

Northeast Chapter Thermal Briefs

SEPTEMBER 2014

OCTOBER MEETING TUESDAY, OCTOBER 21, 2014

3D Laser Scanning & BIM

Presenter: Darren J. Hardy, Senior Vice President of WSP

1 PDH credit pending review!

12:00pm – Luncheon and Presentation Italian American Community Center, Washington Ave Ext

Members \$30 (\$40 with PDH)

Non-Members \$35 (\$45 with PDH)

YEA Members \$20

Students \$15

RSVP to Tim Houle no later than Thursday, October 16th

Thoule@advancedcomfortsys.com or 518-844-8444 x3439

Synopsis

3D laser scanning provides a cost-effective method of surveying existing buildings and buildings under construction. Data captured ranges from the basic structural components to the finest detail, both inside and out. Data provides a snapshot in time which can be used for design or comparison in regards to facility upgrades, build-outs, renovations and restoration. Digital photos can be overlaid for added realism. WSP's accurate 3D laser scanning data can be integrated into Building Information Modeling (BIM) programs, adding value throughout the entire projects life cycle - from planning to design to construction to asset management.

Speaker Biography

Mr. Darren Hardy is multiple state licensed survey professional whose survey career spans 20+ years: Bachelor of Science in Survey Engineering, University of New Brunswick. Significant amount of experience in conducting surveys for documenting existing conditions in a variety of facilities including healthcare facilities within the Greater New York Area.Worked for clients such as Google, Mass General Hospital and Genzyme and understands the complex nature of working within healthcare facilities. Overseen the Geospatial group at WSP for 15 years and been instrumental leading the education and introduction of 3D Laser Scanning to facility management groups by demonstrating the benefits of using this technology for facility improvement and renovation projects.

Inside This Issue:

Monthly Meeting

Messages From 2-9 The Officers

1

Golf recap 10
Society News 11-14

Chapter officers 15 BOG

Statements made in this publication are not expressions of the Society or of the chapter and may not be reproduced without special permission of the chapter.



Message from the President

Summer is over and the fall season is upon us, the change in season also brings upon us the start of our ASHRAE year. I would like to thank the membership and nominating committee for providing me the opportunity to progress through the chairs and to serve as President. I am truly grateful and will do my best to serve the Chapter and the membership.

As always we held our Annual Golf Tournament in September; mother nature provided us a beautiful day for golf, we had approximately 100 golfers and dinner guests, the event is our major fundraiser for the chapter and again proved to be very successful. Special thanks to Dan Williams (President Elect), Erick Moser (Vice President), Chris Schmidt (RP Chair) and David Houle (Treasurer) - these guys did a great job at putting this event together and making it successful. In addition, I want to thank all those that participated, purchased tee flags and provided door prizes, your continued generosity and support is appreciated.

Our scheduled monthly meetings and education sessions will start in October. One of my goals for the Chapter this year is to increase our attendance at our meetings. I understand that time is something we all value and never seem to have enough to accomplish what we need to in our professional and personal lives. Our meetings and events must have a value to the members; if we fail at providing this our attendance will suffer. Please send me any suggestions of what you would like to see in terms of education and events, all of us on the leadership team will do our best to make this year, valuable, informative and last but not least fun!

I look forward to meeting all our members this year so please attend our meetings, tours and events.

Sincerely Doug Belokopitsky Chapter President.



Message from Historian

The Bi State Chapter hosted the Chapters Regional Conference (CRC) August 14 - 16 in Tarrytown, NY. The Northeast Chapter sent several of the Officers and Committee Chairs to attend the conference.

The following awards and certificates were presented:

Dave Ricci – Runner-up in Student Activities Doug Belokopitsky – received the Outstanding Performance in Chapter Program Stan Westhoff received a History Gold Ribbon for the history of Cara Martin Chris Schmidt received the Scholarship Patch, Full Circle Chevron and Achievement Certificate for exceeding chapter goal \$9,617 as the Chapter Research Promotion Chair

Look for information as it becomes available for the Chapter History meeting.

Submitted by Chapter Historian,

Stan Westhoff





Message from Membership



WE WANT YOU!

Message from Refrigeration

Recently, Danfoss and Siemens sponsored a web cast entitled "HVAC: New Chiller Requirements". It was put on by CONSULTING – SPECIFYING ENGINEER Journal.

It explained how to understand the ASHRAE Standard 90.1 2010 addendum ch and the new requirement for testing, commissioning, and rating chillers.

These new chiller requirements are to increase the efficiency of chillers. It reviewed AHRI 550/590 – 2011 and briefly discussed the new AHRI 551/591 test standard.

It reviewed the testing parameters and showed calculations of the Path A and Path B chiller calculations to determine the full load performance and the IPLV and non-standard NPLV of the chiller. These calculations will need to be done by engineers selecting chillers for projects and will go into effect January 1, 2015....

The webcast is still available on https://event.webcasts.com/starthere.jsp?ei=1040620

HAPPY VIEWING!

Ray Hickey - Refrigeration Chair



Message from Research Promotion

I would like to thank those that sponsored holes for the recent annual chapter golf outing this year. We set a new record for funds raised! Many were from continued sponsors but we also had some new sponsors this year which is great. From the hole sponsorships we raised \$5,125. We raised an additional \$526 between the mulligans, 50/50, and golf club raffles. Thanks to all of you who contributed in one way or another. With this total of \$5,651 we have a great start to this year's fundraising goal for Research Promotion. However, do not let that stop you from contributing more – if you would like to make a donation to RP please contact me at <u>cschmidt@b2qassociates.com</u>. For further information on ASHRAE Research and the work your contributions support please visit: <u>https://www.ashrae.org/standards-research--technology/research-promotion</u>. Here you can contribute and learn about current and past ASHRAE Research projects.

2014 Chapter Golf Outing Tee Flag Sponsors

Advanced Comfort Systems Alltek Energy Systems American Energy Care B2Q Associates, Inc. Blake Equipment **Buckley** Associates Eastern Heating & Cooling EDM NY Architecture & Engineering PC EDOS Manufacturers Reps, Inc Emerson Swan FPI Mechanical Inc. F. P. Langley Company F. W. Webb Johnson Controls kW Mission Critical Engineering L. J. Early Company M & W Group National Grid Northeast HVAC Solutions - Loren Cook Northeast HVAC Solutions - Marley Northeast HVAC Solutions - Ruskin Northeast HVAC Solutions - Titus Northeast HVAC Solutions - Armstrong R. F. Peck R. P. Fedder **RJ** Murray RL Kistler Sage Engineering SSOE (formerly Evergreen Engineering) Sweeney Rodgers

Tech Valley Engineering Technology Plus – AERCO Technology Plus - ENERVEX Thermal Environment Sales Trane Company Trojan Energy Victaulic (2) Viessmann WMS Sales – Grundfos







Message from Student Activities

Below is a scholarship we offer annually. If you know of any hard working students that could use a break, spread the word!

ASHRAE NORTHEAST CHAPTER SCHOLARSHIP APPLICATION



American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.,

The ASHRAE Northeast Chapter Scholarship Program is designed to encourage and assist in the education of men and women pursuing a career in the field of heating, ventilating, air conditioning and refrigeration (HVAC&R) through its granting of scholarships. The program also serves the public interest by aiding in the education of men and women to become qualified to practice within the HVAC&R field.

Personal Data

Last Name			First Name				Middle Initial		
Student's Address	Home								
City				State		Zip			
E-mail address			Home Phone						
Date of Birth			Citizenship						

Education

High School		H.S. Location		
H.S. Course of Study		Year Graduated H.S.		
College or University		Location		
Major		Cumulative Grade Point Average		
Anticipated College or Uni Graduation Date	versity			
Other School		Location		
Course of Study		Year Graduated		
Anticipated Graduation Da	te			



Education (continued)

List of Engineering/ Technical Courses taken to date (applicant may refer to transcript):

Extra Curricular Activities and Hobbies:

Professional Data (provide a brief resume of your work experience)

Employer	From/To
	Dates
Brief Job	
Description	
Employer	From/To
	Dates
Brief Job	
Description	
Employer	From/To
	Dates
Brief Job	
Description	

Professional Goals

What is your particular interest in a field(s) covered by ASHRAE, and describe one or more ways that the HVAC&R industry affects the lives of people in today's society. (300 words maximum, attach extra pages as required)



References

Please provide a total of two references along with a separate letter of recommendation from either: Professor, Faculty, Business Person or Former Employer.							
Name & Relation		Address		Phone			
Name & Relation		Address		Phone			
Please list any associations with ASHRAE Northeast chapter members.							
Name & Relation		Address		Phone			

Basic Criteria which all Scholarships are granted:

- Full time enrollment in a college, university, or technical institute. Undergraduate students should be entering their sophomore, junior or senior year with at least one full year of studies remaining in the year for which the scholarship is granted. Graduate students can apply at any point during their studies as long as they have at least one full year of studies remaining in the year for which the scholarship is granted.
- 2. Study that is applicable to service in the HVAC&R profession.
- A cumulative grade point average (GPA) of at least 3.0 on a scale where 4.0 is the highest (attach official transcript).
- Association with the region covered by ASHRAE Northeast Chapter (Capital Region) by attendance to a school in the area or permanent address in the area.

I believe all of the above information to be true and complete and I hereby apply to the American Society of Heating Refrigeration and Air-Conditioning Engineers –Northeast Chapter for an ASHRAE Scholarship. I certify that I am not receiving full funding for my education from an employer, any branch of the Armed Services or any other organization.

Signature of Applicant

Date

Mail or email completed application to: Dave Ricci Johnson Controls Inc. 116 Railroad Ave. Albany, NY 12205



518-451-2700

David.e.ricci@jci.com



Message from Newsletter Editor

As this years newsletter editor I'm committed to getting you the most important up to date information ASHRAE has to offer. Keeping the chapter members in tune with inner workings of the Governing body and what happens behind the scenes is important. The more transparent we are the more involved you'll want to be!

I welcome any and all feedback regarding the newsletter from all Chapter members. Please forward your comments, questions, possible newsletter articles, etc. to me at <u>Erick@rpfedder.com</u>

Regards,

Erick Moser VP/Editor

Business Card Ads

We are currently accepting business card advertisements for this

year's newsletters. The cost of a business card ad is \$60.00 per year.

The newsletter is published monthly, September through June (ten

total issues).

Your business card ad will circulate to OVER 200 RECIPIENTS each month!



Interested in placing an ad? Please contact cschmidt@b2qassociates.com

Employment Opportunities

We are currently accepting employment opportunity advertisements

for this year's newsletters. The cost of a business card ad is \$50.00 per

month. Again, the newsletter is distributed to OVER 200

RECIPIENTS each month!

Interested in placing an ad? Please contact me at Erick@rpfedder.com





2014 Chapter Golf Outing Recap

On September 12th, 2014 we held our annual golf outing at a Airway Meadows. Being a new venue we initially shared some concern about the turnout. This was quickly washed away when over 100 golfers arrived to enjoy the atmosphere of the charming course attached to the small airport. I heard some gripes from people commuting south of the twin bridges but also heard praise from those members residing north of the twins. Overall everyone appeared to have a great time. You may not know, but this event alone helps us sustain and run our chapter. Without your support at this event we wouldn't have a chapter at all. **Thank You** and we hope you will continue making the golf outing as successful in future years as well. Special thanks to our tee flag sponsors and our door prize donors all of who were very generous. Special thanks to the golf outing committee.

1st place team: WMS Sales, John Cuddeback, Greg Reed, Dave Legge and John Schwarz 2nd place team: LJ Early, Denis Boyce, Mike DeFilippi, Bryan Lamb, and Kurt Allen

Most Accurate Drive: Josh Chiappone Closest to the Pin: Mike Wenzel

Upon conclusion of the golf outing a couple of items were found and we'd like to get them back to the rightful owners.

1) Callaway club head cover, looks very new



2) Fila brand sun glasses



Contact Erick Moser if these are yours: <u>Erick@rpfedder.com</u>





ASHRAE in the House

ASHRAE in the House: Society Explores Path toward Involvement in Residential

ATLANTA – When it comes to energy, the residential sector consumes a fifth of all the primary energy used by the United States (21 percent) and more than half (54 percent) of all energy used by buildings.

Similar trends are also observed in other parts of the world. For example, in Europe, residential buildings account for 75 percent of the total building stock and are responsible for 26.2 percent of the total European Union final energy consumption in 2012.

Those figures reflect big energy use. They also present big opportunities for sustainability.

From economic, environmental and energy security perspectives, a sector responsible for this much energy consumption requires significant attention, notes Tom Phoenix, ASHRAE president.

Just as importantly, because we typically spend nearly 90 percent of our time indoors and most of that time is in the home, the indoor environments of residential buildings have a very significant impact on health, productivity and comfort. Household air pollution from indoor combustion for cooking and heating is estimated by the World Health Organization to result in over 4 million deaths annually worldwide – nearly 8 percent of the total, predominantly in developing economies.

As such, ASHRAE is exploring its role in residential, looking at how it can contribute most effectively to the improvement of the performance of residential buildings. The Society recently released a report, "ASHRAE and the Residential Construction Market," which contains a series of recommendations to the Board of Directors.

"Our members do work on buildings all day and then go home, failing to effectively bring the best of ASHRAE home with us to improve energy efficiency and indoor air quality," Phoenix said. "

Max Sherman, who chairs the Presidential Ad Hoc Committee on the Residential Construction Market that developed the report, noted that one of the first questions the group explored was "what is residential."

He notes that in the United States, residential is often associated with low-rise, single-family houses. This association is evident in the division in scopes between the International Residential Code and the International Building Code and between the scopes of ASHRAE standards related to indoor air quality and energy. Additionally, mid-rise multifamily construction often seems to fall through the cracks and is not adequately addressed in either current residential or nonresidential standards, he said.

Sherman said the exploration into residential began under the guidance of 2013-14 ASHRAE President Bill Bahnfleth. The committee looked at the importance of the residential sector, what ASHRAE is already doing in the residential sector and how ASHRAE's role is viewed in the residential market. As part of that, a workshop for key stakeholders was held earlier in the year.

Sherman said that their research showed the residential sector is of growing importance.

Studies show there were over 115 million dwellings in the United States (217 million in the European Union) in 2010. The projection is that by 2030 this number will grow to about 141 million in the United States (241 million in the European Union). Given that number is increasing, efficiency needs to increase as well. ASHRAE can play a significant role in the efforts to reduce energy consumption and environmental impact of the global building stock.



ASHRAE in the House

"Over 74 percent of all existing homes in the United States were constructed before 1989—before widespread adoption of model energy codes governing their construction," Sherman said. "More than 40 percent of the European residential buildings have been constructed before the 1960s when energy building regulations were very limited. By almost any measure, most of these homes are likely under-insulated, have poorly performing fenestration, have significant envelope air leakage, need upgrades to all HVAC&R components and delivery systems, and contain outdated and inefficient lighting systems when compared to today's basic energy code minimums. In addition, we need to treat these homes as systems that provide good indoor environmental quality for people. These needs define significant opportunity for energy, carbon, peak power and water savings within the residential sector."

Sherman said the group found that while ASHRAE has extensive and perhaps unmatched technical abilities in the residential area, it is far from the dominant player. He notes the Society's involvement requires not only focusing the efforts of its own volunteers but collaborating with existing stakeholders.

The report contains several recommendations to the ASHRAE Board of Directors. Several recommendations have already been acted upon and the rest have been referred to appropriate bodies in the Society. The report and additional information can be found at <u>www.ashrae.org/residential</u>.

The recommendations are designed to raise the priority of residential activity within the Society by increasing visibility of existing work in that area and by providing additional Society resources for future work. ASHRAE will support residential through actions in the report, including the likely formation of a new standing committee. It also plans to involve more residential stakeholders and include more residential content in its research, programs, standards and publications.

Phoenix said that the move into residential also is part of the Society's newly adopted Strategic Plan under an initiative that addresses ASHRAE's role in the residential sector. The plan notes that ASHRAE will create partnerships and collaboration with key organizations in the residential sector.

"Together we look forward to working with new partners to develop technology, perform research and educate owners, builders and designers to improve the residential built environment," he said.

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 50,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today. More information can be found at <u>www.ashrae.org/news</u>.



ASHRAE Releases Legionellosis Standard for Fourth Public Review Draft

ATLANTA - A fourth version of ASHRAE's proposed legionellosis standard is open for public comment until November 10, 2014.

Standard 188P, *Legionellosis: Risk Management for Building Water Systems*, currently under development, will establish minimum legionellosis risk management requirements for building water systems. The standard is intended for use by building owners and managers and those involved in the design, construction, installation, commissioning, operation, maintenance and service of centralized building water systems and components.

The draft of the document and instructions on submitting comments can be found at <u>www.ashrae.org/</u><u>publicreviews</u>. The proposed standard will be available for access until Nov. 10, 2014.

Changes to the proposed standard since its last public review in January 2013 include:

- Alignment of the document with the revised title, purpose and scope.
- Removal of hazard analysis and critical control points (HACCP) terminology; some of the principles of the HACCP process are consistent with the process utilized in the document.
- Inclusion of a normative appendix for health care facilities meeting specific requirements that provides an alternate compliance path that is more stringent than for other facilities.
- More emphasis on requirements for design, construction, installation, commissioning, operation, maintenance and service.

Tom Watson, chair of the Standard 188P committee, notes that the standard contains both normative sections and appendices that specify what is required to comply. It also contains informative appendices and references as guidance about how to do things that may be necessary for a given building water system.

"Building water systems vary substantially in their design and their capability for transmission of Legionella," Watson said. "Scientific evidence is either lacking or inconclusive in certain aspects of Legionella control. The informative guidance is included to provide suggestions, recommendations and references."

To learn more about actions regarding ASHRAE standards, visit <u>www.ashrae.org/listserv</u>. There, ASHRAE provides subscriptions to a variety of listserves, including one for Standard 188P, that enable interested parties to stay up to date with the latest news, publication offerings, and various other Society activities.

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 50,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today. More information can be found at <u>www.ashrae.org/news</u>.



AHR Expo Returning to Chicago 2015

ATLANTA – Registration is open for ASHRAE's 2015 Winter Conference in Chicago where attendees have the chance to discuss and examine the latest topics in the building industry, network; participate in technical tours; attend ASHRAE Learning Institute courses; earn professional credits; and obtain ASHRAE certifications.

The ASHRAE Conference takes place Jan. 24-28, Palmer House Hilton, while the ASHRAE co-sponsored AHR Expo is held Jan. 26-28, McCormick Place. Complete Conference information and registration can be found at <u>www.ashrae.org/chicago</u>, and Expo information at <u>www.ahrexpo.com</u>.

In keeping with ASHRAE's goal of continuing education, the Conference offers over 200 Professional Development Hours, as well as Continuing Education Units, which can be applied toward a Professional Engineering license.

The Technical Program features more than 100 sessions and 300 speakers over eight tracks: Systems and Equipment; Fundamentals and Applications; Industrial Facilities (new); Large Buildings: Mission Critical Facilities and Applications (new); Energy Efficiency; Life Safety (new); Design of Energy and Water Efficient Systems (new); Hospital Design and Codes (new). Specifically, the program features sessions on cold climate design, tall buildings, hospital and clean room design and data centers.

The ASHRAE Learning Institute (ALI) offers 20 professional development seminars and short courses to stay current on HVAC&R trends. Among them is a new course on Standard 202, *Commissioning Process for Buildings and Systems*, in addition to updates to Standard 90.1, *Energy Standard for Buildings Except Low-Rise Residential Buildings*, and 62.1, *Ventilation for Acceptable Indoor Air Quality*. Training topics include commissioning, energy management, Standard 55, *Thermal Environmental Conditions for Human Occupancy*, energy efficient data centers, healthcare facilities, building energy audits, the coming smart grid and ground source heat pumps. Register at <u>www.ashrae.org/chicagocourses</u>.

Additionally, ASHRAE offers a special administration of all six certifications on Jan. 28: Building Energy Assessment Professional (BEAP); Building Energy Modeling Professional (BEMP); Commissioning Process Management Professional (CPMP); High-Performance Building Design Professional (HBDP); Healthcare Facility Design Professional (HFDP); and Operations & Performance Management Professional (OPMP). Register at www.ashrae.org/certification.

The keynote speaker at the opening Plenary Session is Aron Ralston, adventurer and subject of the film *127 Hours*. In April 2003, during a hike into a remote area of Utah's canyon country in April 2003, Ralston accidentally dislodged a boulder that crushed and pinned his right hand. After six days of entrapment alone, he freed himself with a cheap multi-tool knife and hiked to a miraculous rescue. Since his amputation, Ralston has written an internationally bestselling book, *Between a Rock and a Hard Place*, later turned into a movie nominated for six Oscars.

Also offered are technical tours, which include Walgreens net zero store, a brewery and McCormick Place.

ASHRAE, founded in 1894, is a global society advancing human well-being through sustainable technology for the built environment. The Society and its more than 50,000 members worldwide focus on building systems, energy efficiency, indoor air quality, refrigeration and sustainability. Through research, standards writing, publishing, certification and continuing education, ASHRAE shapes tomorrow's built environment today. More information can be found at <u>www.ashrae.org/news</u>.



Northeast Chapter Officers and Board of Governors 2014-15

Chapter President: President Elect/CTTC/Program Chair: Vice President/ Newsletter Editor: Treasurer: Secretary: Board of Governors Board of Governors: Board of Governors: Board of Governors: Board of Governors: Membership Chair: Student Activities Chair: Research Promotion Chair: **Refrigeration Chair** Historian: YEA: Government Activities: Webmaster/Home Page Editor/ CECC: Douglas Belokopitsky Dan Williams Erick Moser David Houle Adam Feather John Thomas Russ Danforth Greg Kirkpatrick Trevor Gensch Tim Houle Liesl Hammer Dave Ricci Chris Schmidt Ray Hickey Stanley Westhoff Brian Meneghan Open Michael Schwarz

