

ASHRAE TC 5.1 FANS

MEETING MINUTES

Monday, June 30, 2003

HYATT

KANSAS CITY, MISSOURI

1. CALL TO ORDER

The meeting was called to order at 2:15 P.M. by Chairman **ROBERT SMITH**.

2. ROLL CALL

Members

- | | |
|--|--|
| <input checked="" type="checkbox"/> Gary Kile | <input type="checkbox"/> Suleman Becirspahic - International |
| <input checked="" type="checkbox"/> Paul Heitzmann | <input type="checkbox"/> Paul Saxon - Membership |
| <input checked="" type="checkbox"/> Mark Fly | <input type="checkbox"/> Walt Ziemann - Handbook |
| <input checked="" type="checkbox"/> Robert Z. Smith – Chairman | <input type="checkbox"/> Eric Cole – Vice-Chairman |
| <input checked="" type="checkbox"/> Ron Lievens - Research | <input checked="" type="checkbox"/> Brian Reynolds - Secretary |
| <input checked="" type="checkbox"/> John Murphy - Standards | <input checked="" type="checkbox"/> Ashesh Raychaudhuri - Programs |

Corresponding Members & Guests

- | | |
|-----------------------------------|------------------|
| John Cermak – Long Range Planning | Tom Sobieski |
| Charles W. Coward – Website | Mark Schaffer |
| L.Z. Zeng | Mike Brendel |
| Jim Schick | Wilfred Laman |
| Patrick Chinoda | Michael Circosta |
| Anthony Radspieller | George Gamble |
| Joe Brooks | Steve Idem |

3. ADOPTION OF AGENDA

The agenda was adopted by consensus.

4. APPROVAL OF MINUTES

The minutes of the meeting held on Monday, January 27, 2003 in Chicago, Illinois were approved as written.

5. ITEMS OF BUSINESS

5.1 LIAISON REPORT: (Brian Webb)

Brian Webb requested more information about why AMCA decided not to bid on the 1216 Work Statement. AMCA wrote in a letter that the amount of testing described in the bid could not be done within the proposed budget or the amount that the low bidder presented. The committee explained that the plan is based on careful review and monitoring of the test data as it is taken in order to optimize the actual test cases.

5.2 STANDARDS (JOHN MURPHY)

Three standards are currently up for review. They are 87.1 (Method of Testing Fan Vibration and Critical Speeds), 51, and 68 (Laboratory Method Of Testing To Determine The Sound

Power In A Duct). The first two have SPC chairs selected. 68 still needs to identify an SPC chair. Standard 68 needs to be updated to incorporate the latest information from the corresponding ISO standard for induct sound testing and to add an appendix section that provides users with information needed to construct a sampling tube that meets the performance specifications of the ISO standard.

Individuals interested in serving on any of these SPC's can sign up at the website.

There was a separate sub-committee meeting after the main TC 5.1 meeting to discuss direction on AMCA 210/ASHRAE 51 (John Cermak).

5.4 TC 5.1 HANDBOOK (ROBERT SMITH for Walt Ziemann)

The version of the Handbook Chapter that was voted on and approved by the committee prior to Kansas City included some revisions in the section on vibration that John Murphy advised was not as good as the original vibration section.

A motion was made by John Murphy (8-0-0) to approve the Handbook Chapter IP version with the earlier original vibration section but with all other changes that were sent out for the member vote. A similar motion was made and approved for the SI version. The SI version is identical to the IP version except for the soft conversion of all IP quantities to metric.

5.5 TC 5.1 RESEARCH (RON LIEVENS)

5.5.1 RP-1010 VANEAXIAL FANS

Principal Investigator Prof. Bill Swim was not able to complete the final report in time for the Kansas City meeting. A motion was approved (8-0-0) to direct the PMS to take steps necessary to ensure the final report gets completed in time that the results can be used in a seminar for Nashville (June 04).

5.5.2 URP-1126 OPTIMIZATION OF SAMPLING TUBE FOR IN-DUCT SOUND TESTING

Peter Baade reports that work on the sampling tube will be completed by the end of 2003. Peter has co-authored two papers for the International Fan Noise Symposium in September based on the sampling tube work.

5.5.3 URP-1076 PROPELLER FAN VIBRATION ANALYSIS

Doug Reynolds has promised to confirm by the end of summer if/when the corrections & additional analysis the committee requested can be made in order to complete this RP.

5.5.4 WORK STATEMENT ON CENTRIFUGAL FANS-1216

Two research proposals were evaluated using the ASHRAE Guideline procedure. One proposal was from CETIAT and the other proposal was from Tennessee Technological University. TTU was the lowest bidder and had the highest evaluation. The committee passed a motion (8-0-0) recommending that TTU be awarded the contract. The committee emphasized the importance of having the Principal Investigator review test data as it is taken and report in order to better direct the test direction and make adjustments as necessary.

Mark Schaffer from TC 2.6 attended the meeting and requested to be on the monitoring committee for this project.

Evaluation Committee – Eric Cole, Ron Lievens, John Cermak, John Murphy, Brian Reynolds

Monitoring Committee – Eric Cole, Ron Lievens, John Murphy, Mark Schaffer, Rad Ganesh

Other committee members who are interested can serve on the monitoring committee but it was agreed that the names listed will be the official five that will be sent to Mike Vaughn.

5.5.5 WORK STATEMENT ON PROPELLER FAN-1223

The project was approved but will be delayed because of the research funding shortage. No progress since the last meeting.

5.5.6 PROPOSED RESEARCH PROJECTS

1) INLET INSTALLATION EFFECTS ON FC CENTRIFUGAL FANS, AIR & SOUND – (Paul Heitzmann, Mark Fly, and Ron Lievens)

Ron is adding more information to the WS at the request of the ASHRAE Research committee.

2) INSTALLATION EFFECTS ON PLENUM FANS (Rad Ganesh and Ron Lievens)

An RTAR has been proposed for plenum fans. A motion was approved (8-0-0) to proceed with the RTAR to be written by Rad and Ron.

5.6 TC 5.1 PROGRAM (ASESH RAYCHAUDHURI)

- The proposed plenum fan seminar (Mark Fly) which will be co-sponsored by TC 5.1 and TC 2.6 is being planned for Anaheim. Everything is ready except for having confirmed reviewers.
- A seminar has been proposed for Anaheim, 'Increased Energy Efficiency of Industrial Fans'.
- The RP 1010 seminar or symposium is tentatively planned for Nashville. Bill Swim and John Murphy will be the presenters. The papers need to be completed and sent for peer review by April 15 in order to have the symposium in Anaheim.

6. TC 5.1 MEMBERSHIP REPORT (ROBERT SMITH)

There will be 11 voting members for 2003-2004. See the membership roster printed May 15, 2003. A motion was made and approved (8-0-0) to add Rad Ganesh, Chuck Coward, and Joe Brooks as voting members. Paul Saxon has retired from AMCA and is no longer a member of the committee. Jim Schick resigned as a Voting Member but would like to remain a Corresponding Member of TC 5.1.

8. LONG TERM PLANNING (John Cermak)

Long term planning will be assessed after the forum on Tuesday, "Participation In Setting Long Term Goals For Handbook Chapter 18 - Fans".

8. WEBSITE (Chuck Coward)

There was no response to the request that Chuck sent to the committee members and corresponding members for website content. Chuck suggests that another individual get involved with the website with an intent of becoming the webmaster in about a year or two. Committee members are encouraged to visit the website. The website can be accessed from the ASHRAE main page. The request for more input from the committee on website content was re-emphasized. The minutes from the Kansas City meeting will be posted on the web site.

9. OTHER BUSINESS

Message from Anthony Radspieler - Here are links for the DOE BestPractices Program web site, software tools and the Improving Fan System Performance: A Sourcebook for Industry download, for you to include in the TC 5.1 and Chapter 18 Handbook review meeting minutes.

<http://www.oit.doe.gov/bestpractices>

http://www.oit.doe.gov/bestpractices/software_tools.shtml

http://www.oit.doe.gov/bestpractices/technical_publications.shtml#source

Also, I would like to welcome the membership of TC 5.1 to participate in the developmental direction and review of the various fan resources, publications, tools and trainings -- e.g., Fan Tip Sheets, Fan System Assessment Tool (FSAT), Qualified FSAT Specialist Pilot Training -- under development by the U.S. Department of Energy Best Practices program.

Gary Kile noted that he has been seeing a lack of testing requirements in job specs and asked the committee for their views. Other committee members commented that they are seeing more (not less) testing called for in specs. It was suggested that this area could be a good topic for a future forum. One of the objectives would be to educate building owners on fan operation & maintenance. It was also suggested as good topic to invite a Distinguished Lecturer to your local chapter.

Forum 16 (Participation in Setting Long Term Goals for Handbook Chapter 18 – Fans. The forum was moderated by John Cermak and largely attended by TC 5.1 members. Chuck Coward was asked to summarize forum results.

10. TIME AND PLACE OF NEXT MEETING

The next regular meeting of the committee is scheduled to be held in Anaheim on January 26, 2004.

11. ADJOURNMENT

The meeting was adjourned at 4:05 PM

Minutes recorded by
Brian Reynolds
Secretary, ASHRAE TC 5.1 FANS