

NUTMEG NEWS

April, 2010

Volume 37, Issue 8

April Meeting Announcement

Thursday, April 8th, 2010

The Courtyard by Marriott
4 Sebethe Drive, Cromwell, Connecticut

Tech Session Topic: Energy Techniques for Modeling Buildings

Reviewing some of the most common modeling software including EQuest;
Trane Trace; Carrier HAP and others
Jacob Goldman of Energy Tax Savers Inc. Syosset, NY

Dinner Topic: Using Building Energy Modeling for Substantial Tax Incentives

Jacob Goldman of Energy Tax Savers Inc. Syosset, NY

Board of Governors' Meeting: 4:45 pm	Technical Session: 5:00 pm
Attitude Adjustment 6:00 pm	Dinner & Speaker 7:00 pm

Buffet Choices:

Soup:	Creamy Mushroom
Salad:	Mediterranean Orzo Salad
Entrées:	Chicken Picatta; Pasta Primavera with Cream Sauce
Dessert:	Chef's Choice
	Coffee, tea, and decaffeinated coffee.

Note: *Please call in your reservations to reserve a seat!*

Cost: (With Reservations) Members: **\$30**; Non-members: **\$35**; Students: **\$8**

Cost of Meal without Reservations: (Members/non Members) **\$40**

Please make your reservations by Mon. Apr. 5th: Michelle.LeMoine@uinet.com or fax: (203) 499-2800
Late Reservations have a financial impact on the Chapter, and may not guarantee meal availability.

Coming in May: **Presidents' and History Night with a special presentation by**
John Mandyck of Carrier Corporation

CONNECTICUT CHAPTER OFFICERS

OFFICE		TELEPHONE	FAX
President:	Philip B. Knowlton, P.E.	(860) 342-3970	(860) 342-5246
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Research Promotion:	Matt Mullen	(860) 870-2250	(866) 446-9499
Student Activities:	Matt Owens	(860) 731-4797	(860) 731-4834
Publicity:	Dave Jackson	(860) 646-2469	
Refrigeration:	To Be Announced		
Technology:	To Be Announced		
Honors & Awards:	Barry M. McGuinness	(860) 666-0555	(860) 666-3035
Reception:	Michelle LeMoine	(203) 499-5828	(203) 499-2800
Chapter Historian:	Julie Williams	(203) 756-2749	
Special Events:	Michael G. Skoldberg	(203) 375-6482	(203) 381-9506
Sponsorship:	Roberta Rocchetti	(860) 933-8603	
Golf Outing:	Barry M. McGuinness	(860) 666-0555	(860) 666-3035
Newsletter Editor:	Julie Williams	(203) 756-2749	
Web Site Editor:	Roberta Rocchetti	(860) 933-8603	

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www.ctashrae.org

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Technology Transfer

*by Ed Gutowski, PE, LEED AP
CTTC Chair & President Elect*

Note: This month's article was written by Jacob Goldman (with Charles Goulding) who will be speaking at the April Tech session and Dinner Meeting.

Using Building Energy Modeling for Substantial Tax Incentives

by Jacob Goldman and Charles Goulding

The Energy Policy Act (EPA) Section 179(D) tax provisions enable Connecticut property owners to achieve tax deductions based on building energy simulation modeling, supporting prescribed energy cost reductions surpassing ASHRAE 2001. Examples of the potential savings are presented in the following table:

Potential Tax Savings for 100,000 sq.ft. Building

	Immediate Tax Deduction
Whole Building	\$180,000
Individual System Approach	
Lighting	\$60,000
HVAC	\$60,000
Building Envelope	\$60,000

Lighting only projects can obtain the tax incentive either by a simpler watts per square foot calculation approach or by modeling.

The only way to achieve the large tax deductions available for HVAC and the building envelope or to achieve multiple tax deductions simultaneously is by modeling.

Connecticut property owners in particular, have large tax incentive opportunities because:

1. Connecticut has many LEED buildings where large tax deduction are more probable
2. The Connecticut utilities are offering 40% rebates for fluorescent lighting and 50% for LED and induction which makes it much easier to qualify for multiple tax deductions.
3. Connecticut has many heat only warehouses where multiple large tax deductions are very achievable.
4. Connecticut has many apartment complexes where multiple large tax deduction are very achievable.
5. Connecticut HVAC suppliers are providing many of the tax eligible installations including geothermal, thermal storage and ERV.

Continued on next page

To achieve the modeling based tax deductions the facility must be modeled in IRS approved software and follow a tax based modeling methodology. This technique will be covered during the April 8th Tech section.

Property owners wishing to pursue these tax opportunities should consider using tax professionals familiar with the IRS requirements. The Energy Policy Act (EPAAct) Section 179(D) tax provisions will be discussed during the April 8th Dinner Meeting.

Sponsorship Program & Website News

by Roberta Rocchetti

The Chapter would like to thank Connecticut Temperature Controls for their sponsorship of April's monthly flyer. We want to thank **WWRothmann** Company for sponsoring the wine and the cheese tray at the March outing. April's sponsor for the cheese tray is the **Connecticut Energy Efficiency Fund**.

This month you will see a new web page added to the website titled employment opportunities. Members who are seeking employment may post an article about themselves at no charge. Employers may post a want ad for the same price as the newsletter \$50. If employers want to post the article on the newsletter and on the web page, the cost is \$75.

Please go to www.ctashrae.org for current chapter information.

News from ASHRAE's E-Magazine: High Performing Buildings Energy Renaissance

An American icon is undergoing a \$500 million renovation that will create state-of-the-art office space in a historic building while reducing energy use and carbon emissions. The project is intended to demonstrate the cost effectiveness of a green retrofit for a large older commercial building. In addition to building system upgrades, elements of the original lobby design have been recreated, including a ceiling mural and chandeliers.

ASHRAE Learning Institute Spring 2010 Online Course Series

2 WAYS TO REGISTER

Internet: www.ashrae.org/onlinecourses

Phone: Call toll-free at 1-800-527-4723 (US and Canada) or 404-636-8400 (worldwide)

Note: You may register up to 24 hours prior to an online seminar. Courses are in US Eastern Standard Time.



Introduction to Thermal Energy Storage Systems for A/C
Wednesday, April 7, 2010 – 1:00 p.m. to 4:00 p.m. EDT

Using Standard 90.1 to Meet LEED Requirements
Monday, April 26, 2010 – 1:00 p.m. to 4:00 p.m. EDT

Complying with Standard 90.1-2007: HVAC/Mechanical
Monday, April 12, 2010 – 1:00 p.m. to 4:00 p.m. EDT

Introduction to Cleanroom Design
Wednesday, April 28, 2010 – 1:00 p.m. to 4:00 p.m. EDT

Energy Management in New & Existing Buildings: A Sustainable Activity
Wednesday, April 14, 2010 – 1:00 p.m. to 4:00 p.m. EDT

District Cooling & Heating Systems: Central Plants
Monday, May 3, 2010 – 1:00 p.m. to 4:00 p.m. EDT

Complying with Standard 90.1-2007: Envelope/Lighting
Monday, April 19, 2010 – 1:00 p.m. to 4:00 p.m. EDT

Complying with Requirements of ASHRAE Standard 62.1-2007
Wednesday, May 5, 2010 – 1:00 p.m. to 4:00 p.m. EDT



Understanding & Designing Dedicated Outside Air Systems (DOAS)
Monday, May 10, 2010 – 1:00 p.m. to 4:00 p.m. EDT

Hot Products from ASHRAE

A leader in HVAC&R technology, ASHRAE publications cover topics that impact every facet of the environment, both indoors and out.

Latest Publications from ASHRAE!

- Standard 189.1-2009, Standard for the Design of High-Performance Green Buildings* (A Jurisdictional Compliance Option of the IGCC)
- ASHRAE Handbook Online* – Web-Based access to all 4 volumes
- ASHRAE Pocket Guide* – Useful information that fits in a shirt pocket
- IAQ Guide: Best Practices for Design, Construction and Commissioning*
- Load Calculation Applications Manual*

Other Products from ASHRAE!

- Energy Efficiency Guide for Existing Commercial Buildings*
- Dampers and Airflow Control*
- Building Information Modeling Guide*
- Advanced Energy Design Guide for Small Hospitals and Healthcare Facilities*
- Principles of Heating, Ventilating, and Air Conditioning* – Textbook based on the 2009 ASHRAE Handbook - Fundamentals

Visit www.ashrae.org/bookstore to learn more about these and other outstanding ASHRAE publications!

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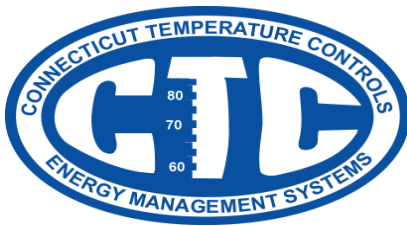
Employment Opportunities

Professional Engineer with 35 years of experience is seeking a position in an educational, municipal, institutional, consulting, or commercial setting. Experience includes designing of building mechanical systems, performing detailed quantitative reviews of drawings for code compliance and energy conservation, and the commissioning of new and renovated buildings. Also holds Plumbing Contractor, Heating-Cooling Contractor, and Fire Protection Contractor licenses.

Contact: Elliott R. Croll
ERCroll@aol.com (203) 239-7372 (home) (203) 627-2764 (cell)

Senior engineer with degrees in both aerospace engineering and applied mechanics and over 35 years of experience in the fields of controls, mechanical and electrical systems is seeking employment as a systems engineer or systems analyst. Contact information:

Frank Tarulli
E-Mail: frank.tarulli@yale.edu Home phone: (203) 926-1450 Work phone: (203) 432-2999



P.O. Box 31-1117
714 North Mountain Road
Newington, CT. 06131-1117
Phone: (860) 953-1862
Fax: (860) 953-1863

Building Automation Sales Position

Connecticut Temperature Controls, LLC., Connecticut's Siemens Building Technologies, Staefa Talon Dealer has an immediate opening for a motivated and experienced DDC System sales and marketing person. This position's main responsibility is to grow our business' market share and profitability by building and maintaining new relationships with design engineering firms, mechanical contractors, owners, etc.

CTC offers a highly competitive wage package and comprehensive benefits package which includes 401K with company match, health insurance, vacations & etc. To apply, please submit your resume to Darin@cttempcontrols.com or fax to (860) 953-1863.

Service Sales Position

Connecticut Temperature Controls, LLC., has an immediate opening for a motivated and experienced controls service sales and marketing person. This position's main responsibility is to grow our service business' market share and profitability by finding and developing new relationships with mechanical contractors, building owners, etc.

CTC offers a highly competitive wage package and comprehensive benefits package which includes 401K with company match, health insurance, vacations. To apply, please submit your resume to Darin@cttempcontrols.com or fax to (860) 953-1863.

History Article: A Profile of Don Esthus

By Julie Williams

Although Don originally hailed from Grand Rapids, Michigan, he has spent virtually the last 45 years in Connecticut. Over the years, Don has worn so many hats that I wouldn't be too keen on opening his closet door for fear of being overwhelmed by the size and variety of his collection.

Don's career started with the U.S. Navy during World War II. He was enrolled in the V-12 Program at Marquette University and the Midshipman's and Diesel Schools at Cornell University before he became Engineering Officer on the minesweeper YMS 437 which trolled the Pacific Ocean in order search and destroy enemy underwater mines, a very hazardous operation.

When the war ended, having spent a little time here in the east at Cornell, Don found work at G.E. in Pennsylvania as a production tester of their electrical equipment, then for G.E. in Pittsfield, Mass with transformers and in Schenectady, N.Y. working with induction motors and controls, where he gained a solid electrical background.

Heading back out west, Don worked at Graybar Electric in Cleveland and Toledo Ohio, at first doing sales in the office and then as a salesman on the road. (We're up to at least ½ dozen hats by now.) Then back to New York, Syracuse, where he worked for Architectural and Consulting Engineering firms for about 10 years, using his electrical experience in the design of electrical systems for buildings.

Finally, in 1964, Don arrived in Connecticut to work for John M. Leahy Associates, Consulting Engineers in South Windsor. He continued as an electrical engineer to design power, lighting and communication systems for buildings on the drawing board at Leahy. He aided in the specification, bidding and construction processes as well as the design.

In 1968, armed with his past experience, he began his own consulting business in the Farmington and West Hartford area, taking responsibility for all aspects of his business in addition to the design of not only electrical and power systems but plumbing and HVAC as well. He was a consultant to architectural and engineering firms in addition to the industry in general, various government branches and even attorneys! (By now his hat closet is pretty well jammed full, but Don hasn't finished yet!)

In tandem with his own business, he worked for the AE Design Group in Southington, as a principal engineer, again responsible for design, drawing and specification of electrical and mechanical systems from the ground up.

After a short stint in business for himself as Donald M. Esthus, LLC, Don began working for van Zelm, Heywood and Shadford in West Hartford in 2000. This time Don was in charge of personnel training and education and presented courses on the Fundamentals of HVAC system design; psychometrics, refrigeration systems and electricity for HVAC systems. He also encouraged and helped other employees create their own educational courses and present topics in their area of expertise.

Along with all these activities, he wrote mechanical Department Operating Instructions; organized standard drafting procedures; documentation of design information and legends; all this as assistant to the head of the mechanical department at van Zelm. As he was keen on seeing others enhance their learning and experience, he organized a Lunch and Learn Program. (At this point, we've pretty much lost track of the number of hats in Don's collection!)

Finally, he is now at Facilities Engineering Associates in Farmington where he is responsible for molding the new CSI Mechanical and Electrical Specifications to the requirements of FEA.

Don holds a Bachelor of Electrical Engineering from Marquette University and a Bachelor of Science in Mechanical Engineering from the University of Hartford as well as a Master of Science in Vocational Technical Education from Central Connecticut State University.

There are not very many of us who wouldn't marvel at all that Don has accomplished and what he has given back to the industry in general. *Our* hats (the few that we have in comparison!!) are off to you , Don

Coming in June:

CTASHRAE's Annual Golf Tournament
At the Chicopee (Mass.) Country Club
On June 18th

Details and directions will be
published in the May issue and on
our website once they are finalized!!

Join us for a day of golf including
3 meals, prizes and fun!

Don't miss this great annual event!



CT ASHRAE Research Promotion Donations
(as of 3/31/2010)

Bronze Donors (\$500 to \$999)

Carrier Corporation - UTC

Major Donors (\$250 to \$499)

Connecticut Clean Energy Fund
Connecticut Trane
Connecticut Temperature Controls

Honor Roll Corporate Donations
(\$150 to \$249)

Performance Technology
Consulting Engineering Services Inc
JP Engineering
W W Rothmann Co Inc

Honor Roll Member Donations
(\$100 or more)

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Mr Heinz P Stock	Erlandson Engineering LLC

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(less than \$100)

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Mr Clifford A Edge	Dr Larry G Berglund, PE, PhD
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