



**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND
AIR CONDITIONING ENGINEERS, INC.**
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TC/TG/TRG MINUTES COVER SHEET

TC/TG/TRG No. TC5.6
TC/TG/TRG/TITLE: Control of Fire and Smoke
DATE OF MEETING: January 31, 2011

DATE: January 31, 2011
LOCATION: Las Vegas, NV

VOTING MEMBERS PRESENT	YEAR APPT'D	VOTING MEMBERS ABSENT	YEAR APPT'D	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Jeffrey Tubbs (Chair)	2009	Stephen D Carey	2008	Dan Rau, Guest
John Clark	2010			Liangzhu (Leon) Wang, Guest
Paul Turnbull	2008			Josiah Wiley, Guest
Jim Buckley	2008			Peter McDonnell, CM
Gerald Kettler	2010			Julian Rochester, Guest
Larry Felker	2008			Matthew Davy, CM
Bob Van Becelaere	2008			Bill Black, CM
Tenison Stone	2009			Gary Lougheed, CM
Ray Sinclair	2010			Cameron McCartney, Guest
Valentina Nedelcu	2008			Tim Orris, CM
Ahmed Kashef (Secretary)	2010			Kai Kang, CM
John Klote	2010			David John, CM
William Webb	2010			John Grezak, Guest
George Hadjisophocleous	2010			Bob Dittrich, CM
				Joe Gonzalez, CM
				Tom O'Dwyer, CM

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ASHRAE LIAISON

TAC Section Head	Giustino Mastro
TAC Chair	Donald Brundage
Manager of Standards	Claire Ramspeck (Staff)
Manager of Research & Technical Services	Mike Vaughn (Staff)
Committee Liaisons	
ALI/PDC	Florentino J Mendez
Chapter Tech Transfer	Stephanie Reiniche
HB Applications	Charles Gullledge, III
Program Liaison	Riyaz Papar
RAC Research Liaison	Danny Castellan
Standard Liaison	Bodh Subherwal
Special Pubs	Stanley Mumma

These draft minutes have not been approved and are not the official, approved record until approved by this committee.

MINUTES
ASHRAE TC 5.6
CONTROL OF FIRE AND SMOKE
Las Vegas, NV
(LVCC) N263C
Monday, January 31, 2011 – 4:15 to 6:30 PM

Prepared by: Ahmed Kashef, Ph. D., P. Eng.
National Research Council Canada

1. Introductions

The Committee Chair Jeff Tubbs called the meeting to order at 4:15 pm.

2. Identification of Voting Members

30 members and guests were present at the meeting. Voting members were identified. 14 voting members were present. 1 voting members were absent. No international members were present.

3. Chairman's Remarks

Jeff welcomed members and guests and briefed attendees on the Section 5 meeting (please attached).

4. Approval of Minutes from June 25, 2010 Meeting (Albuquerque, FL)

Jeff indicated that there were few changes to the minutes. The minutes will be revised and posted on the TC 5.6 web site. Bob Van Becelaere motioned to approve the revised meeting minutes, John Klote seconded. The committee voted to accept the Albuquerque revised meeting minutes of June 25, 2010 (for approval: 14; against: 0; abstention: 0).

5. Subcommittee Reports

a) Research – Paul Turnbull

Active Research Projects:

- No active projects at this time.

WS-1447: (Performance of Pressurized Stairwells with Open Doors)

- WS was accepted by ASHRAE a year ago.
- It has not gone out to bid yet. It is first on the list to go out in the Fall bid package.

RTAR-1600 Make-up Air Velocity for Smoke Control in Atria (#2)

- RTAR has been accepted by ASHRAE for development into WS.
- A revised Work Statement was distributed to the TC prior to the meeting.
- The draft WS was discussed and revised during the Research Subcommittee meeting on Sunday.
- The revisions were reviewed during the TC meeting.
- Ray Sinclair suggested additional changes to the fire sizes and location of the makeup air supply, and also suggested that the project should include not just velocity, but supply air volume.
- The TC determined that the WS would need additional work, and was not ready for balloting.
- Paul will revise the WS, with input from Ray. The revised WS will be distributed for letter ballot.

New RTAR (Smoke Control in Long Atria):

- Draft of RTAR was distributed by email to TC5.6 members for review.
- During the TC5.6 meeting, the RTAR was revised to include an estimated cost of \$150K and a duration of 18 months.
- John Klote made a motion to accept the RTAR as distributed, with the revisions to the cost and duration, and John Clark seconded the motion. The motion passed (14 for, 0 against, 1 absent (D. Carey)).
- The RTAR will be submitted to ASHRAE Research for consideration.

b) Program – Gary Lougheed

Gary updated the TC on the CEC and schedules for Montreal (Feb 14 deadline for final submissions) and Chicago (April 18 deadline for submission of technical papers and abstracts for conference papers). For Montreal the main theme is “Net-Zero Energy Design” with 8 Tracks (ashrae.org/Montreal). For Chicago, it is “The impact of HVAC&R on our daily lives with 10 Tracks (ashrae.org/Chicago).

Montreal, June 2011

- ✓ No items for Montreal

Chicago, Jan 2012

- ✓ Seminar – (Alternative) smoke detection systems for smoke control with Paul Turnbull as moderator and papers by George Hadjisophocleous, Ahmed Kashef and Matthew Davy.
- ✓ Conference Paper Session - Natural ventilation in cold climates with Bill Webb as moderator and papers by Frank Mills and Ray Sinclair.

San Antonio, June 2012

- ✓ Seminar – Special issues related to smoke control in large volume spaces with Jeff Tubbs as moderator and paper by Ray Sinclair and others to be determined.
- ✓ Seminar – Can smoke control contribute to sustainability? (Similar to NFPA discussions on sprinklers and fire alarms versus sustainability.) with Paul Turnbull as moderator and a paper by John Klote and others to be determined.
- ✓ Seminar - Guideline 1.5 with papers from SMCNA on inspection process, AHJ on commissioning, etc. (may be moved to Dallas depending on the completion of the document)

Dallas, Jan 2013

- ✓ No items identified.

Denver, June 2013

- ✓ No items identified.

c) Membership – John Clark

John noted that the committee needs a balance of membership and would like invite anyone interested in the committee activity. A new committee roster was in place as of 1st of July. For those interested in becoming either a corresponding member or a voting member, please provide business card indicating preference as corresponding member or voting member and ASHRAE membership info. The committee is looking for representation from designers. John suggests guests to start as corresponding member, as voting member needs commitment for a 4-year cycle. By 2012, 7 members will be cycled off committee should look for a new members in a year or so.

d) Handbook – John Clark

The Handbook was published in June. The cycle will restart in Montreal where it will only be distributed electronically (no CDs)

Guideline 5 – Paul Turnbull

Guideline 5 (Commissioning Smoke Management Systems) will be revised to the new Guideline 1 (Commissioning HVAC Systems) and Guideline 0 format. The GPC1.5 committee met on Sunday to continue reviewing the document where it left off at the end of the Orlando meeting. The committee completed its review of the entire document. Paul will clean up the formatting a numbering of the documents. It is expected that a draft of the document will be sent to GPC1.5 committee members prior to the Montreal meeting.

Standards – Bob Van Becelaere

No major Changes. The standard is not suitable for nuclear sites. NFPA 80 going to meet next week.

e) TC5.6 Web Site – Josiah Wiley

The committee’s website address is: <http://tc56.ashraetcs.org>. Josiah Wiley is replacing Jason George for maintaining of the web site.

6. Intra-Society Liaison Reports:

- a) TC1.4 (Control Theory and Application) – Larry Felker
- b) TC5.2 (Duct Design) – Bob Van Becelaere
Bob reported that TC 5.2 will meet the next day, and would not expect anything specific to impact 5.6.
- c) TC5.9 (Enclosed Vehicular Facilities) – Kai Kang - a seminar on Wednesday. The Committee will meet on Tuesday.
- d) TC5.10 (Kitchen Ventilation) – John Clark
Design coordination with sprinkler contractor for protection over Type I Grease Duct, there may be a control issue. John is planning to write about this subject. Kitchen exhaust issues are resolved by now.
- e) TC7.9 (Building Commissioning) – Jerry Kettler
Jerry noted that the Standard for commissioning is very close to start. Existing ASHRAE Commissioning Guidelines 0.2 is going for final editing. ASHRAE Commissioning Guidelines 1.2 is for existing HVAC systems is about 80% accomplished (is within one year from publishing). NFPA is developing a similar Standard for commissioning fire safety systems. IES has commission standard to be released. IGSS has whole chapter on commissioning.
- f) TC9.1 (Large Building Air Conditioning Systems)
- g) TC9.8 (Large Building Air Conditioning Applications)
- h) TC9.10 (Laboratory Systems)
- i) TC9.12 (Tall Buildings) – greater than 300 ft (looking for members). Cosponsoring a session tomorrow and their meeting tomorrow.

7. Inter-Society Liaison Reports:

- a) CIBSE (Chartered Institute of Building Services Engineers)
- b) NFPA 80 (Standard for Fire Doors and Fire Windows) – Bob VanBecelaere
Bob noted that NFPA 80 about to start the new cycle next week. NFPA 80 is changing maintenance provisions for fire dampers and smoke dampers, test one year after installed, every four years after that. Smoke dampers tested every year, and cycled every year after that.
- c) NFPA 90A (Air Conditioning and Ventilating Systems) – Jim Buckley
The Committee is meeting in June to the next revision cycle.
- d) NFPA 92A and NFPA 92B (Smoke Management) – Paul Turnbull
The NFPA Smoke Management Committee met in November to act on several public comments and to finalize the combination of the two standards into one document. During the meeting, the committee discussed adding the topic of natural ventilation to the standard, but in the end, most of the new material for natural ventilation was voted down. The combined document (NFPA 92) has been balloted to the committee, and will be voted on at the NFPA meeting in Boston in June.
- e) UL – Tim Orris
UL is starting a 5-years cycle. UL will be a for-profit company
- f) AMCA – Tim Orris
The AMCA Damper Engineering and Code Action & Review Committee's have met several times since last ASHRAE TC 5.6 Meeting. The committee has developed a list of service issues o discuss with UL and will also have Intertek an FM Approvals present information on their damper listing programs at the AMCA Spring Meeting in March. The members are also working with UL staff to improve the UL quoting tool and UL has recently changed their ceiling damper marking requirements.
- g) SFPE – Jeff Tubbs
Jeff noted currently they updated the handbook (2012) will be expanded with more guidelines and there are new committees on how to use fire models and on tall buildings (initial draft was submitted by end 2011 a 100-page guide be pblished).

8. Old Business

9. New Business

10. Adjournment

The meeting was adjourned at 6:00 pm.

Sun Jan 30, 2011

Program Sub-committee – Gary

- Authors evaluation (3.5)
- Authors attendance
- Las Vegas: two sessions, technical and conference sessions
- Life safety under (HVAC&R Systems and Equipment – Track 7)
- Seminar – Presentations on City Center Project for Las Vegas was cancelled.
- Conference Session on natural ventilation was moved to Chicago meeting with Ray and Frank as presenters and Bill Wibb as a moderator.
- For Montreal: Protection Health Care Facilities (scratched). Smoke control for large volume spaces (moved to San Antonio – general paper on case studies by Ray and Randy).
- Chicago: smoke detections (Ahmed/George/Paul – Paul as moderator) – abstracts after Montreal
- Seminar on Guideline 1.5 for San Antonio.
- Seminar in San Antonio on sustainability of smoke control.

Research Sub-committee – Paul

- RTAR-1600: Changing the size of the burn hole (width should be at least 19 m) or ask for performance-based requirements.
- Uniform velocity