

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.



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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 5.9 **DATE:** June 28, 2011
TC/TG/TRG TITLE: Enclosed Vehicular Facilities **LOCATION:** Montreal, Canada
DATE OF MEETING February 1, 2011

VOTING MEMBERS PRESENT	YEAR APPT'D - TERM ENDING	VOTING MEMBERS ABSENT	YEAR APPT'D - TERM ENDING	EX-OFFICIO (CM) MEMBERS AND ADDITIONAL GUEST (G) ATTENDANCE
George Gamble Robert Smith Greg Sanchez Mark Colino John Murphy Mohammad Tabarra (NQ) Dharam Pal (NQ) Asesh Raychaudhuri Igor Maevski Anthony York Ahmed Kashef	2008 – 2012 2008 – 2012 2008 – 2012 2008 – 2014 2010 – 2014 2009 – 2013 2010 – 2014 2010 – 2014 2011 – 2015 2011 – 2015 2011 - 2015	Ian Ong Don Guan Nader Shahcheraghi George Hadjisophocleous	2008 – 2012 2009 – 2013 2008 – 2012 2008 – 2012	Tom O'Dwyer (CM) Kai Kang (CM) Gary Lougheed (CM) Josiah Wiley (G) Michael Keating (CM) Jeffrey Tubbs (CM) Joseph J Grella (CM) Kevin Chang (CM) Bill Lampkin (CM) Gustave Presser (CM) Jarrod Alston (CM) Jane Miller (G) Fred Shortts (G)

DISTRIBUTION

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

TAC SECTION HEAD: Gus Mastro

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)

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Technical Committee TC 5.9 - Enclosed Vehicular Facilities
Meeting Minutes – 28 June 2011 – Montreal, Canada

Robert Smith called the meeting to order at 3:30 PM. There were 9 out of 13 voting quorum members present. The voting member attendance met requirements for a quorum.

Review of prior TC 5.9 Meeting Minutes (February 1, 2011– Las Vegas, NV): Robert Smith motioned to approve minutes; Greg Sanchez seconded the motion. The minutes were approved without revision.

Section 5.0 Announcements:

1. Greg Sanchez announced the subject of the meeting - How to improve performance of the sessions. Greg informed that his intent was to bring up the subject of Speaker's evaluation. He suggested not evaluate presenter based on his accent or language quality.
2. Website – keep it up today
3. High Tower Award – nominees to be submitted. After a short discussion no nominees were proposed.

Program Sub-Committee Report: (Kai Kang)

Kai Kang conducting program subcommittee meeting. During the Sub-Committee meeting, each of the scheduled TC5.9 Program events was re-visited in terms of: event type, proposed meeting date, topic, planned contributors and chairperson availability. The current TC5.9 Program event status is:

- **Chicago (full technical paper for conference paper due date July 8),**
 - CH0: Conference – 'Vehicle design fire for tunnel ventilation' Chair: Igor Maevski
 - CH1: Conference – 'Design Applications and Commissioning issues related to emergency smoke management fans for tunnel applications', Chair: Mark Colino
 - CH2: Seminar – Sustainable environment for enclosed vehicular facilities, Chair: Anthony York
 - CH3: Conference paper – Ventilation Design for Road Tunnels based on risk analysis Chair: Ahmed Kashef
- **San Antonio, TX (June 2012) (Sept 26 Technical Paper due; Conference Paper abs due, Feb 13 Seminar/Forum Due)**
 - SA1: Conference Paper – Innovative Station Ventilation; Chair: Kai Kang
 - SA2: Seminar – 'Towards a Station Ventilation Sustainable Design Guidance', Chair: Mohammad Tabarra
 - SA3: Seminar – "Design Energy Efficiency Jet Fan Systems" Chair: Greg Sanchez (George Gamble, Robert Smith, Mark Colino)
 - SA4: Forum – 'Boundary conditions for Tunnel Ventilation Modeling' Chair: Tom O'Dwyer

Dallas, TX (January 2013)

- DA1: Seminar - Special Ventilation Issues in High-Speed Rail Tunnels. Chair Paul Miclea
- DA2: Forum - Can wireless control improve ventilation performance? Chair: Steve Presser

Denver, CO (June 2013)

TBD

New York, NY (January 2014)

TBD

- **Future program topics:**
 - Ventilation during Construction for Enclosed Vehicular Facilities
 - Air-cleaning for tunnels
 - Commissioning of Tunnel Ventilation Systems
 - Extreme Events Ventilation Requirements
 - Tunnel Ventilation Velocity Profile on Egress Calculations
 - Matrix Development to Achieve LEED Certification into Station Design

As of July 1, 2011 Mark Colino will chair the subcommittee

ASHRAE Journal Sub-Committee Report: (Paul Miclea)

Bob Smith reported and suggested if anybody have topics to be published, should get in touch with Paul Miclea

Handbook Sub-Committee Report: (Jeff Tubbs)

Handbook was published. This is a 4-year cycle. Jeff suggested to the TC5.9 members to review the published document and to initiate some discussion on information missing in the chapter. The new chapter edition may need to address high speed train tunnels and sustainable design.

As of July 1, 2011 a new chairman for the subcommittee will be Kai Kang

Research Sub-Committee Report: (Ahmed Kashef)

Currently we don't have any topic meeting RTAR. Ahmed Kashef reported that ASHRAE has received one item for RTAR:

#1. Pressure transient in rail tunnels and underground station. However the RTAR submitted had no sufficient information on project schedule and cost estimates. The RTAR requires further development. Ahmed Kashef will get in touch with Nader to discuss the status. Submittal is due by August 12.

Other provisional research topics:

#2. Sustainability rating of subway stations ventilation design. Mr. Mohamed Tabara is responsible for this research topic. The intent is to create a matrix tool solid enough for sustainable design, which will be an indication on how sustainable the design is. A score system for sustainability will consider geographic location, ambient conditions, and HVAC design. One important criteria will be energy usage to achieve the thermal comfort. Research will assess LEED and other similar international programs with score points, stars. Draft to be circulated before the meeting in Chicago for review and comments. Duration of the research topic is 12 month.

#3 Interaction of fans performance with fixed fire suppression system. Mr. Igor Maevski is responsible for this topic. Draft scope shall be prepared and copy distributed for the meeting in Chicago. The research includes synthesis study and experimental work on interaction of ventilation and sprinklers.

#4 Performance of jet fans in tunnel niches. Mr. John Murphy is responsible for this topic. Research shall include scale modeling.

Membership Sub-Committee Report: (Tom O'Dwyer)

A number of discrepancies were noted and Tom is working with Bob Smith on the discrepancies.

Website: (David Newman)

No report. The importance to maintain the website and publish the minutes was highlighted.

Liaison Reports:**TC 5.1 (Asesh Raychaudhuri)**

Two very successful seminars Sponsored by TC5.1 were held and the technical papers presentation scheduled for June 29.

Couple of seminars planning and need co-sponsorship:

- Measurements of fan discharge velocity. Seminar
- Energy savings and fans efficiency. Seminar

TC 5.9 agreed to co-sponsor the seminars. John Murphy is the TC5.1 chairman

TC5.6 (Gary Loughheed)

No topics presented in Montreal

Couple of seminars planning:

- o Natural ventilation in cold climate
- o Fire Detection

Mr. Gary Loughheed announced that Montreal ASHRAE Meeting is his last ASHRAE meeting.

NFPA 130. (Greg Sanchez)

Greg Sanchez made a short presentation.

Igor Maevski distributed the status report prepared by the Chairman of NFPA 130 – Mr. Harold L. Levitt of the PA NY&NJ.

NFPA 502. (Igor Maevski)

The 2011 edition of NFPA 502 has been issued and is available for purchase. The new review cycle has not started yet. Comments and suggestions are welcomed.

PIARC. (Ahmed Kashef)

Next PIARC meeting will be held in Mexico City. Collaboration of ITA and PIARC will provide training sessions on design, construction and operation of tunnels. Ahmed also announced that a new PIARC report has been uploaded 2 month ago – road tunnel operation and strategy for emergency operation. Report is available for free.

APTA. (Paul Miclea)

No report

Mining. (George Gamble)

Mr. George Gamble announced on two mining conferences for the next year. The Society of Mining Engineers Annual Meeting and Exhibit, February 19-22 in Seattle and the Mine Ventilation Symposium will be held at the University of Utah, June 17-20 in Salt Lake City, UT.

Old Business

None

New Business and Comments:

- ASHRAE was sponsoring one person from each subcommittee for attending the learning institute. The course to be related to TC interests. ASHRAE promotes a full day and half day courses. The course listing is published on the ASHRAE website. The TC5.9 supports this effort. Mr. Kevin Chang of the PA NY&NJ was selected and attended the course. Mr. Chang reported that the course was very useful.

Gus Mastro, the TAC SECTION HEAD made several announcements at the end of the meeting:

- ASHRAE is looking at setting up training seminars for webmasters in Fall 2012.
- ASHRAE highlights the importance of reviewers and session chairs
- Gus asked to keep the TC website page up to date

Adjournment:

Greg Sanchez made a motion to adjourn the meeting; seconded by Ahmed. TC5.9 Chairman Robert Smith adjourned the meeting at 5:00 PM. Next meeting is scheduled for Chicago

Gary Lougheed presented a subway car tests results on train car shipped from Korea

Recorded by Igor Maevski, TC5.9 Secretary