

**ASHRAE TC 5.1 FANS
MEETING MINUTES
Monday, February 7, 2005**

Wyndham Hotel

Orlando, Florida

1. CALL TO ORDER

Chairman Brian Reynolds called the meeting to order at 2:15 P.M.

2. ROLL CALL

Members

<input checked="" type="checkbox"/> Brian Reynolds -Chairman	<input checked="" type="checkbox"/> George Gamble - Secretary
<input checked="" type="checkbox"/> Aresh Raychaudhuri - Programs	<input checked="" type="checkbox"/> Rad Ganesh
<input checked="" type="checkbox"/> John Cermak – Long Range Planning	<input checked="" type="checkbox"/> Gary Kile
<input checked="" type="checkbox"/> Charles W. Coward – Website	<input type="checkbox"/> Anthony Radspieler
<input checked="" type="checkbox"/> Brent Fullerton	<input checked="" type="checkbox"/> Walter Ziemann - Handbook
<input checked="" type="checkbox"/> Joe Brooks – Vice Chairman	<input checked="" type="checkbox"/> Tim Mathson
<input checked="" type="checkbox"/> David Carroll	

Corresponding Members & Guests

Paul Heitzmann	Peter Bushnell
Franco Cincotti	Rick Jennings
Robert Valbracht	Jim Schick
Patrick Chinoda	Mike Brendel
Eric Cole	John Murphy - Standards
L.Z. Zeng - Research	

3. ADOPTION OF AGENDA

The agenda was adopted by consensus.

4. APPROVAL OF MINUTES

The minutes of the meeting held on Monday, June 28, 2004 in Nashville, Tennessee were approved as written.

5. ITEMS OF BUSINESS

TC 5.1 LIAISON REPORTS

ASHRAE liaisons were not represented at the meeting. No reports were presented.

CHAIRMAN REPORT - Brian Reynolds

The ASHRAE TC Chairman discussed the following at their Sunday meeting:

- The video recording of seminars is considered a success. Approximately \$25,000 in sales resulted from Nashville. Staff is now considering to video record symposiums. DVD format may be available in the future.
- Seminar chairman are authorized to prevent the video distribution of any papers presented at their session if they decide the material is not useful or accurate.
- TC's are to designate a committee member to act as a contact for "Frequently Asked Questions". Brian Reynolds will contact committee members to determine interest level.
- ASHRAE has an established recognition honor, the Hightower Award, for TC committee members that demonstrate outstanding leadership qualities. Brian Reynolds will investigate and distribute the criteria and procedures necessary to nominate a candidate for the award.
- TC 5.1 & 2.6 committee meetings are presently scheduled to meet at the same time. Several members expressed interest in changing the TC 5.1 meeting time to allow attendance at both committee meetings. Brian Reynolds volunteered to investigate moving the TC 5.1 meeting to a later time, either 5 or 6:30 PM, after ten voting members agreed to a change.

6. STANDARDS SUBCOMMITTEE – John Murphy

6.1 SPC 87.1 Method of Testing Fan Vibration and Critical Speeds

Paul Heitzmann, committee chairman, noted that the committee would begin evaluating whether to update or eliminate the standard. Committee members willing to help or with comments were encouraged to contact the chairman.

6.2 SPC 51-99/AMCA 210 Laboratory Method Of Testing Fans For Aerodynamic Performance Rating

John Cermak noted that the committee plans to issue a draft of the revised standard to all TC 5.1 committee members within one month. The committee review is scheduled to be complete by April 30, 2005. At the Denver meeting the final draft will be issued followed by publication of the standard by the time of the Chicago meeting.

6.3 SPC 68-86R Laboratory Method Of Testing To Determine The Sound Power In A Duct

The Standards Subcommittee Chairman of TC 2.6 will make a motion at their committee meeting to eliminate ASHRAE Standard 68. The reason for the motion is that there is limited use of the standard in the US.

John Murphy expressed interest in recommending to the ASHRAE Standards Committee to retain the standard. Keeping the standard provides the US the ability to control the requirements of testing noise via the in-duct method and not be subject to the requirements of the international ISO standard 5136.

John Cermak agreed with the motion proposed by TC 2.6 and mentioned that there are means available to have an impact on the requirements of the ISO standard. Further, he made a motion to have TC 5.1 recommend to the ASHRAE Standards Committee to eliminate the standard. Joe Brooks seconded the motion. The motion was passed by a vote of 6 to 5.

6.4 SPC 87.2 In-situ Method of Testing Propeller Fans for Reliability

John Murphy made a motion to re-affirm the standard without revision. Charles Coward seconded the motion. The motion passed by a vote of 12 – 0.

7. HANDBOOK – Walter Ziemann

The College of Fellows comments regarding the handbook chapter were discussed with the following of note:

- The first two comments concerned system effect factors on fan performance. Walt will investigate including a statement in the chapter referencing the discussion of system effect in Chapter #34 of the ASHRAE Fundamentals Handbook.
- The discussion of noise included in the chapter was evaluated as insufficient. Walt will review the discussion of noise previously included in the chapter and will incorporate the appropriate text for review by the committee at the Denver meeting.
- The discussion of fans operating with variable frequency drive was also evaluated as insufficient. Walt will draft text for review at the Denver meeting. The text will also be presented to TC 1.9 for their review.
- The final comment recommended that a comparative discussion of the methods utilized to measure fan flow be included in the chapter. Given that the topic is discussed in the Fundamentals Handbook the current text will likely not be revised.

The revision of the chapter must be completed by May 2006.

Members on the review committee are: Charles W. Coward, John Murphy, and Anthony Radspieler.

8. RESEARCH – L. Z. Zeng

8.1 URP 1126 Optimization Of Sampling Tube For Induct Sound Testing

Peter Baade has requested an additional six months to complete the calibration of the three remaining tubes.

8.3 URP 1076 Propeller Fan Vibration Analysis

The final report is completed. Paul Heitzmann made a motion to accept the report and Aesh Raychaudhuri seconded the motion. The motion was passed by unanimous vote. The Program Monitoring Sub-Committee (PMS) recommended accepting the approval of the motion.

A paper must be prepared for presentation.

8.4 TRP 1216 Inlet Installation Effects, Air and Sound on Centrifugal Fans

The PMS reviewed the only bid received and determined that the bidder did not sufficiently comply with the Request for Quotation. John Murphy will re-write the RFQ specifications by March 31, 2005 and will send it to the committee for review. Responses must be returned by May 1, 2005 to complete the RFQ for submittal at the Denver meeting.

8.4 RP 1223 Installation Effects on Small Propeller Fans, Air and Sound

ASHRAE and the successful bidder, Tennessee Technological University (TTU), are in final contract negotiations. The PMS will have a kick-off meeting with TTU. John Murphy will visit the facilities of TTU to examine their equipment.

8.4 WS 1272 Work Statement On FC Centrifugal Fans, Air & Sound Installation Effects

Paul Heitzmann will prepare a work statement for review at the Denver meeting.

8.5 Proposed Research Projects – Installation Effects on Plenum Fans

Rad Ganesh will prepare a Research Topic Acceptance Request (RTAR) for review at the Denver meeting.

9.0 PROGRAM - Aesh Raychaudhuri

Forum 8 - How Do We Maximize the Air and Sound Performance of Plenum Fan Applications?

Forty-six people attended the forum. Based on the number of attendees and their positive ratings Aesh Raychaudhuri proposed to prepare a seminar on the same topic for the Denver meeting.

Papers will be prepared by the following:

Rad Ganesh

John Murphy

Charles W. Coward

Thomas Ley (Trane) will be invited to present.

A forum to discuss a recent government study conducted to evaluate shopping mall HVAC systems will also be submitted for the Denver meeting.

Joe Brooks suggested that Aesh Raychaudhuri contact Anthony Radspieler regarding future program suggestions.

10. LONG TERM PLANNING – John Cermak

John Cermak suggested the following long term planning topics:

- Experimental research of fan sound characteristics through a wide range of impeller speeds. The objective of the research would be to establish a new method of evaluation to replace the current AMCA Standard 301 method.
- Establish methods to achieve an interactive handbook chapter
- Experimental research evaluating the requirements of the settling means utilized for SPC 51-99/AMCA 210-99 Laboratory Method Of Testing Fans For Aerodynamic Performance Rating
- Evaluation of the AMCA 300 sound tolerances levels
- Plenum fan test standard

11. WEBSITE REPORT - Charles Coward

The staff of ASHRAE has emphasized the importance of each TC to maintain a high-quality website.

Patrick Chinoda will be the TC Webmaster with assistance from Charles Coward. Patrick agreed to attend the Webmaster training at the Denver meeting.

12. MEMBERSHIP REPORT - Brian Reynolds

Rollover of the committee membership will take place after the Denver meeting.

The committee has thirteen members. The maximum membership of the committee is sixteen.

13. OTHER BUSINESS

Brian Reynolds reiterated the strategic plan for ASHRAE Research as noted below:

- Is the plan self-explanatory and understandable?
- Does the plan cover the important areas of ASHRAE research?
- What important themes or sub-themes are missing?
- How does the draft Research Strategic Plan address the needs and emerging technologies of my TC/TG(s)?

14. TIME AND PLACE OF THE NEXT MEETING

The next meeting of the committee is scheduled to be held in Denver on Monday June 27, 2005.

15. ADJOURNMENT

Joe Brooks made a motion to adjourn the meeting at 3:55 PM. John Cermak seconded the motion.

Minutes recorded by
George Gamble
Secretary, ASHRAE TC 5.1 FANS