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Meeting Minutes TC 5.5 Air-to-Air Energy Recovery

MacDonald Room, Toronto Hilton
3:30 p.m., June 23, 1998

1. Chairman Kirk Mescher opened the meeting with table introductions. He invited those wishing to move from corresponding to voting membership on the committee to contact Bert Phillips.
2. The minutes from San Francisco were distributed and one amendment was proposed, to change the chair of the second Chicago seminar from Kirk Mescher to Maury Wawryk. *Bert Phillips moved, Katherine Hammack seconded, that the minutes from San Francisco be accepted as amended. Motion carried (6,0,0).* The amended version is posted on-line.
3. Subcommittee Reports
 1. Membership - Bert Phillips
 - Members present –Mescher (chair), Vyavaharkar(vice), Phillips, Besant, Hammack, Shipley.
 - Members absent – Elkin, Damshala, Ambs, Buckley, McNab.
 - As of the next meeting, Besant and McNab will be cycling off the committee and Grinbergs and Wawryk will cycle on.
 - Bert Phillips will e-mail the Secretary with any additional membership updates. (**Action Item: Membership**), and the membership list on the website will be updated (**Action Item: Website**).
 2. Program - Katherine Hammack
 - Chicago, Jan 23-27, 1999
 - Seminar, "Dessicant Wheels? Heat Recovery Wheels? What are the Differences?", chaired by Katherine Hammack, with cosponsorship from TC 3.5. The chair is seeking papers from people who can speak about either technology (or both).
 - Seminar, "The Squeeze Between Standards 62 and 90 - Cost-Effective Ventilation Strategies", chaired by Maury Wawryk. The chair has sent out an e-mail soliciting papers.
 - For Chicago seminars, presenters need to forward a business card and an abstract to the seminar chair by 1 August, so the chair can submit it in time for ASHRAE's 7 August deadline.
 - Seattle, June 19-23, 1999

- Seminar, "Ventilation in Residences - Mechanical versus Non-Mechanical", chaired by Bede Wellford.
 - Dallas, Feb 5-9, 2000
 - Symposium "Residential Mechanical Ventilation - Applications and Solutions", chaired by Peter Grinbergs, with co-sponsorship sought from TC 6.3.
 - Seminar, "Kyoto Protocol - Reducing CO₂ Emissions with Non-Refrigerant Based Technology", chaired by Dilip Vyavaharkar, with co-sponsorship sought from TC 5.7.
 - Leon Shapiro of TC 5.7 Evaporative Cooling indicated they may be interested in co-sponsoring several of our programs. The TC 5.5 Chair was asked to write a letter to the Chair of TC 5.7, Pat Thomas, formally requesting this co-sponsorship. (**Action Item: Chair**).
 - *Katherine Hammack moved, Dilip Vyavaharkar seconded, that the program outlined above be accepted. Motion carried (6,0,0).*
3. Standards - Maury Wawryk
- Standard 62:
 - Maury has not been attending these meetings, so Bede Wellford provided a report. The TC expressed their thanks to Bede for all his hard work as liaison to Standard 62.1.
 - There has been a recent public review on five addenda to the standard, with 1500 comments received. The Standard 62.1 Committee was dealing with these comments and making decisions on the addenda at the Toronto meeting.
 - At one point the Chair of the Standard 62.1 Committee, Steve Taylor, requested that Bede not sit at the table, and stated his belief that the views Bede was sharing were his own personal viewpoint and not those of TC 5.5. (Steve publicly apologized to Bede the following day). Steve also expressed the opinion, however, that as 5.5 liaison Bede should confine his comments to air-to-air energy recovery and not speak about ventilation levels. It is Bede's contention that the only reasons to reduce ventilation levels are to reduce energy consumption and cost or to reduce humidity problems and the associated costs. Those issues are key to this TC, and therefore the TC 5.5 liaison should speak on issues of ventilation and not just energy recovery. *Katherine Hammack moved, Gerry Martin seconded, that the TC endorses Bede's comments. Motion carried (6,0,0).*
 - Dilip Vyavaharkar, who also goes to the Standard 62.1 meetings, said the committee appears to be adopting the philosophy that there should be "no smoking" in buildings and that ventilation rates can be lowered. He did not believe there was a scientific basis for either decision.

- Bede spoke about the status of some of the addenda considered.
- Addendum B was a change in objective from "goal of the standard is acceptable ventilation rates" to "goal of the standard is acceptable air quality." The TC opposes this change and believes it is in conflict with the purpose of the Standard, but it went through.
- Addendum C was dropped.
- Addendum E, the smoking change, went through with minor changes.
- In response to Addendum F, the air-to-air energy recovery section of ARI sent a letter, with Maury's signature and others, making the technical comment that there should not be a rationale for a ventilation rate of 5 cfm/person included in the addendum when that is not a rate that appears anywhere in the 1989 standard. The information they were proposing to include (on odor perception in unadapted and adapted populations) might be useful to some people, but unless the standard includes a rate of 5 cfm/person, a rationale for that rate does not belong there. The chair of the subcommittee on this addendum recommended accepted the comment, but he was not present at the meeting. The Standard 62.1 Chair reversed that recommendation and recommended publishing it with the change. There is concern in this TC that this is an attempt to lay the groundwork for a move to lower ventilation rates in schools, auditoriums, and other spaces where occupants presumably adapt. Canadian teachers unions and other affected groups, are expected to strongly oppose this move.
- Standard 62.2 is chaired by Max Sherman. They are looking for comments to come in from committee members. Their draft is not officially out for public comment yet. It currently looks much like the one the former 62R committee had prepared. Bede told us some of the details and has a copy on his computer, if anyone wants to see it. Examples of proposed changes include new requirements for range hoods and bathroom fans, and requirements for filtering in duct runs over 10 feet.
- Standard 84 does not have a formal SPC at this time. They did review a draft provided by Bob Besant. There are still a couple of things up in the air related to the formula. It is currently the same as in the 1991 version, but will likely change. Within a couple of months, a draft will be posted on the website - since removed to members-only area. (**Action Item: Standards, Website**).
- The ARI certification program will be launched in the first quarter of 1999. This program will certify components, such as flat plates,

wheels, heat pipes, etc., and will certify sensible, latent, and total effectiveness numbers, pressure drop, and exhaust air cross-contamination.

- AMCA approached ARI with the idea of doing a joint standard on packaged energy recovery ventilators. ARI responded that they felt it would be best for AMCA to continue development of their gross and net air measurement standard, and then ARI would continue from there with development of a standard for rating the packaged units.
- Standard 90.1
 - The Standard 90.1 Committee has accepted in principle that the load calculations can be modified according to engineering principles if an energy recovery ventilator is present. More details will be provided to the Secretary later for attachment to the minutes. (**Action Item: Standards, Secretary**).
 - An exception needs to be made to the economizer requirements in climates where they do not make sense. This TC would like to see energy recovery ventilators and economizers compared in different climates. The Standard 90.1 Committee would like more technical information on this comparison.
 - There was a danger of Standard 90.1 being voted into continuous maintenance on 24 June, which would result in the loss of all the efforts this TC and others have made so far to work out proposed changes. Alternatively, Standards may decide to resolve all sections of the new standard except for building envelopes. The building envelope section is caught in a conflict between the electric and gas utility industries: most of the 54,000 comments received recently came from companies in these two industries.

4. ASHRAE Liaisons

- Dick Kelso, the incoming RAC liaison, introduced himself to us. He reported that work statements need to be in by 15 September and should include recommendations for bidders, and the criteria by which proposals will be evaluated. If bidders are listed, we need to be sure to include all contact information, so RFPs can be sent to them. Research Plans need to be in by 1 August, including the overall strategy. (**Action Items: Research**). We have one Research Project that is completed but is still considered an open project by ASHRAE: Kirk needs to write an official letter to Bill Seaton to close that out. (**Action Item: Chair**).
- Peter Simmonds, outgoing RAC liaison, presented Katherine Hammack with a plaque in appreciation for her outstanding leadership of this TC over the last few years. Peter also urged us to have our subcommittee chairs and liaisons prepare brief written reports for handout at the meetings, to keep

the oral reporting shorter, keep the meeting moving along, and help the secretary. (**Action: Subcommittee Chairs & Liaisons**).

5. More Subcommittee Reports

0. Research - Peter Grinbergs

- We have three research plans written. We also have one work statement from Bob Besant, which is going to be modified somewhat to lead to a guide or short course. The work statement needs to be reviewed by Dick Kelso, too, so he can be supportive when it reaches RAC. (**Action Item: Research**).
- All this material, including research plans and work statement, will be provided for posting on the website, to facilitate review. (**Action Item: Research, Website**).
- We need to continue developing new work statements, even as we move forward with the ones we have.

1. Handbook - Gerry Martin

- The entire text of the handbook chapter will be posted on the website for review, with proposed changes in italics. It will be removed once review is complete, so as not to interfere with ASHRAE's publication and sales of the handbook. (**Action Item: Handbook, Website**).
- Section responsibilities posted on the website will be updated. (**Action Item: Handbook, Website**).

2. Journal and Insights

- Prakash Damshala was not present, but Kirk Mescher reported on his behalf that both the ASHRAE Journal and ASHRAE Insights are interested in papers. Papers on ventilation and IAQ would be welcome.

3. More Programs - Katherine Hammack

- ASHRAE staff have modified their proposal to begin charging presenters to attend the conference. At the 1998 conferences and previous ones, presenters attended without paying a registration fee. Staff proposed that beginning with Chicago, presenters would be charged 20% of the regular fee, or \$86. If a presenter attended only the session in which s/he presented, that would be free. Staff's reasoning for this move was not just to recover costs, but also to discourage frivolous or superfluous presentations and reduce the number of proposed programs. Bert Phillips pointed out that, while forums and seminars are not a huge commitment, the cost of chairing a symposium can be quite high, because of all the telephone and courier charges, not to mention his time. He's had out-of-pocket expenses as high as \$500-1000 (Canadian) when chairing a symposium. *Katherine Hammack moved, Bob Besant seconded, a motion that Kirk Mescher should be requested to write a letter to ASHRAE expressing the TC's displeasure with this move. Motion carried (6,0,0).* (**Action Item: Chair**).

- Katherine reiterated the need for papers for two seminars in Chicago and a symposium in Dallas.
6. Old Business
 - Dilip Vyavaharkar requested that the website subcommittee report on the number of hits the website is getting. (**Action Item: Website**).
 - Bede Wellford is not officially listed as a liaison to Standard 90.1, although a motion was passed to this effect at our last meeting. Kirk Mescher needs to send a letter to Claire Ramspeck, ASHRAE Manager of OS, to officially appoint Bede as liaison. (**Action Item: Chair**).
 7. Adjournment: The meeting adjourned at 5:15 p.m.

SUMMARY OF ACTION ITEMS

Description	Responsible Party	Status
E-mail additional members updates to website subcommittee	Membership	Open
Post up-to-date membership information	Website	Open
Letter to TC 5.7	Chair	Open
Provide draft of new Std. 84 to website subcommittee	Standards	Open
Post draft of new Std. 84 - since removed to members-only area	Website	Open
Provide more detailed liaison report on Std. 90.1	Standards	Open
Attach liaison report on Std. 90.1 to minutes	Secretary, Website	Open
Submit research plans to ASHRAE by 1 August	Research	Open
Submit work statements to ASHRAE by 15 Sept.	Research	Open
Letter to Bill Seaton	Chair	Open
Provide brief written reports to the TC	Subcommittee chairs and liaisons	Open
Revise work statement	Research	Open
Provide research plans and work statement to website subcommittee	Research	Open
Post research material	Website	Open
Provide text of revised chapter, and updated section responsibilities	Handbook	Open
Post handbook material	Website	Open
Letter about charging presenters \$86	Chair	Open
Report on website hits	Website	Open
Letter appointing Bede Wellford as 90.1 liaison	Chair	Open