



**Technical Committee 9.07 Educational Facility Air-Conditioning Applications**  
**Annual Meeting, San Antonio, TX**  
**Sunday, June 24, 2012 1:00 – 3:00 p , (H) Travis A/B (3)**

TC 9.07 Chair Itzhak Maor called the meeting to order at 1:05 PM

**AGENDA**

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**Roll Call** – Chair Maor reviewed the membership and it was determined only 4 voting members were present at start of meeting. 9 voting members were identified on the membership roster, quorum not determined at start of the meeting. (Lou Kelter came in at 1:12 to constitute a quorum).

**Introductions Members and Guest**

Maor, Attikisson, Matson, Bender, Lu, Cox, Handwork, McMillian, Glass introduced themselves with affiliations noted.

**Agenda Review** – Maor reviewed the agenda and noted that Cox would need to leave early.

**OLD BUSINESS**

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**Chicago Meeting Recap** – No review of Chicago meeting.

**Chicago Annual Meeting Minutes Approval** – Reading of Chicago minutes was waived since electronic version was distributed prior to the San Antonio meeting.

Hugh McMillian made motion to approve minutes, approved unanimously.

**LIAISON REPORTS**

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**TAC Section 9 Report: (Lawrence)** – No report

**Environmental Health: (Mills)** – No report

**Handbook: (Mills)** – No report

**Other TC's:**

**2.1 (Westbrook)** – No report

**9.6 (Cox)** – Robert Cox provided the update with the topic of research. Detailed address to the committee was reserved in the new business.

**SSPC 90.1 (Maor)** – Maor provided update of activities at the SA meetings and CMP's for public review. Performance path year 2004 as a baseline and must show that compliance is 45% better to comply. Handwork provided an update of MSC work, sub-metering and data center activities.



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**SUBCOMMITTEE REPORTS AND BUSINESS ACTIVITIES**

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**Program Subcommittee Report (Glass)** – No activities approved for SA meeting.

**San Antonio program review** - No programs for SA meeting.

**Future program discussions for Dallas and Denver** – Glass had suggestions for Dallas and Denver meeting, same as proposed at the Chicago meeting.

Matson – asked if the Mills topics were research or case studies. It was not identified during discussion which category the topics were. Follow up to Frank Mills was to occur either at the SA meeting or via email by Glass.

Glass encouraged the group to propose ideas for the programs.

Glass solicited someone to take over programs chair- Matson agreed to do this.

Matson – For Dallas, the following program tract may be applicable for TC 9.7; Energy Conservation, Large Building, FM operations and technology improvement.

Denver – Matson is the technical programs chair – Research tracts instead of programs tracts. There's been a drop off with research presentations, and higher education constituents has provided feedback that the lack of research papers has prevented their participation on the summer conferences. Also possible tract on how to solicit research funding from ASHRAE, Mini-conference – Integrated project delivery – Matson described the process of attending the mini-conference. Tracts are:

Building energy modeling

Mile high equipment and systems

Renewable and alternative energy

HVAC systems & equipment

HVAC fundamentals

Seminars and Forums for Dallas are due Aug 13 and Feb 11 for Denver meeting. Conference papers and abstracts for Denver Aug 24. (Confirm dates on website)

Glass to hand off all files and information to Matson.

**Membership Subcommittee Report (Lu)** – Dawen Lu reported TC 9.7 having 7 voting members as of end of SA meeting, but (3) voting members will be added to have a total of (10) voting members after July 1. Glass will be the incoming chair, Lu will be the vice chair. Handwork to be the secretary, Bender to be the webmaster

**Handbook Subcommittee Report (Maor)** – Chris Ahne, the Handbook liaison, addressed the committee to encourage a plan for updating the TC 9.7 chapter. Maor provided a work plan for the group on revising and updating the HB chapter. Ahne requested an outline of proposed changes or review at the SA meeting,

Three goals – Energy Efficiency, Maintenance, and topics for on-line version. In the authors and revisors guide, there are criteria of types of media video, spreadsheets, etc. not available in print but would be available online.



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**Research Subcommittee Report (Cox)**

**Research and Technical Activities report review - No Report**

**Current RTAR's and Research project proposals** – Cox noted the RTAR sponsored on the low humidity by TC 2.1 has been dropped. Cox informed the committee that TC9.7 could pick up the RTAR sponsorship. Cox to confirm with Westbrook on the status of the unsolicited research topic. Cox noted since this is an unsolicited topic it may need to be submitted to the proper process through RAC if this committee will be picking up the full sponsorship. Cox to confirm on the full status of the RTAR. Lu asked what determines the status of “unsolicited”. Cox explained the researcher outside of ASHRAE approached TC 2.1 on this research topic, not requesting any ASHRAE funding for the PI. Lu noted the ADEG recommended DOAS connected to terminal units and there will be an impact on dry/cold climate installations. Cox affirmed a research topic has good general interest in ASHARE circles, but in order for it to proceed a sponsor will need to step forward. Maor also noted the Handbook chapter also need this research to help define the humidity control guidance.

Cox also noted that healthcare facilities need documentation (scientific founding) why the 30% lower limit has been determined and used as a standard. All viral based research shows that very dry air helps reduce the spread of cough / aerosolized pathogens, but there is not any research that shows the physiological impact on patients / humans in dry healthcare environments.

The problem with this research is cannot be performed on people (unless there is monitored case studies), but it will need to be performed with lab animals. This will be expensive research.

Cox noted this could be a topic to team with other groups inside and outside of ASHRAE. But the challenge will be effectively combining all the interest groups to address their unique field applications. Perhaps there is a work statement that can be developed that will apply to multiple areas / interest groups.

Maor noted the current RTAR is unique to elementary schools in Canada / cold climates. Cox agreed the current work statement may need modification to be more transcendental to multiple user / constituent groups.

Maor – Which path should be pursued? Cox – Not sure, but start with reviewing the work statement if applicable to a broader audience.

Attkisson – Why did TC 2.1 drop the sponsorship? Cox – Will research to find out why.

Maor – possibly the Canadian research is well defined and crafted and we should leverage that experience. Cox agreed.

Maor will find out who the PI is for the Canadian group.

Attkisson noted this research topic, even if for K-12, is very applicable to all areas such as hospitals and buildings in general.

Cox – believe this will need to be focused at an epidemiological level, i.e. how does the dry air affect the lungs and other organs and if a person in a hospital recovers slower or faster in a low humidity environment.

Cox suggested TC 9.7 proceed, but find avenues to team with other TC's.

Glass suggested we get a copy of the original URP.

McMillan – suggested other ASHRAE TC's than 9.6 Healthcare – such as Environment, would be a good avenue of joint support.



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Cox – solicited the committee / encouraged a TC 9.7 research subcommittee be formulated to table and formulate research topics to support the Handbook chapter and ADEG's. Cox would like to work with the TC to start a research plan to start RTAR's .

Maor – how to start? Cox – before Dallas meeting the committee should work on topics that would be research topics. Cox to review and support.

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**NEW BUSINESS**

- **Web site , Electronic Communications Update and “Linked In” web site (Bender)** – Bender was not able to update the website with Chicago minutes post this meeting.
- **Linked In** – suggestion from ASHRAE not to utilize LinkedIn as a group to use due to spamming and other compromising issues.
- It was suggested an ftp site be set up for the review and editing of the Handbook chapter.
  
- **Open Discussion on Committee Activities ( All)**
- Attkisson will be more active on the student activities committee as he will be rolling of this committee.
- **Attkisson moved to adjourn at 2:13, unanimously approved.**
- **End of meeting at 2:13 PM.**