



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 5.07 DATE Friday January 22, 2021

TC/TG/MTG/TRG TITLE Evaporative Cooling

DATE OF MEETING Friday January 22, 2021 LOCATION Virtual Meeting

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Sukru Erisgen – Chair	2020	Patricia Graef – Stdnr. Sub. C.	2012	Larry Smith
William Truong – Vice Chair	2020			Mike Scofield
Mark Miller – Secretary	2020			Kevin Marple – Section Head
Steve Slayzak – Prog. Sub. Chair	2020			Mick Flom
Richie Mittal – Res. Sub. Chair	2020			
G.D. Mathur – Hnbk. Sub. Chair	2018			
Annette Dwyer – Webmaster	2016			
Nicholas Lea – CM	2018			
Daniel Harmeyer – CM	2010			
David Baird – CM	2014			
Andrew Cochrane – CM	2011			
Galen Gerig – CM	2018			
Hofu Wu – CM	2012			
Duncan Curd – PCM	2020			
Pooya Navid - PCM	2019			
Alkis Triantafyllopoulos – PCM	2020			
Daryl Griffith – PCM	2019			
Ryan Reimer – PCM	2020			

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

TAC Section Head: Kevin Marple	SH5@ashrae.net Where x is the section number
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	See ASHRAE email alias list for needed addresses.
Mike Vaughn, Manager Of Research & Technical Services	MORTS@ashrae.net

Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.

MEETING MINUTES

ASHRAE TC-5.07 Evaporative Cooling
Friday January 22, 2021
11:00-2:30AM EST
Virtual Zoom Meeting

I. CALL TO ORDER

- Sukru Erisgen called the meeting to order at approximately 11:00 am EST.
- Sukru Erisgen took the attendance based on Zoom login.
- A roll call was held, seven (7) of the seven (8) voting members were present to start the meeting, establishing that a quorum was available to conduct business.
- Sukru read the code of ethics.

II. APPROVAL OF PREVIOUS MINUTES

- Sukru asked for a motion to approve previous meeting minutes, which were distributed after the meeting, also attached to Zoom meeting invitation.
- A motion was made by Mike Scofield to approve the minutes (2nd G.D. Mathur). The motion was carried.
- The minutes from the Atlanta ASHRAE TC- 5.7 meeting approved by a unanimous vote of the voting members.

(7) Approved (0) not approved (1) Not attending, (0) Abstentions

III. Chairs Report

- Kevin Marple is the new Section 5 head
- Chairs breakfast notes (Sukru was not able to attend)
 - Add to basecamp and distribute
- Add code of ethics to meeting agenda for future meetings
- Activity form needs to be updated and submitted by next Tuesday
- ASHRAE CEC is planning on face-to-face meeting in Phoenix but TBC
- Website is out of date (Mark Miller)
 - Need to update with meeting minutes and information
- Basecamp setup for the committee and ensure that it is being used
- Functional group evaluation form not completed yet
 - Kevin will reach out to Sukru to complete that
 - Tool to evaluate the function of the committee and how well we function to meet the strategic goals of ASHRAE as a whole
- Members can send emails to anyone in the organization using following emails
 - reorg@ashrae.net

- astac@ashrae.net

IV. Handbook (Mathur)

- 2 chapters
 - Chap 41 published last year
 - No updates at this point
 - Chapter 53 – Evaporative cooling to be updated 2023
 - 2023 handbook updates due date is April 12 2022
 - 1 year to make updates
 - Feedback was provided (including Dr. Taylor, Mike Scofield)
 - Committee to review and provide feedback to GD
 - After Phoenix meeting GD will edit and send to TC for review before next meeting
 - Post to basecamp for review when ready and committee can ballot vote

V. Membership (Sukru)

- Following members assumed their new roles in this meeting:
 - Sukru Erisgen, Chair
 - William Truong, Vice Chair
 - Richie Mittal, Secretary
 - Mark Miller, Web Manager
- Sukru said, someone is trying to get a copy of our roster for an expert witness for a lawsuit. He said he refused to share a copy of the roster, but this person is trying to obtain the list.
 - Do we have way to reject a membership?
 - Contact at ASHRAE (Joyce) – get contact from Alkis?
 - Everyone has access to PDF
- Handful of member email addresses are not valid. They were bounced back when meeting invitation was sent.
- Sukru/William to send out bulk email to provisional members to asking if they are still interested
 - Review next meeting
- Annette – used to be webmaster but Mark is the new webmaster
 - Mark has updated the website during the meeting
 - Mark needs the agenda
 - Roster needs to be updated to show Mark as new webmaster

VI. Programs (Slayzak)

- Richie mentioned possible presentation on desiccant dehumidification and evaporative cooling
- **Action:** Richie to send a write up to Steve
- Next meeting will be Phoenix
 - Would be ideal for us to present something
 - Adiabatic humidification and effect on Covid 19
 - Dr. Taylor will be presenting with TC.5.11

- Possible 5.7 presentation on Dispelling myths about adiabatic cooling
- Steve to reach out to Dr. Taylor
- Update to ASHRAE 170 allowing high pressure atomizing systems
 - TC 5.11 could help – maybe co-sponsor
 - Alkis can help as well
- Maybe an RTAR about bacteria being caught in adiabatic systems? Covid?
 - Intertek can test this with certain viruses
 - Alkis Triantafyll also uses this for indirect evaporative cooling for pre-cooling and can provide additional information

VII. Research (Mittal)

- Sukru suggested submitting an RTAR. Topic is, “Does evaporative media capture airborne COVID-19 and act as an air scrubber. How to kill COVID-19 in water returning from evaporative media.
 - Need to get the updated contact info for Dr. Love
- Maybe an RTAR about bacteria being caught in adiabatic systems? Covid?
 - Intertek can test this with certain viruses
 - Alkis Triantafyll also uses this for indirect evaporative cooling for pre-cooling
- If we have an RTAR that needs review send to Dennis Loveday
 - D.I.loveday@lboro.ac.uk
- Richie was supposed to send out information a project but lock down prevented access to the office
 - Cooling using dehumidification (3 stage process)
 - Richie will try and send that out when possible
- Sukru would like to propose an RTAR on COVID for indoor/outdoor
 - What is the effectiveness of media in catching or spreading the virus
 - When the air hits the wet surface of the media will the virus attach to the water or media and pull out potential virus particles (would be drained down with the water)
- Should we consider writing a white paper on how evaporative coolers can be installed (new or retrofit) with minimal impact on building efficiency
 - Steve S., Chris H., David Baird to work on this
 - Nothing done to date

VIII. Standard 133,134, and 212 (Chris - Absent)

- Galen Gerig is on standards 133,143
 - They were meeting every month
- Standard to be ready for publishing this year and will need to be reviewed
 - William to follow up with Chris on other standards updates

IX. Website (Miller)

- We will need to update Basecamp
 - Richie to look at updating access for base camp for all members
- Mark is updating now the website now
 - Agenda and meeting minutes

- o Any other suggestions send to Mark

X. Liason Reports

- GD is 2023 handbook liason and has provided an update on our status
 - o GD to send deadlines to Sukru and Richie

XI. Old Business/ New Business

- Galen Gerig – 90.4 tied to 90.1 (Building efficiency)
 - o Starting to look efficiency for Data Centers MLC calcs for IDEC units
 - o Jeff Sloan is working on that – Galen to get Steve Slayzak contact information on that
- Duncan Curd
 - o Working on an RTAR with 9.6 for healthcare

Research Topic Acceptance Request Cover Sheet		Date:	October-2020
(Please Check to Insure the Following Information is in the RTAR)			
A. Title	<input checked="" type="checkbox"/>	Title: Understanding the appropriate application of humidity and temperature control strategies across climate zones on infectious aerosol transmission RTAR# (To be assigned by MORTS) Results of this Project will affect the following Handbook Chapters, Special Publications, etc.: ANSI/ASHRAE/ASHE Standard 170-2017 HVAC design manual for hospitals and clinics ch. 2, 7, 8 at least ASHRAE Applications 2019, Chapter 64 "moisture management in buildings?" ASHRAE Applications, Chapter 9 "Health Care facilities" ASHRAE Fundamentals 2017 Chapters: 10, 25-27?, 36 and handbooks indicated in section 9 of such chapter "moisture management". ASHRAE system and equipment. ASHRAE commissioning guides. Recommendations and guidelines from the Epidemic Task Force	
B. Executive Summary	<input checked="" type="checkbox"/>		
C. Background	<input checked="" type="checkbox"/>		
D. Research Need	<input checked="" type="checkbox"/>		
E. Project Objectives	<input checked="" type="checkbox"/>		
F. Expected Approach	<input checked="" type="checkbox"/>		
G. Relevance and Benefits to ASHRAE	<input checked="" type="checkbox"/>		
H. Anticipated Funding Level and Duration	<input checked="" type="checkbox"/>		
I. References	<input checked="" type="checkbox"/>		
<u>Research Classification:</u> Basic/Applied Research	<input type="checkbox"/>		
Advanced Concepts Technology Transfer	<input checked="" type="checkbox"/>		
Responsible Committee:	ASHRAE TC 9.6	Date of Vote:	
For Against Abstaining Absent or not returning Ballot Total Voting Members	* * * *	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
RTAR Authors Lead: David Thomsen Traci Hanegan, Duncan Curd, Alejandro Falcón Bonilla. Others:	Co-sponsoring TC/TG/MTG/SSPCs (give vote and date) TC 9.6, Healthcare Facilities SSPC 170 Ventilation in Health Care Facilities TC 5.11 (to be approached) TC 62.1 and 62.2 (to be approached) To be approached (Evap cooling?) (Dehumidification?)		
Expected Work Statement Authors Lead: David Thomsen Others: Traci Hanegan (L), Duncan Curd, Alejandro Falcón Bonilla	Potential Co-funders (organization, contact person information): AHRI, CDC, other foundations, US Govt agency, Canada Research Council, Virginia Tech, Yale,		

- Looking for sponsors
 - They will reach out to 5.11
 - Does 5.7 want to co-sponsor?
 - Duncan to send information to Sukru to send out to 5.7 for feedback (cover page also included in the chat)
 - Need to present in March to RAC
 - 2-4 weeks to provide feedback to Duncan

XII. Closing Remarks (Sukru)

- Steve suggests making sure Basecamp is updated with everything that we can

XIII. Next Meeting

- Phoenix, AZ : Date TBD, 4:15 pm - 6:00 pm, Room: TBD

XIV. Adjournment

- A motion to adjourn the meeting was made by GD and properly supported by Steve. All members were in favor; none opposed.

(7) Approved (0) not approved (1) Not attending, (0) Abstentions

Meeting adjourned at 12:15pm. EST