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PRESIDENT'S MESSAGE

By Paul F. Junk, PE, PS, FCC President



The Chapter is working hard to support the goals of professional engineers. You may have heard what happen in Indiana about taking away the requirement for registration of engineers. NSPE and OSPE and others work to explain to the Indiana legislator the need for registration. See article later in this issue. OSPE is ever vigilant on what laws are proposed that affects engineers.

We had an excellent program in September. If you missed it there is a summary later in this issue. We continue working

hard on programs to provide credits for your continuing education requirements. If you know a subject for a future program or a person who can present of program of interest, please make a suggestion. You can contact Leon Winget, PhD, PE, Program Chairman at lewinget@att.net. See Leon's article on programs later in this issue. In the future we will need to include hours for ethics, the chapter will be presenting programs to cover that area.

The Franklin County Chapter does not rely on dues only for our operation. We have support from the sponsors you can find in The Columbus Engineer. Sponsor can participate on

(President's Message continued on Page 2)

OSPE-FCC October Luncheon Program

Date: Thursday October 22, 2015

Place: La Scala Restaurant
4199 W. Dublin Granville Rd., Dublin, OH

Time: Registration: 11:30 am
Lunch: 11:50 am
Speaker: 12:00 pm
Closing Remarks: 1:00 pm

Cost: Members: \$20.00 & Non-Members: \$30.00.

Registration: Visit fccospe.com. Pay at door or online at (www.fccospe.org). No access to computer contact Jim Arnold, 614-299-2133, to help with registration.

Topic: "I-70 Bridge over I-270"

Speaker: ODOT District Six Deputy Director Ferzan Ahmed

Abstract: They said it couldn't be done, but ODOT beat both deadlines on the west side of Franklin County and opened the Interstate 70 east and westbound "crossover" to traffic in 41 hours and completely reconstructed a bridge span in 18 days, which was 12 days ahead of schedule.

6:09 AM on July 1 is a day that ODOT will never forget, and neither will many Columbus drivers. That is the morning a tanker carrying thousands of gallons of fuel burst into flames under a bridge that carried Interstate 70 EB traffic into the

capital city. Not only was part of the bridge damaged beyond repair, but the largest fireworks display in the Midwest was just 48 hours away.

ODOT wasn't in a position to steal the show but did have a responsibility to not only fix the bridge but open it to traffic. No one knows better how it happened than ODOT District 6 Deputy Director Ferzan Ahmed. Mr. Ahmed will present the procedure that ODOT implemented to accomplish this feat.

Biography: Ferzan Ahmed is a native of Pakistan who came to the United States in 1985 to attend college. After graduating from Kansas State University with a degree in Electrical Engineering he worked in New York for a couple of years and moved to Ohio in 1992, joining ODOT the same year as Engineer in Training. Since then Ferzan has worked in the Construction as well as Design departments, and in 2011 was appointed by ODOT Director Jerry Wray to serve as Deputy Director of District Six. Ferzan considers himself a hands on engineer and an self-proclaimed infrastructure junkie! But the part of his job that he enjoys most is interacting with the public.

A certificate for 1 hour of Professional Development for attending the program will be presented at the luncheon.

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four levels. The levels range from Bronze, Silver, Gold, and Platinum. We appreciate their donations and hope you are aware of their support. If you or your employer would like to donate and show your support we would be glad to add your business card to our newsletter. The newsletter is not just for a select a few, if you have anything you want to share with other engineers feel free to write an article.

I am looking forward to seeing you at our next luncheon.

FCC Auxiliary October Meeting

The Auxiliary to the Franklin Co. Chapter of OSPE will meet at noon for lunch on Tuesday, October 20, at Worthington Hills Country Club, 910 Clubview Blvd South, Worthington. Walter and Nancy Roehrs will give a program about Sites along the Danube River in Eastern Europe. Sharon Eifert will give the invocation and lead the pledge of allegiance, and Jean Mitchell is to be hostess. Perspective members and guests are always welcome and can make a reservation with Mrs. Mitchell at 614-262-7071.

Age of Steam Roundhouse



Ted Goodman

Our 2015-2016 September luncheon program was outstanding. Mr. Fredric "Ted" Goodman gave an excellent presentation of the site selection, design and construction of the Roundhouse at Sugarcreek, a small town west of New Philadelphia. The Roundhouse was sufficiently large to house 15 to 18 stalls. In addition, a back shop was built. The design concept was to maintain minimum cost of construction and yet maintain authenticity of the concept of the Roundhouse. A curator (John Karns) was on hand to maintain the latter.

Some interesting facts were the use of wood beams rather than steel. Wood will char on the outside and not let oxygen into the interior. Where steel will lose its strength as the fire gets too hot and the steel will collapse. Some of the beams were as large as 12x12 and as long as 30 feet. The timbers used in the top and bottom chords were spliced end-to-end. The short truss spanned 40' and the long one 70'. The wood beams were harvest from Ohio, out west and Canada. They were basically from red or white oak trees. Mortise and tendon technology was employed. Steel pins were used. No butt joints were visible. The local trade people, namely Amish, were used throughout the project. A local blacksmith made all the hardware: hinges, straps, fasteners, etc.

Walls were brick load bearing. The construction of the walls was annotated in detail. There were some non-bearing block walls utilized. The ground bearing properties were not sufficient to carry the necessary load, the steam engines are not light. Hence wooden piles were used throughout the construction. The large doors were made of wood. Pipes were laid below the floor to provide radiant heat.

In addition a 50,000 gallon wooden water tank was erected. Other items covered were frost box, machine shop, drop pit, smoke stacks, windows for adequate lighting throughout the Roundhouse. For more detail information on the presentation and pictures during construction please go to "fagoodman.com". For more detail on the progression of the Roundhouse go to "ageofsteamroundhouse.com".

Our sincere thanks to Ted Goodman for an outstanding presentation.



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FCC LUNCHEON PROGRAMS

by Leon Winget

Our 2015-2016 luncheon programs have kicked off with a bang. Our September luncheon was outstanding. Mr. Fredric (Ted) Goodman gave a detail presentation of the site selection, design and construction of the Roundhouse at Sugarcreek, a small town west of New Philadelphia. See a more detail description of Ted's presentation elsewhere in this issue of Columbus Engineer (CE).

Our luncheon programs as well as our Columbus Engineer (CE) are important avenues to keep our members informed of recent and new developments in engineering and science related to engineering principles. Our programs are set for this Fiscal Year (FY). We are looking forward to establish programs for the FY 2016-2017. We have six luncheons each FY year.

Should you have any projects that you would like to have presented, please contact either our President or Program Chair Leon Winget at lewinget@att.net

In addition, our programs allow our members to earn one CPD for each session for a total of six CPD's each FY. The programs must be directed toward, either technology or ethics/rules or management. This FY we have programs that include the rapid rebuild of the I-70 over I-270, the Dublin US-33/OH-161 interchange over I-270, Ethics, the design of Roundabouts vs Traffic Circles, and the problems

of corrosion within the pipelines. Please see the 2015-16 Calendar in this issue of CE for all programs listed.

In the near future, our CPDs must include two hours per biennium (2 out of 30 hours) of ethics/rules. Ethic/rules include the principal concepts that we as professionals must abide. An ethics definition "Ethics involves systematizing, defending, and recommending concepts of right and wrong conduct". This year we have one hour of ethics on the schedule, which is our January luncheon program.

At the present time, we are looking forward to the following possible projects for FY 2016-2017: Enhancement of the Buckeye Lake Dam, Development of coal to replace petroleum in road pavement products, 3-D and its impact on engineering design, Self driving cars, and Robotic enhancement of engineering design and build. Should you have input on any of these concepts, please let us know. Any input will be greatly appreciated.

We will be waiting for you suggestions. Should you wish to join the Program Committee, please contact lewinget@att.net.



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Indiana Society of Professional Engineers & NSPE Defeat Effort to Eliminate Licensure

All engineers are advised to remain vigilant. Thanks to the efforts of our sister society in Indiana and the National Society of Professional Engineers, the Indiana Job Creation Commission (JCC) has rescinded its startling recommendation that professional engineering licensure be eliminated.

In June, the JCC, which was created in 2014 to examine the licensing of all the state's professional boards, released its draft report recommending elimination of the PE license in Indiana. The Indiana Society of Professional Engineers (ISPE) and the National Society of Professional Engineers quickly responded and urged the JCC and Indiana governor Mike Pence to reverse the recommendation.

ISPE sent a letter to JCC chairman Nick Rhoads and Governor Pence's office urging them to remove the recommendation. At ISPE's request, NSPE sent a letter addressing both the state and national implications of such a recommendation and urged that the decision not only be reversed but that the final report submitted to the Governor's office reflects these changes.

The Governor's office immediately responded, stating that it opposed the recommendation to eliminate licensure. The final report was amended but still stated that there would be further consideration regarding licensure of engineers.

A public hearing to address this issue further was held on August 20. NSPE submitted additional comments strongly urging that the decision be rescinded as part of the meeting's formal record. ISPE Immediate Past President Scott Haraburda P.E., Ph.D., testified and the JCC rescinded its recommendation.

This is a reminder that all engineers remain vigilant regarding any effort to compromise or eliminate professional engineering licensure. Any efforts of this type should be reported to the Ohio Society of Professional Engineers Legislative and Government Affairs Committee at 614-223-1144 or OSPE@OhioEngineer.com

NCEES Model Law Proposal for Separate Structural Engineers License is Defeated!

OSPE President Dennis Irwin lodges Society's opposition to proposal with state board of registration. The national Council of Examiners for Engineering and Surveying (NCEES) Model Law proposal for structural engineer licensing was narrowly defeated last week at the NCEES Annual Meeting in Colonial Williamsburg, Virginia. The proposal included a protective structural engineering title restricted structural engineering practice.

Prior to the NCEES Annual Meeting, in a week long Ohio Society of Professional Engineers Society poll, an overwhelming majority (84 percent) of member respondents opposed the proposal.

OSPE President Dennis Irwin, PH.D., P.E., reflected his members' opposition in a letter to the State Board of Registration for Professional Engineers and Surveyors, writing, "OSPE maintains that the ethical obligations to practice within a P.E.'s area of competence are sufficient, as has always been the case, to ensure the public's health, safety, and welfare."

President Irwin continues, "We are also very concerned that, depending how narrowly the practice of structural engineering is defined in model law or in various jurisdictions, perfectly competent P.E.'s would not be permitted to seal plans that contain relatively minor (compared to the NCEES description of "significant structures") structural analysis or design elements."

"As you know." President Irwin concluded, there are a multitude of disciplines that are covered by current PE licensure laws. Any one of those could conceivably lobby for a protected title and restricted practice. Such a situation could, in turn, lead to a de facto requirement for the public to hire several engineers for the project simply to comply with these multitudes of practice areas when, in fact, under current law, which we believe to be sufficient, a single engineer in responsible charge would be able to ensure the safety, health and welfare of the public.

The State Board of Registration attended the NCEES meeting and voted against the proposal. State Board of Registration Executive Director John Greenhalge said it was within 10-15 votes of passing. NSPE staff advised continuing vigilance, saying, "There was substantial support for the motion and it is absolutely vital that we educate these states about the enormously negative impact such a change would have for the profession."



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2015-16 CALENDAR

Oct. 13	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Oct. 18	5:00 p.m.	Deadline for November Columbus Engineer
Oct. 22	11:30a.m.	Program: : ODOT On the project I70 over I270, ODOT District 6 - Delaware-Deputy Director Ferzan Ahmed Environmental Engineers
Nov. 10	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Nov. 15	5:00 p.m.	Deadline for December Columbus Engineer
Nov. 19	11:30a.m.	Program: Dublin US-33 over I-270 Bridge - Andy Wolpert, Ch2M Hill
Dec. 8	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Dec. 17	5:00 p.m.	Deadline for January Columbus Engineer
Jan. 12	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Jan. 15	5:00 p.m.	Deadline for February Columbus Engineer
Jan. 21	11:30a.m.	Program: Ethics - Bill Lhota
Feb. 9	5:30 p.m.	FCC Board Meeting @ Korda Nemeth
Feb. 15	5:00 p.m.	Deadline for March Columbus Engineer
Feb. ??	8:00 a.m.	Local Mathcounts Competition @ Columbus State Community College
Feb. 16-21		National Engineers Week (see www.eweek.org)
Feb. ??	8:00 – 3:00 p.m.	Engineer for a Day Program
Feb. ??	11:30 a.m.	Program: E-Week Luncheon