

Thin Air **Bulletin**

May 2017

May Meeting Announcement

Join us for our final chapter meeting of the 2016-2017 year. Thomas P. Carter, P.E. will present his lecture "Thermosyphon Cooler Hybrid System for Water Savings in an Energy-Efficient HPC Data Center: Modeling and Installation." at this month's meeting. Note that this is scheduled for dinnertime.

Date: Tuesday, May 23 Time: 5:00pm - 6:30pm Location: Pappadeaux Kitchen

Cost: \$25 (members) / \$30 (quests)

Click here for more info or to register online. (Cash and credit cards also accepted at door)

Message from the President

Dear Members,

As the last dusting of snow sublimates from our lawns, I invite you to look toward the chapter's continued growth. This year we welcomed a few new faces to the Board of Governors and more than a few new faces to membership. To all our newest members, welcome. To our continuing large base of support, thank you for continuing to attend events and support the chapter.

May Presentation Synopsis

The Thermosyphon Cooler Hybrid System (TCHS) integrates the control of a dry heat rejection device, the Thermosyphon Cooler (TSC), with an open cooling tower. A combination of equipment and controls, this new heat rejection system embraces a "smart use of water," using evaporative cooling when it is most advantageous and then saving water and modulating towards increased dry sensible cooling as system operations and ambient weather conditions permit. Innovative fan control strategies assure the most economical balance between water savings and parasitic

This will be my last newsletter as President. I would like to thank all the members of the Board of Governors for making this a successful year for programs and activities. We innovated around new activities such as a science day at George Sanchez Elementary and Day on the Hill with a visit to the New Mexico Legislature. Board members brought new life and enthusiasm to the chapter this year. Thank you for attending these new style of events. These events only work if the membership takes an interest.

May will be a student's night program where we will bring in the science fair scholarship award winners to talk about their projects. I look forward to seeing you at the last program of the year!

Feel free to e-mail me at stephen.forner@trane.com with your thoughts and suggestions.

Stephen Forner

Upcoming Events

May 23 Chapter Meeting

Thermosyphon Cooler Hybrid System for Water Savings in an Energy-Efficient HPC Data Center: Modeling and Installation 5:00am - 1:00pm Pappadeux Kitchen

Save the date!

Sept 15th, 2017 Annual Golf Tournament Fund Raiser UNM Championship Golf Course (South) 7:30am - 1pm

Sponsors and Player registration coming soon.

Our single fundraising event for the year, this golf event helps fund scholarships, student activities, research promotions, speakers, chapter operations, and more.

fan energy. The unique low-pressure-drop design of the TSC allows water to be cooled directly by the TSC evaporator without risk of bursting tubes in sub-freezing ambient conditions.

In addition to describing the operation and installation of the TSC and its integration into the ESIF building, this paper focuses on the full heat rejection system simulation program used for hourly analysis of the energy and water consumption of the complete system under varying operating scenarios. Preliminary data from the site will also be shared. This presentation is based on a paper recently presented at the 2017ASHRAE Winter Conference.

For more information on Thomas Carter, see his biography in the newsletter. For more information about the presentation and to register, please visit the <u>event page!</u>

2016-2017 Board of Governors

President	Stephen Forner
President-Elect	Jerry Hine
Treasurer	Stacey Chan
Research	Joseph Higham
Historian	Gary Grange
Research (RVC)	Andrew Farrish
Membership	Ryan Shaffer
Student Activities	Douglas Brown
Grassroots Government	Trevor Keegan
Awards	Rex Stockwell
Golf Tournament	Allen Anaya

Click here for more info on our upcoming events

Electronic Communication...Clay Andrews

Thank you to all our officers for volunteering their time and leadership for our chapter! Visit our website for their contact info.

In Other News...

Membership

The Membership committee would like to recognize Clay Andrews and Marti Adams as new members in the month of April, welcome to New Mexico ASHRAE! As we approach the end of another great year of ASHRAE please be sure to check on the status of your Society and local chapter dues to be certain you are current. If you have any questions please feel free to reach out to me.

Thank you,

Ryan Shaffer ryan.shaffer@jci.com Membership Promotion

Learn more about membership

Annual Golf Tournament Fund Raiser Announcement

Mark your calendars now!!!!!! Friday September 15th, 2017 7:30am Shotgun Start

Thank You to everyone who participated in making last year's tournament successful. We are looking to make this year more successful;

From the History Book Summer 2000

President: Nick Nellos

President-Elect: Tom Watters Secretary: Jim Asperger Treasurer: Mike Dunavant

ASHRAE Region IX CRC:

The Chapter Regional Conferense (CRC) was held in Boise on August 10, 11 & 12, 2000. Twelve NM Chapter members attended and participated in golfing and river rafting while also attending to the business of the Region at two business sessions. There were also two technical sessions presented: 1) Semiconductor Leads the World Economy presented by S. L. Stout of Micron Technologies and 2) HVAC, Indoor Air Quality & Ultra-Violet "C-Band" Contaminant Source Control presented by R. Scheir. The NM Chapter received the PAOE for the recent ASHRAE year. Also, the NM History Committee received the Gold Ribbon Award for the submission of the Chapter History.

History Committee:

Last year Bill Jenkins of the City of Albuquerque (retired) spoke at the September Meeting. thus if you have any comments, please feel free to contact me or anyone else on the board.

Allen Anaya 505-385-7338 allena@varitecsolutions.com

Ten years ago John Ehrichman was the guest speaker at the October Meeting held at Bishop's Lodge.

Twenty two years ago, June 1978, the New Mexico Chapter was the host for the ASHRAESummer Meeting.

Young Engineers in ASHRAE

Look for the YEA event announcements and social activities announcement later this summer including Ninja Park and The Peddler!

Local Job Listings

We are now accepting ads for local jobs!

To place an ad, the employer must have at least one NM ASHRAE member working in the firm OR pay a fee of \$50 per month per ad. Each ad will be posted on the website and in the Thin Air Bulletin for 30 days unless renewed by the employer. The ad must be in the following format:

Job Title: Company Name: Website Link: Contact Information: Short Description (50 word limit):

Submit job postings to Clay Andrews at rcandrews@arsedengr.com and indicate the ASHRAE member in the firm.

May Speaker Bio

Thomas P. Carter, P.E.
Sr. Program Manager, Heat Rejection Technology
Johnson Controls
100 Cumberland Valley Avenue
Waynesboro, PA 17268 USA
(717) 816-7261
thomas.p.carter@jci.com

Tom Carter is the Senior Program Manager, Heat Rejection Technology, for Johnson Controls focusing on innovative water saving heat rejection, system configuration, and controls technologies. Prior to joining Johnson Controls in 2011, Tom had a 34 year career at Baltimore

Aircoil Company, primarily related to R&D activities involving evaporative heat and mass transfer and thermal energy storage. Tom is a registered Professional Engineer in Maryland and a named inventor on 22 U.S. patents. He holds a BS degree in Mechanical Engineering from Purdue University and a MS in Computer Science from the Johns Hopkins University.

Tom is a Member of the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE). He recently served on SPC-22, Methods of Testing for Rating Water-Cooled Refrigerant Condensers, and SPC-181P, Methods of Testing for Rating Liquid to Liquid Heat Exchangers. Tom was past Chairman of ASHRAE's Technical Committee 8.6 (Cooling Towers and Evaporative Condensers) and past Chairman of ASHRAE Standards Committee (SPC-64) which revised the standard for testing Evaporative Condensers.

He was previously active on a number of technical committees in the Air-Conditioning, Heating, and Refrigeration Institute (AHRI): serving as past Vice Chair, of the Research and Technology (R&T) Committee, past member of the AHRI R&T Refrigeration Subcommittee, past member of the Standards Policy Committee (SPC), past member of the SPC's Cooling Standards Subcommittee. He also served as past member, and past Vice Chair of the Air Conditioning and Refrigeration Technology Institute (ARTI) Steering Committee.

Tom is an associate Member of the American Society of Mechanical Engineers (ASME). He served as a past member of the ASME Energy-Water Nexus Interdisciplinary Council and past member of the CRTD Research Committee on Water Management Technology. He currently serves as a member of the WEG Subcommittee on Cooling Systems.

Tom has authored and co-authored numerous technical papers for ASHRAE, ASME, the Cooling Technology Institute (CTI), and the Electric Power Research Institute (EPRI).

Society News and Opportunities

HVAC Design and Operations Training

2017 Online Course Series

Registration Open for 2017 Chapter Regional Conference (CRC) Region IX: Kansas City, MO

More news at <u>ashrae.org/news</u>

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