



**Robert Smith called the meeting to order at 3:30 PM.** There were 13 out of 14 voting quorum members present. The voting member attendance met requirements for a quorum.

**Review of prior TC 5.9 Meeting Minutes** (June 28, 2011– Montreal, Canada): Robert Smith motioned to approve minutes; Mark Colino seconded the motion. Date of the meeting needs to be corrected. The minutes were approved with revision noted.

**Section 5.0 Announcements:**

Starting from the Dallas meeting, speakers will be charged a registration fee (expected to be \$100) to attend the ASHRAE Meeting.

ASHRAE will appoint the Reviewers of the conference papers. ASHRAE is seeking for volunteers to register as a reviewer.

**Program Sub-Committee Report:** (Mark Colino)

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:

- **San Antonio, TX (June 2012)**

- SA1: Seminar – Sustainable Environment for Enclosed Vehicular Facilities and Related Design Guidance, Chair: Anthony York
- SA2: Seminar – “Design Energy Efficiency for Jet Fan Systems” Chair: Greg Sanchez
- SA3: Forum – ‘Boundary conditions for Tunnel Ventilation Modeling’ Chair: Tom O’Dwyer

**Dallas, TX January 2013 (Abstracts due March 19, Papers due July 2012)**

- DA1: Seminar - Special Ventilation Issues in High-Speed Rail Tunnels. Chair Nader Shahcheraghi
- DA2 Conference Paper - Ventilation Design for Road Tunnels Based on Risk analysis Chair: Ahmed Kashef,
- DA3: Conference Paper – Innovative Station Ventilation; Chair: Kai Kang

**Denver, CO (Abstracts due September 26, 2012 Papers due June 2013)**

- DE-1 Conference Paper - Vent Shaft spacing for high speed rail application Chair: Nader Shahcheraghi
- DE-2 Conference Paper - Retrofit of Existing Tunnel Ventilation Systems. Chair: Igor Maevski

**New York, NY (January 2014)**

- NY-1 Conference Paper –The influence of fire suppression systems on Tunnel Ventilation Chair: Ian Ong

- **Future program topics:**

- Forum - Can wireless control improve ventilation performance? Chair: Steve Presser
- Ventilation during Construction for Enclosed Vehicular Facilities
- Air-cleaning for tunnels (Igor Maevski)
- Commissioning of Tunnel Ventilation Systems (Nader Shahcheraghi)
- Extreme Events Ventilation Requirements (Greg Sanchez)
- Tunnel Ventilation Velocity Profile on Egress Calculations (Ahmed Kashef)
- Matrix Development to Achieve LEED Certification into Station Design (Mohammad Tabarra)
- Commissioning and maintenance of Tunnel Dampers (Bill Lampkin)

**ASHRAE Journal Sub-Committee Report: (Paul Miclea retired and suggested to ask volunteers liaison for ASHRAE Journal)**

John Murphy reminded on the purpose to keep pressure on ASHRAE journal to get articles on Enclosed Vehicular facilities to be published. **Tom O'Dwyer** volunteered to take this role.

**Handbook Sub-Committee Report: (Kai Kang was not present at the meeting). Summer 2014 approving date for the chapter.**

Kai needs to establish the schedule for handbook development. Greg Sanchez, Thomas O'Dwyer, Igor Maevski volunteered to be a reviewer. Jeff Tubbs will check the dates. This is a 4-year cycle. The new chapter edition may need to address high speed train tunnels and sustainable design. Monitor changes in NFPA 130, 502.

**Research Sub-Committee Report: (Ahmed Kashef)**

Currently we don't have any topic meeting RTAR. Ahmed Kashef reported that ASHRAE has 120K max. For RTAR need to answer 5 questions:

1. Need
2. Appropriate for ASHRAE topic
3. Adequate description to evaluate the budget
4. If proper procedure has been followed.

Currently we have 3 topics for the RTAR:

#1. Pressure transient in rail tunnels and underground stations. Paul Miclea, Nader Shahcheraghi. However the RTAR submitted had no sufficient information on project schedule and cost estimates. The RTAR requires further development. Need to submit in May for funding approval at the next meeting.

Other provisional research topics:

#2. Sustainability rating of subway stations ventilation design. Dr. Mohamed Tabarra 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 monitored. Mohamed sent preliminary info, but no costs and schedule. A score system for sustainability will consider geographic location, ambient conditions, and HVAC design. One important criterion 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. Cost and schedule is missing.

#3 Interaction of fans performance with fixed fire suppression system. Dr. Igor Maevski is responsible for this topic. Draft scope was prepared and copy distributed for the meeting in Chicago. The research includes synthesis study and experimental work on interaction of ventilation and sprinklers. Duration of the research topic is 12 month. Cost and schedule is missing.

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

A number of discrepancies were noted and Tom is working with Bob Smith on the discrepancies. The task is to review old minutes and to propose ASHRAE to correct their minutes as needed. The Chairman is a voting member by default.

New Members:

Michael Keating volunteered to be a voting member

Bill Lampkin volunteered to be a voting member

Greg made a motion. Igor was second. Mike Keating, Bill Lampkin became voting members as of July 1, 2012.

**Website: (David Newman)**

David has the webpage up to date. He wants to build the website per committee.

Web page: [www.tc59.ashraetch.org](http://www.tc59.ashraetch.org)

The importance to maintain the website and publish the minutes was highlighted.

**Liaison Reports:**

TC 5.1 (Asesh Raychaudhuri)

A Successful Seminar with great attendance was reported.

Proposing seminar for San Antonio: Energy Efficiency and Fan Efficiency Grade (FEG)

TC 5.9 agreed to co-sponsor the seminars automatically.

Seminar on Jet Fans Design and Application - volunteer Greg Sanchez (TBD)

TC5.6 (No liaison). Volunteered by Josiah Wiley (of Ruskin)

Ed Koop (Ruskin)

NFPA 130. (Igor Maevski)

The ROP meeting is on-going this week.

NFPA 502. (Igor Maevski)

The ROP meeting was held last week.

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)

Design Fire Report was published.

Vehicle emission report was published.

Tunnel operation report is coming out soon

APTA. (Nader Shahcheraghi)

No report

Mining. (George Gamble)

The Mine Ventilation Symposium will be held at the University of Utah, June 17-20 in Salt Lake City, UT.

13 technical sessions are on the agenda.

### **Old Business**

None

### **New Business and Comments:**

- New Chairman from the end of June will be Greg Sanchez. Greg proposed Mike Keating for a new secretary.

### **TAC SECTION HEAD Announcements:** Gus Mastro made several announcements at the end of the meeting:

1. Updated roster is needed electronically by the end of the TC meeting  
February 15 – draft roster  
March 31 - final roster  
May 1 - distribution of the roster
2. High Tower Award goes to Donald Batey
3. Website – encourage TC to update website
4. TC members cannot speak to other group without approval statements in writing. Unless they are liaison to that committee or delegated

### **Adjournment:**

Greg Sanchez made a motion to adjourn the meeting; seconded by Ahmed Kashef. TC5.9 Chairman Robert Smith adjourned the meeting at 5:00 PM. Next meeting is scheduled for San Antonio, TX in June 2012.

*Recorded by Igor Maevski, TC5.9 Secretary*