



Valley Engineer Newsletter

NOVEMBER, 2016

UPCOMING PROGRAMS

- December 8, 2016, ASCE Holiday Banquet Renaissance Hotel, Allentown
- December 15, 2016, Holiday Party, Morgan's Restaurant
- February 11, 2017, MATHCOUNTS®, Southern Lehigh High School, Center Valley
- February 24, 2017, LVEC Engineer's Week Banquet, Holiday Inn, Breinigsville



**PENNSYLVANIA SOCIETY
OF
PROFESSIONAL ENGINEERS**

**LEHIGH VALLEY CHAPTER
(ORGANIZED 1935)**

PRESIDENT'S MESSAGE

Alfred Gruenke, PE
November, 2016

There is an old saying that says, "May you live in interesting times." I used to think this was a blessing, because it asked for your life to be varied, and interesting.

However, there is another interpretation. The ideal is to live a steady, uneventful life, uninterrupted by unforeseen occurrences. If life is interesting, things are happening that are disrupting the continuous flow of life. This is where we are in the Chapter affairs at this time. MATHCOUNTS is on track, Scholarship donations are coming in, and activities are ongoing. The business of the Chapter is operating like a smooth, well-built and well-oiled machine with minimal intervention required.

This has been/will be a very busy holiday season. Between holiday parties, family commitments, and other reasons, we will not hold a regular December Chapter meeting. We will have a short meeting at the December 15th Holiday Party.

The Scholarship contributions have taken a slightly different tack this season. We have received around \$1,000.00 through our PayPal account. This is a bit unconventional. We lose 3% in fees, and the donor cannot claim a tax deduction, but the convenience obviously overcomes other shortcomings.

Continued on page 2

Last month I was asked to post pictures of PSPE license plates. Don Kohn has complied; a picture of his vanity plate is on the last page of this Newsletter. We thank Don, and ask for others to submit photos of their PSPE license plates, vanity and otherwise.

Also, last month, some questions were raised about the prize our Chapter's second place finish at the PSPE Trivia contest in September is entitled to received. Well, fellow members, your humble correspondent pursued the matter to the highest levels of the Pennsylvania Society of Professional Engineers! i.e., Jen Summers, of the PSPE Harrisburg office. She informed me that unfortunately, the only prize awarded for winners of this highly intellectualized drama is merely bragging rights. So, we're going to take that and treat ourselves to libations at the Holiday Party on December 15th at Morgan's Restaurant. Money well spent!

Brian Kutz has obtained a fantastic speaker for our Holiday Party, Becky Bradley, Executive Director of Lehigh Valley Planning Commission. Her topic will be capacity improvements planned for Route 22, a substantial restoration of the Route 33 corridor, emerging interest in alternative infrastructure improvements such as modern roundabouts, and innovative construction delivery techniques such as the rapid bridge replacement program.

Meanwhile, I have been engaged in a task that has humbled the best and brightest among us. It is one activity that has caused family discord and accusations of incompetence from all quarters. Fortunately, it is seasonal, allowing lots of time for reconciliation.

I am referring, of course, to the odious task of repairing Christmas lights. These strings of bright, twinkly lights are beautiful to behold, but somehow never appear to survive one season to the next unscathed. The lights are in series; if one light burns out the whole string goes out. There is a shorting device in each bulb that is supposed to short out if the bulb burns out but this doesn't always work.

One can, of course, buy new strings every year, but as an engineer, this goes against all that is holy and good within me. I cannot throw away something that could be fixable. I just can't do

it. So, I subject myself to possible derision and scorn, and ignominious failure.

My success rate is no better than 50%. Eventually, of course, I give in to reality and eventually throw out lights I can't fix.

I've worked on 5,000 hp synchronous motors, wound rotor motors with liquid resistors in the secondary, various programmable control systems, all sorts of gadgets and gizmos, even a diesel locomotive! I've done okay, but Christmas lights have brought me to my knees!

Happy Holidays! Hope to see you at Morgan's on December 15th.

THANKSGIVING AWAY FROM HOME

Alfred Gruenke, PE

The modern American Thanksgiving celebration has three features: family, food, and football. Other cultures have holidays similar to Thanksgiving, such as harvest celebrations but the essence of this holiday, the eating of a New World bird, the turkey, is uniquely American.

Thanksgiving is always a major event among Americans overseas. We are separated from our families, so it is celebrated with our families away from home, our fellow ex-patriots.

Planning may require months. Considerable creativity and bending of the rules is required, since the ingredients for the Thanksgiving meal are not always readily available. The turkey, however, is essential.

It is fortunate for the proper celebration of Thanksgiving that the turkey is fairly common in many parts of the world, through some searching may be necessary. In Egypt, a turkey could be purchased by going to the market and ordering "dechromie". The price was by weight, on the wing. Butchering was extra. Fortunately, our guest house cook knew how to prepare it tastefully.

Trimmings such as pumpkin pie are impossible in Egypt. To obtain pie filling, plus a few other items, everyone going home of R&R was

Continued on page 3

"required" to bring something back. In this way, plus local purchases, the meal was a success.

One of my Thanksgiving dinners was at the American Embassy in Islamabad. Many American Embassies have Thanksgiving dinner for US citizens and guests, or they at least will advise as to where Thanksgiving is served in the area. In Korea, we were told to try the nearest US Army base. We opted for our own dinner.

The customer in Korea managed to purchase for us a rather small specimen from a farm close to an American military base. Our guest house cook butchered it, all the while expressing his opinion of such bird with various expletives deleted, in various languages. The meal was fine, however.

Because the turkey was rather small, we supplemented it with a nice beef roast purchased in a nearby town.

An associate and I had an interesting time buying the required spices. Since our combined Korean vocabulary was less than ten words, we resorted to wandering from shop to shop, opening spice containers, pinching, sniffing, and tasting, until we found what we needed. We were not charged for the spices, because I suspect that the shopkeepers were not sure we were in full possession of all our marbles.

Once in Egypt, and twice in Ecuador, we had Thanksgiving dinner at a hotel restaurant. Most major hotels worldwide are aware of the significance of Thanksgiving, and are able to serve a decent turkey dinner. It may not be on the menu, but ask the manager at least a week ahead of time. The trimmings may not be the same as a "homecooked" meal, but something is better than nothing. A major difference with these dinners is the inability to "pig out." The portions are considerably less than at home, and there are no leftovers.

Depending on the time, and if one is lucky, it may be possible to participate in the third F of Thanksgiving, watching football on television. With the establishment of global television this is becoming easier every year.

A colleague managed to get himself invited to the Marine House at the Embassy in Ankara, Turkey

for dinner, plus the Lions-Eagles football game afterwards. It never hurts to ask.

One year, when staying at the Hotel Oberoi in Katmandu, Nepal, I completely forgot about Thanksgiving. My "Thanksgiving Dinner" consisted of wild boar, rice, and asparagus. A couple of American tourists, who had gone to the Embassy for their dinner, reminded me of my transgression the next day. So much for being travel-wise.

Thanksgiving away from home can be depressing. But with one's associates, and some creativity, it can become tolerable, and sometimes even enjoyable.

BOROBUDUR

Alfred Gruenke, PE

Situated in the middle of the Indonesian island of Java is a real architectural jewel, the Buddhist temple at Borobudur. Built in the 8th Century, it a monument to civilization, and truly one of the Wonders of the World. The original height was 42 meters, worn down to 35 meters. The temple covers an area of 14,165 square meters. It is composed of 2,000,000 blocks of stone with a volume of 55,000 cubic meters. It is the world's largest Buddhist temple as well as one of the greatest Buddhist monuments in the world. Borobudur is so massive and grandiose that it is a popular subject of speculation by "Ancient Aliens" proponents on the History Channel. Their argument is, no mere mortal could have built such a structure without extra-terrestrial help. Having seen it, it's difficult to disagree. It is a UNESCO World Heritage site.

Borobudur was built during the Buddhist and Hindu era and predates the Moslem era by around 500 years. It still functions as a Buddhist temple. The Indian influence is obvious.

During a rare day off from our task of building a cement plant in Cilacap in South-Central Java, a number of colleagues and I had our driver take us to Borobudur, located about 100 miles away and twenty five miles North-West of Yogyakarta, the ancient capital. There is an active volcano nearby which we also visited.

Continued on page 16

SCHOLARSHIP SPONSORS

A great way to be involved in the LVPSPE Chapter is to contribute to the **LVPSPE SCHOLARSHIP FUND**. Please Contact the Valley Engineer Editor to sponsor scholarships for the remainder of the calendar year.

If you would like to contribute in any amount – please send your TAX DEDUCTIBLE donation to PA ENGINEERING FUND. Donations should be mailed to:

LVPSPE
P.O. Box 3441
Allentown, PA 18106

Please note “LVPSPE Scholarship Fund” on the comment line.

Or, you may contribute via the LVPSPE website <http://www.lvpspe.org/Donations>.

Scholarship application is at <http://www.lvpspe.org/Scholarships>. Any questions regarding scholarships can be directed to

Alex Dezubay, PE
610-597-2007
Scholarship@LVPSPE.org

PSPE SCHOLARSHIPS

The Pennsylvania Engineering Foundation currently administers the following scholarships for engineering students:

Undergraduate

- \$1,000 PEF Grant: (2 awards)

Upperclassman

- \$2,000 Pennsylvania Engineering Foundation Grant

Applications and guidelines are on-line now at <http://www.pspe.org/scholarships>

2015 – 2016 LVPSPE SCHOLARSHIP DONORS

Graduate

FLSmith, Inc.
Bethlehem, PA
Bridge Gap Engineering
Northampton, PA

Senior

Lutron Electronics Co., Inc.
Coopersburg, PA
Millenium Electro-Hydraulics Services
Whitehall, PA
Victaulic Company
Easton, PA

Junior

Barry Isett & Associates
Allentown, Phoenixville, Hazleton and
Forty Fort, PA; Phillipsburg, NJ
Borton Lawson Engineering
Bethlehem, PA
Hanover Engineering Associates
Bethlehem, PA
McTish, Kunkle & Associates
Allentown, PA
Rettew
Lancaster, PA
Pennonni Associates, Inc.
Bethlehem, PA
The Pidcock Company
Allentown, PA

Sophomore

PEAK Technical Staffing USA
Horsham, PA
Advantage Engineers
Allentown, PA
DME Alliance
Allentown, PA
Newton Engineering
Allentown, PA
Staffeld Engineering Services
Center Valley, PA

Continued on page 13



MONARCH
PRECAST CONCRETE CORPORATION

Paul L. Stein, Jr.

425 North Dauphin Street Phone: 610-435-6746
Allentown, Pa 18109-2199 Fax: 610-437-7133
pstein@monarchprecast.com
www.monarchprecast.com




McTish, Kunkel & Associates
Consulting Engineers & Surveyors

Site Planning & Design
Land Surveying
Transportation Engineering
Structural Engineering
Environmental Permitting
Municipal Engineering
Construction Inspection

3500 Winchester Rd., Suite 300
Allentown, PA 18104
610.841.2700
email: info@mctish.com

Engineering firm of choice since 1972



KEYSTONE CONSULTING ENGINEERS

Three Regional Locations

East Office
Bethlehem, PA
610-865-4555


West Office
Wescosville, PA
610-395-0971

North Office
Kresgeville, PA
610-681-5233

www.KeystoneConsultingEngineers.com


Johann F. Szautner, D.I., P.E., P.L.S.

CIVIL & FORENSIC ENGINEERING



1775 Euclid Avenue
Bethlehem, PA 18018-2112

Phone: 610 216 3918
forensicengineerszautner@verizon.net



R. Peruzzi Inc.
Electrical Engineering Consultant

Robert Peruzzi, PhD, PE
President

P: 610 462 3939
E: peruzzi@rperuzzi.com
W: www.rperuzzi.com

719 Fourth Avenue
Bethlehem, PA 18018

Behavioral Modeling and Verification for RF
Analog and Mixed-Signal IC and SOC Design



STAFFELD ENGINEERING SERVICES

Staffeld Engineering Services (SES) provides business and engineering consulting services, primarily to chemical and manufacturing companies.

We develop and implement economical solutions for a wide range of manufacturing and technical issues. SES offers the following services:

- Process Troubleshooting
- Process Improvements
- Equipment Specifications
- Modeling & Optimization
- Project Economics
- Technical Training Services

Scan the QR code below to visit our website (www.staffeld.com) for more information.



STAFFELD ENGINEERING SERVICES
Post Office Box 241
Center Valley, PA 18034-0241

www.staffeld.com
1-855-STAFFELD
peter@staffeld.com

www.newtonengineering.us



newton
ENGINEERING

TRAFFIC, SURVEYING AND DEVELOPMENT PROFESSIONALS
- *Tomorrow's Engineering Solutions Today* -

TRAFFIC, TRANSPORTATION & HIGHWAY

- Highway Occupancy Permits
- Highway and Driveway Design
- Traffic Counts, Analysis & Projections
- Traffic Impact Studies

LAND DEVELOPMENT & SUBDIVISION ENTITLEMENTS

- Subdivision Layout and Design
- Land Development Engineering
- Sketch and Concept Plans
- Soil and Erosion Control Plans

PRECISION SURVEY

- Boundary Surveys
- Topographic Surveys
- Construction Stake-Out
- As-Built Plans

PROFESSIONAL, CPESC & CERTIFIED

- Professional Civil Engineers
- Professional Surveyors
- Professional Traffic/Operations Engineers
- Certified Stormwater Quality Professionals
- Certified Erosion & Sedimentation Professionals

CONTACT US AT:
Suite 212, Zack Building
6235 Hamilton Blvd. Allentown, PA 18106
(p) 610-366-0060 (f) 610-366-7818
(e) info@newtonengineering.us



KOHN ENGINEERING

FIRE PROTECTION CONSULTING

Donald J. Kohn, P.E.
Principal

4220 Mountain Road
Macungie, PA 18062

KohnEngineering@ptd.net www.KohnEngineering.com

Phone 610-967-4766 Fax: 610-967-6468



PEAK TECHNICAL STAFFING USA

Engineering Talent. Guaranteed.

Rob Cleland
VICE PRESIDENT - NORTHEAST REGION

215.586.3600 866.234.PEAK (7325) cel 267.221.2038
robcleland@peaktechnical.com www.peaktechnical.com
601 DRESHER ROAD, SUITE 250, HORSHAM, PA 19044

Michael F. Basta, PE

Kevin Campbell, PE

Alex Dezubay, PE



Minuteman Press

Design • Print • Copy • Posters • EDDM
Mailing Services • Promo Products • Post Office

BLUEPRINTS
New Service!

D Size Prints
\$1.50

ALLENTOWN 1801 West Tilghman Street Allentown, PA 18104 484.223.3311 M-F 8am-6pm Sat 8am-2pm	BETHLEHEM 123 East Broad Street Bethlehem, PA 18018 610.865.9946 M-F 7:30am-5:30pm
EASTON 661 South 25th Street Easton, PA 18045 610.923.9266 M-F 8am-6pm Sat 8am-2pm	DESALES UNIVERSITY 2755 Station Ave Center Valley, PA 18034 610.282.1100 x1201 M-Th 9am-5pm Sat 9am-4pm

WWW.MMPLV.COM

 **UNITED STATES POSTAL SERVICE.** **FULL SERVICE CONTRACT UNITS**

NOW AT OUR ALLENTOWN & EASTON STORES

THE PIDCOCK COMPANY

**CIVIL ENGINEERING
LAND PLANNING
ARCHITECTURE
LAND SURVEYING**

FOUNDED 1924

Oxford Drive at Fish Hatchery Road
2451 Parkwood Drive
Allentown, Pennsylvania
18103-9608

TELEPHONE: 610-791-2252
TELEFACSIMILE: 610-791-1256
EMAIL: info@pidcockcompany.com
WEBSITE: www.pidcockcompany.com

Pennoni

**PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS**

**PROVIDING ENGINEERING
SERVICES SINCE 1966**

- Construction Services
- Energy & Sustainability
- Environmental
- Geotechnical
- Laboratory Testing
- Landscape Architecture
- Materials Testing & Inspection
- MEP
- Municipal Planning
- Site Design
- Structural
- Survey & Geomatics
- Transportation
- Water/Wastewater



2041 Avenue C, Suite 100, Bethlehem, PA 18017
610-231-0600 | www.pennoni.com

RETTEW
We answer to you.



Engineers, environmental consultants, surveyors, site designers, and safety advisors committed to sustainable development and resource conservation.

Charles Myers, PE
Director of Energy & Environmental Engineering
cmyers@rettew.com
484-240-4519

610-866-8330
rettew.com |   

PENNSYLVANIA
Athens • Lancaster
Lehigh Valley • Mechanicsburg
Pittsburgh • Williamsport

**Integrity
Ownership
Trust**

MULTIDISCIPLINE
ENGINEERS
& CONSULTANTS

**BARRY
ISETT &
ASSOCIATES INC**



Landscape Architecture Land Planning
Water & Waste Water Construction Se
Development
Inspections Lan
Land Planning
Services La
Municipal Engineering Plumbing Water



SOCIETAS AWARD
FOR RESPONSIBLE CORPORATE CONDUCT

www.barryisett.com

- ALLENTOWN 610.398.0904
- PHOENIXVILLE 610.935.2175
- PHILLIPSBURG 908.454.9500
- HAZLETON 570.455.2999
- FORTY FORT 570.285.8200



Hanover

Engineering Associates Inc



*Proudly serving our clients and community for over 40 years
with offices throughout Pennsylvania*

- Municipal Engineering and Planning
- Structural Engineering
- Mechanical Engineering
- Environmental Services
- Subdivision and Land Development
- Stormwater Management
- Transportation Planning and Permitting
- Surveying
- Utility Line Design and Permitting
- CAD/GIS/GPS Services

Office Locations

<i>Bethlehem</i>	<i>610.691.5644</i>
<i>Pocono</i>	<i>570.688.9550</i>
<i>Lehigh</i>	<i>610.395.9222</i>
<i>Lancaster</i>	<i>717.721.7444</i>
<i>Elizabethtown</i>	<i>717.367.0144</i>
<i>Towanda</i>	<i>570.265.1020</i>
<i>Wellsboro</i>	<i>570.724.5326</i>
<i>New Castle</i>	<i>724.598.6414</i>

Putting your project needs first ... always

www.hanovereng.com

THE COLDEST SEASON IS ALSO
THE WARMEST.



Nermin Ferhadbegovic is a proud sponsor of the Pennsylvania Society of Professional Engineers. Happy Holidays!



Nermin Ferhadbegovic
Financial Advisor
MassMutual Eastern Pennsylvania
3701 Corporate Parkway, Suite 320
Center Valley, PA 18034
610-798-2557
nferhadbegovic@financialguide.com
www.easternpa.massmutual.com



EASTERN PENNSYLVANIA

We'll help you get there.®

PHILANTHROPY + DIVERSITY AND INCLUSION + ENVIRONMENTAL STEWARDSHIP + ETHICS AND INTEGRITY

MassMutual Financial Group refers to Massachusetts Mutual Life Insurance Co. (MassMutual) and its affiliated companies and sales representatives. Local sales agencies are not subsidiaries of MassMutual or its affiliated companies. Nermin Ferhadbegovic is a registered representative of and offers securities through MML Investors Services, LLC. Member SIPC. Supervisory office: 3701 Corporate Parkway, Suite 320, Center Valley, PA 18034. 610-798-2557. CRN201809-186185

LEHIGH
WHITE CEMENT

For extraordinary designs



Visit www.AECDaily.com for our online AIA/CES course
"Reflective Concrete Floors: Durable & Sustainable"

www.lehighwhitecement.com



Develop Your Career with Us

“I’ve been a part of Lutron for 3 ½ years.”

Jamie McMahon (Electrical Engineering Major)
Design and Development Engineer

At Lutron, we’ve been designing and manufacturing energy-saving light control solutions since 1961.

Our success depends on your success. Join Lutron’s Innovation Leadership Program and you’ll develop the skills and knowledge needed to win in the world of innovation.

- Immediately join an engineering development team
- Receive formal mentor support
- Collaborate regularly with business unit managers and directors
- Acquire real-world experience through field assignments
- Foster relationships with Lutron’s global customers

Key opportunities include:

- Engineering**—Electrical, Mechanical, Computer, Software, Manufacturing, Industrial, Architectural
- Science**—Physics, Chemistry, Math

Opportunities are also available in sales leadership and field engineering leadership—**hiring all majors.**



To learn more about how you can be a part of our future visit

www.lutron.com/careers



▲ Dynamic keypad in Black



©2012 Lutron Electronics Co., Inc. | PN 308-0717 REV/B

Bridging the World through Relationships of Trust



Bridge Gap Engineering is an agile and highly responsive engineering company lead by a uniquely diverse team of trusted cement and minerals industry experts. Based on service, solutions and relationships, Bridge Gap Engineering is a learning organization focused on knowing our customers and their changing needs in the 21st Century. Our experience spans decades and our knowledge spans multiple industries encompassing plant design, process design, and plant maintenance and operations.

PE Engineers

Josh Cooney • Peter Paone • Roger Wall • Frank Walsh • Dan Sautter

E.I.T.

Jeff Kutz

1717 Main Street, Northampton, PA 18067 • 610-400-8145

www.bridgegapengineering.com

COUPLING INNOVATION WITH CONFIDENCE



Since 1919, Victaulic has been the world's leading producer of pipe joining solutions. Our products are used in the most recognizable landmarks, from the Hoover Dam to Egypt's Alexandria Library, making bold designs possible.

Backed by 1,800+ patents, Victaulic is committed to our customers' needs, providing solutions for your design challenges. We draw it, train on it and certify the installation, all while utilizing best-in-class technology. From concept through construction, we ensure your project runs efficiently as possible.

Engineering Solutions:

- Construction Piping Services (CPS) helps reduce risk and increase reliability for a smoother project experience.
- BIM Software keeps communication and collaboration in sync.
- Proprietary truck loading software saves time and confusion on the job with phased product schematics.

victaulic.com



VICTAULIC IS A REGISTERED TRADEMARK OF VICTAULIC COMPANY.
© 2014 VICTAULIC COMPANY. ALL RIGHTS RESERVED.

Proud to Honor our Engineers in the Lehigh Valley & Around the Globe



Engineering is what we do at FLSmidth. As a world leader in providing equipment and services to the cement and minerals industries, our success begins with our engineers who plan and design the systems and equipment for which our customers rely.

2040 Avenue C · Bethlehem, PA 18017 · www.flsmidth.com

Internet Addresses

National Society of Professional Engineers

www.NSPE.org

Pennsylvania Society of Professional Engineers

www.PSPE.org

Lehigh Valley Chapter – PSPE

www.LVPSPE.org

2016 – 2017 State Officers

State Director

Angelika Forndran, PE
StateDirector@LVPSPE.org
215-536-7075

Alt. State Director

Brian Kutz PE
VicePresident@LVPSPE.org
484-821-0470

VP Northeast:

Michael F. Basta, PE
StateVP@LVPSPE.org
610-767-1617

Board of Direction Meetings

The monthly Board of Direction meetings are 6:00 PM on the second (2nd) Monday of each month. Open to all members; they are held at the office of Barry Isett & Associates, 85 South Route 100, Allentown, PA.

2016 – 2017 Chapter Officers

President:

Alfred Gruenke, PE
President@LVPSPE.org 610-395-6561

Vice President:

Brian Kutz, PE
VicePresident@LVPSPE.org 484-821-0470

Secretary:

Chris Williams, PE, LEED AP
Secretary@LVPSPE.org 610-398-0904

Treasurer:

Ray Szczucki, PE
Treasurer@LVPSPE.org 610-614-1245

Immediate Past President:

Kevin Campbell, PE, LEED AP
PastPresident@LVPSPE.org 610-398-0904

Chapter Directors:

Alex Dezubay, PE
Directors@LVPSPE.org 610-597-2007

Nicole Gasda, PE
Directors@LVPSPE.org

Frank Walsh, PE
Directors@LVPSPE.org

2015 – 2016 LVPSPE SCHOLARSHIP DONORS


(cont'd)

Freshmen


Kohn Engineering
Macungie, PA
Civil & Forensic Engineering
Bethlehem, PA
R. Peruzzi, Inc.
Bethlehem, PA
J.P. Mascaro & Sons
Audubon, PA
Keystone Consulting Engineers
Bethlehem, Wescosville and Kresgeville, PA
Monarch Precast Concrete Corporation
Allentown, PA

Contributors

Michael F. Basta, PE
Kevin Campbell, PE
Alex Dezubay, PE
Alfred Gruenke, PE
Grayson McNair, PE



ADVANTAGE ENGINEERS
your engineering advantage



Providing timely, professional, cost effective
Design & Construction Phase Geotechnical Services
for over 1,300 projects and counting.

6520 Stonegate Drive, #110
Allentown, PA 18106 • (610) 366-7120

Serving the Mid-Atlantic Region from 5 offices in
Pennsylvania, Maryland, and New Jersey
www.advantageengineers.com



**Borton
Lawson**
ENGINEERING
ARCHITECTURE

PROUDLY SUPPORTS
MATHCOUNTS and the
LVPSPE Scholarship Program

484.821.0470 | borton-lawson.com



**J.P.
MASCARO
& SONS**



If it's service, it's us!

1-888-MASCARO www.jpascaro.com

Alfred Gruenke, PE

Grayson McNair PE



Engineering Solutions For Life

PROCESS ♦ MECHANICAL ♦ ELECTRICAL ♦
PLUMBING

- Life Sciences
- Food & Beverage
- Chemical Process
- Research & Development

www.DMEforLife.com 610.366.1744

**Engineering Design Services for
Advanced Technology Industries**

DME Alliance Inc., 7540 Windsor Drive, Suite 311, Allentown, Pennsylvania 18195

I took a few photos, not nearly enough. However, I had the foresight to purchase a pamphlet entitled "The Magnificence of Borobudur" by Larisa, in English, French, and Japanese.

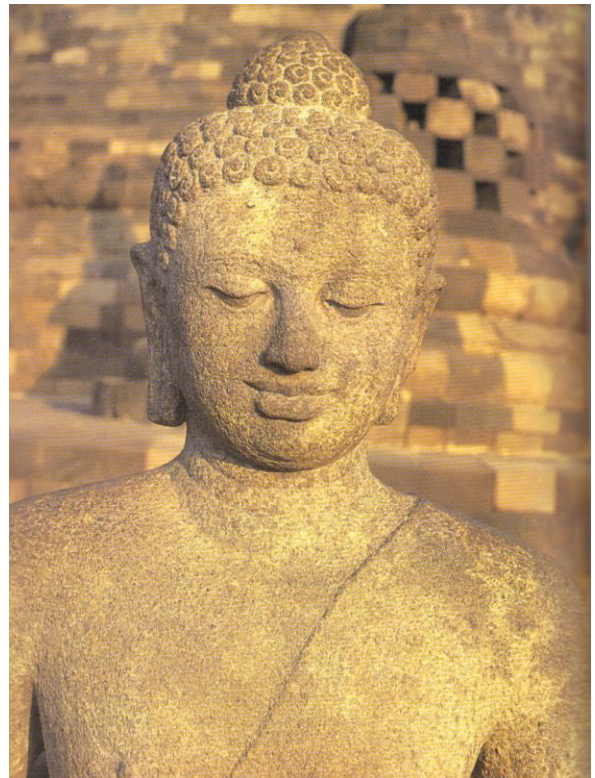
The base is roughly square, approximately 120 meters each side. There are 504 Buddha statues and 2,670 beautifully-carved relief panels.



Note the main stupa on top, surrounded by 72 bell shaped stupas (photo from "The Magnificence of Borobudur")

It is difficult for me to do justice to this edifice. As can be seen in the picture above, it is pyramidal in shape, with a flat top. The main stupa is surrounded by 72 bell shaped perforated stupas, each with a statue of Buddha seated inside. A stupa is a Buddhist commemorative monument which houses sacred relics associated with Buddha or other holy persons. One of the stupas is particularly significant, in that one can reach inside and touch the big toe of the Buddha! This is considered particularly lucky. The Buddhas sit in a cross-legged lotus position with monk's clothing, the right shoulder not covered. The hair is tied into a knot at the top of the head, curled clockwise. There is a distinguishable dot between the two eyebrows. All the statues are identical.

Borobudur was more or less abandoned for hundreds of years. It was buried under layers of volcanic ash and jungle vines, to be "discovered" by the-then British Governor of Java, Sir Thomas Raffles early in the 19th Century. It has undergone a number of restorations, the largest from 1975 to 1982. Even though this is a Buddhist temple in a Moslem country, it is a popular tourist destination. It is the most visited tourist attraction in Indonesia.



Lord Buddha (photo, from "The Magnificence of Borobudur")



Some of the 72 stupas at the top of Borobudur

Sir Thomas Raffles' other claim-to-fame is the founding of Singapore. His name is everywhere in this island nation. The downtown shopping district as well as an upscale hotel are named after him.

Continued on page 17



Borobudur (photo from internet)



One of the relief panels

Our perception of the Wonders of the World tends to be from a Western perspective. The Wonders of the World which we are most familiar with are Eastern Mediterranean-centric, covering the area from Greece through Egypt, western Turkey, onto Iraq. Borobudur is not nearly as well known, but it ranks right up there, if not more so. If going anywhere in the area, a side trip to Borobudur is certainly worthwhile. It was for me.

Nothing in the world is more dangerous than sincere ignorance and conscientious stupidity.
-Dr. Martin Luther King, Jr.

The Optimist Creed

Promise yourself

To be strong that nothing can disturb your peace of mind.

To talk health, happiness and prosperity to every person you meet.

To make all your friends feel that there is something worthwhile in them.

To look at the sunny side of everything and make your optimism come true.

To think only of the best, to work only for the best, and to expect only the best.

To be enthusiastic about the success of others as you are about your own.

To forget the mistakes of the past and press on to the greater achievements of the future.

To wear a cheerful expression at all times and give every living creature you meet a smile.

To give so much time to improving yourself that you have no time to criticize others.

To be too large for worry, too noble for anger, too strong for fear, and too happy to permit the presence of trouble.

The senses deceive from time to time, and it is prudent never to trust wholly those who have deceived us even once.
-Rene Descartes

For those who do not think, it is best at least to rearrange their prejudices once in a while.
- Luther Burbank

Did you ever stop to think, and forget to start again?
- A. A. Milne (Winnie-The-Pooh)

Minutes for the November 9, 2016 Board of Directors Meeting
6:00 pm at the office of Barry Isett & Associates, 85 S. Route 100, Allentown, PA

Attendees: Al Gruenke, Brian Kutz, Al Dezubay, Kevin Campbell (phone) and Chris Williams

- A. Call to Order – Al Gruenke called the meeting to order at 6:06 pm.
- B. Activities – Brian Kutz
- November: Tour of a Lutron production facility on 11/29.
 - December: Holiday Party at Morgan’s on 12/15. Becky Bradley from the Lehigh Valley Planning Commission will be speaking on the growth of the Lehigh Valley with a focus on transportation along the Route 22 corridor. Brian will bring a laptop and projector.
 - Al suggested doing an event at the National Museum of Industrial History in Bethlehem. Al has a contact at the museum.
- C. President – Al Gruenke
- If anyone has an interesting article, please provide to Al for inclusion in an upcoming newsletter.
 - Don Kohn suggested putting photo of a PSPE license plate in the newsletter.
 - Al discussed donations which were recently received from various companies.
 - Don Kohn will be reviewing EOY/YEOY applications.
- D. Scholarships – Al Dezubay
- Al Dezubay suggested updating website to show the last two years of scholarship winners. Al Gruenke will coordinate with Tracy to update the website.
 - Brian will be providing administrative assistance to Al for scholarship coordination.
 - Al will be contacting guidance counselors rather than only principals as was done in prior years.
- E. MATHCOUNTS – Kevin Campbell
- First letter went out to schools.
 - Same MATHCOUNTS planning team as last year will be putting the event together.
- F. Miscellaneous
- Look for article from John Nawn in PE Reporter and in newsletter.
 - December LVPSPE board meeting will be on the 2nd Tuesday of the month.
- G. Adjournment at 6:30 pm on a motion by Chris, seconded by Al D.

Don Kohn's License Plate



<http://pspe.org/store/pe-license-plates/>

PSPE members can order a vanity plate (five characters + PE) for a one-time cost of \$200, or you can receive the "next plate off the line" for \$100.

These plates feature PSPE's official logo on the left and stacked PE letters on the right. You must be an active or retired Pennsylvania PE to order a plate.

Download an official PennDOT application here and order your PE license plate today!

<http://pspe.org/wp-content/uploads/2015/09/PSPE-License-Plate-Application-Form.pdf>

Scholarship Contributor

Lehigh Valley, PA

The Lehigh Valley Chapter, Pennsylvania Society of Professional Engineers (LVPSPE) is a local organization affiliated with the State and National Professional Engineer organizations. Our purpose is to support and advance engineering at all levels, especially to young people who will someday replace us. Our Chapter raises funds to support two very important initiatives: MATHCOUNTS® and the LVPSPE Scholarship Program. Our fundraising goal is \$13,000 to support both programs.

This coming February will be the 33rd consecutive year that we have coordinated the MATHCOUNTS event. Over 200 students from approximately 30 regional middle schools participate, with the top qualifiers moving on to the PA state competition and then possibly on to compete at the national level.

Each year, our Chapter also provides scholarships to regional high school students that have been accepted to college and are pursuing engineering degrees. Last year we awarded six students scholarships totaling \$12,000 thanks to the generosity of our donors. We increased the number of scholarships to six for this year because the quality of the recipients was so good!

All supporters will be acknowledged at MATHCOUNTS and the Scholarship Awards dinner. They will also receive recognition in our monthly newsletter.

Donation Level	Amount	Valley Engineer Space
Graduate	>\$1,000	Full Page
Senior	\$1,000	Full Page
Junior	\$500	Half Page
Sophomore	\$250	Quarter Page
Freshman	\$150	Eighth Page (Business Card)
Contributor	<\$150	Line Item

Contributions are tax deductible if made out to: **PA Engineering Fund**
 Donations should be mailed to:

**LVPSPE
 P.O. 3441
 Allentown, PA 18106**

I want to acknowledge and thank last year's donors for their support:

- FLSmith, Inc. • Bridge Gap Engineering • Lutron Electronics Co., Inc. • Millennium Electro-Hydraulics Services • Victaulic Company • Barry Isett & Associates • Borton Lawson Engineering • Hanover Engineering Associates • McTish, Kunkle & Associates • The Pidcock Company • Rettew • Pennoni Associates, Inc. • DME Alliance • Newton Engineering • Kohn Engineering • Staffeld Engineering Services • Keystone Consulting Engineers • R. Peruzzi, Inc. • Michael F. Basta, PE • PEAK Technical Staffing USA • Advantage Engineers • Civil & Forensic Engineering. • J.P. Mascaro & Sons • Monarch Precast Concrete Corporation • Kevin Campbell, PE • Alex Dezubay, PE • Alfred Gruenke, PE • Grayson McNair, PE

Thank you very much for your consideration and should you have questions about our program, please feel free to contact me.

Alfred Gruenke, PE

Alfred Gruenke PE
 President, Lehigh Valley Chapter PSPE