



**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. TC9.2 DATE August 10, 2016

TC/TG/MTG/TRG TITLE Industrial Air Conditioning

DATE OF MEETING June 28, 2016 LOCATION St. Louis, MO

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Eileen Jensen	2015	Vinod Gupta	2015	Bill Lampkin
Paula Hernandez, MNQ	2015	Waller Clements	2015	Kyle Vach
Deep Ghosh	2015	Norm Maxwell	2014	Mike Connor
Douglass Abramson	2015	Ravi Ganta	2014	Kevin Marple
Erich Binder	2014	Vladimer Fedqiw, MNQ		Duncan Phyfe
				John Riley
				John McKernan
				Leon Shapiro
				Mark Miller
				Michael Heinrich
				Tom Axley (remote)
				Jon Fretthold (remote)
				April Ricketts (remote)

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

TAC Section Head: Krishnan Gowri	SH9@ashrae.net
ALI/PDC: James Bochat CTTC Liaison: Michael Heinrich Research Liaison: Jeff Gatlin Standard Liaison: Niels Bidstrup	<a href="mailto:jim.bochat@cxconcepts.com">jim.bochat@cxconcepts.com</a> <a href="mailto:michael.heinrich@westplainsengineering.com">michael.heinrich@westplainsengineering.com</a> <a href="mailto:jeff.gatlin.pe@gmail.com">jeff.gatlin.pe@gmail.com</a> <a href="mailto:nbidstrup@grundfos.com">nbidstrup@grundfos.com</a>

Mike Vaughn,  
Manager Of Research & Technical Services

MORTS@ashrae.net

## **DRAFT MINUTES**

### **ASHRAE TC 9.2 - Industrial Air Conditioning Technical Committee**

#### **Meeting Minutes – St. Louis, Missouri**

**June 28, 2016**

#### **Note:**

**These draft minutes have not been approved. They are not the official approved record until approved by the committee.**

#### **Meeting Location:**

**St. Louis, MO, at the America’s Convention Center, Room 232.**

#### **Call to Order, Introductions & Acceptance of Previous Meeting Minutes:**

1. Meeting was called to order by Chairman Eileen Jensen at 1:05 PM
2. The Chairman gave opening remarks and called for Introductions
3. The Sign-In sheet was distributed and returned to the Secretary.
4. Electronic Format Attendees: April Ricketts, Tom Axley, Jon Fretthold.

#### **Quorum Status Determination of Meeting Quorum.**

Quorum was established with 5 voting members present out of 8.

#### **Approval Minutes from Orlando.**

1. Chairman called for acceptance of minutes from Orlando.
2. Erich Binder moved to accept the minutes; Kevin Marple seconded.
3. Motion approved unanimously, 5-0-0 CV.

#### **Chair Report – Mrs. Jensen:**

1. Chair Breakfast.  
There are two new multidisciplinary task groups since the Orlando Meeting: one is “The Impact of ASHRAE Standards and Technology on Energy Savings/Performance” and the other one is “Occupant Behavior in Buildings”. Mr. Abramson expressed interest in ” Occupant Behavior in Buildings”. Mrs. Jensen mentions that the Society is pushing hard for everyone to use the TC website template, since there are just a couple of TCs that are not doing it. There is a new cover sheet for submitting TC minutes which can be found on ASHRAE TC website; TCs are no longer required to send a copy to the TAC chair.  
Seminar proposals for Las Vegas must be submitted by August 8<sup>th</sup>. 2016.
2. Membership Report and Voting Member status beginning July 1st.
  - a. Ms. Eileen Jensen, TC Chair.
  - b. Mr. Kevin Marple, Vice Chair.
  - c. Ms. Paula Hernandez, Secretary, non-quorum.

- d. Mr. Vinod Gupta.
  - e. Mr. Waller Clements.
  - f. Mr. Deep Ghosh.
  - g. Mr. Vladimir Fedkiw, non-quorum.
  - h. Mr. Norm Maxwell.
  - i. Mr. Douglass Abramson.
3. New Members announcements. We have five provisional Corresponding Members, one of whom is on the phone, April Ricketts. The online application seems to be working because we are having many new participants.

**Nuclear Subcommittee Report – Mr. Abramson:**

- 1. The subcommittee draft meeting minutes are attached.
- 2. It was suggested the subcommittee have a face to face meeting in January and any other meetings by teleconference for everybody to participate.

**Handbook Report – Mr. Connor:**

- 1. Mr. Connor attended the Handbook Chair training Sunday.  
 There is a Handbook online tool where documents can be shared instead of emailing them.  
 Internet explorer is the only one supported by the system. There may be some troubles using different versions of Microsoft Office software. Cannot use Dropbox or Googledocs due to licensing issues.  
 People can download files but the checkout function has not been addressed yet so Society doesn't recommend using it.  
 Mr. Connor has an Excel archive with the details of each Chapter of the Handbook.  
 He commented that we have significant edits in Chapter 14 and in the Nuclear Facilities chapter.  
 The Handbook Committee said that it is okay if a Chapter has no changes but the TC still has to vote on it.
- 2. Scott MacMurray is in charge of reviewing the Chapter on Nuclear Facilities,
- 3. Ms. Jensen volunteered to review the Power Plants chapter again, and she also volunteered to do the Engine Test Facilities chapter because she has a reviewer for that.
- 4. The issue of the 3D printing was discussed, which is becoming more common in offices. They are looking for someone who has expertise in this topic, possibly to provide a paragraph about it in the Printing Plants chapter.  
 These could be putting out a lot of contaminants.  
 Ms. Jensen is asking for volunteers for this chapter. Mr. Shapiro volunteers to work on that since he noted there are some presenters slated for Las Vegas that have expertise on this issue.
- 5. The Textile Processing Plants chapter may have something new.
- 6. Wood and Paper Product Facilities needs a reviewer. Mr. Ghosh and Mr. Marple already had someone provide changes on this chapter last time.

7. Mr. Ghosh suggested that the Power plants and Mines chapters can be voted on to make no changes in these chapters because we have done changes already in the last update of the Handbook.  
Mr. Abramson makes a motion that we do not make any changes in Power plants and Mining chapters. It was seconded by Mr. Marple and unanimously approved. Motion passes 5-0-0 CV.
8. Mr. Connor proposed a new chapter on Semiconductors and Nanotechnology Facilities, which was discussed on the Handbook Subcommittee Meeting on Sunday afternoon. TC 5.4 may be involved in this chapter as well. ACGIH has some information and Factory Mutual has a publication which we may wish to cite.  
There was a question on whether or not this was directed towards clean spaces. Clean spaces already exists as a chapter, but it is not the intent of this committee to cover it; it should only be referenced.  
The proposed chapter should provide a road map on why these facilities are designed the way they are. Four People offered to help.
9. In order to make an application with the Handbook Committee, this committee has to vote to go with this, and the Handbook Committee will get it voted at the Las Vegas Meeting. Mr. Ghosh moved to create the new chapter. Mr. Abramson seconded the motion.
10. A question was raised as to whether or not TCs 2.3 and 2.4, which cover gases and small particles removal, might want to participate in development of the Chapter. Mr. Connor thought that they may and that TC5.8 might also have something to do with it.
11. No further discussion, the motion passed unanimously, 5-0-0 CV.

**Research Report – Mr. Clements:**

Not present, no report.

**Programs Report – Mr. Connor and Ms. Jensen:**

1. Mr. Gupta sent Ms. Jensen a programs report. She says they had a discussion about potential programs for Las Vegas.
2. Committee members were reminded that the deadline for seminar submittals is August 8<sup>th</sup> which is coming very fast. There are two tracks, Commercial and Industrial IAQ and the other one Energy Efficient Industrial Buildings.
3. One of the suggestions that Mr. Connor came up with was safety before energy efficiency; Mr. Ghosh has volunteered to work on that.
4. Mr. Binder says they have three ideas for the workshops for Energy Efficient Industrial Buildings.  
Mr. Connor says is not that about energy but of operations.  
The point is that energy efficiency is not the most important issue to design for industrial facilities, safety is first.

5. The other suggestion is what happens in your property should stay in your property. They have a chair for that. Exhaust emissions would be an example.
6. Other one is Battery ventilation, Deep Ghosh is hoping to present something on that, workshop or seminar.
7. Hazardous spaces, Mr. Baucom was not present so no additional information is available for this.
8. Mr. Ghosh and Mr. Connor proposed a workshop on the new Handbook Chapter for Semiconductor Facilities.
9. Mr. Binder has spoken with Steven Comstock about having more advertising on industrial HVAC in ASHRAE.

**Standards – Mr. Ghosh:**

1. They are working on Guideline 21, Guide for the Ventilation and Thermal Management of Batteries for Stationary Applications. They have sent it to IEEE for formal balloting.
2. Another Standard they are working on is Standard 128, Method for Rating Portable Air Conditioners. This is being sent to the Standard Committee for review and public comment.

**CTTC Liaison – Mr. Heinrich:**

1. He noted that the CTT committee is interested in knowing how we are doing and appreciate our work. Ms. Jensen asked if there is a presentation on TCs, which Mr. Heinrich confirmed there is a PowerPoint available online.
2. The committed shared that they are interested in getting new younger members to be involved in industrial sector and asked if the CTT committee could take that message back to their members.

**Hazardous Spaces – Mr. Baucom:**

1. Not present. Ms. Jensen noted there has been some online communication, but not much has been done since the last meeting.
2. Mr. Binder volunteered to follow it.

**Standard 62.1 Liaison Report – Mr. Clements:**

1. Not present, no report,
2. Mr. Connor asks if there is still discussion on Std. 62.3 – no one present had any information.

**Standard 90.1 Liaison Report – open:**

1. Ms. Jensen asked for a volunteer, just to ensure the committee's interests are fairly represented.

2. It was noted that it is a significant commitment to take. No volunteers stepped forward.

#### **Webmaster Report – Mr. Baucom:**

1. Mr. Baucom was not present, however, Ms. Jensen noted that he has been very responsive.
2. As noted earlier, there is there a new TC website template, we are keeping the format we are having right now. This is because there are still some issues on their template.
3. One of the problems is that Society does not have our roster correct, and this is a problem. This is a good reason for us to continue having our own website.

#### **Journal / Insight Liaison – Mr. Maxwell:**

Not present, no report

#### **Old Business:**

1. Ms. Jensen has attended meetings with TC5.8, and acknowledged the presence of John McKernan current chair of TC5.8 at this meeting. She noted that these committees have largely the same population of Members in both committees, and that we are sometimes struggling for participation. Rather than see both committees fall, she posed the question of the possibility of combining the two committees to have better use of the volunteer's time.
2. Mr. Abramson mentioned that he is a member of both committees and felt this could be worthwhile.
3. A question was raised as to what to call the combined committee but no consensus was achieved. It was noted that much of the specialized work of either committee could be covered under subcommittees, which don't require physical attendance at Society meetings.
4. Mr. McKernan stated that TC5.8 had the same topic a year ago, and generally agreed it is probably a good time to come back together.
5. Mr. Ghosh and Mr. Connor mentioned that many committees have come from TC9.2. Mr. Ghosh thought it made sense to pool our resources.
6. It was pointed out that there is a process to go through.
7. Ms. Jensen asked for an informational show of hands, of who is in favor of coming together. The general consensus was that it could be a good idea.
8. It was noted that the committees could split again if we decide that this way will work better.
9. Ms. Jensen and Mr. McKernan noted there have been times we have not been able to achieve quorum.
10. Mr. Marple added that he has spoken with some people and many of them agreed this would make better use of the volunteer's time.

11. Ms. Jensen, Mr. McKernan, and Mr. Marple will contact the TAC chairs and other Society officials to determine the process. They will provide the results of that information at the Las Vegas meeting.

**New Business:**

1. Ms. Jensen said that the TC chairs were surveyed earlier this year. Amongst the results of that survey, the chairs generally gave ASHRAE a good rating, with regards to the quality of the information ASHRAE provides.
2. Ms. Jensen also noted that the TC chairs were asked for suggestions for potential improvements. She suggested the possibility of trying to put together a memorandum of agreement or some other working relationship with ASME, since they are involved with a lot of industrial-related and safety issues. She thought there may be a way we can get something between the two groups, including a possible joint meeting in the summer since they have some meetings around the same time as ASHRAE's Annual meeting.
3. On the telephone Mr. Axley stated that would be something worth looking into.
4. Ms. Jensen noted that Mr. Axley has a lot of experience with both ASHRAE and ASME and appreciated his support.
5. No other new business.

The Chair then called for Motion to Adjourn – Motion by Mr. Abramson. Motion passed unanimously, 5-0-0 CV.

**Meeting Adjourned at 2:43 PM**

**Sincerely,**

*Paula Hernández*  
*TC 9.2 Secretary*