

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-
CONDITIONING ENGINEERS, INC.
1791 Tullie Circle, N.E./Atlanta, GA 30329
404-636-8400**

TC/TG/MTG/TRG MINUTES COVER SHEET

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

TC/TG/MTG/TRG No. TC 5.1 DATE 2 July 2012

TC/TG/MTG/TRG TITLE Fans
DATE OF MEETING 25 June 2012 LOCATION San Antonio, TX

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
John Murphy	2009	(none)		[See Attached List]
Joe Brooks	2010			
John Cermak	2008			
Patrick Chinoda	2008			
C. W. Coward	2008			
Brent Fullerton	2010			
Rad Ganesh	2011			
Tim Mathson	2010			
Kim Osborn	2010			
Brian Reynolds	2010			
Zhiping Wang	2008			

DISTRIBUTION

<i>All Members of TC/TG/MTG/TRG plus the following:</i>	
TAC Section Head:	Gus Mastro
TAC Chair:	William McQuade
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters:	Dr. Domanski (Research) Rick Larson (Standards)
Manager Of Standards Manager Of Research & Technical Services	Stephanie Reiniche Mike Vaughn

Corresponding Members and Guest attendance:

F_NAME	L_NAME	Affiliation	Corres	Guest
Jenny	Abney Sivie	PennBarry	X	
Mike	Brendel	Lau	X	
David	Carroll	Morrison Products, Inc.	X	
Franco	Cincotti	Comefri USA	X	
P.G. (Peter)	Danos	Johnstone Supply-Gurnee	X	
Harold	Dubensky	Johnson Controls, Inc.		X
Jay	Eldridge	Daikin McQuay	X	
Mark	Fly	AAON	X	
Danielle	Fox	Lawrence Berkeley Nat'l Lab	X	
George	Gamble	Twin City Clarage	X	
Armin	Hauer	ebm-papst	X	
Larry	Hopkins	Huntair Inc.	X	
Joshua	Kading	Texas A&M		X
Tim	Kuski	Greenheck		X
Alex	Lekov	LBNL		X
Joshua	Lynch	Soler & Palau - USA		X
Dustin	Meredith	Trane	X	
Jane	Miller	Flakt Woods		X
Laura	Petrillo	AHRI	X	
Ashesh	Raychaudhuri	Dept of Veteran Affairs	X	
Mark	Schaffer	Schaffer Acoustics	X	
Robert	Smith	Innerquest	X	
Greg	Wagner	Morrison Products, Inc.	X	
Craig	Wray	LBNL	X	
Mike	Wolf	Greenheck		X

**ASHRAE TC 5.1 Meeting
Monday 25 June 2012**

San Antonio, TX

Minutes

1. Call to Order

The chair, John Murphy, called the meeting to order at 4:15 pm.

2. Roll Call

All voting member of the committee were present. The voting members were:

John Murphy – Chair, Standards S/C Chair
Joe Brooks, Secretary
John Cermak, Long Range Planning S/C Chair
Patrick Chinoda
Chuck Coward
Brent Fullerton, Webmaster
Rad Ganesh
Tim Mathson
Kim Osborn
Brian Reynolds – Handbook S/C Chair
Zhiping Wang

A quorum of 100% was established.

3. Adoption of Agenda

The agenda with some clarifications was adopted by consensus.

4. Approval of the minutes

Motion TC 5.1-08-2012

Moved by: John Cermak
Seconded: Chuck Coward

“That the minutes of the last meeting of the TC held on 23 January 2012 be approved as distributed.

Passed unanimously

5. Items of business

5.1 TC 5.0 Section Head/Liaison Reports

The ASHRAE Section Head, Gus Mastro, provided highlights of the section's chair meeting. His report encouraged the continued maintenance of the section websites. He reminded the committee that Hightower award nominations were due on 9/1/2012 to him and to make any nomination dissertation as strong as possible with specific accomplishments. He

reported that two additional Multidisciplinary Task Groups were formed. They were MTG.GWP, Alternative Lower Global Warming Potential Refrigerants and MTG.EAS, Energy-Efficient Air Handling Systems for Non-Residential Buildings. Gus also informed the committee that ASHRAE will now require all speakers to pay a \$95 fee.

5.2 Chairman's report

The chair added to the section head report. He provided the numbers of technical presentation submissions made for this meeting and the number of presenters that did not upload their presentation or failed to report. He also noted that this TC has always fulfilled their program submissions.

6. Subcommittee reports

6.1 Standards subcommittee

The standards subcommittee chair, John Murphy reported on the status of each standard under the cognizance of TC 5.1

6.1.1 ASHRAE Standard 149

Although this TC recommended reaffirmation at the last meeting, ASHRAE Standards requires it to be revised due to permissive language in the standard or recommend its withdrawal. Discussion led to the following motion:

Motion TC 5.1-09-2012

Moved by: Joe Brooks

Seconded: John Cermak

"That TC 5.1 recommends that ASHRAE 149 be revised and that George Gamble be the chair of the revision committee.

Passed unanimously

6.1.2 ASHRAE 68/AMCA 330

It was reported that Tim Mathson is chair of this joint standard review committee and that they are considering either withdrawing the standard or identically adopting ISO 5136.

6.1.3 ASHRAE 51/AMCA 210

It was reported that Tim Mathson is chair of this joint standard review committee. The committee met yesterday and reviewed comments made on the standard. The major revision to the standard will include measurement of electrical input power to either the motor or motor controller and to improve the definition of the fan outlet area.

6.2 Handbook subcommittee

The Handbook Subcommittee chair, Brian Reynolds, reported that the galley proofs were reviewed since the Winter meeting and the handbook is published.

6.3 Research subcommittee

6.3.1 Current projects

The subcommittee chair, David Carroll introduced the chairs of each active project PMS (Project Monitoring subcommittee) to report the status of the project. He also reported on the highlights of the RAC committee attended earlier in the day. The RAC indicated that there were a low number of RTARS which may signal a decrease in the number of projects which, in turn, may signal an increase in money available for research. He also reported that there will be a new program track for the technical meetings to include results of research projects.

PMS 1216 (Inlet Installation Effects on BI/Airfoil Centrifugal Fans, Air & Sound) is chaired by Rad Ganesh. He reported that the final report is complete and the technical paper has been submitted. The only remaining deliverable is the presentation of the results at an ASHRAE technical conference.

PMS 1420 (Installation Effects on Plenum Fans) is chaired by Franco Cincotti. He reported that the PMS met just the prior evening and that AMCA is ready to continue testing with the inlet cabinet. It was also noted that a no cost extension was granted up to September 2015.

6.3.2 Future projects

Possible future research projects were informally discussed. It was noted that a RTAR has been submitted to consolidate the information produced from all of the System Effect research projects. Also discussed was a possible project to partner with TC 1.4 and the DOE to collaborate on fans used in Air Handling Units to improve their efficiency. This discussion was table to a discussion on the MTG.EAS.

6.4. Program subcommittee

The program subcommittee chair, Asesh Raychaudhuri, summarized current program from this TC and future possibilities. For the next meeting in Dallas, TX, it was thought that:

- the results of Research Project 1216 could be presented in a Seminar,
- a seminar on the latest in Induced Flow Fan testing may be useful,
- a seminar on an alternative method of establishing minimum efficiency for Powered Roof (and Wall) Ventilators was offered by Tim M., and
- possibly a forum, facilitated by Michael Ivanovich, on fan energy savings in other countries was suggested.

There were no suggestions for programs at the next summer meeting in Denver.

6.5. Long Term Planning subcommittee

The chair of this subcommittee had nothing to report.

7. FAQ

The chair of this subcommittee, John Murphy, reported that ASHRAE just initiated a wiki.ASHRAE that would include definitions used in all of ASHRAE publications and standards.

8. Website Report – Brent Fullerton

TC 5.1 webmaster, Brent Fullerton, reported that the TC 5.1 website was up to date, including minutes and the rebranding of ASHRAE.

9. Old Business

It was reported that Annex U, which added Fan Efficiency Grade requirements was approved by ASHRAE SSPC 90.1 and would be out for a 45-day public review later this summer. It was also reported that the US DOE will be regulating fans and that the framework document will be out shortly.

10. New Business

The Multidisciplinary Task Group – Energy-Efficient Air-Handling systems for non-Residential Buildings (MTG-EAS) met via conference call since the winter meeting. The vice chair of the MTG, Craig Wray, reported that the MTG is meant to coordinate work, not to do the work. All MTG members were given the assignment to provide at least three key strategic ideas from the group they represent for that group to work on. John Murphy, who represents TC 5.1 on the MTG asked each TC 5.1 member to provide all ideas to him via e-mail. He described this as a type of brain-storming, so all ideas should be at least mentioned. Some ideas that were brought up during the discussion were:

- How to determine the lowest amount of fan power to get the job done,
- Select fan operating point close to the peak fan efficiency,
- For different system types – estimate reasonable usage
- Determine what can be done with system controls to operate the fan in the best way.
- Should use the most efficient fan, should use fan close to peak efficiency, and should find a way to make this happen and how to control the outcome.
- For reconstruction and retrofits, what part of system can be altered to improve the system.
- Belt drive – how to improve their performance.

John Murphy asked the TC to send their ideas to him at Jogram@bright.net

11. Time and Place of Next Meeting

The next meeting of TC 5.1 will be held in Dallas during the winter conference (on 28 January 2013).

12. Adjournment

The meeting adjourned at 6:00 pm