TC/TG/TRG MINUTES COVER SHEET

(Minutes of all TC/TG/TRG Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/TRG NO.: TC 5.1
DATE: March 11, 2008

TC/TG/TRG TITLE: Fans

DATE OF MEETING January 21, 2008
LOCATION: New York, NY

<table>
<thead>
<tr>
<th>VOTING MEMBERS PRESENT</th>
<th>YEAR APPT’D - TERM ENDING</th>
<th>VOTING MEMBERS ABSENT</th>
<th>YEAR APPT’D - TERM ENDING</th>
<th>EX-OFFICIO (CM) MEMBERS AND ADDITIONAL GUEST (G) ATTENDANCE</th>
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<tbody>
<tr>
<td>Joe Brooks</td>
<td>2004-2008</td>
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<td>Chuck Coward (CM)</td>
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<td>David Carroll</td>
<td>2004-2008</td>
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<td>George Gamble (CM)</td>
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<td>Franco Cincotti</td>
<td>2007-2011</td>
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<td>Rad Ganesh (CM)</td>
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<td>Brent Fullerton</td>
<td>2004-2008</td>
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<td>Paul Heitzmann (CM)</td>
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<td>John Murphy</td>
<td>2005-2009</td>
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<td>Steve Idem (CM)</td>
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<td>Asesh Raychaudhuri</td>
<td>2007-2011</td>
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<td>Zhiping Wang (CM)</td>
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<td>Brian Reynolds</td>
<td>2007-2011</td>
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<td>Peter Danos (G)</td>
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<td>Tom Sobieski</td>
<td>2007-2011</td>
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<td>Jerry Lilly (G)</td>
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<td>Bob Valbracht (G)</td>
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DISTRIBUTION

(All Members of TC/TG/TRG plus the following):

TAC SECTION HEAD: Gaylon Richardson

COMMITTEE LIAISONS: Kimball Ferguson (Special Publications), John Hogan (Standards), Alan Veeck (Program), Fred Kohloss (RAC Research), Michael Circosta (Chapter Technology Transfer), Julian De Bullet (Professional Development), Samuel Cummings (ALI), Dave Meredith (Handbook); Claire Ramspeck (Staff Liaison); Michael Vaughn (Research & Technical Services)
1. **CALL TO ORDER**
   Chairman Joe Brooks called the meeting to order at 4:30 P.M.

2. **ROLL CALL**
   **Members**
   - Mike Brendel
   - Joe Brooks – Chair
   - David Carroll – Research
   - Franco Cincotti
   - Brent Fullerton
   - John Murphy – Standards
   - Asesh Raychaudhuri – Program
   - Brian Reynolds – Handbook
   - Tom Sobieski

   **Corresponding Members & Guests**
   - John Cermak (CM)
   - Chuck Coward (CM)
   - George Gamble (CM)
   - Rad Ganesh (CM)
   - Paul Heitzmann (CM)
   - Steve Idem (CM)
   - Zhiping Wang (CM)
   - Peter Danos (G)
   - Jerry Lilly (G)
   - Dustin Meredith (G)
   - Kim Osborn (G)
   - Teve Sazama (G)
   - Mark Schaffer (G)
   - Jim Schick (G)
   - Robert Z. Smith (G)
   - Bob Valbracht (G)

3. **APPROVAL OF MINUTES**
   John Murphy made a motion to approve the minutes of the meeting held on Monday, June 25, 2007, in Long Beach, California, with the correction of the spelling of ASHRAE on page 4. Chuck Coward seconded the motion. The minutes were approved as corrected by a vote of 9 to 0.

4. **ROSTER**
   Nine (9) of ten (10) voting members were present. A quorum was formed.

5. **ADOPTION OF AGENDA**
   The meeting agenda was adopted by consensus.

6. **REPORTS**
   **TC 5.0 SECTION HEAD REPORT**
   No Report

   **TC 5.1 LIAISON REPORTS**
   1. **RAC Research** – No report
   2. **Handbook** – No report
   3. **Program** – No report
   4. **Journal** – No report
   5. **Standards** – No report
CHAIRMAN’S REPORT – Joe Brooks
18 programs have been approved (5 from Section 5) for NY PDH credit. 92% of the presentations were uploaded (the goal is 100%).

As of June 30, 2008 4 members (Joe Brooks, David Carroll, Brent Fullerton and Tim Mathson) will roll off the voting member list. 5 corresponding members (John Cermak, Patrick Chinoda, Chuck Coward, George Gamble, Rad Ganesh) will become voting members.

7. PROGRAM SUBCOMMITTEE – Asesh Raychaudhuri
The subcommittee chair is the only person authorized to submit data on program elements (i.e., seminars and forums) so all submittals must be made through Asesh. Attendance at Seminar 27 was very good.

7.1 Salt Lake City – A seminar on fan selection is planned with papers by John Cermak and John Murphy. A seminar on VFDs is planned with two papers from ABB, and another paper possible.

7.2 Chicago – Two and possibly three transaction papers from RP 1223 will be ready.

8. HANDBOOK – Brian Reynolds
Staff reported on an error that was identified in Figure 5 (Pressure Relationships of Fan with Outlet System). A new figure was developed by John Cermak and submitted to staff. No committee approval vote required. We did not receive confirmation that the corrected figure made it into 2008 edition.
9. RESEARCH – David Carroll

9.1 Research Workshop – David attended the workshop and reported that RTARs and Work Statements may now be submitted 4 times per year.

9.2 RP 1126 Optimization of Sampling Tube for Induct Sound Testing – no progress reported. John Murphy will contact Peter Baade to determine when the final report may be finished.

9.3 WS 1216 Inlet Installation Effects, Air and Sound on Centrifugal Fans – The PES reported that only 2 of the 3 bids received were acceptable. The recommendation was to accept the low bidder. This recommendation was approved by a vote of 7 Yes, 0 No, 1 Abstain, 1 Absent.

9.4 RP 1223 Installation Effects on Small Propeller Fans, Air and Sound – Testing is complete and the final report is in work. 3 Papers will be written to publicize the results.

9.5 RP 1272 Inlet Installation Effects on Forward curved centrifugal fans, Air and Sound – The Contractor has requested a no cost time extension until June 30, 2008. Recommendation approved by vote of 8 Yes, 0 No, 1 Absent.

9.6 WS 1420 Installation Effects on Plenum Fans – The Work Statement was revised in the last two days. Tom Sobieski moved to submit this to the membership for an e-mail ballot. Seconded by Franco Concitti. Approved unanimously.

9.7 Suggested Research Topics
Two future research projects under consideration are:
1. Research to develop criteria for improving the design of flow settling means utilized in multi-nozzle chamber performance testing defined in AMCA Standard 210. John Murphy and John Cermak volunteered to coordinate the preparation of an RTAR for review at the next meeting.
2. A round robin test program to establish the accuracy of ASHRAE 51/AMCA 210 tests. No volunteer came forward to prepare an RTAR.

10. LONG TERM PLANNING – John Cermak
No report. Joe Brooks and Mike Brendel are added to this sub-Committee.

11. FAQ
No report. No questions have been forwarded from ASHRAE staff.

12. WEBSITE REPORT – Brent Fullerton
The TC 5.1 website is on-line and updated.

14. OTHER BUSINESS
Chuck Coward reported that the 90.1 committee had requested guidance from the TC on how or whether to establish minimum fan efficiency. Joe Brooks, John Cermak, Chuck Coward, John Murphy and Kim Osborn volunteered to serve as an ad hoc committee for this purpose. This committee was established by a motion by John Murphy, second by Tom Sobieski. Approved unanimously.

15. TIME AND PLACE OF THE NEXT MEETING
The next meeting of the committee is scheduled to be held in Salt Lake City, Utah on Monday, June 23, 2008.

16. ADJOURNMENT
The meeting was adjourned at 6:57 PM.