



Chicago ASPENews



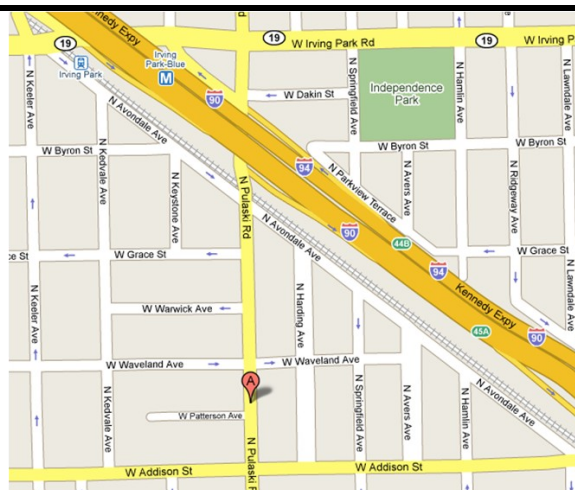
Chicago Chapter of the American Society of Plumbing Engineers
Vol. 40, No. 8
March, 2009

General Meeting Thursday March 19, 2009

LaVilla Restaurant and Banquets



3636 N. Pulaski
Chicago, Illinois
Plenty of Free Parking



AGENDA

- 5:30pm-6:30pm Cocktail Hour; *Beer Laureate Bornquist (free beer and wine)*
- 6:00pm-6:30pm *Primer: Point-of-use Water Heaters - Chronomite;*
Dick Simms of Deery-Pardue
- 6:30pm *Dinner - \$30 Members / \$35 Non-Members*

MENU

- Foccacia
- Irish Soda Bread
- Cream of potato soup
- Garden salad with choice of dressing
- Corned beef and cabbage
- Boiled potatoes
- Chicken Vesuvio
- Make your own ice cream Sunday
- Pop, coffee, wine and beer (maybe even of the green variety!)

7:45pm

Technical Program: Solar Water Heating
Mark Kaulas of Bornquist



RSVP as soon as possible to Bruce Weiss, VP Technical!

- *Return the enclosed card for those of you getting this via US Mail*
- *Call 312 212.2022*
- *Fax 312 212.6401*
- *Email Chicago.ASPE.RSVP@gmail.com*

Local Chapters are not authorized to speak for the Society



PRESIDENT'S MESSAGE

Happy Saint Patty's Day! The GREEN holiday!

Spring is a springin' and the birds are a singin'!

February's Meeting was Hugely Popular!

The Parthenon was a big hit, as always! We had 90 people even though many of our regulars were missing! We had some new attendees, some new members, and even 2 new student members from IIT. We only had about 40 RSVP's; so that made it tougher for the waiters, etc, to accommodate us. It also gives added headaches to the VP Technical who makes the arrangements for all our meetings AND it adds to our chances of running behind schedule. We really are trying to stick to the schedule, but we have to also "go with the flow". I've heard no complaints about this meeting and several have given positive feedback. Thanks for the feedback! It helps us to know how to serve you better.

Special thanks to those who RSVP'd and followed through with their commitment! If we can improve on this, we will be more efficient. RSVP as soon as possible to Bruce Weiss, VP Technical! Email Chicago.ASPE.RSVP@gmail.com.

The speakers were great!. The demonstrations were awesome!. One of the most popular was the "CO₂ Beer Quick-Chill"! I think the "Girl in the Plastic Bubble" trick was popular too! Sorry you missed it!

ASPE CHICAGO 40th ANNIVERSARY!

Well, we are in our 40th year as a Chapter, and Phase 1 or our celebration has been delayed until the March meeting. In honor of the great amount of time that we have been chartered as a Chapter, we will be giving away a grandfather clock. One lucky person will be enjoying the warm chimes of Father Time in his/her home or office.

Don't forget that the Product Show is coming soon.

We already have quite a number of RSVP's and some are totally new to our Show! If you are an Exhibitor, be sure to get your paperwork and checks in ASAP **OR YOU MAY BE A SPECTATOR!** If you are a spectator, not that there is anything *WRONG* with that, mark your calendar and be there for the seminars and the Show. We will have some new Exhibitors this year as well as many of your favorites! We have prizes and SURprises, too. There's also dinner as you know. Watch for announcements of the Product Show Committee meetings. Frank Sanchez is the Product Show Chairman again this year; so, contact him if you have any questions or comments. Thanks Frank and Phill Kroll (Co-chair)!

Plan Now to Attend the 2009 ASPE Technical Symposium

The *ASPE Technical Symposium* will be held October 23-25, 2009, in Dearborn, MI. Intense educational sessions and fun special events will be included. The Engineered Plumbing Exposition (EPE) promises an array of exhibitors who will showcase the newest products in the industry. Attendees will have numerous opportunities to win prizes. Visit www.aspe.org for more updates. Also look for more information in future issues of the ASPENews as well as in PS&D and The Pipeline. And read the whole ASPE Newsletter! You're probably spending plenty of time indoors lately, so read the newsletter! You never know what you might be missing. Stay tuned for more details.

(continued on page 3)



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("C" is required)

PRESIDENT'S MESSAGE (continued)



FREE (for ASPE Members IN GOOD STANDING) CPD REVIEW CLASS

David DeBord, your FAVORITE "CURRENT" ASPE President, and the always lovely Jason McDonald, your favorite Newsletter Editor, will present the famous Ficek/McDonald CPD Review Class **Saturday March 14** at the luxurious offices of **Grumman/Butkus** in beautiful downtown Evanston, IL! If you are planning to take the exam, this is the **PERFECT** way to target your studying energy in the right direction! Contact Jason McDonald ASAP if you want to take this review

class. **DEADLINE for registration is Friday March 6!!!!!!**

Next CPD Exam Will Be Held April 17 & 18, 2009

The Certified in Plumbing Design examination will be administered on Friday and Saturday, April 17 or 18, 2008, depending on available sites. The exam is an online proctored exam with approximately 200 possible testing sites throughout the U.S. and Canada. The testing fee for the examination is \$375 for ASPE members, \$300 for ASPE members with PE, and \$625 for nonmembers or \$550 for nonmembers with PE. Download the **CPD Bulletin** for more information. <http://aspe.org/new/CPD/cpd.php>; **Registration Closes April 3, 2009!**

ASPE Webinar

An ASPE Technical Professional Education Program

LEED Point Strategies

Wednesday, March 18, 2009

2:00 PM ET / 1:00 PM CT / 12:00 PM MT / 11:00 AM PT

***FREE FOR ASPE MEMBERS, THANKS TO OUR SPONSOR:**



Registration will close March 17th at 5PM Central Time

Earn Continuing Education Credits:

This one-hour contact program provides 0.1 CEU or 1.0 PDH.

Only attendees who are registered for this webinar will receive CEU / PDH Credit

Water for People

We have been donating the 50/50 raffle money to Water for People for the last couple of months. They have sent us letters of thanks. Every 15 seconds a child dies because they didn't have clean drinking water. The small contributions that we send can actually save many lives. For more information, follow this link: <http://www.waterforpeople.org/>

We only have **2** regular monthly meetings left this season! Don't miss them! One of them is this month and the other is Election Night in May! Thanks for your support! See you on **March 19** at **LaVilla on Pulaski** in Chicago! Please refer to the front page of the ASPENews for all of the details.

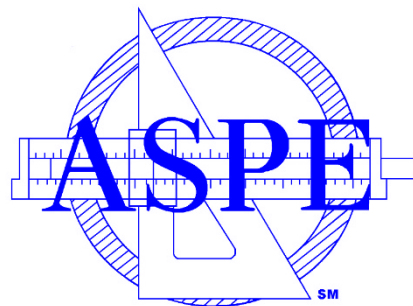
David DeBord, CPD LEED AP; President

ddebord@esdesign.com; 312 456.2359

ASPE CHICAGO LOSES A FRIEND

On February 5, ASPE Chicago lost member Bob Weaver of Riddile & Associates. Bob was sales manager at Riddile and was a 10-year member of the Chicago Chapter. Bob leaves behind his beloved wife Sandy and their children Maryellen, Stephen, James and Jeffrey. Bob was very active in Boy Scouts and a friend to many.

Bob will be missed.





FEBRUARY MEETING RECAP

35 RSVP's and 95 Attendees - PLEASE RSVP for meetings!

Special thanks to Reliable Fire and ANSUL for providing sponsorship of the beer and wine (Beer Laureates).

Primer Recap

Sprinkler heads and cover plates; Presented by Walter Barker, National Technical Representative of Viking

Walter had a nice crowd as he explained the ins and outs of various sprinkler designs offered by Viking. We want to thank Walter for providing the information and bringing nice visual aids.

Main Technical Presentation Recap

Clean Agent Fire Systems and Proper Room Design; Presented by Larry Raddatz of Reliable Fire

Reliable Fire provided a great presentation on clean agent systems and effective design. Larry showed us how to cool down a six pack of beer with CO₂ and although the crowd did not react much, I thought it was cool. Thanks to Berit of Added Sales for being such a good sport and going into the "Chamber of Death" or ANSUL demonstration chamber as it is more often called. Reliable Fire offered some good design tips and guidelines for the design of clean agent systems.

MARCH MEETING

Primer

Point-of-use Water Heaters - Chronomite; Presented by Dick Simms of Deery-Pardue & Associates

Derry-Pardue will be giving an overview of the Chronomite point of use tankless water heater. Chronomite Laboratories Inc. patented the first microprocessor controlled tankless water heater providing unlimited hot water simultaneously to multiple lavatories with one heater. Utilizing state-of-the-art technology, the microprocessor meets the users' demands for superior performance with accurate, pre-set output temperatures, while being efficient and cost effective.

Main Technical Presentation

Solar Water Heating; Presented by Mark Kaulas of Bornquist

Solar water heating is becoming more common in the Chicagoland area. The demand has greatly increased for both system comments and design knowledge and Mark is in a position to provide both of these items. He does not only provide the equipment but is extremely active in the installation and monitoring of the system operation. He will discuss the basics of design as well as lessons learned from installations that have been in place for several years.

Mark Kaulas' career spans 28 years as a Manufacturers' Representative designing and selling water heater, pumping, oil/grease separation, and valving systems. He is a graduate of the University of Illinois, Champaign, IL. Mark is an active member of the Chicago ASPE Chapter; serving on its Board of Directors and also participating on a number of its committees including an Illinois Plumbing Code advisory panel.



Bruce Weiss, CPD LEED AP; Vice President Technical

bweiss@aeieng.com; 312 212.2022



LEGISLATIVE CORNER

Have you ever heard the expression, “**My way or the highway?**” Well, sometimes that’s how things work here in Chicago. It doesn’t matter if X & Y codes allow you to use air admittance valves, PEX piping for domestic water systems, or even PVC plastic pipe in commercial projects. The City of Chicago Plumbing Code has a particular way to do things and you won’t be allowed to use those systems here, at least for now.

This is one of the reasons I started The Great City of Chicago Plumbing Code “Informal” Interpretations. Hopefully, this will help you avoid one or two headaches

I am referring to them as “informal” until I create a final list that will be signed and stamped by the City. Therefore, please remember that you should check your local codes and contact the authorities having jurisdiction because they have the final word on code interpretations.

Part III - Commercial /Residential Dishwashers and associated appurtenances.

Please remember that the City of Chicago does not allow the use of corrugated or stainless steel braided water supply lines. This is because those hoses usually do not meet the pressure rating standards requested by the City Code. It is on their website: <http://tiny.cc/Z1i0g>

I know!! The Code does not mention stainless braided hoses anywhere, at least I have not seen it or looked for it. However, the Code is clear that all water systems should comply with minimum pressure requirement. Refer to 18-29-604.10.1.3; here you will notice that the maximum pressure allowed in the city is 100 PSI. Some of these hoses cannot withstand 100 PSI and therefore they have been banned in the Great City of Chicago. So, if thought it was because it created less work for the Plumber, you were wrong. Oh, wait a minute!



Anyway, you will notice that some manufacturers provide faucets with guess what? Yes, **braided stainless steel supply tubes!** However, you need to make sure that the hoses and the entire faucet are rated to 125 psi. You can confirm this via the rating/certification to A112.18.1 - 2005/CSA B125.1-05 Plumbing Supply Fittings.

When manufacturers supply these types of components as part of the fitting as opposed to them being part of the system, they go through a more rigorous test and they are certified as part of the fitting. In essence then, it’s part of the fitting and not the piping. Also, since the stainless steel braided hoses are factory installed and not installed on the job, they are code compliant and fine for use in the City.

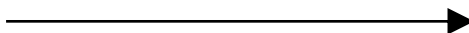
Note that the water supply to a dishwasher shall be copper and you should never allow the use of braided stainless steel to avoid conflicts with the plumbing inspector. It doesn’t matter that it is available at your local hardware store, it is just not allowed.



When a residential (private) dishwasher waste connection connects to the house side of a trap from a sink, the drain shall discharge separately into a trap or tail piece of the kitchen sink and not connect to the garbage disposal - see 18-29-409.3. I prefer to provide them with a separate 2” OSD, the air gap and a hose adaptor.



(continued on page 6)



LEGISLATIVE CORNER (continued)

Correct Installation

Regarding commercial dishwashers, remember that some may need a booster heater (180F), a PRV, proper backflow protection and indirect waste. The waste line could also be hard piped provided the dishwasher is on its own line and it has an in-line floor drain installed immediately downstream of the connection. 18-29-409-3.1

Please remember that you should **always** check your local codes and contact the authorities having jurisdiction because they have the final word on code interpretations.

The City of Chicago Plumbing Bureau can be reached at 312 743.7477; fax number 312 743.7434. All questions should be submitted to Mr. John Flynn, Plumbing Inspector.

Please remember that I would like to receive your questions regarding ambiguous code sections. I will contact the local jurisdictions and will try to obtain an answer.

Please contact me with your questions and comments,

Did you know?

ASPE Chicago Chapter has online forums!

<http://aspechicago.15.forumer.com/index.php?act=idx>

I will post these "informal" interpretations articles here, so that you can make comments or even post new questions. It takes only a minute to sign up.

ICC has also a similar website where people around the world post questions and comments.
<http://www.iccsafe.org/cgi-bin/ultimatebb.cgi>

Frank Sanchez, CPD; Vice President Legislative
fxs@grummanbutkus.com; 847 328.3555 x251



HELLO AGAIN FROM YOUR FRIENDLY TREASURER,

It was brought to my attention at the February meeting that the information regarding invoices to be sent with payment was not clearly noted. The invoice is sent with the payment for manufacturers reps who are billed for dinner guests. I hope this clears up any misrepresented information.

More water saving tips and facts:

- Use a hose nozzle and turn off the water while you wash your car and save more than 100 gallons at a time.
- Store drinking water in the refrigerator rather than letting the tap water run every time you want a cool glass of water. This could save hundreds of gallons a month.
- If a drip from your faucet fills an eight ounce glass in 15 minutes, it will waste 180 gallons per month and 2,160 gallons per year.



Thanks,

Mark G. Mannarelli, Treasurer
mmannarelli@esdesign.com; 312 456.2354

THE PRODUCT SHOW WILL BE HERE IN LESS THAN 2 MONTHS!

Exhibitors, by now you should have in your inbox the registration form for our upcoming Product Show. I will send a reminder shortly, don't forget to register!

Registration deadline is March 27, 2009

(A \$50 late fee will apply after that date)

[Click here for a Reservation Form](#)

We had our Second Product Show meeting at La Villa on January 27, 2009. We had 9 attendees and we received great feedback and suggestions.

Third Product Show Meeting - Save the Date

Date: Tuesday, March 10, 2009
Time: 6:30pm
Location: La Villa Restaurant
3632 North Pulaski Road
Chicago, Illinois 60641

Booth Selection Night - Save the Date

Date: Friday, April 10, 2009
Time: 6:30pm
Location: Luczak Sales, Inc
1128 Tower Road
Schaumburg, Illinois 60173

Note that our Product Show meetings are open to all who are interested and our Chapter will provide snacks and beverages. RSVP to: Phill Kroll at pkroll@metroddn.com.

Frank Sanchez, CPD; Product Show Chairman

fxs@grummanbutkus.com; 847 328.3555 x251

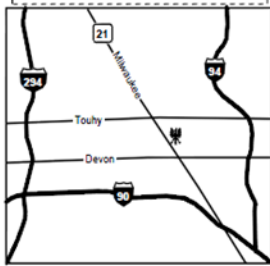
2009 PRODUCT SHOW RAFFLE AND ADMISSION
TICKET ONLY
THIS IS NOT A DINNER TICKET
ASPE CHICAGO CHAPTER
38TH ANNUAL PRODUCT SHOW
APRIL 16, 2009
3:30pm - 8:30pm
WHITE EAGLE BANQUETS & RESTAURANT
6839 Milwaukee Avenue; Niles, IL
(See Map on reverse side)
One Ticket per person. Must be present to win.

DROP IN RAFFLE BOX

P R O D U C T S H O W	Name:	Company:	Address:	Phone:	email:	A D M I S S I O N O N L Y
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38TH ANNUAL ASPE CHICAGO CHAPTER PRODUCT SHOW
APRIL 16, 2009

Seminars 11:30am to 4:15 pm

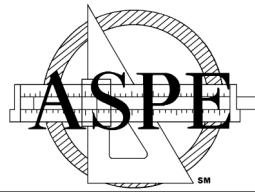


SEMINAR TOPICS WILL INCLUDE:

- Water Piping and Thermal Expansion
- Alternate Venting Methods
- Booster Pumps- Variable Speed drives and Their Implications
- Commercial Plumbing Fixtures and Trim Selection Criteria
- ADA Design Requirements
- Steam Fired Water Heaters and Control Valves
- Bariatric Plumbing Fixtures
- IPC 2009 UPDATES
- Building Information Management - BIM
- 3D Coordination and Design Overview.
- Reclaimed Water and Water Reuse
- Chemical Waste Systems and Tanks

ONE PER PERSON
DOOR PRIZES
SEE OTHER SIDE!
ONE PER PERSON

CHICAGO



CHAPTER

38th Annual ASPE Chicago Chapter Product Show

Thursday, April 16th, 2009
WHITE EAGLE RESTAURANT

6839 Milwaukee Avenue, Niles, Illinois
Phone: (847) 647.0660

Show Hours:

- 3:30 PM – 8:00 PM

Free Lunch Provided

- During Technical Seminars

Buffet Dinner Available (Optional)

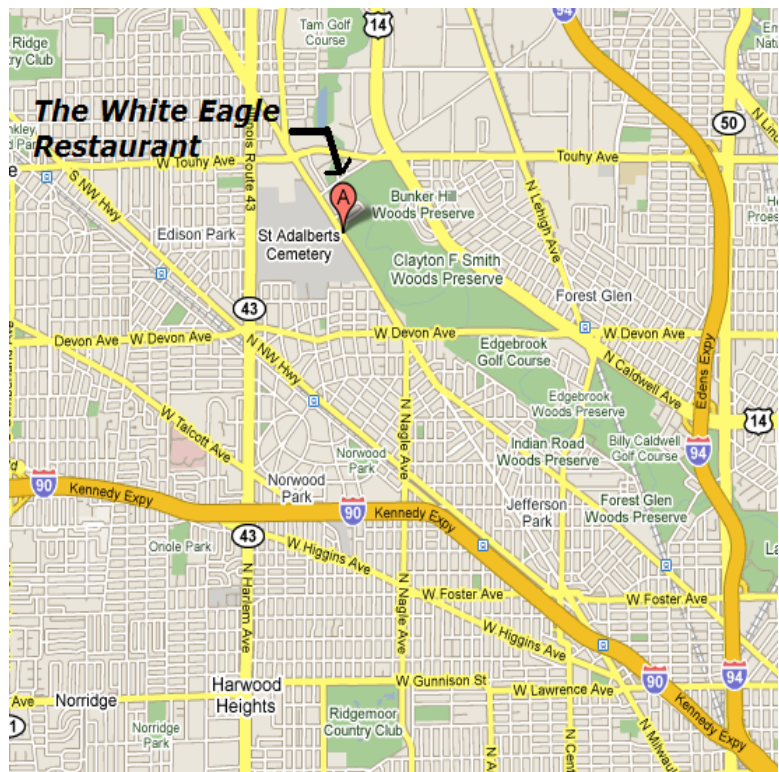
- 5:45 PM – 7:00 PM - \$25.00

Free Technical Seminars:

- 11:30 PM – 4:30 PM
- 4 **Free** hours of IL State approved CEU's
- 8 additional hours ASPE Approved CEUs.
- Free Lunch and exclusive seminar attendee raffle.

Seminars will include:

- BIM / Revit Overview
- IPC 2009 Code Updates
- Bariatric Plumbing Fixtures
- ADA Requirements
- Water Piping and Thermal Expansion
- Alternate Venting Methods
- VFD and Implications
- Reclaimed Water and Water Reuse



ATTENTION!!
CPD's, PE's & AIA's
GET YOUR FREE CEU'S & 4 HOURS OF IL STATE
APPROVED CEU'S
AT THE FINEST LOCAL SHOW IN THE INDUSTRY!

Over 90 Exhibits with more than 500 Products displayed!
Free Door Prizes, Seminar Attendee Prizes and Giveaways!
Product Show and All Seminars are **FREE**

Note: You must register at the show in order to get CEU's.
For additional information, contact Frank Sanchez at (847) 328.3555 Ext. 251,
or e-mail to fxs@grummanbutkus.com

38th Annual ASPE Chicago Chapter Product Show and Technical Seminars

Thursday, April 16 2009 - White Eagle Restaurant - Niles, IL 11:30 am to 4:30 PM

ROOM 1

2009 International Plumbing Code Updates **Presented by Fred Grable, P.E. of ICC, Codes and Standards Department**

11:30 am -12:30 pm (1.0 hour)

Fred Grable, ICC Staff Engineer and former master plumber, brings extensive experience as both a plumbing contractor and engineer. He has nearly two decades of experience as an engineer for an industrial pressure piping manufacturer and in wastewater treatment equipment field services.

Fred will review the significant changes between the 2006 IPC and the 2009 IPC. He will cover items in Chapters 2 through 11, Definitions, Regulations, Fixtures, Water Heaters, Water Distribution, Sanitary Drainage, Indirect Waste, Vents, traps and interceptors and Storm Drainage. Make sure you bring your IPC copy and take plenty of notes.

Bariatric Fixture System Performance and Design Considerations **Presented by Pat McQuillan, of Zurn Engineered Water Solutions**

12:45 am - 1:45 pm (1.0 hour)

Pat McQuillan is the sales and marketing Manager for Strategic Accounts at Zurn Engineered Water Solutions. Pat has worked at Zurn for eight years and has been in the HVACR and plumbing industry for 20 years. Pat has a BSME from the University of Michigan, Ann Arbor, MI and an MBA from DePaul University, Chicago, IL.

This presentation gives those involved with healthcare building design insight on the capabilities and limits of bariatric fixture systems. Special consideration will be given to the design and retrofitting of bariatric patient rooms and some of the common design practices seen throughout the United States.

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Reclaimed Water and Water Reuse - Latest Requirements

Presented by: Julius Ballanco of JB Engineering

2:00 pm - 3:15 pm (1.0 hour)

Julius is well known throughout the country as one of the most knowledgeable experts in the plumbing industry. He is President of JBA, a renowned engineering and consulting firm in Indiana and current ASPE National President.

Before developing any reclaimed water or water use system, it is important for the plumbing engineer to understand the latest requirements regulating these reclaimed water and water reused systems. Within the past year, new documents have been published regarding the requirements for reclaimed water and water reuse systems. This program will review the new requirements and discuss how this will impact the design of these systems. Included will be a discussion of systems that have gained approval of the new requirements.

BIM / Revit: Plumbing Engineering and Construction Coordination

Presented by: CADworks

3:30 am - 4:30 pm (1.0 hour)

CADworks has provided services and products to architectural and engineering firms, and to the AEC industry at large, for two decades. They bring this resultant success forward through the evolution of Computer Aided Design to Building Information Modeling.

CADworks will address a spectrum of topics related to the innovative Building Information Management Software (BIM). They will provide an overview of Revit is how it is applied to Plumbing Engineering and construction coordination. Through the use of innovative technology, BIM strives for better MEP engineering and a better built environment. There will be tons of supporting visuals. Please note that this is an overview class and not a hands-on presentation.

ROOM 2

**** Illinois State Plumbers Continuing Education credits are available for these seminars only ****

Water Piping and Thermal Expansion

Jim Richter of The Metraflex Company

11:30 am -12:30 pm (1.0 hour)

In the 29 years Jim Richter has been working for a manufacturer of expansion joints, check valves and flexible pump connectors, he is constantly surprised by ways to make mistakes in the design and application of these products. There is nothing like a lawsuit to further your knowledge of and explore the limits of product performance. Jim has a number of patents for products used in the industry, as well as many inventions no one needs.

Jim will discuss the effects of hot water expansion on plumbing systems and what items can be incorporated into plumbing hot water systems to protect piping, equipment and installations. Jim will touch on seismic requirements and will discuss mechanical expansion joints and couplings and convention pipe expansion loops.

Alternate Venting Methods- Common Plumbing Errors and Mistakes

Presented by: George B. Swietczak

Plumbing Inspector for the Village of Villa Park, IL

12:45 am - 1:45 pm (1.0 hour)

George started in the plumbing industry as a Local 130 apprentice in 1968, becoming a journeyman in 1971. In 1990 I was chosen by Local 130 and The United Association and The US Department of Labor to lead the instruction of Poland's Solidarity Plumbing Instructors. He is also a plumbing program instructor for the Associated Building Contractors Association since 1992, having taught each and every level I thru IV. Ninety nine percent of the students from his classes have received their plumber's licenses on their first attempt.

The seminar will address the common problems that George has witnessed in his capacity as a plumbing inspector. He will discuss incorrect piping installations on both plans he reviews and installations he inspects. George will provide insight into common code violations that can be avoided with proper knowledge of the Illinois Plumbing Code guidelines.

Booster Pumps- Variable Speed drives and Their Implications on Booster Pumps

Presented by Victor Rilling of Advanced Mechanical Technologies

2:00 pm - 3:15 pm (1.0 hour)

Victor Rilling is president of Advanced Mechanical Technologies located in Phoenix Arizona. Victor has been active in the plumbing and HVAC industry since 1995 and has owned his own manufactures representative firm the mechanical room since 1999. It has since grown into the Advanced Mechanical Technologies a company that manufactures it own plumbing and HVAC packed equipment. Variable Speed drives have become common place in booster pumps and in fact have become the standard. As the pump drives have been updated, this has had an effect on the overall pumping system. He will cover why hydro-pneumatic tanks may no longer required and the amount of start stop cycles that the motors see and the effect this has on the system.

Commercial Plumbing Fixtures and Trim Selection Criteria

Presented by Jeremy Cantor- Delta Faucet Company

3:30 am - 4:30 pm (1.0 hour)

Jeremy Cantor has working been in the plumbing industry for the past three years. He is currently Delta Faucet Company Manager for the Chicago Area, working closely with Architects and Engineers.

The following presentation will explore commercial products for plumbing. This presentation will demonstrate what to look for when specifying commercial grade fixtures. Topic areas will included standards fixtures and trim as well as electronics, water conserving, and healthcare related product. The overall intention of this presentation will be to ensure that the specifying community has a better understanding for commercial grade plumbing fixtures.

ROOM 3

Accessibility Seminar: Codes and Requirements

Ron Grabski of One Source Mfg Reps

11:30 am -12:30 pm (1.0 hour)

Ron has been in the Plumbing Industry for 30 years and possesses a B.S. in Business from Eastern Illinois University and an MBA from the Keller Graduate School of Business in Chicago (1983). He is currently a manufacturers' representative and a consultant to the industry with numerous publications. Ron has served on the Exhibitor's Board for ASPE and has been Chairman of the Fixtures Committed for the Plumbing Manufacturer's Institute.

This seminar will address the changing demographics of the ageing population and how it affects a variety of codes, regulations and requirements. It will cover what specifying engineers need to know about accessibility requirements in senior citizen housing, hospitals and retirement facilities.

Chemical Waste Systems and Tanks

Presented by: Charlie Ismert of Shier Products

12:45 am - 1:45 pm (1.0 hour)

Charlie Ismert is the Sales & Marketing Manager with Shier Products (New Berlin, Wisconsin). Charlie graduated from the University of Kansas Journalism School with a degree in Strategic (Marketing) Communications. He has been with Shier Products for over five years. Since 1972, Shier Products has been pioneering plumbing and wastewater products for drain line purity. Family-owned and operated, Shier manufactures a quality line of grease interceptors, oil separators, solids interceptors, chemical waste tanks and stainless steel floor drains.

Charlie will explain when and why do we need Chemical Waste Tanks, the importance of pH, compare dilution vs. neutralization and will cover limestone neutralization. He will analyze Central vs. local installation, materials, sizing, cover options, venting and maintenance of chemical waste systems. Also, we will cover alternative applications, like neutralizations systems and decontaminations holding tanks

Steam Fired Water Heaters: Controls and Applications

Presented by Norm Marshall of Patterson-Kelley

2:00 pm - 3:15 pm (1.0 hour)

PK pioneered the concept of semi-instantaneous water heaters over 50 years ago, and continues to evolve and refine its models, which focus on a small heater that produces high hot water output at a closely controlled temperature.

This seminar will cover storage-free water heaters; since there is no storage tank, standby heat loss is minimized and floor space is reduced significantly. This can become handy when designing a mechanical room, and utilize that space for more profitable purposes.

Bob will talk about different applications and requirements for semi-instantaneous water heaters and will analyze the different controls available. He will compare 1/3-2/3 valves vs. the fully modulating control ones and will explain its appropriate applications on HVAC and Domestic Hot Water Systems.

Fire Protection Systems

Presented by: To be announced

3:30 am - 4:30 pm (1.0 hour)

Lunch will be provided AT NO COST to those seminar attendees who stay for all four seminar sessions AND the Product Show. Also, you will receive a free raffle ticket. Last year we gave away a \$300 GPS System. No purchase necessary but must be present to win.

FEBRUARY 2009 MEETING ATTENDANCE

The following list of individuals attended the February 2009 meeting of the ASPE Chicago Chapter. In accordance with ASPE Society policy, these individuals are entitled to 0.75 RU's towards the required 24 RU's needed every two years to maintain CPD registration. Meeting attendance is also recognized by the Illinois Department of Professional Regulation to count as 1 PDH towards the required 30 PDH's needed every two years to renew Professional Engineering licenses.

Sean Allard	Raul Diaz	Mark Loth	Wayne Robinson
Tom Babcock	Jim Feeney	Greg Luczak	Vince Rodriguez
Brian Berg	Joe Ficek	Mark Mannarelli	Ben Rubach
Scott Baron	Jerry Fields	Nevo Martelli	Marat Sagalchik
Phil Blazic	Otton Finiewicz	Brian Mazzocchi	Frank Sanchez
Shawn Block	Randy Fiorito	Shawn McAuliffe	Chris Sbarbaro
Rick Butler	Jay Fleishman	Joe McCleery	Keith Seier
Sergio Cano	Tony Garcia Jr.	Jason McDonald	Bruce Shegarfi
Jeremy Cantor	John Geiger	Michael J. McGann	Dick Simms
Brian Carlos	George Gonzalez	Scott Milne	Kent Swanson
Mike Castellano	Steve Gremer	Greg Nagrant	Brandon Taylor
Kathryn Ciuffini	Faranz Hakiman	John Nieman	Luka Ulicevic
Jeff Cochran	Lew Hamilton	Zoya Oberfeld	Mike VandenBergh
Manuel Cordero	Brian Hank	Jim O'Neil	Scott Voelkenberg
Dan Courtney	Berit Herdman	George Pagach	Gbain Voker
Mike Cusack	Tom Higgins	Daniel I. Patt	Bruce Weiss
Ken Cutler	Herb Hymen	Howard Pawlak	Lyndsay Whitfield
Mike Cwanek	Mike Karnatz	Joel Pedigo	Dave Wick
Bob Dahlmann	E.J. Kedzie	Bob Pikula	Chris Wisinski
Natalia Dankanich	Richard Klaess	Mike Ponx	Mel Withrow
Ralph Dantino	Val Kurdaliev	Larry Raddatz	Wayne Zibell
Dave DeBord	Terry LeBeau	Rich Ransford	
Jeff Detemple	Lindsey Lehman	Don Rasmussen	
Jamie Diamond	Ed Lichner	Dennis Richards	

This printing constitutes our record of who was in attendance. We apologize for any misspelling of names and ask that for future sign-ins, please print legibly. Thank You!

GREETINGS FROM YOUR ADMIN SECRETARY!



As usual, I would like to introduce winners of the February meeting. Brandon Taylor of Primera Engineering won a free dinner and Ed Kedzie, recently retired from UIC, was the 50/50 raffle winner. Last month Ed won a free dinner (we have a double winner again). And some people do not believe in winning twice, but it's really happening; so, just keep trying. By participating in the raffle, you benefit while you help others. Congratulations guys!

Best regards,

Natalia Dankanich, Administrative Secretary
nkd@grummanbutkus.com; 847 328.3555 x208

FELLOW AFFILIATES



The Chicago ASPE Chapter Product Show is less than 2 months away - Thursday April 16. Please get your booth space requirements in ASAP. You want to make sure that your space is available as there are several newcomers who have already reserved space.

If you have not received your application and would like to display, please contact me and I will see that you get one.

Thank you,

Richard Simms, Affiliate Liaison
dsimms@deery-pardue.com; 630 350.7575



WELCOME TO THE FOLLOWING NEW MEMBERS!!

Kathryn Ciuffini	Alejandro DeAguilar	Brett McQuillan
Ernest Havran	Andrew Grabowski	Ben Obenauf
Aris Avanesian	Rostislav Kucher	William Patterman
Scott Baron	Ali Nasir	Amanda Pidgeon
Jeff Bernaeyge	Daniela Kurdaliev	Aubrey VanderHeyden

Have a great Water Day!

Rick Butler, Vice President Membership
rick@luczak.com; 847 781.5100



NEW ASPE PUBLICATION

I recently received an important mailing – the *Plumbing Engineering Design Handbook, Volume 4*. The handbook development was chaired by our Newsletter Editor and Past President Jason McDonald.

Contributors were Past President Joe Ficek and our Board members David DeBord, Bruce Weiss and Frank Sanchez. Chapter members also contributing were Mark Kaulas, Tom Wilson, Jason Geller, Dennis Richards, Mark Stickney and Jodie Sherven. Steven Skattebo of the Wisconsin Chapter and Max Weiss of Jay R. Smith Co. also contributed. Other contributors include Mike Gauthier and Greg Ay-mong of Highland Tank and many others whose names did not appear in the book but helped substantially.

The handbook, titled *Plumbing Components and Equipment*, consists of 14 chapters and is an excellent volume.

Don Johnson, Chapter Historian

MAY ELECTIONS WILL BE HERE IN NO TIME!

This is the second appearance of this article. Sure, we changed the title and some of the text to try to make you think it is brand new!! Elections will be held at the May ASPE Chicago meeting and EVERYTHING is open!! This is a perfect opportunity for you to get more involved with the Chapter. If there is a direction you would like to see the Chapter take or if you have some ideas that you think could make our Chapter stronger, THIS is the way to do it – get on the Board of Directors!! Officer positions (Board of Directors) available are:

- **President**
- **Vice President Technical**
- **Vice President Legislative**
- **Vice President Membership**
- **Treasurer**
- **Administrative Secretary**
- **Corresponding Secretary**

Also open right now for the 2009-2010 (and 2010-2011) ASPE Chicago season, is **Newsletter Editor**. If you are creative and have fun correcting other people's spelling and grammar, this is the job for you! I have LOVED being Newsletter Editor (yeah, really) and may even offer to take it back over in a couple years. But, for 2009-2011, I am not expecting to have the time to work on it. Honestly, the time involved is about 6 hours per month. It's not too much of a time commitment.

A new position being considered for 2009-2010 is **Chapter Social Coordinator**. This person will be responsible for organizing and coordinating Chapter social events and activities like the Ride to the Rock. He/she will also be involved, probably in a liaison level, with events chaired by others like Booster Night, CPD Review class, Product Show, Chapter Anniversary parties and Symposia/Conventions.

If you are interested in running for any Officer position or would like to become the next Newsletter Editor or Social Coordinator, please contact David DeBord at ddebord@esdesign.com as soon as possible.

Jason McDonald, Newsletter Editor
jsm@grummanbutkus.com; 847 328.3555 x204



CORRESPONDING STUFF

38th Annual ASPE Chicago Chapter Product Show

Thursday, April 16th, 2009

WHITE EAGLE RESTAURANT; 6839 Milwaukee Avenue, Niles, Illinois; 847 647.0660

Show Hours: • 3:30 PM – 8:00 PM

Free Lunch Provided During Technical Seminars

Buffet Dinner Available (\$25, Optional) • 5:45pm – 7:00pm

Free Technical Seminars • 11:30pm – 4:30pm • 4 Free hours of IL State approved CEU's • 8 additional hours ASPE Approved CEUs. • Free Lunch and exclusive seminar attendee raffle.

Seminars will include • Green Technologies for Plumbing Engineers • IL State Plumbing Code Seminars • Special Systems • Medical Gas Systems • Fire Protection • and much more!!!

Note: You must register at the show in order to get CEU's. For additional information, contact Frank Sanchez at (847) 328.3555 Ext. 251, or e-mail to fxs@grummanbutkus.com

IFPA/SFPE; www.chicagosfpe.org / www.ifpanet.org

9th Annual Combined Fire Prevention Show

Tuesday March 24, 2009, 4pm – 8pm

White Eagle Banquets and Restaurant; 6839 N. Milwaukee; Niles, IL; 847 647.0660

Admission is FREE – Cafeteria Style Dinner \$30 – Cash Bar

** Purchase tickets in advance or at the door. IFPA members can check in at the door for their dinner tickets (paid as part of their annual dues).

One of the largest exhibitions of products services and related industrial components of the Fire Protection industry in the Chicagoland area. They expect to have more than 50 exhibitors. Manufacturers, Fabricators, Distributors, Insurance Organizations, Engineering Companies and Fire Prevention Associations will exhibit the cutting edge of fire products, services and information.

Two classes for CEU or Professional Development prior to the show. These classes will run consecutively and go from 3:15 to 4:15 PM for the 1st sitting and 4:30 to 5:30 PM for the 2nd sitting allowing participants ample time to visit the show and have dinner.

The classes will be:

- **Overview & Results on Testing Conducted on High Volume Low Speed Fans**, presented by Pete Willse from XL GAPS
- **NFPA 3, The Commissioning and Integrated Testing of Fire and Life Safety Systems**, presented by Cecil Bilbo

The class size is limited, so register early. Please fill in the names of those that will be attending and check the box of the class the wish to attend.

For more information contact Scott Sandfox at 847-524-8250

ILPHCC; www.ilphcc.org

ILPHCC Expo (The State Plumbing Show)

Friday March 20, 2009; noon-6pm

Drury Lane Conference Center, Oak Brook, IL

WQA Aquatech USA – The Water Opportunity Show; www.wqa-aquatech.com

Conference - March 17-21, 2009; **Exhibition** – March 18-20, 2009

Donald A. Stephens Convention Center; Rosemont, IL

This is a show for those interested in or involved in water treatment. There are seminars and around 200 exhibitors (as of 10/31/08). Register by 2/19/09 and save some money. You can register online at www.wqa-aquatech.com, fax WQA Aquatech USA at 630 505.9637 or mail WQA Aquatech USA, 4151 Naperville Road; Lisle, IL 60532.

Jerry Fields; Corresponding Secretary

jerry@luczak.com; 847 781.5100

WORLD WATER DAY- MARCH 22

“When the well’s dry, we know the worth of water.” – Benjamin Franklin.

“And we know the importance of our jobs in the plumbing industry” – Rick Butler.

We all take water for granted even though there is an increased level of saving water in the U.S. with LEED and GREEN initiatives. Most water concerns throughout the world are for simple survival. Every day, more than 6,000 people die from water-related illnesses!

The reason I bring this up? Well, ASPE Chicago is helping out with its dinner raffles. At the last few meetings, the 50/50 raffle proceeds have been going to a group called “Water for People”. They take on the water challenge in a unique way. Instead of just supplying water to developing countries, they teach the local communities water access, sanitation, and safety. This makes the solution long term, and “SUSTAINABLE” (one of the new buzz words in our industry). Some examples of projects Water for People initiate:

- Stand Pipes
- Pit Latrines
- Storage Tanks
- Laundry Stations
- Health and Hygiene education
- Showers/Hand washing stations
- Gravity fed water systems
- Solar disinfection
- RAINWATER Collection



Rainwater collection? Hey, that’s a “state-of-the-art” system that many of us are developing for our “GREEN” projects right now. How can these third world communities afford rainwater systems?

Here is the spec for the system below; it rains, rain falls on the roof, flows down the roof, is captured in a gutter and flows through a pipe into a 500 gallon cistern near each building.” To ensure safety for the cooking and drinking water, they were taught to boil the water first. Man, we also do that when a local community has problems at their water departments.

Another interesting project was to build a fence across a small river to prevent the collectors from being attacked by crocodiles.

Lack of water also affects these communities in other ways. The search for water takes away from work, child education and family life. One example I found was of a child who had to travel three hours to find water to bring back to their village EVERYDAY. That is six hours away from family and education.

Water for People’s main goal is to increase the number of people receiving sustainable water and sanitation services from 200 to 1,000 people per day by the year 2011. In my opinion, our little part has to help because these are simple low cost solutions. I know it helps, because we received a letter from Water for People, thanking us for our efforts.

Rick Butler, Vice President Membership
rick@luczak.com; 847 781.5100

MEMBERSHIP UPDATES

Remember that if you change companies, email addresses, personal information and the like, PLEASE contact your VP Membership Rick Butler ASAP (rick@luczak.com or 847 781.5100). This will ensure that you keep getting your ASPE mailings and that your directory information will be accurate. Thanks!



6666 W. Quincy Avenue • Denver, CO 80235 • U.S.A.
303.734.3490 • 303.734.3499 Fax • www.waterforpeople.org

January 30, 2009

Mr. Mark Mannarelli
American Society of Plumbing Eng.
175 W. Jackson Blvd Ste 1400
Chicago, IL 60604

Dear Mr. Mannarelli:

Thank you for your generous contribution of \$200.00 to Water For People. Your support is making a life-changing difference for thousands of less fortunate people. Simply gaining access to safe drinking water and sanitation can help people take the first step out of poverty. Lives can be saved. Health can be restored. Children can go to school. Women can work. And new doors can be opened that lead away from poverty and into a future of hope. You make it possible.

For 17 years, Water For People has been helping in developing countries by supporting the development of locally sustainable drinking water resources, sanitation facilities, and hygiene education programs. Since its inception, Water For People has been building its capacity to reach more people in more countries to make a truly meaningful impact on the global water crisis.

In 2007, Water For People and its partners provided access to safe drinking water and improved sanitation facilities for 188 communities, more than doubling our impact in 2006. Because of your support, in 2007 alone, 108,755 more people now have safe water, adequate sanitation, and hope for a better future. At the same time, Water For People continues to improve its functional allocation of resources, keeping overhead costs to a minimum. An impressive 83% of revenue generated in 2007 was directed to supporting our international programs.

If you have questions regarding your gift or wish to learn about other ways in which you can become involved with Water For People, please contact Jessica Kelley at 720-488-4589. Again, thank you for being part of the mission of Water For People.

Best regards,

Edward D. Breslin
Acting Chief Executive Officer

This letter serves as your receipt for tax purposes. Water For People is a 501(c)(3) nonprofit organization and provided you with no goods or services for your gift of \$200.00 on 1/23/2009.

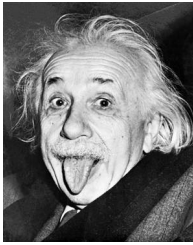


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Denver Water

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Water For People



"I should've been
a plumber."
- Albert Einstein

AS I KNOW IT - REVIEW OF BASIC WATER PIPE SIZING

The first thing we need to know is that the basic tools that we use to size water supply piping are generally oversized. That's good because some of us are under-sizing our water piping!

Over sizing **waste** piping can actually **interfere with proper drainage**.

Over sizing **water** piping is basically just **wasting money and energy**.

It will still "work", but that doesn't make it right!

Hunter's Curve is used to predict the probability of simultaneous usage of the fixtures. His studies were based on people as they lived eighty years ago. These studies were also based on fixtures that used much more water than today's reduced-flow fixtures. Things have changed. It doesn't totally invalidate the data, but it is something that we continue to reevaluate. The accuracy of Hunter's curve has come into question and results utilizing the curve have proven to be as much as 100% inflated in some cases. **It is most accurate for pipe sizes over 2" and velocities less than 10 FPS.**

Let's review the basic sizing procedure:

We **"always"** add FU's, NOT GPM! That is because most of our loads are **non-continuous** loads. Demands for **cooling towers** and other equipment with **continuous or semi-continuous** loads **must be included as GPM**.

We add up all of the fixture units and then we assign the GPM to each pipe segment.

GENERALLY, we limit our velocity to 5 FPS.

We do this to protect the interior of the piping from erosion as well as to reduce the stress on the fittings. This is considered when we are sizing the booster pumps and the domestic water main. This is **USUALLY** going to be about 3 PSI per 100 feet of piping. The general range is from about 2 to 5 PSI. Since we account for this in our "system" calculations, we should know what that number is and we probably expect it to be around 3 PSI. We should always calculate the system to see what we have available for friction loss and size our piping accordingly. Sometimes we will be in a position of having 2 PSI or less available and our pipe sizes may need to be increased over what they would be if we had more PSI available.

Go to the **ASPE Pipe Sizing Data** charts in **PEDH Volume 2**:

Look for the GPM on the flow side of the chart.

Follow that line over to the intersection of either the velocity or allowable friction loss, whichever comes first.

We will see a line with a size over it.

Everything below that line will be that pipe size.

Disregard 3½" piping. We don't use this size anymore.

As simple as this sounds, a lot of people will be looking **ABOVE** the line instead of **BELOW** the line.

EXAMPLE: (copper pipe)

In this example, we see that at **4.6 FPS**, the pressure lost to friction is **5 PSI/100 FT**.

But at **7.95 FPS**, the pressure loss is **13.7 PSI/100 FT**.

And at **9.94 FPS**, The loss increases to **20.8 PSI/100 FT**!

This is where we are **SAVED** by **OVERSIZED** data because this entire system would be **under-sized** by one pipe size! That increases the velocity, which increases the pressure drop. The piping is stressed by the increased velocity and the increased pressure drop may prevent us from providing sufficient pressure to some of the fixtures!



***Note that the tables in the ASPE Tables Book (we still have about 20 available!) are useful for checking the impact of this condition.**

Moral of this story: Don't cross that line!

David DeBord, CPD LEED AP; President
ddebord@esdesign.com; 312 456.2359

Flow Rate	Type L ID=	0.785
(gpm)	Velocity	Press Loss
	(ft/sec)	(psi/100')
5.00	3.31	2.7192
6.00	3.98	3.8101
7.00	4.64	5.0674
8.00	5.30	6.4874
9.00	5.97	8.0668
10.00	6.63	9.8029
11.00	7.29	11.6931
12.00	7.95	13.7353
13.00	8.62	15.9276
14.00	9.28	18.2680
15.00	9.94	20.7550
16.00	10.61	23.3871

2008-2009 ASPE Chicago Chapter Meeting Schedule

DATE	PRIMER	TECHNICAL PRESENTATION	LOCATION
September 18	Zero Power Fixtures; Repco Associates	Plumbing Fixtures and LEED; Kohler Company	<i>LaVilla 3638 N Pulaski Chicago</i>
October 16	Water Heater Controls; Luczak Sales	High Efficiency Water Heaters - When is the Proper Application?	<i>The Parthenon 314 S Halsted Chicago</i>
November 20	Medical Gas Inlets/Outlets; Ohio Medical	Booster Pumps - Variable Speed Drives and their Implications on Booster Pumps; Advanced Mechanical Technologies	<i>Rosewood Restaurant 9421 Higgins Rosemont, IL</i>
December 18	Booster Night; <i>Special Entertainment</i>		<i>LaVilla 3638 N Pulaski Chicago</i>
January 15	Acid Waste and High Purity Piping; Zurn Acid Waste Piping	Alternative Venting Methods; George Swietczak, Village of Villa Park Plumbing Inspector	<i>Rosewood Restaurant 9421 Higgins Rosemont, IL</i>
February 19	Sprinkler Heads and Cover Plates; Viking	Clean Agent Fire Systems and Proper Room Design; Reliable Fire Equipment	<i>The Parthenon 314 S Halsted Chicago</i>
March 19	Point-of-use Water Heaters; Chronometer & Deery-Pardue	Solar Water Heating; Bornquist	<i>LaVilla 3638 N Pulaski Chicago</i>
April 16	Technical Seminars	38th Annual ASPE Chicago Product Show	<i>White Eagle 6839 Milwaukee Ave Niles</i>
May 21	Elections	Vacuum Plumbing Systems; Deery-Pardue	<i>The Parthenon 314 S Halsted Chicago</i>
June 19	Annual ASPE Chicago Golf Outing		<i>Hilldale Golf Club 1625 Ardwick Drive Hoffman Estates</i>
July 18		Ride to the Rock	 <i>Chicagoland to Starved Rock</i>