

**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 5.9 DATE January 24, 2014
 TC/TG/MTG/TRG TITLE Enclosed Vehicular Facilities
 DATE OF MEETING January 21, 2014 LOCATION New York, NY

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
Greg Sanchez Igor Maevski Mark Colino Robert Smith Ahmed Kashef Anthony York	2008-2014 2011-2015 2008-2014 2008-2014 2011-2015 2011-2015	Bill Lampkin Michael Keating Dharam Pal DQ	2012-2016 2012-2016 2010-2014	David Newman (CM) Josiah Wiley (CM) Andrew Louis (CM) Cheng Chang (CM) Thomas Doebeli (CM) George Gamble (CM) Yuan Li (CM) James J. McCarron (CM) Tony Moskalik (CM) John Murphy (CM) Valentina Nedelcu (CM) Fred Shortts (CM) Richard Yarges (CM) Jane Miller (CM) Dean Geraci (G) Hing-Wai Wong (G) Toby Sargant (G) Norris Harvey (G) Sukru Birkok (G) Paul Quinlan (G) Darryl Benroth (G)

DISTRIBUTION

All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head:	Walter Grondzik
TAC Chair:	Kenneth Peet
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters:	

Manager Of Standards Manager Of Research & Technical Services	Stephanie Reiniche Mike Vaughn
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AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.
Technical Committee TC 5.9 – Enclosed Vehicular Facilities
Meeting Minutes – 21 January, 2014 – New York, NY

Greg Sanchez called the meeting to order at 3:30 pm.

There are 6 out of 9 voting quorum members. The voting member attendance met requirements for a quorum.

No minutes available from the Denver meeting.

Michael Keating is not able to meet the secretary's role due to change in job. Jane Miller has agreed to act as secretary for the next 2 meetings.

Chairman's remarks presented by Greg Sanchez. **Section 5 Information Announcements:**

- a) Please update your ASHRAE bio online
 - a. NEW - Add your disciple
- b) ASHRAE ExChange – new networking system for ASHRAE members; find on ASHRAE site
- c) ASHRAE is tracking committee activities - RTARs, seminars, conference paper, etc to see activity level of each committee
- d) New tracks in development for Section 5

Roster

- 3 phasing out as voting members: Mark Colino, Michael Keating, Dharam Pal
- New voting members appointed: Andrew Louie, John Murphy, Nader Shadcheraghi, Jane Miller
- New total of (10) voting members
- Greg Sanchez appointed Nader Shadcheraghi as new Vice Chairman 2014-2016 , Jane Miller as new Secretary 2014-2016.

Old Business

- No minutes available for Denver; brief summary below
 - Voted on RTAR 1715; approved to submit to RAC in August 2013
 - Discussion on proposed new standard on ventilation in subway and tunnel stations for normal operating conditions/comfort – formed initial subcommittee

Program Sub-Committee Report: (Mark Colino)

2014 Winter Meeting – New York, NY

NY1 (Conference Paper Session) – “The Challenge of Upgrading Tunnel Ventilation Systems: Three Case Studies”; Chair: Mark Seymour; Presenters: David Newman, Yuan Li, Jarrod Alston; proceeded as Conference Paper Session #15 on Monday, January 20 from 11 am to 12 pm. TC 5.9 was not indicated as the sponsor of the session; proposed Chair (Igor Maevski) was replaced by CEC.

Conference paper entitled, ‘Upgrading Performance of Centrifugal Fans with an Impeller Replacement’ (by Robert Smith) was moved to Conference Paper Session #23 on Wednesday, January 22 from 9:45 am to 10:45 am.

2014 Annual Meeting – Seattle, WA (Seminar & Forum Proposals due Feb 13, 2014; Conference Papers due Jan 9, 2014)

SE1 (Seminar) – “Commissioning of Tunnel Ventilation Systems”; Chair: Nader Shahcheraghi; Presenters: Bill Lampkin, TBD; Co-sponsor: 5.1

SE2 (Conference Paper Session) – “Enclosed Vehicular Facility Projects in Seattle Area”; Chair: Robert Smith; Presenters: Igor Maevski, David Hahm, Dilip Shah; Co-sponsor: 5.1

SE3 (Forum) – “Boundary Conditions for Tunnel Ventilation Modeling”; Chair: Tom O’Dwyer; Potential Co-sponsor: TC4.10

Seattle Conference Tracks: Indoor Environment (Health, Comfort & Productivity); Research Summit; Ground Source Heat Pumps (State of the Art Design Performance & Research); HVAC&R Systems & Equipment; HVAC&R Fundamentals & Applications; Standards, Guidelines & Codes; Refrigeration; Installation, Commissioning, Operation and Maintenance of Existing Buildings; Professional Skills

2015 Winter Meeting – Chicago, IL (Conference Paper Abstracts due Mar 24, 2014; Seminar & Forum Proposals due Aug 2014)

CH1 (Seminar) – “Sustainable Environment for Enclosed Vehicular Facilities & Related Design Guidance”; Chair: Anthony York; Presenters: Mohammad Tabarra, TBD; Potential Co-sponsor: TC2.8

CH2 (Conference Paper Session) – “Innovative Station Ventilation”; Chair: Mark Colino; Presenters: Tom O’Dwyer, Jim McCarron (2); Co-sponsor: TC5.6

CH3 (Conference Paper Session) – “Numerical Analysis for Fire-Life Safety”; Chair: Igor Maevski; Presenters: Yuan Li, David Newman; Co-sponsor: TBD

CH4 (Seminar) – “Ventilation Design for Road Tunnels Based on Risk Analyses”; Chair: Ahmed Kashef; Presenters: Alex Devs, TBD; Co-sponsor: TC5.1

CH5 (Seminar) – “Special Ventilation Issues in High-Speed Rail Tunnels”; Chair: Nader Shahcheraghi; Presenters: Ian Ong, Marc Morgan; Co-sponsor: TC5.1

Chicago Conference Tracks: HVAC&R Fundamentals & Applications; Design of Energy & Water-Efficient Systems; HVAC&R Systems & Equipment; Large Buildings (Mission Critical Facilities); Industrial Facilities; Energy Efficiency; Life Safety; Hospital Design & Codes

2015 Annual Meeting – Atlanta, GA (Seminar & Forum Proposals due Feb 2015; Conference Papers due Jan 2015)

At this time, no Program events are scheduled for this meeting.

Atlanta Conference Tracks: TBD

Future Program Topics

- Can Wireless Control Improve Ventilation Performance (Champion: Steve Presser)
- Air Cleaning for Tunnels (Champion: Igor Maevski)
- Extreme Events Ventilation Requirements (Champion: Greg Sanchez)
- Best Practices for Enclosed Vehicular Facilities (Champion: Tom O’Dwyer)
- Tunnel Ventilation Velocity Profile on Egress Calculations (Champion: Ahmed Kashef)
- Matrix Development to Achieve LEED Certification in Station Design (Champion: Mohammad Tabarra)
- Platform Screen Doors (Champion: Greg Sanchez)
- Natural Ventilation Applications in Enclosed Vehicular Facilities (Champion: Mark Colino)
- BIM in Tunnel Ventilation Design (Champion: Igor Maevski)
- Aerodynamics and Ventilation in Vehicular Facilities (Champion: Kai Kang)

Membership Sub-Committee Report: (Tom O’Dwyer) some discrepancies exist between membership lists; will review with Tom

Ad Hoc ASHRAE Journal Sub-Committee: (Tom O’Dwyer) no news to report

Handbook Sub-Committee Report: (Andrew Louie)

No revisions will be made to 2015 Handbook

For the 2019 cycle, the following have volunteered to revise or review:

Revisers	Reviewers
Greg Sanchez	David Newman
Ahmed Kashef	Dean Geraci
Robert Smith	Yuan Li
Jim McCarron	Anthony York

Research Sub-Committee Report: (Ahmed Kashef)

Currently there are 3 topics for RTAR:

- RTAR 1715 Pressure transient in rail tunnels and underground stations, author - Nader Shadcherahgi
 - Submitted August 1, 2013
 - Rejected with questions
 - Next step – must resubmit with response to questions, further explanation to continue
 - Ahmed will contact Nader Shadcheraghi
 - Need all comment by end of March
 - Resubmit by early May
 - Also must vote before resubmitting
 - Will be by email – please reply/no reply is a “no” vote

- RTAR 1690 Interaction of fans and fixed fire fighting systems, author is Igor Maevski
 - Also must vote at 5.9 meeting (today) before resubmitting to confirm work statement
 - Mark Colino motioned to approve, Robert Smith seconded
 - Voting (4) yes, (0) no, (2) abstain (authors of RTAR)
 - John Murphy suggested the RAC may require more detail for final approval, may need to refine the test plan
 - Selected committees to continue once the RTAR is finally approved:
 - PES review/evaluate bids:
 - Mark Colino (chair), Robert Smith, John Murphy, Greg Sanchez, David Newman
 - PMS review research:
 - Greg Sanchez (chair), Robert Smith, John Murphy, Mark Colino, David Newman
 - comments to be submitted by Robert Smith, Mark Colino, David Hahm to Greg Sanchez
 - Greg to forward comments to Ahmed, Jane (minutes)

- RTAR tbd Sustainability rating of Subway stations ventilation systems design ,author is Mohamed Tabarra
 - Missing information to submit RTAR, work statement
 - Ahmed to contact Mohamed for more details
 - Will plan to review and vote in Seattle

- **Standards Sub-Committee Report:** (Igor Maevski)
 - New standard recommendation was submitted to Standard Committee and approved with the following changes
 - Revised title “Non-Emergency Ventilation in Enclosed Road, Rail and Mass Transit Facilities”
 - Scope reduced to eliminate garages, environmental and noise issues
 - Revised Purpose:

- This standard provides requirements for ventilation systems for enclosed transportation facilities during non emergency operation conditions.
- Revised Scope:
 - This Standard applies to enclosed transportation facilities, which consist of road tunnels, railway tunnels, mass transit tunnels and mass transit stations.
 - This standard provides criteria for non-emergency ventilation.
 - This standard addresses the design, construction, commissioning, operation and maintenance requirements of non-emergency ventilation systems and equipment.
- Next step – will be reviewed at Board of Director's Meeting 1/22/14.
 - Was approved; next step is the PPIS
 - Develop TOC
 - Assign tasks – developer, reviewed for each topic
 - For example – road tunnel, railway tunnel, etc.
- **Web Site:** (David Newman)
 - Please forward any relevant information to be included on the web site
 - Will post program committee report
 - 5.9 website login tc59user password vent4life

Liaison Reports:

TC 5.1 (John Murphy for Asesh Raychaudhuri) nothing to report pertaining to TC 5.9

TC 5.6 (Ahmed Kashef)
 • Seminar 45 "Life Safety Issues with Tall Buildings" co-sponsored with TC 9.12 was presented 1/21/14 at 1:30 pm

NFPA 130 (Tom O'Dwyer) collecting information for the next revision cycle/2014 just released

NFPA 502 (Igor Maevski) just issued 2014 edition, break for next 4-5 months until next cycle begins

APTA (Greg Sanchez) Rail Conference June 15-18 Montreal

Mining Industry (George Gamble)
 • SME Annual Meeting to be held February 23-26 in Salt Lake City
 ○ See George Gamble for list of papers to be presented; copies also available
 • NIOSH organization has synergy with some 5.9 concerns. If interested in learning more, please contact George Gamble.

New Business none

Adjournment Greg Sanchez adjourned the meeting at 5:15 pm

Next Meeting scheduled for Seattle, WA on July 1, 2014.
 Recorded by Jane Miller, TC 5.9 Secretary.