

Joe Grella called the meeting to order at 3:30 PM. There were 4 out of 9 voting members present. The voting member attendance met requirements for a quorum. Secretary circulated the roll call sign-in sheets which have a place where members can identify the subcommittees in which they wish to participate.

Review of prior TC 5.9 Meeting Minutes (June 26, 2007 – Long Beach, CA): Joe Gonzales had a correction to the prior minutes. Greg Sanchez made motion to accept the minutes as modified and Jeff Tubbs seconded the motion. The minutes were approved with Joe's revision.

Section 5.0 Announcements: TC5.9 Vice Chair Mark Colino gave the announcements from Section meeting that he attended Sunday Morning.

ASHRAE Program Committee and ASHRAE Meetings & Arrangement Committee have combined to form Conferences and Exchange Committee (CEC), which will organize/schedule Program for all Annual, Winter and Specialty Meetings
Program Liaison positions will be dissolved, TC Program Sub-Committee Chairs will be invited to CEC meetings beginning in 2009
Program presentations will be delivered to venues 24 hrs before session commences, no changes to presentation content will be permitted after that time
PDH certificates will no longer be available at conclusion of sessions (they will be mailed to attendees)
TC's are encouraged to submit Program topics that support ASHRAE Mtg themes
Themes of Upcoming ASHRAE Mtgs: Winter Mtg 2009 (Chicago) = Sustainability in Urban Design;
Annual Mtg 2009 (Louisville) = Optimal Air Quality Management; Winter Mtg 2010 (Orlando) = Humidity and Sustainable Indoor Environment

Program Sub-Committee Report: Greg Sanchez summarized the proceedings of the TC5.9 Program Sub-Committee meeting. Greg gave deadlines for the Chicago and Louisville Meetings.

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

- **Chicago, IL (Jan 24-28, 2009)**
 - CH1 Seminar – "Security and Detection in Tunnels", Chair: Paul Miclea;
 - CH2 Forum – "Scoping Methods to Measure the Heat Release Rate of Transit Vehicles", Chair: George Hadjisophocleous;
- **Louisville, KY (June 20-24, 2009)**
 - LV1: Transactions – 'Comparison of Tunnel Ventilation Simulation and Field Tests', Chair: G. Hadjisophocleous;
 - LV2: Transactions – 'Back to Basics – Applications and computer modeling in Road and Rail Tunnels', Chair: Kai Kang;
 - LV3: Seminar – 'Air Cleaning for Tunnels', Chair: Paul Miclea;
 - LV4: Seminar – 'Integration of Rail Stations into Buildings', Chair: Jeff Tubbs;
 - LV5: Forum – 'Fire Protection in Road Tunnels', Chair: Ian Ong;
- **Orlando, FL (Jan 23-27, 2010)**
 - OR1: Transactions – 'Natural Ventilation Applications and Principles in Transit Systems', Chair: Greg Sanchez;
- **Future program topics:**
 - Towards a Station Ventilation Sustainable Design Guidance;
 - Commissioning of Tunnel Ventilation Systems;

- Extreme Events Ventilation Requirements;
- Appropriate Boundary Condition for SES & CFD modeling (Possible for LV2);
- Tunnel Ventilation Velocity Profile on Egress Calculations;
- Ventilation Requirements to Support Structure Fire Protection;
- State-of-the-Art in Tunnel Ventilation;
- Fan Specification on Temperature Rating;
- Matrix Development to Achieve LEED Certification into Station Design.

Ad Hoc Subcommittee - ASHRAE Journal:

The Adhoc subcommittee on ASHRAE Journal Publications combined with Sustainability and Energy Reduction met on Sunday June 22 at 3:00PM. Further discussions were held during the subcommittee meetings Tuesday June 24.

It was confirmed that the chief editor of ASHRAE Journal is considering another article reflecting the TC 5.9 activities and Mohammad Tabarra offered to write it. In fact Mohammad gave a presentation at the Seminar 30 Thermal Control in Subways titled "Sustainable Ventilation Design of a Modern Subway System".

The draft article will be submitted by Mohammad to Paul for review and then submitted to the ASHRAE Journal. The anticipated date for the draft is end of July – first part of August. A confirmation of this will be sent to ASHRAE Journal.

The following topics were listed for further consideration by the subcommittee on Sustainability and Energy Reduction:

- **Shaft penetration / visual impact**
- **Underground water cooling**
- **Air cleaning / filtration**
- **Train bodies to be lighter**
- **Regenerative braking**
- **Natural lighting enhancement**
- **Human body heat recovery**
- **Platform Screen Doors to reduce A/C in stations**
- **High efficiency design for lighting and vertical circulation**

It was proposed that the subcommittee on Publications / Sustainability and Energy Reduction be maintained and a time slot requested for Chicago.

Handbook Sub-Committee Report:

Jeff Tubbs gave the report on the Handbook Subcommittee. Jeff gave the planned schedule for the next update. Jeff indicated that he plans to subdivide the Handbook into portions for review by contributors. Joe Gonzalez, Greg Sanchez, Kai Kang, David Newman, Don Guan and Nader Shahcheraghi will be some of the reviewers.

Research Sub-Committee Report:

John Murphy gave the report on the Research Subcommittee.

John indicated that there is money available for new research projects. One suggested area of research would investigate the effectiveness of jet fans in niches. Discussion followed regarding previous work in this area. John offered to help anyone who has a research proposal and to review the RTAR prior to submittal. John further indicated that the form and instructions for writing RTARS was on the ASHRAE Website.

Membership Sub-Committee Report:

Joe Grella gave the membership report TC 5.9 committee. The committee consists of 70 members. There are 9 voting members including 2 international members. Following the end of the Annual Meeting, 3 voting members' terms will expire: Joe Grella, Dharam Pal and Sean Cassidy.

Effective July 1 the following Voting Members will be added to the roster for 2008-2009: George Hadjisophocleous, Nader Shahcheraghi, Mark Colino, Greg Sanchez, Ian Ong and Bob Smith.

Mark Colino will be the new Chairman of the Committee and Bob Smith will be Vice Chair. Greg Sanchez will be the new Secretary.

Liaison Reports:

Gary Lougheed reported that TC 5.6 would be making submissions for two sessions for the meeting in Chicago: A transactions session on CFD Modeling and of Atria Smoke Control and a seminar on Design and Acceptance Criteria for Smoke Control Systems.

NFPA 130: Mark Colino gave the NFPA 130 report for Bill Kennedy. 1. The NFPA 130 committee has drafted proposed changes for the "2010" Edition of NFPA 130, due to "hit the streets" Aug/Sep 2009. 2. The draft proposed changes have been posed on the NFPA web site. Also posted is how to make a "public comment". 3. Public comments on the proposed changes must be submitted to the NFPA by 29 Aug. You can comment to a member of the Committee after that, but there's no binding commitment for the Committee to respond.

NFPA 502: Mark Colino gave the NFPA 502 liaison report for Art Bendelius. There is not much to report regarding the NFPA 502 Standard. The 2008 Edition has been in publication for some time. The initial meeting addressing the next cycle (the 2011 Edition) will be held in the fall of this year.

PIARC: Mark Colino gave a report on PIARC activities for Art Bendelius. The PIARC working group on Ventilation and Fire Control is also in a transition phase; moving from the last cycle 2004-2007 to the new cycle 2008-2011. The first meeting of the newly constituted working group on ventilation and fire control, in this new cycle, will be held in July 2008. Representing the US on this working group will be Norris Harvey. My direct involvement with PIARC ended at the end of last year although I continue to follow through on the publications developed in the last cycle.

Two of the publications developed in the last cycle by the PIARC Technical Committee on Road Tunnel Operations and its Working Group 6 on Ventilation and Fire Control are now available from PIARC.

The two technical reports now available are:

1. Technical Report titled "*Road Tunnels: A Guide to Optimising the Air Quality Impact upon the Environment*", ISBN: 2-84060-204-0, Ref 2008-R04
2. Technical Report titled "*Road tunnels: An Assessment of Fixed Fire Fighting Systems*", ISBN: 2-84060-208-3, Ref: 2008-R07

A third technical report completed during the last cycle, titled "*Road Tunnels: Operational strategies for emergency ventilation*", is currently undergoing translation into French. Publication will be later this year (2008). There are three other technical reports developed during the last cycle by other working groups of the Road Tunnel Operations Technical Committee that are also currently available:

"*Risk analysis for road tunnels*", ISBN: 2-84060-202-4, Ref: 2008-R02

"*Integrated approach to road tunnel safety*", ISBN: 2-84060-195-8, Ref: 2007-R07

"*Management of the operator – emergency teams interface in road tunnels*", ISBN: 2-84060-201-6, Ref: 2008-R3

All of these reports are now available, at no cost, at PIARC's virtual library. For additional information go to <http://publications.piarc.org/en/technical-reports/>.

Paul Miclea gave brief report about the APTA Rail Conference in San Francisco, June 7 - 11 simply stated that there was a session on Tunnel Ventilation chaired by Bill Kennedy, with 4 papers. I also gave a paper in a session dedicated to central control. Both sessions were well attended.

Mining Industry liaison report was given by George Gamble. The 12th SME Mine Ventilation conference was held June 9 to 11, 2008 in Reno, NV.

Asesh gave report on the planned TC 5.1 program activity for the January meeting in Chicago. Asesh ask that TC 5.9 co-sponsor these programs. After some discussion it was decided to cosponsor the TC 5.1 programs.

Website:

Joe Grella gave the report on the website. He indicated that the website is currently meeting ASHRAE minimum standards and asked for help expanding the current one. David Newman and Sean Cassady are currently doing the web updates for TC 5.9.

Adhoc Subcommittee on Rail Vehicle Design Fire:

An overview was given of the Initial Planning Meeting that had taken place on April 29, 2008 at AMTRAK’s offices in Philadelphia, PA. The report “Draft Work Statement Rail Vehicle Design Fire Project” was distributed at the meeting to interested persons. The committee is continuing to seek opportunities for funding the project. Minutes from the April meeting were also distributed.

New Business and Comments:

Adjournment:

Jeff Tubbs made a motion to adjourn the meeting; seconded by Greg Sanchez. TC5.9 Chairman Joe Grella adjourned the meeting at 4:45 PM. Next meeting is scheduled for January 27, 2008 in Chicago, IL.

EX-OFFICIO (CM) MEMBERS AND ADDITIONAL GUEST (G) ATTENDANCE			
Steve Presser (CM)	Casey Grant (G) Leo Subbarao (G) Valentina Hedelcu (G) Mark Colino (CM)	Tamara Saakian (G) Jerry Casey (G) Baljinder Bassi (G) Greg Sanchez (CM)	Cameron McCartney (G) Viral Gandhi (G) George Hadjisophocleous (CM) Nader Shahcheraghi (G)

Recorded by Robert Smith, TC5.9 Secretary