

## ASHRAE TECHNICAL COMMITTEE MEETING TC-5.07 EVAPORATIVE COOLING

Date: Monday, June 27, 2016

Location: St. Louis, Missouri Marriott Grand Hotel-Parkview Meeting Room

Chairman: Andy Cochrane PE

### **Preliminaries:**

The meeting was called to order by Andy at 4:20 PM. A sign up sheet for attendance was passed around and the current roster was circulated for corrections by those in attendance to their listing in the roster. A quorum was present for voting.

The minutes from the Orlando meeting were approved as amended. Item # 11 in the Orlando minutes was corrected to show the authors of the May 2016 ASHRAE Journal article "Variable Air Volume System Heat Recovery Economizer" was authored by Mike Scofield, Nick Des Champs and Tom Weaver.

### **Attendance:**

Mark Miller Spec Air Voting Member  
Leon Shapiro 21<sup>st</sup> Century Water Voting Member  
Richie Mittal Overdring Voting Member  
Andy Cochrane Industrial Air Voting Member  
Mike Scofield Conservation Mechanical Systems Secretary  
G. D. Mathur Calsonic Kansei Handbook Chair  
Jay Madden Southern Cal. Edison Corresponding Member  
Robert Davis PG&E Corresponding Member  
Pat Demitrio Nortec Corresponding Member  
Nick Lea Nortec Corresponding Member  
Vishnu Sreeram Munters Corresponding Member  
Steve Forner Trane Co. Corresponding Member  
Harris Sheiman ASHRAE Handbook Liaison  
David John TC Research Liaison  
Ken Peet TAC Liaison

### **Handbook Committee:** G. D. Mathur Chair

Mr. Mathur discussed the current 2016 HVAC Systems and Equipment Handbook Chapter 41 which was just updated and published by Society this summer.

Next reviews of Chapter 52 of the ASHRAE 2015 HVAC Applications Handbook will begin in the next 2 years to meet the 2019 publication deadline.

**Programs Committee:** Steve Slayzak Chair was not in attendance.

Leon Shapiro reported on the Las Vegas ASHRAE meeting next January and the Water and Energy Nexus Track which our committee fit into quite well.

Nick Des Champs said that Professor Mark Modera has proposed a TC-5.7 Seminar for Las Vegas entitled “Recent Developments in Evaporative Cooling”. Mark has several possible speakers at U. C. Davis Western Cooling Efficiency Center (WCEC) that will present on this topic and that they would welcome other speakers to join the Seminar.

Mike Scofield proposed an additional speaker, Mr. James Falconer with AEI Consulting Engineers in San Francisco, who has a topic entitled “R-718 to the Rescue” that he would speak on.

August 8, 2016 is the deadline for submission of this proposed Seminar to Society.

Andy noted that if a program is not accepted for a Seminar at the Las Vegas winter meeting, a new ASHRAE policy would allow TC-5.7 to present the topic in a Sunday afternoon TC-5.7 Committee meeting time slot and it would be advertized in the meeting announcement as a Seminar that ASHRAE members, signed up for the meeting Technical Sessions, could attend.

Mike Scofield will work to try to line up speakers for a Seminar or Conference Paper at the Long Beach California summer meeting next June entitled “Water, Water Everywhere but Not a Drop to Cool”. This topic will focus on the use of sea water in evaporative cooling applications such as Cooling Towers and Direct Evaporative Cooling systems.

**Website Committee:** Annette Dwyer Chair was not in attendance.

Andy said that the website is up to date and shows the current minutes from the Orlando meeting.

**Research Committee:** Andy Cochrane Chair.

Andy discussed the Evaporative Cooling Design Guide and the Sea Salt water usage for Evaporative Cooling RTARs. Mark Miller will line up recommended bidders for the Research Project work.

Mike Scofield discussed the relationship between room Relative Humidity and the survival of airborne pathogens such as the Flu virus. Mr. Nick Lea, incoming Chair of TC-5.11 Humidification, said there is Recent research, done at Kansas State University, RP-1630, that verifies that airborne Influenza Virus shows a significant decline at indoor Relative Humidified (RH) between 40 % and 80 %. Their TC-5.11 is trying to sponsor a Research Project study on existing Nursing Home installations that would show the effect on occupant health of maintaining room RH between 40 to 60 %. These facilities were selected as the site of the study since they operate on 24/7/365 duty cycles. TC-5.11 would like TC-5.7 to join in sponsoring this RTAR.

**Standards Committee:** Mark Modera Chair. Mark was not in attendance.

Andy stated that he thought Standards 143, 133 and 212 were all current and up to date.

**Membership Committee:** Mike Scofield Chair.

Mike said that there have been several new additions to our TC-5.7 Committee and urged those in attendance to join our group as either Members or Corresponding Members.

Annette Dwyer urged those at the meeting to check the TC-5.7 web site to be sure their data and status is listed correctly.

**New Business:**

Andy urged all members of TC-5.7 to take time at local ASHRAE Chapter meetings to let the local members know what we all do on our committee. The “grass roots” of Society needs to know how they might make contributions to the Art and Science of Evaporative Cooling through joining our TC-5.7 group.

A motion to adjourn the meeting was made and approved at 5:30 PM