

THE DAYTON ENGINEER

VOLUME 7, ISSUE 6

JULY 2016

Independence Day—4 July
Embrace Your Geekness
Day—13 July



National Moon Day—20 July
Amelia Earhart Day—24 July
Culinarians Day—25 July

THOUGHTS FROM THE BOARD

Welcome to the new fiscal year for DSPE! Preparing our Chapter's Annual Report to OSPE allows reflection on the previous year successes. Twelve (12) Continuing Professional Development (CPD) eligible programs were offered to our members and their guests with subject material reaching across the broad spectrum of the engineering disciplines. Additionally, a program on the ethical practice of engineering and another program providing an opportunity to engage our local legislators were provided. These two (2) programs, along with the spring program with County Engineers and the Ohio Depart-

ment of Transportation (ODOT), have become annual standard offerings in DSPE's program schedule. This past year our newsletter increased its frequency to monthly with more content announcing, and then reviewing, these CPD-eligible program offerings to give members further advanced notice of upcoming luncheon program subjects and summarize those programs members may need to miss. All of these efforts are dedicated to the promotion of the profession of engineering and, as members of the Dayton Society, OSPE, and possibly NSPE, you have expressed your dedication to your chosen profession. As mentioned

in the April 2016 newsletter, we have had new members join DSPE, a large number being engineering students at local universities, who are joining that dedication to the profession. Let us all reflect on what that dedication means and what membership in the Society represents as the 'value of membership' becomes our theme for the 2016-2017 fiscal year. As part of this reflection, check out the last article in this newsletter with respect to dedication. There's something about Dayton that incubates creativity and invention! Be a part of it!
—Winn Holcombe, P.E.,
Chapter President 2016-2017

In This Issue:

- **September's Legislative Update Preparation**
- **Interviewing Tips-2**
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DSPE INSTALLATION DINNER—12 JULY

Please join us on 12 July 2016 at **Wellington Grille**, in Beavercreek, for our Annual DSPE Installation Dinner. The new OSPE President, Mr. Bob Fuller, P.E., F-NSPE, will preside over the installation and provide us with his vision for OSPE and outline his expectations for the Ohio chapters in executing his

vision. The Wellington Grille is located at 2460 Dayton-Xenia Road, in Beavercreek OH. Please send your RSVP no later than 5 July to Winn Holcombe at: winn.holcombe@yahoo.com, or Aurea Rivera at: solutions@imagineeringresults.com.

LEGISLATIVE BILL TRACKER—COURTESY OSPE MAGAZINE

Below you will find the current list of the legislative bills currently in Ohio's Legislature. In order for DSPE to conduct a fully successful Annual Legislative Update at the September DSPE Chapter meeting, please review this list of bills and consider questions you would like to pose to our attending State Representatives and Senators. Please forward

your questions to Dr. Rich Henry, P.E., our Legislative and Government Affairs Director no later than 15 August 2016. The accumulated questions can be submitted to the attending legislators prior to the meeting so they can research and develop answers. Contact Info: Rich Henry: rhenry1049@aol.com.

OSPE tracks bills in 131st Ohio General Assembly

INFRASTRUCTURE BONDS, Senate Joint Resolution 3 (Schiavoni)	Proposing to enact Section 2t of Article VIII of the Constitution of the State of Ohio to permit the issuance of general obligation bonds to fund sewer & water capital improvements.	Status: 1st hearing in Senate Finance, 2/9/16. <i>OSPE supports.</i>
OIL & GAS LAW, House Bill 8 (Hagan)	To revise provisions in the Oil & Gas Law governing unit operation, including requiring unit operation of land for which the DoT owns the mineral rights.	Status: 1st hearing in Senate Energy & Natural Resources, 4/14/15.
VOLUNTEER IMMUNITY, House Bill 17 (Blessing)	To provide civil immunity for architects, contractors, engineers, surveyors & tradespersons providing volunteer services during a declared emergency.	Status: Signed by Governor, 2/14/16. <i>OSPE supports.</i>
TRANSPORTATION BUDGET, House Bill 53 (Grossman)	To make appropriations for programs related to transportation & public safety for the biennium 7/1/15-6/30/17 & to provide authorization & conditions for the operation of those programs.	Status: Signed by Governor, 4/1/15.
CRIMINAL RECORDS, House Bill 56 (Schuring)	To limit the use of criminal records in the hiring & employment practices of public employers.	Status: Signed by Governor, 12/22/15. <i>OSPE opposes.</i>
BIENNIAL BUDGET, House Bill 64 (Smith)	To make operating appropriations for the biennium 7/1/15-6/30/17 & to provide authorization & conditions for the operation of state programs.	Status: Signed by Governor, 6/30/15.
SCHOOL BARRICADES, House Bill 114 (Roegner)	To require the Board of Building Standards to adopt rules for the use of a barricade device on a school door in an emergency situation & to prohibit the State Fire Code from prohibiting the use of the device in such a situation.	Status: Passed House, 6/24/15. Later, this measure was added to budget bill, which was enacted. <i>OSPE opposes measure.</i>
PIPING MATERIALS, House Bill 214 (Thompson)	To restrict when a public authority may preference a particular type of piping material for certain public improvements.	Status: 2nd hearing in House Energy & Natural Resources, 4/8/16. <i>OSPE opposes.</i>
PROFESSIONAL ENGINEERS, House Bill 236 (Blessing)	To require professional engineers to complete continuing professional development hours in professional ethics or rules relevant to engineering or surveying practices.	Status: Referred to Senate Transportation, Commerce & Labor, 2/10/16. <i>OSPE supports.</i>
WATER RESERVOIRS, House Bill 304 (Leland)	To eliminate law authorizing the maintenance of buffers around municipal water reservoirs by contiguous property owners.	Status: 1st hearing in House Local Gov't., 11/17/15. <i>OSPE supports.</i>
DWELLING EGRESS, House Bill 306 (Perales)	To require a separate, exterior means of egress for dwelling areas above the second story of certain residential rental properties.	Status: 3rd hearing in House Commerce & Labor, 11/17/15.
OIL GAS LAW, House Bill 422 (O'Brien)	Regarding assignments of leases for real property for the placing of an injection well, permits for a well to inject brine and other waste substances from oil and gas operations, permits to conduct brine or other waste substances operations, requirements governing ground water monitoring related to the injection.	Status: Referred to House Energy & Natural Resources, 1/20/16.
CAPITAL IMPROVEMENTS, House Bill 492 (Rogers)	To create the Supplemental State Capital Improvements Pilot Program funded by a temporary transfer from the Budget Stabilization Fund and to make an appropriation.	Status: Referred to House Finance, 4/13/16.
ALGAE CONTROL, a.k.a. "Clean Lake Erie Act," Senate Bill 1 (Gardner)	To transfer the Agricultural Pollution Abatement Program from ODNR to the Dept of Ag, to establish requirements governing dredged material, nutrient loading, phosphorous testing by publicly owned treatment works & household sewage treatment systems, & to declare an emergency.	Status: Signed by Governor, 4/2/15.
TAX CREDITS, Senate Bill 12 (Hottinger)	To grant an income tax credit to individuals who earn degrees in STEM fields of study.	Status: Referred to Senate Ways & Means, 2/4/15. <i>OSPE supports.</i>
LAKE ERIE DISTRICT, Senate Bill 45 (Eklund)	To authorize the creation of a special improvement district to facilitate Lake Erie shoreline improvement.	Status: 2nd hearing in Senate Energy & Natural Resources, 3/17/15.
SEWAGE SYSTEMS, Senate Bill 58 (Peterson)	To authorize a property owner whose property is served by a household sewage treatment system to elect not to connect to a private, county or regional sewerage system under specified conditions.	Status: Referred to Senate Energy & Natural Resources, 3/4/15.
HOUSEHOLD SEWAGE SYSTEMS, Senate Bill 118 (Eklund)	To authorize a board of county commissioners or municipal legislative authority to elect to withdraw the county or municipal corporation from the application of any rule adopted after 1/1/14, by the Dept of Health governing the design of household sewage treatment systems.	Status: 2nd hearing in Senate Energy & Natural Resources, 4/12/16.
CONTRACTOR LABOR, Senate Bill 152 (Uecker)	To prohibit a public authority from requiring a contractor to employ a certain percentage of individuals from the geographic area of the public authority for the construction or professional design of a public improvement.	Status: 5th hearing in House State Government, 4/12/16.
BIDDING THRESHOLDS, Senate Bill 210 (Balderson), House Bill 333 (Schaffer)	To increase the monetary thresholds above which competitive bidding is required for township road construction, repair or maintenance contracts, & to increase the monetary thresholds above which a force account assessment is required for such projects.	Status: SB 210, referred to Senate State & Local Government, 9/15/15. HB 333, 3rd hearing in House Local Gov't., 2/23/16.
WATER SYSTEMS, Senate Bill 269 (Schiavoni)	To require a public water system to provide notice not later than 30 days after becoming aware that lead contamination may affect drinking water and to require EPA director to adopt rules to increase monitoring frequency for lead & copper.	Status: 1st hearing in Senate Energy & Natural Resources, 4/12/16.
CAPITAL APPROPRIATIONS Senate Bill 310 (Oelslager)	\$2.6 billion capital appropriations proposal: Ohio School Facilities (\$650M), higher ed. institutions (\$484M), local infrastructure (\$500M), parks & natural resources (\$275M), health & human service facilities (\$100M) & community projects (\$160M).	Status: 2nd hearing in Senate Finance, 4/19/16.
ENERGY PLAN, House Concurrent Res 9 (Baker)	To establish a sustainable energy abundance plan for Ohio to meet future Ohio energy needs with affordable, abundant & environmentally-friendly energy.	Status: Passed Senate, 6/17/15.

UPCOMING CHAPTER MEETINGS

JULY DSPE MEETING—14 JULY 2016



1:30 PM at the Engineers Club of Dayton, 114 Monument Ave,

The July 2016 DSPE Chapter meeting will be on 14 July from 12:00 noon to

Dayton, OH 45402. Mr. Brian Pollock, Senior Acquisition Official, and Colonel Annette Gablehouse, USAF, 711th Human Performance Wing, will discuss the conversion of two aircraft fuselages to aerospace medical training platforms. A buffet lunch will be served. The cost is \$20 for members, \$30 for

nonmembers and \$10 for students. Attendees will receive one (1.0) Professional Development Hour (PDH). Those wishing to attend should make your reservations no later than Tuesday, 12 July 2016 with Ed Schlaack by email at SchlaackE@mcOhio.org or by phone at (937) 781-2632 (office).

AUGUST DSPE MEETING—11 AUGUST 2016

The August 2016 DSPE Chapter meeting will be on 11 August from 12:00 noon to 1:30 PM at the Engineers Club of Dayton, 114 Monument Ave, Dayton, OH 45402. The topic for this meeting is Bonds and Insurance presented by Bricker & Eckler Attorneys at Law Messrs. A buffet lunch will

be served. The cost is \$20 for members, \$30 for nonmembers and \$10 for students. Attendees will receive one (1.0) Professional Development Hour (PDH). Those wishing to attend should make your reservations no later than Tuesday, 9 August 2016 with Ed Schlaack by email at

SchlaackE@mcOhio.org or by phone at (937) 781-2632 (office).



SEPTEMBER DSPE MEETING—8 SEPTEMBER 2016

The September 2016 DSPE Chapter meeting will be on 8 September from 12:00 noon to 2:00 PM at the Engineers Club of Dayton, 114 Monument Ave, Dayton, OH 45402. The topic for this meeting is the Annual Legislative Update with our State Senators and Representatives. A

buffet lunch will be served. The cost is \$20 for members, \$30 for nonmembers and \$10 for students. Attendees will receive one (1.5) Professional Development Hour (PDH). Those wishing to attend should make your reservations no later than Tuesday, 6 September 2016 with Ed Schlaack by email

at SchlaackE@mcOhio.org or by phone at (937) 781-2632 (office).



UPCOMING DSPE BOARD OF DIRECTORS MEETINGS

The next DSPE Board meeting will be on 13 September 2016 from 5:15 to 6:30 PM at the Wright State University Engineering and Computer Science Dean's office conference room. **No regularly-scheduled Board of Directors meetings in July or August.**

INTERVIEWING FOR SUCCESS 2: ALL QUESTIONS ARE THE SAME!

Explanation: Filling a job vacancy in government involves a series of well-defined steps that are detailed, time consuming, and bureaucratic. The hiring process is made difficult on purpose to ensure supervisors make good hiring decisions and retain the people...not because they are good (hopefully they are) but because the hiring action crucible will encourage good management practices.

Simple process: The gaining supervisor provides the “proposed” questions, their rubric to the HR analyst for final review and approval. The HR analyst’s ensures that questions are “legal”, and protect the candidate’s rights. The process can be lengthy depending on the hiring experience of all involved as well as any government action concurrent with your hiring action. Experienced supervisors recognize this, and use the same questions for ALL their hiring actions. Why? Once a question is

approved by an organization’s HR, it can be leveraged in any future interviews without any additional review. All that remains to be done is tailor the question to the job vacancy.

To end the mystery, here are five questions, themes that will be present in most journeyman level, supervisory jobs in federal government.

Please share with the panel your **relevant** knowledge, skills, and abilities that **uniquely qualify** you for this job.

What do you believe are the major **challenges and opportunities** facing the “fill-in-the-blank” activity?

Tell us about your **participation** in community (local, state, national) level functional or analytical forums. What was the most challenging aspect of your responsibility?

Describe your **mentorship style**, experiences, and examples of

mentoring within your career. How would **you mentor** employees assigned to your team?

Is there anything that has not surfaced in our questions or your answers that we should know about **your qualifications** for this position?

Lesson: Contact your colleagues (speaks of the importance of making friends across the organization) and ask them to share with you the dynamics of their interview process. Specifically ask for the questions used in their interview. Keep a personal journal that contains these questions and the most appropriate answers based on the position advertised and the organizational culture. Do that, and your chances of getting that next job have improved by 80%. The other 20% will be discussed in future postings!

—Aurea Rivera, P.E.

DSPE AWARDED 4-STAR STAR CHAPTER!



Our own Jim Montgomery, P.E., accepted the OSPE 4-Star Performance Award at the 2016 OSPE Spring Conference and Annual Meeting from OSPE President Dennis Irwin, P.E., PhD. (photo courtesy OSPE).

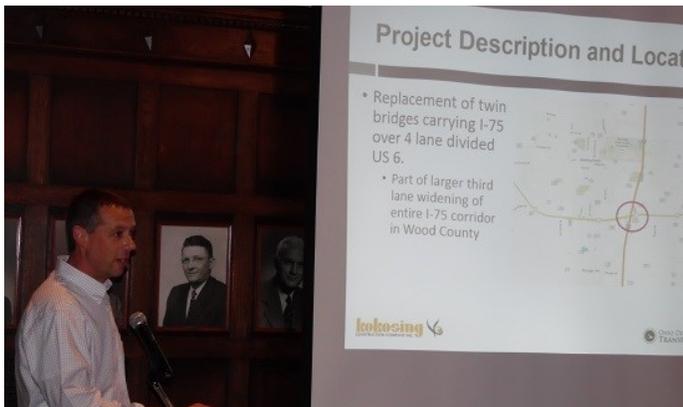


OUR THANKS TO

Thanks to Mr. David Geckle, P.E., Area Engineer for ODOT, for presenting the June Chapter meeting topic: “**Interstate 75/ US Route 6 Lateral Bridge Slide**”. We learned that this was the first project of its kind in Ohio where a replacement bridge deck was constructed alongside the existing

roadway and then within a period of one weekend, the existing bridge decks were demolished and the new decks were laterally rolled onto new piers and abutments. More information, some terrific photos, and a great video can be found on the ODOT website at:

<http://www.dot.state.oh.us/districts/D02/I75Widening/Pages/I-75-at-US-6-Slide-In-Place-Bridge.aspx>



THE CALENDAR: DSPE, EFO AND OSPE

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| 12 Jul | DSPE Installation Dinner, Wellington Grill, Beavercreek (Dayton-Xenia Road) |
| 14 Jul | DSPE Chapter Meeting, Dayton Engineers Club |
| 11 Aug | DSPE Chapter Meeting, Dayton Engineers Club |
| 8 Sep | DSPE Chapter Meeting, Dayton Engineers Club |
| 13 Sep | DSPE Board of Directors Meeting, Wright University Engineering Dean Conf Room |

DAYTON CHAPTER—OHIO
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WE'RE ON THE WEB!
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OSPE is dedicated to the advancement of professional engineers in Ohio and is the single most powerful voice representing all disciplines within the engineering profession. The Dayton Society of Professional Engineers, is a chapter of the OSPE serving the local Dayton Region. DSPE aspires to conduct a monthly chapter luncheon meeting that will serve our members by providing an opportunity to come together to share professional experiences, to network, and to gain continuing professional development through interesting presentations on a variety of technical, management, and ethics topics on all engineering disciplines.

Is there anything you would like to see in the Newsletter? Please let me know: jon.wheeler@yahoo.com.

— Jon Wheeler, P.E., Director, Newsletter Editor

FINANCIAL CONTRIBUTIONS TO HELP MEET CHAPTER MISSION



Our chapter activities are focused on youth education and scholarships and include **2nd Grade Coloring Contest via ImagineEngineering**, and **Middle School MATHCOUNTS**. These are our Society's flagship events to bring to our youth an awareness of the value of science,

technology, and especially the engineering profession. It requires hands-on participation and financial contributions from our members, that's you and me. Your personal and corporate financial contributions are solicited through our Engineers Foundation of Ohio (EFO) to help us host these events on a local, state, and national level (except for the coloring contest). Please consider making a personal

contribution and soliciting from your company, if they have a community relations department. Contributions through EFO are fully tax-deductible. Please contact us for the tax ID number for your records. Even more important for the success of these events is your hands-on participation. Please contact a board member for opportunities.

DAYTON INVENTION AND INNOVATION (IS IT IN THE WATER?)

(Courtesy Dayton Convention & Visitors Bureau) So...I was just thinking to myself the other day: Dayton? Ohio? What's the big deal? Well from an inventor's standpoint, there's plenty to chew on. What was invented in Dayton? Stepladder, Photoelectric cell. The Black Light. Radioisotopic Thermoelectric generator for spacecraft. The Airplane. Controlled pitch propeller. Microfiche. Cellophane tape. Collapsible portable crib. Human heart-lung machine. Motorized

wheelchair. Walker attachments for wheelchairs. Pull tab and pop top beverage cans. Ice cube tray with ejector mechanism. Automotive and refrigeration equipment. Space food. Micro-encapsulation. Goniometer to measure location of the thalamus for surgery. Liquid crystal alignment methodology. Parking meters. Official building mail chutes. Ethyl leaded gasoline. Self-contained refrigeration. Airplane supercharger. Aircraft rudder

controls, elevator, wing lift shapes. Aircraft ejection seats. Electric cash register. Mood rings. Nuclear-powered pacemaker. Parachute. Liberty engine. Solenoid. Double-glass windows. Carbonless paper. Artificial heart and kidney. Gas masks. Portable breathing resuscitator. Movie projector, movie camera, movie film, and movie theater. And much, much more!
—So what is it about Dayton that incubates such creativity and innovation?