

Engineers' News

January 2016

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www.FortWayneEngineersClub.org

January Tour



Sweetwater
5501 US Hwy 30 W, Fort Wayne, IN 46818

Thursday, January 28th at 7:00 PM

FWEC board member Ellsworth Smith has arranged a tour of Sweetwater. Spouses and quests are encouraged!

Consider arriving early to purchase a meal at the Downbeat Diner or a beverage from the Crescendo Cafe. Additionally Sweetwater has a two story slide available to try for the brave and to view for the rest. Sweetwater's store and other shopping is also available.

Parking is available on the North side of the complex with entry at the flagpole/reception. Meet in the dining seating area behind the Crescendo Cafe.

We will tour the theater with a demonstration and the stage near the Crescendo Café, the guitar gallery showcasing the 57 point inspection each instrument is subjected to, the service area with guitar repair, we are also approved to enter the main mechanical room to look at the HVAC system, general view of receiving and warehouse, we will step outside to view building equipment so wear appropriate footwear. The tour will end at the store with information on products and services available.

Membership Survey - Your Input is Desired!

The Fort Wayne Engineers' Club is conducting a <u>survey</u> of its membership to better understand the desires of the club.

The <u>survey</u> is hosted through Survey Monkey and responses will be reviewed by the board with additional information posted in upcoming editions of the Engineers News. The <u>survey</u> will be active through February 29th.

FWEC MEMBERS Honorary 14% Paid 59%

Fiscal Year 2016 is now upon us and it is time to ensure that all members dues are current. 27% of the FWEC membership is delinquent in the payment of their dues. Treasurer Ryan Stark has sent notices to members believed to be delinquent in their payment. Anyone unsure of their dues status can contact Treasurer Ryan Stark at FortWayneEngineersClub@yahoo.com.

Dues to the FWEC have remained constant in our ever changing economy at \$10/year for full and associate members and only \$5/year for student members.

<u>Dues paid online</u> are subject to an additional fee of \$1 for processing.

Northeast Indiana DiscoverE

Engineers Week Banquet



FEBRUARY 21-27, 2016

Northeast Indiana DiscoverE will be holding its annual Engineers Week banquet on Saturday, February 27th at the Walb Classic Ballroom on IPFW's campus.

Doors open at 6:00 PM with dinner served at 6:45 PM. Banquet tickets are \$30 per person and will be available online.

The Northeast Indiana DiscoverE banquet features:

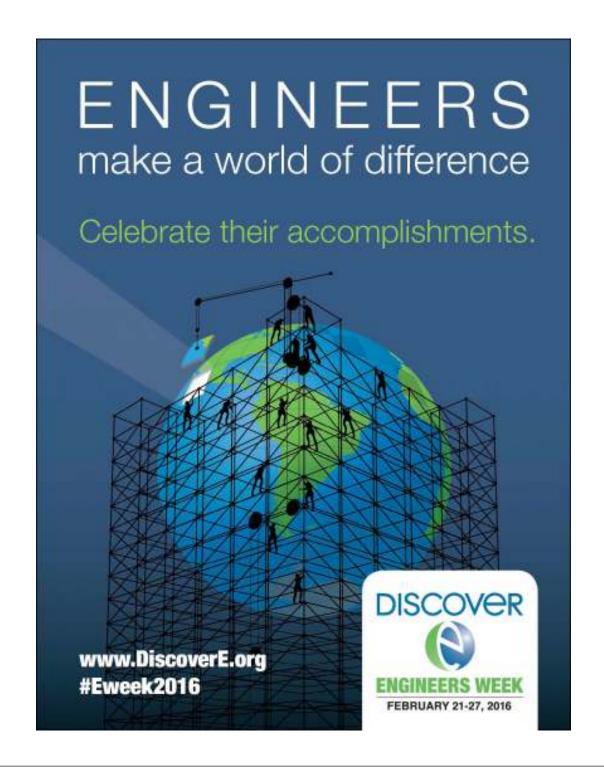
- Master of Ceremonies Sandy Thompson
- Featured speaker <u>Dick Teets President and Chief Operating Officer of Steel</u>
 Operations of Steel Dynamics Inc
- Academic Award presentations to engineering students
- Citizen Engineer presentation
- Distinguished Service Award Dan Ewing of the Fort Wayne Engineers Club
- Science Central and IPFW Bridge Building Contest highlights
- Future City program highlights
- Student/Engineer visitation program highlights

Join the FWEC on Social Media

The Fort Wayne Engineers' Club now has a group on LinkedIn®. This group is open to all existing and potential FWEC members. We'll post FWEC tour reminders, photos, tour discussions, and more on the group's page.

Join our group in . Fort Wayne Engineers' Club

Additionally, the Fort Wayne Engineers' Club now has a Facebook page.



2015-2016 Membership Year FWEC Board

President: Rod Vargo Vice President: Dave Schaller

Treasurer: Ryan Stark Secretary: Elizabeth Garr

1st Year Board Members: Marna Renteria & Ellsworth Smith 2nd Year Board Members: Mike Magsam & Jack Phlipot

3rd Year Board Members: John Magsam & Rob Cisz Northeast Indiana DiscoverE Committee Chair: Jake Dinius

Resident Agent: Ryan Stark

Board positions are crucial to the planning of tours and events for the FWEC. Please consult the <u>FWEC constitution</u> or contact us at <u>info@fortwayneengineersclub.org</u> for information on specific duties on board positions.

Welcome New FWEC Members

The FWEC would like to welcome the following new members.

Full Members: Jim Kruse MSAE and BSAE, Lawrence Zepp BA Physics

Student Member: Scott Forsythe IPFW



Contact Jake for your FLUID POWER, SAFETY & AUTOMATION needs: (260) 797-9819

Visit the SIDENER ENGINEERING website at: www.SidenerEng.com

FWEC Board Meetings

Fort Wayne Engineers' Club board meetings are open to all FWEC members. The next FWEC board meeting will be Tuesday February 2nd at 7:00 PM. Board meetings are held on the <u>Indiana Tech campus in the Academic Center</u> in room ACC-201.

Advertise in the Engineers' News

The FWEC provides advertising space within the Engineers' News. Advertisements are \$10 per issue and limited to ½ page of content. For submissions please contact info@fortwayneengineersclub.org.

FWEC Membership

The FWEC exists through funding of its membership. Please forward your copy of the Engineers' News to prospective members and encourage their attendance at tours. Remember, the FWEC is the best deal in town, annual membership is \$10. We offer free monthly tours September through May. Please be sure to recommend FWEC membership to your colleagues and friends.

December Social History - Sweets So Geek



FWEC President Rod Vargo provides our December social history.

Twenty-four members and guests participated in our December 10 social at <u>Sweets So</u> Geek.

The owner, <u>Chad Seewald</u>, was a dishwasher at an upscale restaurant who chose to volunteer time to learn from the restaurant's pastry chef. Chad rose from dishwasher to pastry chef, moved on through other employment while starting a family, pursued several craft food hobbies in the meantime, and eventually opened Sweets So Geek in 2014.

Sweets So Geek uses hearty high-quality ingredients in baked goods, ice cream, sherbet, chocolates, nonalcoholic drinks, and more. Chad also utilizes and enjoys a range of movie and technical shapes or references.

Essentially any reasonable shape may be generated from pictures, imagination, or small objects. A range of food-grade molding techniques are possible including vacuformed plastic, silicon, commercially available forms, and some 3-D printing. The latter is limited for making molds because 3-D printouts are fairly porous, so the details are indistinct.

Edible items are not printed out directly because available feedstock (edible "ink") has very marginal flavor and palatability.

Some members of the FWEC Board were aware that baking and other aspects of these foods involved demanding thermodynamics, proportions of ingredients, and initial sourcing of materials. Chad seemed to thrive around the practice of such skills, providing interesting discussion and a tour of what he perceived as a sparse kitchen.

Items available to walk-in customers are made in tiny batches or on an as-you-wait basis. Ice cream and sherbet, for instance, are produced one gallon at a time. Flavors and other details are constantly rotated from sufficient repertoire to seemingly never repeat. The repertoire comes from years of ongoing playful thinking and experimenting.

Custom orders include cakes which may measure feet in all dimensions and have required as much as 60 hours to produce, often with considerable assembly involved. Sweets So Geek has earned quite a reputation for consistent excellence in flavors and execution. Prices reflect the specific levels of quality and labor that are agreed upon.

Everyone seemed extremely pleased with the varied products and unique flavors. There was ample atmosphere and space in the storefront, encouraged further by a steady stream of apparently regular and clearly satisfied customers. The store often does birthday parties for children, but adults might better appreciate the flavors, variety, and experience.

Fort Wayne Coder Dojo



Fort Wayne Coder Dojo is technology club for kids of all ages but is now comprised of +/- 10 to 14 year olds who share an interest in Minecraft modifications. The next club meeting will take place on Saturday January 23rd at 1:00 on the <u>Indiana Tech campus in the Zollner Engineering Center</u> room Z103.

TekVenture's "Making it Thru Winter Workshops!"



TekVenture is hosting a variety of "Making it Thru Winter Workshops!" Workshops are for Members and Non-Members, but there is a 20% discount for Members.

Workshop categories:

- Rapid Prototyping Center
- WOODWORX
- BOTZ & VOLTZ
- Safety & Operation
- GREENWORX
- TEK*GARAGE
- MACHINEWORX
- HOTSHOP

Information on all available workshops, dates, and cost can be found on <u>TekVenture's</u> Workshop site.

Fort Wayne Inventors Club



The <u>Fort Wayne Inventors Club</u> will have its next meeting on Thursday January 14th on the <u>Indiana Tech campus in the Center for Creative Collaboration (C3)</u>. The C3 is located inside the Academic Center building on the IndianaTech campus.

During meetings FWIC members discuss our experiences—the successes, the failures, the aha's, and the oh-no's. We also bring in speakers to share what inventors need to know. The club is particularly useful as a venue to give inventors time to showcase their work and receive feedback about it from their peer inventors. We also point inventors to resources they need to be more effective and help them meet people to collaborate with on projects.

Fort Wayne Astronomical Society



The <u>Fort Wayne Astronomical Society</u> will have their next general meeting on Tuesday January 19th at 7:30 pm at the <u>University</u> of Saint Francis Schouweiler Planetarium.

What If There Was No Moon?

By Jon Thomas

We should not take the Moon for granted. Without the Moon many things on Earth would be

vastly different. And what if the Moon were to suddenly disappear? Eclipses, tides, stability of the Earth's axis, seasons, etc. would all be impacted. Even life itself may never have been able to develop! This talk will explore the facts, myths and speculations about what would have been impacted.

Northeast Indiana Chapter Project Management Institute



Dr. Steven Walter, PMP Systems Impact, LLC presents "di Santa Maria del Fiore: Lessons Learned"

While the architects overseeing its construction faced some somewhat unique challenges (such as the decimation of the workforce due to the Black Death in the mid-1300's), other developmental problems are more familiar. Factors such as poor initial project definition, the push to start construction prior to completing the design, reliance on immature technology, weak project management practices and a lack of identified resources were rampant in Renaissance Italy. On the other hand, one of the most impressive project management feats was the sponsors' ability to attract 170 years of continuous funding. Thus, the story of Basilica di Santa Maria del Fiore offers many relevant "lessons learned" that are applicable to modern project management. As George Santayana observed a century ago, "those who cannot remember the past are condemned to repeat it."

Register now and meet with us at Don Hall's GuestHouse. Networking begins at 5:30 PM, dinner will be served at 6:00 PM, chapter announcements at 6:45 PM and the presentation begins at 7:00 PM. Reservations end 1/24/2015. Pay now with credit card. Pay at door option is no longer available.

- NEIC chapter members: dinner and speaker-\$20, speaker only-free
- PMI Hardship Provision or PMI Student Membership-\$10
- Non-members: Dinner and speaker-\$30, Speaker only-\$10 Register Now

While many speak of a renaissance in project management, there are very few who speak of project management in the Renaissance. An example of early project management was the design and construction of the Basilica di Santa Maria del Fiore, the world's third largest church and one of the most famous landmarks in Florence, Italy. It is widely recognized as an architectural and engineering tour de force due to its freestanding dome that was

constructed from more than 4 million bricks, weighing more than 37,000 tons.

The design and construction of the Basilica di Santa Maria del Fiore is also remembered as one of the world's most troubled projects. When Arnolfo di Cambio laid the first stone in 1296, he could not have forecasted that the basilica would take more than 170 years to complete. The ensuing decades of budget and schedule overruns can be mostly traced to the lack of a structured development process.

Bio:

Dr. Steve Walter founded his consulting firm, Systems Impact, in 2014. Dr. Walter has more than two decades of experience in systems engineering, project and program management and higher education. Prior to starting his consulting business, he was the Distinguished Professor of Systems Engineering at Indiana University—Purdue University Fort Wayne (IPFW). He joined the IPFW faculty in 2006 after serving in a variety of systems engineering and program management roles at Northrop Grumman Space Systems Division. Prior to Northrop Grumman, he was a senior member of the technical staff and principal investigator at the NASA Jet Propulsion Laboratory (JPL). Dr. Walter earned his Bachelors of Science degree in Physics from the University of Maryland and his Masters and Doctorate in Physics from the University of Colorado at Boulder. He holds both the Expert System Engineering Professional (ESEP) and Project Management Professional (PMP) certifications.

Northeast Indiana DiscoverE Committee Meeting



Northeast Indiana DiscoverE is a standing committee of the FWEC. The committee will meet on Monday February 1st at 12:00 PM at MSKTD & Associates in the Main conference room. This is a planning meeting to discuss the needs of DiscoverE for the upcoming year. Northeast Indiana DiscoverE functions include:

- Middle school bridge competition
- High school bridge competition
- Academic awards for college students
- Citizen Engineer award for professionals

- Engineers Week banquet
- And more...

Maumee Valley Blacksmiths



The Maumee Valley Blacksmiths, part of the Maumee Valley Antique Steam & Gas Association, meet on the 2nd Saturday of each month in the blacksmith building at showgrounds of Jefferson Township Park, New Haven and also meet on the 4th Saturday of each month at the Solomon Farm.

For more information please contact John Schamber via e-mail at: fwtoolman@hotmail.com.

Engineers' News Past

The FWEC has a significant history; Treasurer Ryan Stark and his wife were able to find past Engineers News documents dating back to 1938! Here is an excerpt of the past newsletter (a scanned copy of the entire newsletter is available through the FWEC website):

January 1986

A new GE business in Fort Wayne / design evolution of the new flexible manufacturing system with which the new GE aircraft engine electronic controls are produced. Thursday January 23rd, 1986, 7:30 PM 2nd floor auditorium Downtown Library.

Mr. Dale Weaver, manager of manufacturing at this new facility in the South half of GE Taylor Street plant will describe the product and its main applications using slides to augment his talk. He will tell of the evolution of the production process and its need for a completely new facility for the modern usage of flexible manufacturing techniques which dictated the relocation from its former base in the North Cincinnati suburb. Originally, a plant tour was proposed, but due to security and "clean room" needs this is not possible.

Mr. Weaver has been with GE for 22 years, and is a '64 graduate of the University of Illinois and has a MBA from Xavier University in 1970.

This will be a joint meeting with the Anthony Wayne chapter of ISPE. The meeting was planned with the cooperation of M.L. Miller, former president.

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