

**ASHRAE TC 5.1 FANS  
MEETING MINUTES  
Monday, June 28, 2004**

Opryland Hotel

Nashville, Tennessee

**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"/> Asesh Raychaudhuri - Programs     | <input 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                 | <input type="checkbox"/> Ron Lievens                          |
| <input checked="" type="checkbox"/> John Murphy - Standards           | <input type="checkbox"/> Robert Z. Smith                      |
| <input type="checkbox"/> Suleman Becirspahic - International          | <input type="checkbox"/> Eric Cole – Vice-Chairman            |
| <input checked="" type="checkbox"/> Joe Brooks                        |   |

Corresponding Members & Guests

- |                 |                    |
|-----------------|--------------------|
| Paul Heitzmann  | Mark Stevens       |
| Dick Williamson | Tom Sobieski       |
| Brent Fullerton | Anthony Radspieler |
| Franco Cincotti | Garry Myers        |
| Brian O'Donnell | Steve Hancock      |
| David Carroll   | Dan Int-Hout       |
| Patrick Chinoda | Wilfred Laman      |
| Tim Mathson     | Jim Schick         |

**3. ADOPTION OF AGENDA**

John Cermak recommended that a reference to AMCA Standard 210 be included in the heading of item 6.2. The agenda was then adopted by consensus.

Deleted: John Cermak revised the agenda of the meeting.

**4. APPROVAL OF MINUTES**

The minutes of the meeting held on Monday, January 26, 2004 in Anaheim, California were approved as written.

During the discussion of the minutes it was noted that the TC 5.1 roster included incorrect term dates for several members. Chairman Brian Reynolds will contact ASHRAE to correct the errors.

**5. ITEMS OF BUSINESS**

**5.1 TC 5.1 LIAISON REPORTS**

**Standards** – Jim Woods, for Davor Novosel, commented that ASHRAE had not yet received the necessary paperwork correspondence for SPC 87.1. Paul Heitzmann, chairman of SPC 87.1, commented that he had sent the necessary correspondence to ASHRAE several weeks ago. Paul will check to ensure that ASHRAE has received the correspondence.

**Handbook** – Gary Myers presented the following comments:

1. ASHRAE has adopted a new communication method for email messages to the ASHRAE handbook liaison. The new email address, [hbsi@ashrae.net](mailto:hbsi@ashrae.net), will automatically forward messages to the current liaison address.
2. Next year a CD will be published with the printed edition of the handbook.
3. John Murphy commented that the final draft of the TC 5.1 handbook chapter for the 2008 edition is due June of 2006. Gary will send John an official schedule for the submittal of the draft.

4. Later in the meeting Dan Int-Hout, Section Head, commented that next year ASHRAE would publish a "Super CD" that will include all four volumes of the handbook. The CD will be interactive, include a search feature, and will be updated every year. It has not yet been determined if the CD or the printed edition will be the official ASHRAE version.

## 6. STANDARDS SUBCOMMITTEE – John Murphy

### 6.1 SPC 87.1 Method of Testing Fan Vibration and Critical Speeds

Paul Heitzmann, SPC Chairman, requested volunteers to review the SPC. A request for volunteers can also be made on the ASHRAE website. It is not necessary to be a member of the TC to be a member of the SPC.

Deleted: review

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

John Cermak has completed the second revision. The committee will vote for approval of the revision in September.

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

The standard reaffirmation must be coordinated with TC 2.6. John Murphy will contact representatives of TC 2.6 and determine the status of the reaffirmation.

Since it is now possible one again to obtain a sampling tube from B&K, there is no longer a need to revise the standard to provide the user with detailed information how to build a sampling tube. As a result, the ASHRAE standard for In-duct testing is considered equivalent to the ISO Standard. The committee recommended that in the future, ASHRAE adopt the ISO In-duct standard instead of maintaining a separate standard.

### 6.4 SPC 87.3 Methods of Testing Propeller Fan Vibration - Diagnostic Test Methods

John Murphy made a motion, seconded by Paul Heitzmann, that the standard be reaffirmed. All eight voting members present voted to pass the motion.

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## 7. HANDBOOK – Walter Ziemann

Charles Coward spoke in place of Walt Ziemann regarding the revision of the handbook chapter. The following ideas were presented for consideration in the course of the revision process:

1. User friendliness – consider the needs of a student entering engineering studies
2. Convenience and clarity
3. Begin implementing links to references in the chapter and handbook and include the documents on the CD
4. Ensure references are current and validated
5. Resources and tools to support the chapter are the same as the references in the chapter. Can these resources become interactive?
6. Committee members should review the handbook chapter.
7. The Handbook liaison at the Chairs Breakfast suggested having someone who is a user of the Chapter but not a committee member, be a reviewer. It was suggested to put in a request for Handbook reviewers in the ASHRAE News.

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The following members volunteered to conduct the review:

John Murphy  
Anthony Radspieler  
Brent Fullerton  
Charles W. Coward

By the next meeting in Orlando, Florida the volunteers will identify what changes are required and will present a draft of the recommended changes.

Asesh Raychaudhuri volunteered to contact members of TC 5.9 to determine if there was anyone interested in participating in the review.

**8. RESEARCH – L. Z. Zeng**

John Cermak spoke in place of L. Z. Zeng regarding research.

**8.1 URP 1126 Optimization Of Sampling Tube For Induct Sound Testing**

Peter Baade is now able to manufacture the sampling tube. Calibration of the tube will be completed in the near future.

**8.2 URP 1076 Propeller Fan Vibration Analysis**

A graduate student is assisting Peter Baade. The project will be completed prior to the Orlando, Florida meeting.

**8.3 Work Statement On Centrifugal Fan TRP 1216**

ASHRAE staff recommended that the committee address the following during the re-bid process:

1. Ensure that the Chairman of the Research Committee is available during the bidding process to answer questions

2. Clarify the number of fans that are to be tested

The revised work statement prepared by L. Z. Zeng was presented to the committee for discussion and review. The committee recommended the following:

1. The "Proposal Evaluation Criteria" section should indicate the importance of each of the criteria. In other words each criteria should include a percentage weight value.

2. Under the sections "Suggested Approach" and "Other Information for Bidders" a point should be added that requires the detailed test plan, including the order of the tests, must be approved by the Program Monitor Subcommittee prior to testing. The review is to be a mandatory requirement of the bid.

3. A revised work statement must be distributed to the committee for a vote prior to the next meeting.

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

The ASHRAE review process was utilized in the review of the five (5) proposals received. Two (2) of the proposals were rated unacceptable and three (3) were rated acceptable.

John Murphy made a motion to award the contract to Tennessee Technological University (TTU), the lowest acceptable bidder. The motioned was seconded.

The committee voted seven (7) for, zero (0) against, and one (1) abstention. The committee member abstaining is affiliated with one of the unsuccessful bidders.

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

No update was available.

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**8.6 Proposed Research Projects – Installation Effects on Plenum Fans**

The Research Topic Acceptance Request (RTAR) which was originally suggested by Rad Ganesh, has not been prepared. John Cermak volunteered to assist with the project.

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**9.0 TC 5.1 PROGRAM - Aresh Raychaudhuri**

- Program for ASHRAE Research Project 1010 – At this time one of the papers for the planned symposium has been rejected. Aresh Raychaudhuri is working with ASHRAE to resolve the problems and obtain acceptance of the paper. If that effort is not successful a seminar will be conducted in place of the symposium.
- Efforts are underway to prepare a new seminar for Orlando entitled "New Technologies for Vane Axial Fans"
- A forum to discuss installation effects on plenum fans, suggested by Rad Ganesh, is also planned for Orlando
- The discussion for the program at the Denver meeting included:

1. A seminar to update the progress of the "Fan System Assessment Tool" computer programs developed by the US Department of Energy. The seminar will be a follow up to the seminar presented at the Anaheim meeting on the same subject.
2. A forum to discuss a recent government study conducted to evaluate the shopping mall HVAC systems

#### 10. LONG TERM PLANNING – John Cermak

John Cermak suggested that the committee consider a research project regarding the settling means utilized for SPC 51-99/AMCA 210-99 Laboratory Method Of Testing Fans For Aerodynamic Performance Rating.

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#### 11. MEMBERSHIP REPORT - Brian Reynolds

Brian Reynolds will review the committee roster and make any necessary corrections.

The voting member roster effective July 1, 2004 is as follows:

Deleted: Joe Brooks will be the new Vice Chairman effective July 1, 2004.

Brian Reynolds – Chair  
Joe Brooks – Vice-Chair  
George Gamble – Secretary  
Ashesh Raychaudhuri – Programs  
Walt Ziemann – Handbook  
John Cermak – Long Range Planning  
Chuck Coward  
Rad Ganesh  
Gary Kile  
David Carroll  
Tim Mathson  
Anthony Radspieler  
Brent Fullerton

#### 12. WEBSITE REPORT – Patrick Chinoda

Patrick Chinoda will prepare a presentation for the Orlando meeting addressing:

- How to access the TC 5.1 site
- What are the site contents
- Ideas for future site content

#### 14. OTHER BUSINESS

No other business was discussed.

Daniel Int-Hout, Section Head, made the following announcements:

- Seminars that include Power Point presentations are now recorded by ASHRAE and are available for \$49.00 through the ASHRAE website. The presentations may become a member benefit in the future.
- The presentations will be formatted to prevent printing
- Forums and symposiums are not recorded

#### 15. TIME AND PLACE OF THE NEXT MEETING

The next regular meeting of the committee is scheduled to be held in Orlando, Florida on Monday February 7, 2005.

#### 16. ADJOURNMENT

The meeting was adjourned at 4:15 PM

Minutes recorded by  
George Gamble  
Secretary, ASHRAE TC 5.1 FANS