



**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

DATE: June 27, 2011

TC/TG/TRG/TITLE: Control of Fire and Smoke

LOCATION: Montreal, QC

DATE OF MEETING: June 27, 2011

VOTING MEMBERS PRESENT	YEAR APPT' D	VOTING MEMBERS ABSENT	YEAR APPT' D	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Jeffrey Tubbs (Chair)	2011	Stephen D Carey	2012	Kai Kang, CM
John Clark	2013	John Klote	2014	Liangzhu (Leon) Wang, CM
Paul Turnbull	2012	William Webb	2014	Tim Orris, CM
Gerald Kettler	2014	Bob Van Becelaere	2012	Ray Sinclair, CM
Tenison Stone	2013	Jim Buckley	2012	Josiah Wiley, CM
Valentina Nedelcu	2012	Larry Felker	2012	Bill Black, CM
Ahmed Kashef (Secretary)	2014			Gary Lougheed, CM
				Jerald Alston, CM
				Peter McDonnell, CM
				Dan Rau, CM
				Julian Rochester, G
				David John, CM
				John Hamilton, CM
				Gus Mastro, G

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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
Montreal, QC
(F) St. Maurice (C)
Monday, June 27, 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

21 members and guests were present at the meeting. Voting members were identified. 7 voting members were present. 4 voting members were absent.

3. Chairman's Remarks

Jeff welcomed members and guests and briefed attendees on the Section 5 meeting (please see attached). Jeff mentioned that ASHRAE is looking at ways to improve liaison with the TC chair for more efficient reviewing of technical and conference papers. He indicated that a number of workshops and conferences organized by ASHRAE are coming up soon. The tracks details of Chicago and San Antonio are now available on the ASHRAE website. ASHRAE will continue to have the "HVAC&R Systems and Equipment" and "HVAC&R Fundamentals and Applications" tracks for the upcoming meetings. There are new Multi Task Groups (MTG) being formed to look at specific themes with their meetings are open to public.

4. Approval of Minutes from Jan 31, 2011 Meeting (Las Vegas, NV)

The committee voted to accept the Las Vegas meeting minutes of Jan 31, 2011 (for approval: 7; 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 bidding package.

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

- RTAR has been accepted by ASHRAE for development into WS.
- Ray Sinclair suggested in the Las Vegas Winter Meeting 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 also supply air volumetric rates.
- Paul will revise the WS, with input from Ray. The revised WS will be distributed for letter ballot for submission on August 2011.

New RTAR 1644 (Smoke Control in Long Atria):

- RTAR was reviewed by the RAC and is being returned with comments requesting further revision and clarification. Their comments should be received within 30 days.
- Paul will revise the RTAR accordingly upon the receipt of the comments.

Ideas for future RTARs

- Plugholing issues in atrium smoke management using exhaust inlets located on the atrium walls – current practice assume conservative approach if using vents on the wall rather than on the ceiling – Gary will write the first draft of the RTAR.
- Smoke purging from stair and shafts – by John Klote
- Comparisons of existing software tools to existing experimental data

b) Program – Gary Lougheed

Gary updated the TC on the CEC and schedules for Chicago (August 12 deadline for submission of seminar and forum proposals) and San Antonio (September 26 deadline for submission of technical papers and abstracts for conference papers). For Chicago the main theme is “The impact of HVAC&R on our daily lives”. For San Antonio, it is “Leading the way to better buildings”.

Montreal, June 2011

- ✓ No items for Montreal

Chicago, Jan 2012 (TRACK 9)

- ✓ 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 (TRACK 1, 2 & 7)

- ✓ 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 with Paul Turnbull as moderator and a paper by John Klote and others to be determined.

Dallas, Jan 2013

- ✓ Seminar – in collaboration with TG9 JF Justice Facilities on smoke control in correctional facilities with possible paper by Peter McDonnell.
- ✓ Seminar - Guideline 1.5 with papers from SMCNA on inspection process, AHJ on commissioning, etc.

Denver, June 2013

- ✓ Seminar on Design fire for smoke control (possible papers by NRC and FPRF).
- ✓ Technical Session on Smoke control modeling - applications, validation, development (possible papers by Jarrod Altson, Leon Wang Bill Black, Ahmed Kashef)

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 is 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 design engineers. 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 new cycle started where it will only be distributed electronically (no CDs)

e) Guideline 5 – Paul Turnbull

Guideline 5 (Commissioning Smoke Management Systems) will be completed by the end of Montreal meeting. It will go for public review soon after voting from the subcommittee.

f) Standards – Bob will no longer report to 5.6.

g) TC5.6 Web Site – Josiah Wiley

The committee's website address is: <http://tc56.ashraetcs.org>.

6. Intra-Society Liaison Reports:

- a) TC1.4 (Control Theory and Application)
- b) TC5.2 (Duct Design)
- c) TC5.9 (Enclosed Vehicular Facilities) – 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 existing buildings is very close to start. Existing ASHRAE Commissioning Guidelines 0.2 is going for final editing public review. ASHRAE Commissioning Guidelines 1.2, for existing HVAC systems, is about 80%. Many standards for commissioning fire safety systems and testing are being developed by different bodies (NFPA, ASTM, IES, IGSS, etc.)
- 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).

7. Inter-Society Liaison Reports:

- a) CIBSE (Chartered Institute of Building Services Engineers)
- b) NFPA 80 (Standard for Fire Doors and Fire Windows) –
- c) NFPA 90A (Air Conditioning and Ventilating Systems) – Tim Orris.
90A was voted on at NFPA meeting in Boston in early June 2011. One floor motion passed, removing fire/smoke dampers from certain shafts, reverting back to previous language requiring only fire dampers in those locations.
- d) NFPA 92A and NFPA 92B (Smoke Management) – Paul Turnbull
The two standards are now one standard “NFPA 92”. No technical differences from 92A and 92B, but arranged to make it easier to find requirements for each type of system, and editorially revised to remove conflicting language that made it unclear which way to do things when both types of systems were in the same building. 92A and 92B are now obsolete.
- 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 discussed a list of services issues with UL Staff in early March. The members are also working with the UL staff to improve the UL quoting tool. Intertek and FM Approvals presented information on their damper listing programs to the damper manufacturers as an alternative to UL.
- 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 for tall buildings (initial draft was submitted by end 2011 a 100-page guide be published). Guideline for substantiating models for their intended use.

8. Old Business

9. New Business

10. Adjournment

The meeting was adjourned at 6:00 pm.