

**ASHRAE TC 5.1 FANS
MEETING MINUTES
Monday, January 26, 2004**

Hilton Hotel

Anaheim, California

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 type="checkbox"/> John Cermak – Long Range Planning | <input type="checkbox"/> Gary Kile |
| <input checked="" type="checkbox"/> Charles W. Coward – Website | <input type="checkbox"/> Ron Lievens |
| <input checked="" type="checkbox"/> John Murphy - Standards | <input checked="" type="checkbox"/> Robert Z. Smith |
| <input type="checkbox"/> Suleman Becirspahic - International | |
| <input checked="" type="checkbox"/> Joe Brooks | |

Corresponding Members & Guests

Paul Heitzmann	Jerry Bennett
Thong Dang	Tom Sobieski
Brent Fullerton	Anthony Radspieler
Eric Cole – Vice-Chairman	Franco Cincotti
L.Z. Zeng	Steve Hancock
David Carroll	Joe Gonzalez
Patrick Chinoda	Tora Abrahamson
Tim Mathson	Jim Schick
Mike Brendel	Wilfred Laman
	Steve Idem

3. ADOPTION OF AGENDA

The agenda was adopted by consensus.

4. APPROVAL OF MINUTES

The minutes of the meeting held on Monday, June 30, 2003 in Kansas City, Missouri were approved as written.

5. ITEMS OF BUSINESS

5.1 LIAISON REPORTS: ASHRAE liaisons were not represented at the meeting. No reports were presented.

6. STANDARDS SUBCOMMITTEE – John Murphy

6.1 SPC 87.1 Method of Testing Fan Vibration and Critical Speeds

Paul Heitzmann was nominated to be chairman. The committee approved the nomination.

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

A two (2) year timeframe was adopted for the review.

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

Standard 68 needs to be updated to incorporate the latest information from the corresponding ISO 5136 standard for induct sound testing and to add an appendix that provides users with the information necessary to construct a sampling tube that meets the performance specifications of the ISO standard.

A chairman has not been appointed.

7. HANDBOOK – Walter Ziemann

An email message from Walter Ziemann noted that the draft of the handbook chapter was submitted to the ASHRAE staff in September 2003. The ASHRAE handbook liaison agrees with the handbook subcommittee chairman that the preparation is on schedule.

8. RESEARCH – L. Z. Zeng

8.1 RP 1010 Vaneaxial Fans

The final report was approved by letter ballot.

The initial review by ASHRAE noted that editorial corrections (labeling) were required. The corrections were completed and the report was returned to ASHRAE.

A PDF copy of the report was sent to committee members.

8.2 URP 1126 Optimization Of Sampling Tube For Induct Sound Testing

Peter Baade has completed testing and is now preparing the data necessary to calibrate the sampling tube. Completion of the project is expected to be early this year.

8.3 URP 1076 Propeller Fan Vibration Analysis

Doug Reynolds has indicated that the project will be completed in time for the meeting in Nashville, Tennessee.

The research is part of the update of SPC 87.1. Paul Heitzmann, chairman of SPC 87.1, requested volunteers for the subcommittee evaluation. Volunteers are able to sign up on the ASHRAE website or contact Paul Heitzmann. A meeting will be scheduled for Nashville, Tennessee.

8.4 Work Statement On Centrifugal Fan TRP 1216

During the Kansas City meeting the committee recommended that Tennessee Technological University (TTU) be awarded the contract. ASHRAE reviewed the recommendation and suggested that the project be re-bid. Their suggestion was based on the belief that the proposal prepared by TTU did not include all of the tests required by the specifications. The research subcommittee agreed with ASHRAE.

The subcommittee recommended to the committee that the project specifications should be amended to better clarify the number of tests required and to limit the research to fall within the budget range of \$100,000. A motion was made to accept the subcommittee's recommendation. The motion was approved.

A second motion was made to approve the following members of the TRP 1216 evaluation and monitoring committees:

L.Z. Zeng – Chairman

Mark Schaffer

Rad Ganesh

John Cermak

John Murphy

The motion was approved.

The amended project specifications are to be approved at the Nashville meeting. The bidding process is to follow as soon as possible.

8.5 Work Statement On Propeller Fan WS 1223

Funding has been approved by ASHRAE. The request for proposals can be advertised. The evaluation committee must determine the weighting factors used to evaluate the proposals. The 1223 evaluation committee will include the same members as the 1216 evaluation committee.

Brian Reynolds recommended that the work statements for 1223 and TRP 1216 be made similar and that WS 1223 be amended, if necessary, to ensure that the cost of the proposal is within the budget. The statement requires checking prior to advertisement.

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

L.Z. Zeng requested the committee members to provide information regarding the work statement for this project.

8.7 Proposed Research Projects – Installation Effects on Plenum Fans

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

8.8 Other Topics for Research

John Murphy suggested research regarding the effects of variable speed drives on fans. The subject was of general interest but it was suggested that considering the number of research projects already underway the topic should be discussed at a later time.

8.9 Research Chairman

L.Z. Zeng accepted the appointment as the committee research chairman.

9.0 TC 5.1 PROGRAM (ASESH RAYCHAUDHURI)

9.1 Seminar 31 – Fan System Assessment Tool - Anaheim

The seminar was well attended. The topic of the seminar was a computer program, developed by the Department of Energy, designed to evaluate how well an existing fan is suited to the operating system. The program will be available to the public in approximately 6 months.

9.2 Symposium for Nashville

The results of Research Project 1010, An Experimental Study of Inlet System Effects on the Performance and Noise of Axial Fans, will be the basis of the papers presented at the symposium. John Murphy and Professor Bill Swim will present papers. The papers must be submitted for review by February 13, 2004.

A seminar is also planned for the Nashville meeting but speakers have not yet been chosen.

9.3 Program for Orlando, Florida

Aasesh Raychaudhuri requested suggestions from the committee members for the Orlando program. A possible topic is the effect of variable speed drives on fans. Rad Ganesh suggested a seminar on installation effects on plenum fans.

10. LONG TERM PLANNING

The conclusion drawn from the Kansas City forum, "Participation In Setting Long Term Goals For Handbook Chapter 18 - Fans", was to write the contents of Chapter 18 utilizing our own ideas and concepts. The CD and written versions of the chapter will be identical but the CD version will include tutorials for the reader to review and execute. The tutorials will include a sample problem to allow the reader to select equipment and design a system. The objective of the problem will be to educate the user and make them more knowledgeable regarding potential problems of system design.

11. MEMBERSHIP REPORT (Brian Reynolds)

The staff of ASHRAE is now using a new EXCEL program to keep track of membership.

Technical committee membership is limited to 18 voting members and 2 international voting members. Presently TC 5.1 includes 11 voting members and 1 international voting member. Each voting member is allowed a term of 4 consecutive years on the committee. After 4 years the member becomes a non-voting member for 1 year and then may return as a voting member of the committee. The 4-year terms of John Murphy and Robert Smith will end after the summer meeting.

Technical committees may have any number of corresponding members. Corresponding members or anyone interested in becoming a voting member please send Brian Reynolds a written request.

12. WEBSITE REPORT (Chuck Coward)

Patrick Chinoda will assume the responsibilities of maintaining and updating the TC 5.1 website.

13. HOMELAND SECURITY

Larry Spielvogel, Chair of the ASHRAE Presidential Ad Hoc Committee on Homeland Security, prepared a letter to TC chairman requesting suggestions for proposing research regarding homeland security topics that might be supported by Government agencies. The letter also mentioned comments and suggestions for Homeland Security related standards related to our field of expertise.

There will be an ASHRAE sponsored Homeland Security satellite broadcast on Wednesday, April 14, 2004.

14. OTHER BUSINESS

The Department of Energy is requesting members to join a technical review committee for fan equipment. Anyone that did not sign up to become a committee member and is interested in participating please contact Anthony Radspieler at aradspieler@lbl.gov.

15. TIME AND PLACE OF NEXT MEETING

The next regular meeting of the committee is scheduled to be held in Nashville on Monday June 28, 2004.

16. ADJOURNMENT

The meeting was adjourned at 3:30 PM

Minutes recorded by
George Gamble
Secretary, ASHRAE TC 5.1 FANS