AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.

1791 Tullie Circle, N.E./Atlanta, GA 30329 404-636-8400

TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG No. TC 8.10	DATE_01/29/2013
TC/TG/MTG/TRG TITLE	Mechanical Dehumidification Equipment and Heat Pipes
DATE OF MEETING Tuesday I	anuary 20, 2013 — I OCATION — Dallas Tayas

MEMBERS PRESENT	VOTING MBER Y/N	YEAR APPTD	MEMBERS ABSENT	VOTING MBER Y/N	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Craig Burg - Chair	Y	2012	John Murphy	N	2012	Stephen Duda,
Ralph Kittler – VC	Y	2013	Tom Rice	N	2012	Mark Stevens
RSchrecengost - Sec	Y	2012	Ron Bailey	N	2009	
Timothy Sechrist	Y	2012	Mike Balistreri	N	2009	
Julie Ferguson	Y	2012	Tom Brooke	N	2006	
John Bloemer	Y	2011	Stephen Brown	N	2009	
Titu Doctor	Y	2010	Chris Check	N	2010	
Ken Jurgensmeyer	Y	2013	Dane Christensen	N	2010	
Alois Malik	Y	2012	Keith Coursin	N	2008	
Mark Scott	Y	2012	Bryan Dunnavant	N	2004	
			Florin Gavrilut	N	2009	
Daniel Abbate	N	2010	Hugh Henderson	N	2006	
Kenneth Cooper	N	2008	Walter Horn	N	2009	
Eric Erdman	N	2011	Scotty Hutto	N	2012	
Eric S Johnson	N	2006	Reinhold Kittler	N	2006	
Harry Milliken	N	2012	Doug Kosar	N	2005	
Josephine Lau	N	2013	Ness Lakdawala	N	2012	
			Chang-Seo Lee	N	2009	
			Bruce Lindsay	N	2012	

These draft minutes have not been approved and are not the official, approved record until approved by this committee.



MEMBERS PRESENT	VOTING MBER Y/N	YEAR APPTD	MEMBERS ABSENT	VOTING MBER Y/N	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
			Stanley Mumma	N	2008	
			Sunil Nanjundaram	N	2010	
			Armin Rudd	N	2010	
			Samuel M.Sami,	N	2012	
			Mike Scofield	N	2010	
			Mirza Shah	N	2009	
			Brian Simkins	N	2006	
			Frank Surani	N	2006	
			Harout Topikian	N	2010	
			Richard Trent	N	2010	
			George Yeager	N	2013	
			Walter Grondzik	N	2013	
			Hugh McMillan	N	2013	
			Thursten Simonsen	N	2013	
			Paul Lindahl	N	2012	
			David Yanshar	N	2011	

DISTRIBUTION

All Members of TC/TG/MTG/TRG plus the following:				
TAC Section Head:	Steve Duda			
TAC Chair:	Walter T Grondzik			
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters:	David Yanshar, Research Liason James Aswegan, Standards Liason			
Manager Of Standards	Stephanie Reiniche			
Manager Of Research & Technical Services	Mike Vaughn			



Date: Tuesday – January 29, 2013

Place: Sheraton Hotel – Room: City View 5 (H4)

Time: TC 8.10 Subcommittee Committee Meeting – 2:00 PM to 3:30 PM

(The full committee meets from 3:30 PM to 6:00 PM in the same room.) Note: Since this is a relatively small TC, we discuss research, handbook, and program activities during one combined subcommittee meeting. Voting members are strongly encouraged to attend the subcommittee meeting. Corresponding members and guests are welcome.

Sub-committees

1. Call to order & Introductions

- Vice-Chairman Craig Burg called the meeting to order at 2:00 PM.
- Everyone introduced themselves.
- Nine (9) people were in attendance with seven (7) voting members.

2. Request for Any Additions to Subcommittee Agenda

• No Requests for changes

3. Research:

- Research Subcommittee Chair, Julie Ferguson (was not present so Chair reviewed)
- RTAR 1566 "Equations to Estimate Evaporation Rates From Wetted Surfaces"
 - o Harry Milliken summarized some items related to this and with discussions with the liaison. Still need to find bidders and hard to find. Mentioned phases and the associated tasks for the scope, etc. for the bidders in the work statement.
 - Once all phases were done then publish papers and handbook.
 - Harry indicated he reworded the RTAR and sent it in. Some discussion about where that is in the system. Goal was to get TC to vote on and approve in Dallas but now we need to move forward for July.
 - We need to develop a bidder list, complete a literature search and have an interview process for the bidders. It is then hoped that this will justify whether to go to the next phase 2.
 - o Due to David Yanshar the TC only has July 2013 to move forward without having to start completely over.
- 1565-RP: Development of the ASHRAE Design Guide for Dedicated Outdoor-Air Systems



TC 8.10 - Mechanical Dehumidifiers and Heat Pipes

Meeting Minutes Winter Conference Meeting

Dallas, Texas 2013

- o Sponsoring TC: 8.10 (Mechanical Dehumidification Equipment and Heat Pipes) with Co-Sponsoring TCs: 1.12 (Managing Moisture in Buildings), 5.5 (Air-to-Air Energy Recovery), 8.12 (Desiccant Dehumidification Equipment and Components)
- At the San Antonio meetings in June, both the Research Administration Committee (RAC) and Technology Council voted to approve the Proposal Evaluation Subcommittee's recommendation to select the University of Nebraska as the contractor for this project.
- o The Research Agreement (contract) was signed with ASHRAE in August, and the project officially began in September 2012.
 - So far the contractor has gathered and reviewed articles, papers, and presentations on DOAS, and conducted surveys of HVAC design engineers.
 - They have submitted a proposed table of contents and booklet layout format, which the PMS will review and approve at our meeting in Dallas.
 - Next, they will conduct in-depth interviews with several HVAC design engineers, and draft the chapters for review/comment by the members of the PMS.
- o Currently, the expected completion date is September 2014.
- RTAR "Develop a method to determine residential whole home dehumidification capacity requirements."
 - o John Bloemer submitted to Research Liaison, David Yanshar last June 27th.
 - David mentioned it is not ready and it needs lots of work. RAC needs information to review it. What are the reasons? Is there a well-established need, does ASHRAE need to do it, what is the budget for best value, is there appropriate description of the approach, etc.
 - Discussions about other guides or booklets out there are not "good" for sizing and are conflicting in information. Discussions similar to above about doing a literature research to determine what needs to be further researched. Current units come in 65, 90 and 130 pints / day with fractional compressors. Left it to rewrite the RTAR and do more research of available information up front. Need to see and review Standard 160.
 - o TC Co-Sponsors:
 - TC 1.12 voted to co-sponsor it (at 11-0)
 - TC 8.12 did not show any interest.
 - TC 4.7 Someone was concerned about this and we are not sure who contacted them
- New proposed RTAR from Stan Mumma. Generic and wants everyone to review and get back to the committee ASAP. Suggestion that he put it in the form of an RTAR for us to review. We think we know what he wants but we need more details to review.



Dallas, Texas 2013

- Harry's RTAR on wetted deck. Action item to follow up.
- Action item for the RTAR on water treatement. Go back to TC 3.6 Water Treatment. Randy to follow up.
- Other proposed research project ideas (long-range research plan)
 - o Choose to not do so as the Committee's plate is full.

4. Handbook

- Handbook Subcommittee Chair, Ralph Kittler began the overall discussion. The 2016 Chapter revision cycle (due June 2015).
- Need to pull together a pool Chapter for Natatoriums (last Chapter in list in Applications, with another Chapter for Atria) and include water treatment options, etc. Maybe pull out information on Chapter 25. Discussions for wet deck area calculations for evaporation, etc. might need to be included as well. Questions should be considered in activity factors, etc. as there is no research.
- We still need to start a section on Industrial dehumidifiers and try to expand the Chapter 25 in that area.

5. Programs

- Proposed program ideas for future meetings by Tim Sechrist.
- Reviewed the list of programs, etc. In Chicago there was a program on Natatorium Design and it was rejected. We resubmitted and it got rejected in San Antonio after a slight rewrite and rejected again. More discussions occurred but we will pursue it for Denver.
- Operating experiences with DOAS systems. Never got a paper off the ground, etc.
- Do we want to do a Seminar on AHRI Standard 920 with the new MOT (possibly) we have finished and hopefully will be published. Do we need to get the rating standard into 90.1. Proposed for Denver. Need at least 2 speakers with one being Harry Milliken.

6. Standards

- SPC 190 (SPC Chair Titu Doctor) at Board Approval
- SPC 198 (SPC Chair Craig Burg) at Board Approval

7. Request for additions to the main committee meeting agenda

• No requests for additions to the agenda.

8. Review of TC 8.10 goals and accomplishments since last published listing.

- No discussion or update as there was not time available in the Subcommittee.
- 9. Adjourned: At 3:31 PM.



Date: Tuesday – January 29, 2013

Place: Sheraton Hotel – Room: City View 5 (H4)

Time: TC 8.10 General Committee Meeting – 3:30 PM to 6:00 PM

(The full committee meets from 3:30 PM to 6:00 PM in the same room.) Note: Since this is a relatively small TC, we discuss research, handbook, and program activities during one combined subcommittee meeting. Voting members are strongly encouraged to attend the subcommittee meeting. Corresponding members and guests are welcome.

General Meeting

1. Call to order& Member Introductions

- Chairman Craig Burg called the meeting to order at 3:41 PM.
- Introduction of members and guests
- Roll Call was completed, with fifteen (15) people in attendance of which there were nine (9) voting members so a quorum was present.

2. Roster Updates:

- Ken Jurgensmeyer to be added after the Summer Meeting.
- A couple of requests to be made Corresponding Members with Tom Rice becoming a provisional Corresponding Members

3. Request for any Additions to the Agenda:

• There were no other additions or changes to the agenda requested

4. Request for approval to San Antonio Minutes

• Acceptance was moved by Ralph Kittler and seconded by Titu Doctor (passed 9-0-0)

5. Request for approval to Chicago Minutes

- In San Antonio, there was no quorum present to approve the minutes from the Chicago meeting.
- Acceptance was moved by Ralph Kittler and seconded by Mark Scott (passed 9-0-0)

6. Liaison Reports

Section Head	Steve Duda
TAC Chair	Walter T Grondzik
Handbook	Paul A Lindahl, Jr
Research	David Yanshar



TC 8.10 - Mechanical Dehumidifiers and Heat Pipes Meeting Minutes

Winter Conference Meeting Dallas, Texas 2013

- TAC Steve Duda (Head for Section 8)
 - o Feel free to contact with any questions or comments email sh8@ashrae.net
 - Chairs Breakfast items: Local Chapter Chair training using a Power Point (PPT) on ASHRAE website to download. Topic is: What is a TC and what do you do as a TC member. Present to local Chapter for review. Recruitment tool for how to get involved.
 - o Need to update bio on employment category.

7. Chairman Announcements:

- Need to update bio on employment category.
- One item for programs is they are looking for qualified members of TCs to review and provide comments on seminars, etc. for tracks going forward with the programs.

8. Subcommittee Reports

Program	Tim Sechrist
Handbook	Ralph Kittler
Research	Julie Ferguson
Standards	Craig Burg
Webmaster	John Murphy

• Program Subcommittee Report (Tim Sechrist)

- One program was submitted for San Antonio and rejected again (also from Chicago):
 - 1. We plan to resubmit the previously rejected natatorium program for New York. Discussed submitting again for New York under the Indoor Environmental Quality track
- o Another program item was discussed previously titled: "Operating Experiences with Dedicated OA Systems seminar". This did not get off the ground as one of the proposed authors was unable to complete any effort on this item.
- O Discussion on having a Forum for Denver (and may be in same room as the Sub-Committee rooms). Moderator would be John Bloemer on the Residential Dehumidification items discussed in the Sub-Committee and titled "What do we need for a Residential Dehumidification Guide".
- o Moved by Tim and seconded by Julie (passed 9-0-0)

• Handbook Subcommittee Report (Ralph Kittler)

- o Handbook chapter was published in the new handbook, and now to think about what to change for the next revision.
- A teaser was added in for some industrial dehumidification. Need to include industrial dehumidification items and text to put in the Chapter. It's in good shape, but always can be improved.



TC 8.10 - Mechanical Dehumidifiers and Heat Pipes

Meeting Minutes

Winter Conference Meeting Dallas, Texas 2013

- o May move some stuff out of our Chapter into a new Natatorium Chapter.
- o After some discussion, Craig Berg made Harry Milliken a Liaison for TC 9.8 Large Building Air Conditioning Applications.

• Research Subcommittee Report (Craig Burg, Julie Ferguson)

- o 1565-TRP, "Development of the ASHRAE Design Guide for Dedicated Outdoor Air Systems" (John Murphy)
 - Craig reviewed the summary from the PMS meeting and overview from John Murphy.
 - The Research Agreement (contract) was signed with ASHRAE in August, and the project officially began in September 2012.
 - So far the contractor has gathered and reviewed articles, papers, and presentations on DOAS, and conducted surveys of HVAC design engineers.
 - They have submitted a proposed table of contents and booklet layout format, which the PMS will review and approve at our meeting in Dallas.
 - Next, they will conduct in-depth interviews with several HVAC design engineers, and draft the chapters for review/comment by the members of the PMS.
- o RTAR 1566 "Equations to Estimate Evaporation Rates from Wetted Surfaces"
 - Harry Milliken summarized some items related to this and with discussions with the liaison. Still need to find bidders and hard to find. Mentioned phases and the associated tasks for the scope, etc. for the bidders in the work statement. The expiration date is July 23.
 - Good chance to move forward with a Graduate Facility at some University. Or, we go to other researchers.
 - Mick Nelson will provide Harry a list of colleges from USA Swimming.
 - The rest of the TC needs to read the reduced RTAR description and provide feedback to Harry.
 - Previous TC results were: TC 1.12 (1/13/10, unanimous), 9.8 (1/25/10, unanimous) and 8.12 (no date available, unanimous)
- o New Research proposal Develop "Method to determine residential whole home dehumidification capacity requirements."
 - John Bloemer Action item is to re-write the RTAR and move forward.
- Stan Mumma's new RTAR will be sent out for review and editing. Discussed that TC 8.10 needs more details from Stan. Not a full RTAR as yet, but more detail on concepts to discuss as a committee.
- o RTAR "Gas Filtration Eliminating Chloramines". Alois Malik will continue to work on this one. Have no input from Alois on this. Possibly move to on-hold status.

• Standards Subcommittee Report (Craig Burg)

o SPC 198 is on for board approval.



- o SPC 190 on for board approval.
- Website (Craig Burg, John Murphy)
 - Webmaster John Murphy stated the website is up to date.
 - o Approved meeting minutes will be uploaded soon.
 - o The address for the TC web site is http://tc810.ashraetcs.org

9. TC Goals and Objectives Status and Updates (Craig Berg)

- Briefly reviewed our older goals and we need very well.
- There were many items and discussed some new ones to add to the listing. Craig will complete a list and send it out for the committee to review.

10. New Business

- There is a new AHRI Standard for Heat Pipes in the works. Meeting once a month and getting closer to finishing it. Then our committee may proceed with a Method of Test document. Harry asked if there is any other equipment AHRI needs to work on?
- It was noted that the draft minutes would be sent to ASHRAE headquarters and published on the TC web site. The Secretary and the Webmaster will see that this is done.

11. Motion to adjourn:

• Ralph Kittler at 5:11 pm.