

**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 01/21/2014

TC/TG/MTG/TRG TITLE Mechanical Dehumidification Equipment and Heat Pipes

DATE OF MEETING Tuesday, January 21, 2014 LOCATION New York City, NY

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	
Ralph Kittler – VC	Y	2013	Julie Ferguson	Y	2012	Svein Morner
R.Schrecengost - Sec	Y	2012	Titu Doctor	Y	2010	
Timothy Sechrist	Y	2012	Mark Scott	Y	2012	
Alois Malik	Y	2012	Tom Brooke	N	2006	
John Bloemer	Y	2011	Stephen Brown	N	2009	
Ken Jurgensmeyer	Y	2013	Chris Check	N	2010	
			Kenneth Cooper	N	2008	
Richard Trent	N	2010	Keith Coursin	N	2008	
Dane Christensen	N	2010	Bryan Dunnavant	N	2004	
Richard Trent	N	2010	Florin Gavrilut	N	2009	
Daniel Abbate	N	2010	Hugh Henderson	N	2006	
George Yeager	N	2013	Walter Horn	N	2009	
Eric Erdman	N	2011	Scotty Hutto	N	2012	
Harry Milliken	N		Reinhold Kittler	N	2006	
			Doug Kosar	N	2005	
			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.*



**TC 8.10 - Mechanical Dehumidifiers and Heat Pipes**  
**Meeting Minutes**  
**Winter Conference Meeting**  
**New York City, New York 2014**

<b>MEMBERS PRESENT</b>	<b>VOTING MEMBER Y/N</b>	<b>YEAR APPTD</b>	<b>MEMBERS ABSENT</b>	<b>VOTING MEMBER Y/N</b>	<b>YEAR APPTD</b>	<b>EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE</b>
			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	
			Mike Balistreri	N	2009	
			Josephine Lau	N	2013	
			Walter Grondzik	N	2013	
			Hugh McMillan	N	2013	
			Thursten Simonsen	N	2013	
			Paul Lindahl	N	2012	
			David Yanshar	N	2011	
			Eric S Johnson	N	2006	
			Tom Rice	N	2012	
			Ron Bailey	N	2009	



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**DISTRIBUTION**

*All Members of TC/TG/MTG/TRG plus the following:*

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



**TC 8.10 - Mechanical Dehumidifiers and Heat Pipes**  
**Meeting Minutes**  
**Winter Conference Meeting**  
**New York City, New York 2014**

**Date:** Tuesday – January 21, 2014

**Place:** Sheraton Hotel – Room: Madison 4 (5th Level)

**Time:** TC 8.10 Subcommittee Committee Meeting – 1:00 PM to 3:30 PM

*Note: Per our last committee meeting that there was a suggestion to extend the sub-committee meeting and adjourn the main committee meeting when business is complete (potentially earlier). This was due to the fact that much of the discussion takes place at our sub-committee meetings and the main committee meeting is used primarily for brief review and final voting. The sub-committee meeting has been adjusted to start at 1:00 PM rather than our previously typical 2 PM start.*

*(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: – Chair, Craig Burg**

- Chairman Craig Burg called the meeting to order at 1:06 PM.
- Everyone introduced themselves.
- Ten (10) people were in attendance with six (6) voting members.
  - Attendees: See attached.

### **2. Request for Any Additions to Subcommittee Agenda**

- No Requests for changes

### **3. Research: - Subcommittee Chair, Julie Ferguson**

- Subcommittee Chair, Julie Ferguson (was not present so Chair reviewed)
- RTAR - 1566 - “Equations to Estimate Evaporation Rates From Wetted Surfaces” (Harry Milliken)
  - Our RTAR has been rejected once again. Harry Milliken summarized some items related to this and the TC held discussions with the liaison. We need to answer the 6 or so questions back from RAC, etc.
  - The concern is finding bidders and starting a Project Monitoring Sub-committee (PMS). The feeling is that more definitions and more clarity are needed for RAC to ensure the work can be completed by bidders. Perhaps we need to form a matrix or



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something with the tests and why and include the “pool toys”. Additional concerns are the quality of the work you will get back and the overall costs of the project,

- TC: 8.10 (Mechanical Dehumidification Equipment and Heat Pipes) with Co-Sponsoring TCs: 8.12 and 9.8.
- Idea is to redo the RTAR and send out to the committee and sponsoring TCs and then resubmit.
- RTAR - “Develop a method to determine residential whole home dehumidification capacity requirements.” (John Bloemer)
  - John Bloemer summarized status of this RTAR. No number issued since it’s not been submitted. Discussions about frustration in getting paperwork together and discussed whether it’s important or not.
  - Still believe there is a need because there are no other guides or booklets out there that good for sizing and there is conflicting information.
  - Committee will review again and get Julie to forward this to David Yanshar.
- TC Co-Sponsors:
  - TC 1.12 wants to co-sponsor
  - TC 8.12 now shows some interest.
- 1712-PRP (formerly 1565-RP): Development of the ASHRAE Design Guide for Dedicated Outdoor-Air Systems (John Murphy)
  - We believe we are back on track. Previously, both the PMS and cognizant TC 8.10 unanimously voted to terminate the contract with the previous contractor in May 2013.
  - In October 2013, the Research Administration Committee (RAC) approved releasing this project for re-bid. Six proposals were submitted to ASHRAE by the December 16, 2013 deadline.
  - The Proposal Evaluation Subcommittee (PES), which consists of representatives from the co-sponsoring TC’s plus four co-funders (Southern Company, Munters, Innovent, and SMACNA), reviewed and evaluated all submitted proposals. Before making the final selection, the PES is requesting clarification and further information from some of the bidders.
  - Selection by the PES is expected to be finalized in February 2014. The selected bidder must then be approved by TC 8.10 (the lead sponsoring TC), and by both RAC and Technology Council.
  - If approved, work on this project is likely to begin in Summer 2014.

#### **4. Handbook: - Subcommittee Chair, Ralph Kittler**

- Subcommittee Chair, Ralph Kittler discussed the Chapter items. No real feedback from anyone after he asked for it at this time.



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- Things to consider adding to the Chapter: Fan energy issue/items (typically run 24/7), optimized location of sensors for the system fan or the other systems' components (when to cycle on/off). May want to consider the OA component, where and when, it's added into the system. Could have lots of energy impacts. And, we still need to update the industrial items / paragraphs within the Chapter.
- Items to consider to "spice" up the Chapter on-line with videos, color photos to add for the equipment or areas for educational items to make it more interesting to read. The 2016 Chapter revision cycle (due June 2015).
- Another item is the Natatorium Chapter to get started. Chapter must be voted on this year and the previous author had to change jobs. Pull it out of Chapter 5

#### 5. Programs: - Subcommittee Chair, Tim Sechrist

- Subcommittee Chair, Tim Sechrist began the discussion on our proposed program ideas for future meetings.
  - We continue to be unsuccessful getting programs accepted. The format has been changed a little, but still frustrating. Some discussions on presenting a workshop now which is a new format with two or three speakers and then have some audience interaction.
  - We need to do some additional review of requirements, etc. Talk to some of the Track Chairs, etc. Need to talk to Steve Duda.
  - Discussed possible seminars / workshops:
    - TC 9.8 (Large Buildings) was interested in cosponsoring something about what the Engineer needs or should have on plans and specifications. Only have until about February 13<sup>th</sup>. Discussed 4 speakers, Natatorium, DOAS. Can 9.8 then provide two speakers? Harry can speak and/or chair. Alois and/or John Murphy are possible speakers. Typically need a general abstract, short speaker bios, etc. Might go to TC 8.12 and go completely dehumidification, etc. Include items from the Design Engineer and the Manufacturer.
    - Still need something on SPC 198, and AHRI Standard 920 – DOAS (Craig), then something for operating experience on DOAS. Sooner the better. Track on Codes and Standards. Probably not a workshop, but maybe a seminar. Maybe we tie together the specification items with that because it is the next logical step.
      1. Maybe natatorium, then MOT, then manufacturer tells what they want to see in a spec / schedule, then the Engineer tells what they will / should put in the spec / schedule.
    - Add AHRI Standard 910 with SPC 190 - Natatoriums, or something. Maybe same format above. Or have 910 along for the ride with SPC 198
    - All need to be submitted by February 13th.



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- Full blown Natatorium for Chicago and needs to be submitted by August or so. Papers are due in March or April. AHRI Standard 910 with SPC 190 - Building pressurization on natatoriums.

**6. Standards: - Subcommittee Chair, Craig Burg**

- AHRI 911 and 921 new standards and impact to ASHRAE Standard 190 and 198. AHRI rules are nominally rounded in each standard for SI or IP versions. So the SI version will get slightly different performance of the equipment. And, certification will occur only in IP. Both standards may have to be revised in the next cycle.
- Any new ideas:
  - **Ventilation air for the changes** due to aquatic health code? STD 62.1 has suggestions in it. They have made changes. Do we want to have a guideline? Concern is we would need a high level of consulting. Maybe it needs to go to the research list. Overall air distribution, how much OA do you really need, and all the energy implications. What is the concentration of contaminants are we worried about? What's an acceptable baseline? Is this something to add to the Chapter?

**7. Request for additions to the main committee meeting agenda**

- No requests for additions to the agenda until main meeting.

**8. Adjourned:** Ralph moved to adjourn at 3:05 PM.



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**Date:** Tuesday – January 21, 2014

**Place:** Sheraton Hotel – Room: Madison 4 (5th Level)

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

*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: - Chair, Craig Burg**

- Chairman Craig Burg called the meeting to order at 3:29 PM.
- Introduction of members and guests

### **2. Determination of Quorum: - Chair, Craig Burg**

- Roll Call was completed, with eleven (11) people in attendance of which there were six (6) of nine voting members so a quorum was present.
  - Attendees: See attached

### **3. Membership / Roster**

- Discussions about our Roster and who is rolling off.
- Craig (Chair) will roll off. Harry will become a VM.

### **4. Request for approval to Denver Minutes: - Secretary, Randy Schrecengost**

- There were no additions or changes to the draft meeting minutes.
- With no changes above, acceptance of meeting minutes was moved by John Bloemer and seconded by Tim Sechrist (passed 7-0-0-CV).

### **5. Request for any Additions to the Agenda:**

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

### **6. Section 8 Chair Meeting Report: - Chair, Craig Burg and Vice-Chair, Ralph Kittler**

- A new Multi-Disciplinary Program Group (MPG) – working on Hot Dry Climate Design Guide
- Updated TC's Goals and Objectives – please review.

### **7. Liaison Reports**

<b>Section Head</b>	Steve Duda
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<b>TAC Chair</b>	Walter T Grondzik
<b>Handbook</b>	Paul A Lindahl, Jr
<b>Research</b>	David Yanshar
<b>Standards</b>	James Aswegan

*Note: As the Liaisons might not be available at the beginning of the meeting as a courtesy we will provide them the opportunity to address as they enter following the item on the agenda*

- TAC - Steve Duda (Head for Section 8)
  - Did not attend

**8. Subcommittee Reports**

<b>Program</b>	Tim Sechrist
<b>Handbook</b>	Ralph Kittler
<b>Research</b>	Julie Ferguson
<b>Standards</b>	Craig Burg
<b>Webmaster</b>	John Murphy

- **Research Subcommittee Report (Craig Burg, Julie Ferguson)**
  - RTAR 1566 - "Equations to Estimate Evaporation Rates from Wetted Surfaces"
    - Harry Milliken discussed and items will be summarized and sent for ballot vote.
    - We need to answer 6 or so questions on how to perform the MOT and to answer question in about 3 weeks to resubmit the work statement.
    - The concern is finding bidders and starting a Project Monitoring Sub-committee (PMS). The feeling is that more definitions and more clarity are needed for RAC to ensure the work can be completed by bidders. Additional concerns are the quality of the work you will get back and the overall costs of the project.
  - 1712-PRP (formerly 1565-RP): Development of the ASHRAE Design Guide for Dedicated Outdoor-Air Systems (John Murphy)
    - Both the PMS and cognizant TC 8.10 unanimously voted to terminate the contract with the previous contractor in May 2013.
    - In October 2013, the Research Administration Committee (RAC) approved releasing this project for re-bid. Six proposals were submitted to ASHRAE by the December 16, 2013 deadline.
    - The Proposal Evaluation Subcommittee (PES), which consists of representatives from the co-sponsoring TC's plus four co-funders (Southern Company, Munters, Innovent, and SMACNA), reviewed and evaluated all submitted proposals. Before making the final selection, the PES is requesting clarification and further information from some of the bidders.



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- Selection by the PES is expected to be finalized in February 2014. The selected bidder must then be approved by TC 8.10 (the lead sponsoring TC), and by both RAC and Technology Council. If approved, work on this project is likely to begin in Summer 2014.
- RTAR - New Research proposal - Develop “Method to determine residential whole home dehumidification capacity requirements.”
  - There may be other TCs that want to get more involved and more supportive.
  - Committee will review again and get Julie to forward this to David Yanshar.
- TC decided to wait on other options / topics.
- **Program Subcommittee Report (Tim Sechrist)**
  - Subcommittee Chair, Tim Sechrist began the discussion on our proposed program ideas for future meetings and mentioned we have been unsuccessful getting programs accepted. New workshop format was what we wanted to go after.
  - Discussed possible seminars / workshops:
    - Something on SPC 198, and AHRI Standard 920 – DOAS. (Craig). Maybe natatorium, then MOT, then manufacturer tells what they want to see in a spec / schedule, then the Engineer tells what they will / should put in the spec / schedule.
    - Add AHRI Standard 910 with SPC 190 - Natatoriums. Maybe same format above. All need to be submitted by February 13th.
    - Full blown Natatorium for Chicago will be re-submitted by August or so. Papers are due in March or April. AHRI Standard 910 with SPC 190 - Building pressurization on natatoriums
    - Tim moved and Ralph seconded and it passed 7-0-0-CV
- **Handbook Subcommittee Report (Ralph Kittler)**
  - Subcommittee Chair, Ralph Kittler discussed the Chapter items and asked everyone to spend some time to review what we have done, and to consider some other things to consider adding to the Chapter. Examples are fan energy issue/items, optimized location of sensors for the system, and perhaps when and where to add the OA component.
  - We still need to update the industrial items / paragraphs within the Chapter.
  - Consider items to consider to “spice” up the Chapter on-line with videos, color photos to add for the equipment or areas for educational items to make it more interesting to read. What about a calculator?
- **Standards Subcommittee Report (Craig Burg)**
  - AHRI 911 and 921 new standards will be printed in SI units and the impact to ASHRAE Standard 190 and 198. A decision on certification is still to be determined.



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Both standards may have to be revised in the next cycle. Concerns about rounding errors and differences between IP and SI units.

- During the Subcommittee there was an additional idea for ventilation air for the changes due to aquatic health code? No further discussion was carried through.
- Status on AHRI 930 – Proposed standard for wrap around heat exchangers. What would be the ratings, or metrics, etc.? Still looking at the options, feasibility, and trying to wrap that up by the end of the year.
- Various testing labs have limitations on some of their equipment for testing moisture removals, etc. Discussions with them and manufacturers on future limitations, etc.
- **Website (Craig Burg, John Murphy)**
  - Webmaster John Murphy was not present.
  - Approved meeting minutes will be uploaded soon. Otherwise the site is updated.
  - The address for the TC web site is <http://tc810.ashraetcs.org>

**9. New Business**

- None

**10. Installation of New Chair**

- Will be installed after the Summer meeting

**11. Motion to adjourn:**

- John Bloemer at 4:27 pm.