seminar. The topic is Quality Assurance (QA), which has evolved greatly over the past two decades. She will define QA and discuss who is responsible for managing this elusive attribute. Successful companies have a dynamic and vibrant QA Management System. Topics that she will cover are: an effective QA management system; the basic tools of QA; an introduction to Predictive Analysis; differences and similarities of risk and quality management; and QA impact of the of "-ilities!" This will be a very interesting seminar and our speaker has a way of keeping the material "non-dry". Please see the seminar announcement in this issue for more details. I will see you there, right!

"Imagine Engineering Program" is the student's (second grade) first formal contact with the engineer. These popular children teaching aide depicts many types of engineers in action. The engineers illustrated in the book include men and women of various cultural and professional backgrounds. A professional engineer spends one period talking with the students about the innovative things engineers are doing right in our own state. The Imagine Engineering Program offers a coloring contest featuring fun, educational prizes for the top three statewide winners. We can use your expertise in making these presentations. Please volunteer by contacting Devon Seal. Plan to save a morning or afternoon to make a presentation to a second grade class. You will be surprised to see the interest of the second graders.

The FCC membership drive is about to get underway. Ron Eifert needs your help to get the word out to all professional engineers with the many benefits for our members. To get the most from our membership, the professional engineer must get involved, as you have heard many times before. Some of our many benefits are the savings of 25% to 50% on FCC and OSPE CPD luncheons and seminars throughout the year. These savings alone are more than the cost of the chapter and state dues. Remember that OSPE is the one association that goes to bat for PE's in protecting our profession. We need your help in keeping our association strong.

Thus, these programs are great opportunities to get involved. In addition, we have the MATHCOUNTS Program both Regional and State, in its 30th year, the Regional and the State Science Fair, and the grading of scholarships. We need your help please volunteer your services, they will be greatly appreciated.

And, please join us at the seminar on October 25th!

FCC-OSPE October Luncheon/Seminar Program

DATE: Thursday October 25, 2012

PLACE: The Spaghetti Warehouse
397 W. Broad St., Columbus, OH

TIME: Registration: 11:15 AM
Lunch: 11:30 AM - 12:00 PM
Lunch Program 12:00 PM - 12:50 PM
Seminar: 1:00 PM - 5:00 PM

COST: The cost for the luncheon only is \$20/members and \$30/non-members. The cost for the luncheon and seminar is \$150/members and \$200/non-members. Call Chapter at 470-4170 or email registration information to OSPEFCC@aol.com by Oct. 8. Please include name and phone number, your lunch meal choice, number of people attending, and whether you are staying for the entire seminar or just the luncheon. Pay at the door (cash or check payable to FCC-OSPE)

Luncheon Program: 1.0CPD
Introduction to Quality Assurance - Much More Than an Inspection System

When you hear the word quality, what is the first thing that comes to mind? Who would be responsible for managing this elusive attribute? Learn what “quality assurance” is and how the QA arena has changed over the years. Have you ever thought of yourself as a Quality Manager? You just may be a closet quality professional!

Seminar Program: 4.0CPD
Quality Assurance - Predictive and Strategic

Successful companies have a dynamic and vibrant Quality Management System. Cyndi describes today’s management models and tools of quality assurance. Learn the roles Quality Assurance plays in the world of business. Is a technical background required for the QA Specialist? How does Quality Assurance relate to Engineering?

Topics Covered:

- * Overview of an Effective Quality Management System – A Strategy

- * The Basic Tools of Quality Assurance
- * Introduction to Predictive Analysis
- * Differences and Similarities of Risk and Quality Management
- * Quality’s Impact on the World of “-ilities!



Presenter: Ms. Cynthia (Cyndi) Reichardt, CMQ/OE, Sr. Quality Manager, Security Capabilities Transportation Security Administration, DHS

Ms. Reichardt joined the Transportation Security Administration, Arlington, VA, in 2007. As TSA’s Sr. Quality Manager, she leads an effort to

design and implement a Quality Strategy to procure and manage all TSA Security Equipment.

Prior to TSA, Ms. Reichardt served as Sr. Staff Quality Assurance Specialist for the Defense Contract Management Agency, HQ, Alexandria, VA, focusing on Contract Management, Technical Operations and Product Assurance. Ms Reichardt served as the Agency’s Functional Sponsor for Industry and OSD Quality Assurance issues and transformation. As a member of the OSD/AT&L Quality Advisory Board, Ms. Reichardt directed DOD contract management professionals in developing policies, guidance and procedures. She was responsible for the Agency Administrator for Knowledge Management’s international, Quality Assurance Community of Practice. Her focused was to create a more collaborative and flexible work environment, reduce duplication of effort, encourage knowledge sharing and enhancing the competencies of the quality assurance workforce. Ms. Reichardt served as the Quality Assurance Committee Chair, Systems Engineering Division, National Defense Industry Association, 2003 - 2007.

Ms. Reichardt is a graduate of the U.S. Naval War College, Newport, RI. She is Level III certified in Production, Manufacturing and Quality Assurance, and is a recipient of the Vice Presidential Hammer Award and the President’s Quality Management Award.

The Birth of Quality Assurance – An Engineering Tool

Using my author prerogative and based on sketchy background information and my liberal interpretation of what happen in the past, I am presenting a highly opinioned version of the “Birth of Quality Assurance – An Engineering Tool”. Please note that the underline phrases below are significant to the topic of this article. Those contained in parenthesis are side-lights, but should be of interest. The main objective is to highlight that the two persons most responsible for “Quality” were engineers, and that “Quality” is now very important in our careers as Professional Engineers.

Herbert Hoover believed strongly in the “Efficiency Movement”, especially following his presidency. (The Efficiency Movement held that the government and the economy were highly inefficient.) Hoover was born in Iowa, (and is noted as the first President of the USA born west of the Mississippi.) He was orphaned at an early age and was taken-in by his uncle in Oregon. He self claims to be the first student at Stanford University, as he was the first to sleep in a dorm at the university. He graduated as a geologist, and accepted a job with Bewick, Moreing & Co. in central Western Australia at a gold mine. Later as a partner of the firm, he oversaw several mining operations in Australia. He and his partner, a pioneering metallurgist, formed a separate company, Zinc Corporation, to develop and patent a froth flotation process to claim the associated zinc in the mining operation. Up to that time, the zinc was being discarded in the waste pile. He considered this highly inefficient way to operate a mine. Hence started his career in “efficiency”. (This was also one of the principle sources of his wealth. He did not accept a salary, while as the US President. The company is now part of Rio Tinto, and Mr. Hoover owned part of the company until his death in 1960. He made several trips to Australia through out his life.) He later went to China to oversee the gold mining operations. He was trapped in Tianjin, China during the Boxer Rebellion. However, since he knew the terrain, he guided the marines and their supplies through the mountains. (Both he and his wife, who was also a mining engineer, learned Mandarin while in the country. This later became handy while in the White House, so they could communicate when they wanted some privacy from staff.) His expertise learned during the Boxer Rebellion, was put to use following the WWI, to direct food to the starving people in Russia, and he received quite a bit of criticism for helping the Bolsheviks. Following his stint in the White House, Hoover tried hard to promote “efficiency” throughout the country. During the later stages of and following WWII, President Truman tapped Mr. Hoover to help deliver food to the starving people in Eastern Europe as part of the lend-lease program. Again using his

expertise in moving supplies in difficult situations was put to use.

And now the connection to “the birth of quality”. Joseph Juran enters the scene. Mr. Juran was born in Romania. His family moved to Minneapolis, while he was 12 years old. He became proficient in math, and earned his degree in electrical engineering from University of Minnesota. (His brother, Nathan Juran, two years younger, earned a degree in architecture. He move to Hollywood, and later earned an Academy Award for one of his many science fiction flicks.) Joseph Juran first job was with Western Electric. He moved through the ranks rather rapidly. (Seeing the potential threat of the economy in the 1930’s, he earned a law degree from Loyola University in Chicago, Illinois, although he never practiced law.) Later, he left Western Electric and became involved in the lend-lease program with Mr. Hoover. The two shared their desires to improve “efficiency” in the world. In the 1950’s, Mr. Juran join the New York University in the Industrial Engineering Department and hence finalized his strong interest in efficiency, which is now noted as Quality Engineering. However, Quality Engineering is much more than just efficiency, as those attending the seminar will soon discover. Juran consulted with several companies around the world, especially Japan. He is credited with turning Toyota around, although the process took a couple of decades to materialize. He has written several papers and books on the subject of “Quality”. He retired at the age of 83, although he remained active until he was 99. His book “Juran’s Quality Handbook – The Complete Guide to Performance Excellence” is now considered the bible in the field. Mr. Juran died in 2008, before the sixth edition was finished. The first third of the book is his own writing, and Joseph De Foe with over a dozen other authors finished the book after his death and published it in 2010.

It has been said that the 20th century was the century of production and the 21st century is the century of quality. The two most outstanding persons that are credited with the birth of “Quality” concept were engineers. Namely, Herbert Hoover, a mining engineer, and Joseph Juran, an electrical engineer by training but spent the last 50 years of his career as an industrial engineer.

The engineering profession is not static. It is constantly changing and improving. As professional engineers, it is our task to mentor the young engineers and those to become engineers. We must keep-up with those changes, so that we are good mentors. The FCC seminar, Quality Assurance, this October, will present one of those needed changes. Stay tune, as more changes will be highlighted in the Columbus Engineer.

2013 New Faces of Engineering – Professional

Nominations are being accepted for the 2013 **New Faces of Engineering-Professional** recognition which will be given during Engineers Week. The **New Faces of Engineering-Professional** strives to promote the accomplishments of young engineers by highlighting their engineering contributions and the resulting impact on society. The campaign is designed to enhance and improve the image of engineering by:

- * Putting faces to what has often been referred to as “the stealth profession”.
- * Showing a group of young, diverse and talented engineers, thereby portraying engineering as an exciting profession open to everyone.
- * Providing both stimulation and incentive for college engineering students to explore the variety of career options available to them with their engineering degrees as well as encouraging high school students to study engineering in college.
- * Help engineering students understand they are part of a global profession.

The following criteria are being used to select possible nominations for the **New Faces of Engineering-Professional** recognition:

- * Engineers must be 30 years of age or younger as of December 31, 2012.
- * Nominee must have a degree in engineering from an ABET accredited U.S. college or university, or from an equivalent international educational institution.
- * **New Faces of Engineering-Professional** recognizes achievements in all engineering disciplines. Nominees must be a member of a sponsoring Engineers Week partner, in this case, NSPE.

If you know of anyone – a colleague or yourself – please contact Tina Sutermeister, FCC Awards chairperson prior to the October 9th FCC-OSPE Board Meeting. (sutermeister@alcatel-lucent.com)

2012-13 Upcoming Award Nominations

Have you ever considered submitting an employer/colleague for an OSPE award? This year is the time to do it as nominations are being accepted for the following OSPE awards:

- Nov. 13th Professional Development Awards for
 - Construction
 - Industry
 - Private Practice

These three awards are presented to nominated employers of engineering personnel (in either construction, industry, or private practice) who have made the most outstanding contribution to the advancement and improvement of the engineering profession through employment policies & practices in accordance with established professional practices as outlined in “Guidelines to Professional Employment for Engineers and Scientists”.

- Nov. 19th OSPE/ACEC-Ohio Quality Based Selection(QBS) Award

This award is for both, government and non-government agencies that have QBS programs. One state award and up to four merit (runner-up) awards will be given.

- Dec. 1st OSPE Young Engineer of the Year Award

This award is for any OSPE member (PE or EIT) in good standing who is age 35 or under as of January 1, 2013.

Don’t hesitate, contact Tina Sutermeister, the FCC Awards chair now, at 614-718-3795 or email: tina.sutermeister@alcatel-lucent.com as she can provide you with the application forms and assist you in completing the application requirements to be submitted to OSPE.



A History of FCC/OSPE – “The Early Years – Part III” (The Peace Years)

(This is the fifth issue of the History of Franklin County Chapter. The content is based on the publication “A History of FCC”, compiled by Frank Geyer in 1972.)

Onward to FCC fiscal year 1946-47. Korea had been divided into two zones, separated by the 38th Parallel. North Korea was under the influence of USSR and South Korea by the USA. The Bikini Atoll was the site of the atom bomb tests by the USA. The Philippines received their independence. Civil War began in China between the Nationalists and the Communists. The Truman Doctrine was proposed and the Marshall Plan was adopted to give economic and military aid, to those European countries threaten with Communism.

Major developments on the home front included the first air-conditioned trolley buses, which took place in Atlanta, Georgia. OSU had over 4300 men registered in the Engineering College. Ohio had 591 covered bridges with the majority located in Fairfield County.

The Franklin County Chapter had grown to 414 members. The president was J.J. Heier who held a get-together at his home for the officers and chairs of the committees. Outgoing President Marco outline the purposes and functions of the committees. He emphasized that members should give some of their time to the advancement of their profession.

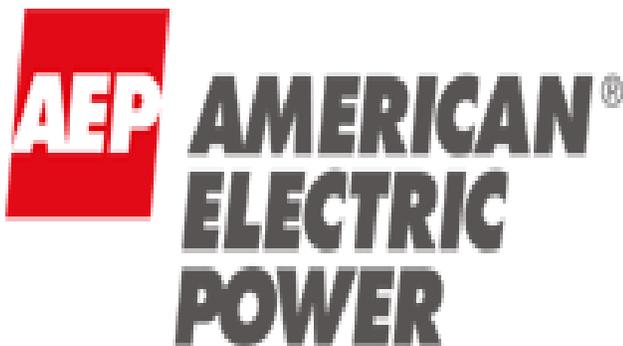
Tours were given of the Dennison Engineering Company and the GM Fischer Body-Ternstedt Division in western Columbus, September 1946 and June 1947, respectively. The topics at the sit-down dinners were:

- Illegal use of the title “Engineers” by non engineers (September 1946)
- Metropolitan Park Systems (October 1946)
- Progress made in the gas turbine locomotives
- The Scioto-Sandusky Conservative District
- Demonstration of electricity and electrical engineering at the Central High School (Now home to COSI.)

In addition, during the October meeting, certificates of registration were presented to 41 newly registered Engineers by the Dean emeritus of Ohio Northern University and members of the State Board. The dinner costs at the meetings were \$1.25 to \$1.85, depending on the location. (However, keep in mind that the US Civil Service announced examinations for engineering positions paying a grand total annual salary of \$2,644.)

The OSPE Annual Meeting was scheduled in Columbus on March 20-22, 1947. Over 800 Engineers and their wives and guests registered at the Deshler-Wallick Hotel. During this fiscal year, the FCC membership had grown to 444, including 5 Surveyors and 5 Juniors (Now EI’s) and another 64 students enrolled making a total of 508 members.

Next the “The Early Years – Part IV – Peace Time - Continued”.



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2012-13 CALENDAR

Oct. 9	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
<u>Oct. 15</u>	<u>5:00 p.m.</u>	<u>Deadline for January <i>Columbus Engineer</i></u>
Oct. 16	Noon	FCC-OSPE Auxiliary Meeting - Gianmarco's Restaurant
Oct. 25	Noon	Luncheon - Program: "Quality Complex-Assurance, Risk and Strategy" by Cynthia Richardt
Oct. 25	1:00 - 5:00 p.m.	Seminar - Program "Establikshing a Quality Program" by Cynthia Richardt
Nov. 13	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
<u>Nov. 29</u>	<u>Noon</u>	<u>Program: Luncheon – TBA</u>
Dec. 11	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
<u>Dec. 15</u>	<u>5:00 p.m.</u>	<u>Deadline for January <i>Columbus Engineer</i></u>
Jan. 8	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Jan. 15	5:00 p.m.	Deadline for February <i>Columbus Engineer</i>
<u>Jan. 17</u>	<u>Noon</u>	<u>Program: Luncheon – TBA</u>

FCC Sept. 19 Luncheon Program



Above photo shows Dr. Halil Sezen, Associate Professor of Civil, Environmental and Geodetic Engineering at OSU presenting the Luncheon Program "How to Read and Communicate with Engineers Effectively". His program was well received and generated a number of questions.

OCT. AUXILIARY MEETING

The Auxiliary to the Franklin County Chapter of OSPE will meet on Tuesday, October 16 for a noon luncheon at Gianmarco's Restaurant, 6030 Chandler Court, Westerville.

Mr. Ben Shoemaker, Director of Admissions for Otterbein University, is to speak.

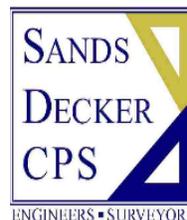
Agnes Benedict will give the invocation and lead the Pledge of Allegiance, and Betty Cuniberti is the hostess.

Potential members and guests are always welcome. Call Jean Mitchell at 262-7071 for a reservation.

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