



				Ex-officio members and additional attendance
				Kishor Khankari
				Davor Novosel
				Brent Fullerton
				Mark Hallman
				Mike Craig

**DISTRIBUTION**

<i>All Members of TC/TG/TRG plus the following:</i>	
TAC Section Head:	Thomas Lawrence
TAC Chair:	Donald Brundage
All Committee Liaisons As Shown On TC/TG/TRG Rosters:	
Manager Of Standards	Claire Ramspeck
Manager of Research & Technical Services	Michael R. Vaughn

**ASHRAE TC 9.10 Laboratory Systems**  
**Montreal**  
**Tuesday June 28, 2011**  
**Meeting Minutes**

**1. Call to order 3:30**

Coogan called the meeting to order and established a quorum with 11 voting members present out of 18 (17 Regular and 1 International).

**2. Introductions**

All present introduced themselves and were invited to sign the attendance sheet.

**3. Membership Update**

All interested to be corresponding members should give their card to Jim, Wade or Roland.

**4. approval of previous minutes**

Minutes from the Las Vegas meeting were reviewed. They were previously distributed by e-mail and posted on the TC website.

Gaylon Richardson moved to accept the minutes.

George Sestak seconded.

Motion passed. (10-0-0 CNV)

**5. House keeping and announcements from Technical Activities Committee**

Roland Charneux reported news from the TC Chairs' meeting:

- M. Tom Lawrence is the section 9 chair.
- M. Carl Huber in the research liaison.
- Report activity form is due Tuesday night.
- Information from CEC
  - Evaluation of speakers will be done and action taken when score is lower than 3.5.
  - TC's will be asked to initiate programs.
- TC's asked for webmasters training.
- Multidisciplinary task groups (MTG) has been created. Example : MTG. EECI "Energy efficient classification of general ventilation air cleaning devices" and MTS. "Energy targets".
- Thank you letters to employers from M Ron Jarnagin are available.

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## **6. Electronic communications**

Roland Charneux will resend messages to members to join Google group and get their access to Goggle site.

## **7. Program Subcommittee – (Scoggins)**

Ginger Scoggins reported on the program subcommittee.

Programm subcommittee meeting was attended by 7 persons.

### Montreal Meeting:

The following seminars were scheduled at the Montreal meeting :

- Sem 5: "Numerical Methods for Predicting Outdoor Dispersion from Exhaust Stacks" (Sunday 8-9:30) – Co-sponsor with TC 4.3.
- Sem 56: "Are Net Zero Laboratories Even Possible, and if So How?" (Wednesday 9:45-10:45)
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### Chicago Meeting:

- We have a dedicated track in Chicago for Hi-Intensity HVAC Applications which will include labs, clean rooms and hospitals.
- The following TC 9.10 conference abstracts were accepted for the Chicago Meeting:
  - "Control of Space Pressurization for Sealed or Tight Rooms" – Jim Coogan
  - The dates for Chicago are as follows:
    - July 8th – Conference papers due for review
    - August 12th– Seminar and Forum proposals due (last date)
    - Sept. 7th – Final conference papers due
    - Jan. 6th – Final Powerpoint presentations due (last date)
- The following is a list of potential seminars discussed for submission for Chicago:
  - Seminar – Coogan – "Energy Performance management for Labs"
  - Seminar – Conlan/Richardson (Co-sponsor with TC7.7)
  - Seminar – "EPC Standard for Labs 21" – Mike will Chair
  - Seminar – Havathekar – Co-sponsor with 9.11 – Peter will follow up.
  - Seminar - Mehboob - "International Cleanroom Applications" – Co-sponsor with 9.11
- Session Chairs: Roland, Peter, Wayne, Gaylon all agreed to consider being session chairs.

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San Antonio Meeting:

- Items not presented from previous meetings:
  - Technical Paper -Wei Sun - Results of Project 1344
  - Seminar – "Integrated Systems testing"
  - Possible seminar on Integrated Control Systems??
  - Forum – "Risk Assessment on Lab Contamination" – Under Indoor Environmental Track
  - Possible re-do of Roland's conference paper from Montreal
- The following are the dates for San Antonio:
  - Conference Paper Abstracts – Sept. 26, 2011
  - Conference papers submitted – Jan. 9th, 2012
  - Seminar/Forum Proposals Due – Feb. 13th, 2012
  - Seminar/Forums Final Date – June 4th, 2012

Dallas Meeting:

a)Some sessions will most likely slide into Dallas

Denver Meeting:

- Wayne Lawton – 2 conference papers (one session)  
"High containment Bio-lab BSL-3AG" (by Ken Gow1) and "BSL-3 Enhanced Greenhouse" (Yang Lu)

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**8. Research (Wayne Lawton)**

List of RTAR attached to the present minutes.

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## **9. Handbook - Hartman**

- Lou Hartman is absent.
- The reviewed chapter came out in the last handbook.
- Georges Sestak will be the new liaison for chapter review.

## **10. Standards – (Conlan)**

Wade Conlan reported for the standards subcommittee. 16 persons attended the meeting.

Current standards and codes were updated on status of Review.

Standard 90.1 – Discussion was held on the Addendum C for the 2010 version that uses induction fans with dampered make-up as the baseline for energy models in Appendix G. The committee felt that while this might be the least energy efficient that it is commonly used even though there are many options to increase the efficiency of the fan systems. No action at this time.

NFPA 45 – New version has been issued and Gaylon will report if there are any concerns for this group once he is done the review.

ANSI Z9.5 – New version has been released. Jim Coogan helped author this document and graciously agreed (after the meeting) to identify any concerns or actions required by this sub-committee.

ANSI Z9.13 – Nothing at this time.

ANSI Z9.14 – is being created at this time.

ASHRAE 110 – No progress. Fred Lorch is going to contact Gerhard Knutson to see if he can help push the items through and get it issued.

- Some Research Committee items discussed to go along with the release is the SF6 issue. Gaylon and Fred to coordinate the letter from ASHRAE asking for this research to resolve the State of California's request. Fred is also going to contact EHC to see if they can help get this research moved forward.

ASHRAE Std 62.1 – Henry Hays to forward a interpretation from Std 62 on recirculation air in labs with a wheel. It is attached for review. No one in the room was contacted by SSPC-62 for this response and will be asked in the main meeting. Any action will be determined moving forward after the main meeting.

- Standards 170 – Labs in Hospitals was questioned
  - Gaylon noted it listed certain ACHR that would be violated if there was 1 liter of chems.
  - Asked who decided this number.
  - Adam Bare will help Gaylon determine this information since a co-worker is leading 170.

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BMBL – discussion on a Reverse Flow and Transients between Pat and Henry. Further action is required by Henry to email the section to Pat the section or paragraph to see his take.

ALAR/AAALAC – Henry attended a conference in Baltimore where they were talking about a change to their information for ventilated cages versus non-ventilated. Committee will address once it is issued.

Std 189.2: Adam Bare to talk with the 189.2 Chair to find out about the scope of labs.

Std 191 – Nothing at this time.

Std 90.1 Users Guide – Wade Conlan got Pat Keith Emerson’s card for him to contact.

Labs 21 – EPC 3.0 is on website and ready for use.

New Items Discussed:

- Gaylon noted that transfer of air from one space to another is not being allowed. No one had run into this situation.
- Gaylon noted that AABC is issuing their new standard with a chapter on manifolded systems. It is going to ANSI for review. Gaylon requested that anyone who wants to be a reviewer contact him.

Gaylon Richardson has agreed to take over the Standards Sub-Committee Chair starting in Chicago in 2012.

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**11.Design Guide - (Henry Hays)**

- Major push will be done from now to Chicago.
- Plan for a vote in San Antonio.
- Will include videos, visual documents
- All people willing to be involved are welcomed.

**12.Journal - (R. Charneux)**

One article published in June by Carter, Cochran and Reifschneider (complete list attached).

**13.Laboratory design short course – (Scoggins)**

- John Varley started a 3 hours program on laboratory design.
- John is willing to update his document.
- Ginger will pursue with ASHRAE.
  - An outline with learning objective is needed
  - Speaker bio
  - Objectives

**14. Liaison Reports**

**TC 1.4 Control Theory and Applications - (Coogan)**

Develop a "Method of tests for airflow control", accuracy, low velocity, ...continue

**TC 2.2 Plant and Animal Environment - (Hays)**

Vivarium are in the scope of TC-2.2.

The committee is too small, no quorum for last 3 meetings.

There will be a vote in Chicago on future status of the committee.

It is moved by Gaylon Richardson, seconded by Georges Sestak that :

If TC 2.2 disbands, TC 9.10 advises the TC 2.2 chair that TC 9.10 would accept the responsibility for plant and animal research facility.

Motion passed (10-0-0 CNV).

**TC 4.3 Ventilation Requirements and Infiltration - (Cochran)**

CO<sub>2</sub> demand control ventilation intern report completed.

**TC 4.10 Indoor Environmental Modeling - (Cochran)**

Nothing to report.

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**TC 5.1 Fan Design and Application - (Coward)**

Works done on fan efficiency grade (FEG) application to induction fans

- Applicable to high plume fan
- To which fans does minimum efficiency applies?

**TC 5.3 Room Air Distribution - (Lorch)**

Lorch – Writing 2 RTAR on active and passive chilled beams.

**TC 5.8 Industrial Ventilation - (Lawton)**

Nothing related to 9.10 at this time

**TC 7.7 Test and Balance - (Richardson)**

111 under review

No interaction with NSF

**TC 7.9 Building Commissioning - (Traylor)**

TC-7.9 vote for affiliation with NEBB

**TC 9.2 Industrial Air Conditioning - (Kumpf)**

Nothing related to TC-9.10

**TC 9.6 Healthcare Facilities**

- Carl Lawson retired. Tracy Hanegan will be the new liaison.
- 170 under review. Lab CFM to be reviewed.
- Facility guideline institute (FGI) as the old AIA.
- STD 100, benchmark for healthcare to be reviewed for labs.
- Healthcare design manual under review. 95 % review in September plan to be published in spring 2012.

**TC 9.11 Clean Spaces - (Charneux)**

Research on room pressurization proceeding

Design guide on clean rooms progress

**SSPC 62.1 Ventilation for Acceptable Indoor Air Quality - (Alevantis)**

No report.

**SSPC 90.1 - (Conlan)**

Refer to standard report

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**SMACNA - (Richardson)**

Commissioning standard published in fall.

**NSF - (Spevak)**

Latest update in 2010.

**ISPE - (Gardner)**

Sustainable facilities and HVAC will be combined.

**AIHA Z9.5 - (Coogan)**

All problem resolved. Will be published soon.

Z-114 under rewriting.

**Labs 21 - (Sharp)**

Conference in September in Rhode Island

Push for EPC

International design competition (real site).

**USGBC - (Swann)**

Committee dissolved.

No more need for liaison

**SSPC 141.2 - (Spevak)**

Spevak - Changed their scope to include velocity.

**15. Web Site**

Jim Coogn will post RTAR 1573.

**16. Old business**

FAQ : How lab fume hoods are certified

- AIHA as guidance
- Use 110 method
- Fred Lorch and Gaylon Richardson has answered

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**17. New business**

One free course is available per TC. Tracy Hanegan will take it.

So-Yeng Chen, Wade Conlan, Geoges Isherwood and Tony Rossy rolling off.

Ginger Scoggins, Wayne Lawton, Adam Bare, Brad Cochrand and Tracy Hannegan rolling in.

A multidisciplinary task group (MTG) has been formed on BIM. Kishor Khankari will represent TC 9.10.

YEA (Young Engineer in ASHRAE) ask to have young engineers involved and TC should have mentoring.

A call for help on ASHRAE website to draw new people to the committee.

Develop a process to have ASHRAE participate at Lab 21. Joint activities to give visibility to ASHRAE. Contribution of TC-9.10 to newsletter of Labs-21.

Ginger will create a LinkedIn group page for TC-9.10.

**18. Evaluation – Coogan**

Objectives were met on time.

**19. Adjourn 5:35 pm.**

Proposed by Georges Sestak, seconded by Gaylon Richardson.

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**APPENDIX**

- Research RTAR
- Journal articles