

**ASHRAE TC1.5 Computer Applications**

**Draft Meeting Minutes**

**Las Vegas, NV  
2011 Winter Conference  
January 31, 2010**

These draft minutes have not been approved and are not the official, approved record until approved by this committee.

AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.  
1791 Tullie Circle, N.E./Atlanta, GA 30329  
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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.: 1.5

TC/TG/TRG TITLE: Computer Applications

DATE OF MEETING: January 31, 2011

LOCATION: Las Vegas, NV

**DISTRIBUTION:**

ALL MEMBERS OF TC

ALL COMMITTEE LIAISONS

## ASHRAE TC1.5 Activity Feedback Form

**TC NO. TC 1.5      TC TITLE: Computer Applications**  
**CHAIR: Mike Pouchak      VICE CHAIR/SECRETARY: Mike Galler**  
**DATE: June 28, 2010**

**TC Web Site: <http://tc15.ashraetcs.org/index.html>**

TC# 1.5	Committee Name: Computer Applications
	Chair: Mike Pouchak

Meeting was Held	(Day) Monday	(Date) January 31, 2011
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Membership		
	Number Present	Total Number on Committee
Voting Members	7	8
International Members	1	1
Corresponding Members	16	40
Visitors and Guests	6	6

Handbook Responsibilities		Standards Responsibilities	
Volume and Chapter (number only)	Next Revision Due Date	Standards Number (number only)	Next reaffirmation date
Applications, Ch. 39	CD+ '10		

Transactions	Seminars	Forums	Poster Sessions
	Seminar 30 – vav tech		

Current Research Activities		FAQs Responsibilities	
Research Project (number only)	PMS meeting held (yes/no)	FAQ number (number only)	Last time reviewed (Month/Year)
1354	No - Completed		
1468	PES meeting held		

Does Committee have Website on ASHRAE Server?  Yes  No URL if on another Server: \_\_\_\_\_  
 If so, is Website up to date?  Yes  No \_\_\_\_\_

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## Attendance

### Attendance:

Name	Role	Em-App	Res	Prog	HB	T&P	Main 1.5 Mtg
<b>Voting Members</b>							
Mike Pouchak	TC 1.5 chair	X	X	X	X		X
Stephen Roth	Program Subcommittee Chair		X	X			X
John Kennedy	Research Subcommittee Chair	X	X	X			X
Xiaohui (Joe) Zhou	Emerging Applications Subcommittee Chair	X	X	X	X		X
David Branson	PMS 1468 chair	X	X	X			
John Crosby					X		X
Walter Grondzik							X
Ron Nelson							X
<b>Corresponding</b>							
Mike Galler	TC 1.5 Vice Chair	X	X	X			X
Steven Rosen	Handbook Subcommittee Chair				X		X
Alison Kwok	Standards Subcommittee Chair						
Mark Hydeman	ALI Coordinator						
John Bade		X	X				
Matt Biesterveld		X					
Bruce Billedeaux		X	X				X
Norm Bourassa		X	X	X			
David Bornside		X	X	X			X
Dave Branson		X	X	X			
Bing Dong		X					
Tim Dwyer				X			
Krishnan Gowri			X				
Rob Hitchcock		X	X				
Yan Lu		X					
Andrew Mitchell		X	X				
Victor Penar							X
Karl Peterman		X					
Jim Pegues							X
Mary Piette		X					
Eric Sturm		X					
Benjamin Welle		X	X				X

## Action Items

<b>Responsible Member</b>	<b>Description</b>	<b>Due Date</b>	<b>Completion Date</b>
-	-	-	-
-	-	-	-
-	-	-	-

## TC Minutes

### TC1.5 Computer Applications 2011 Winter Meeting Las Vegas, NV

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**TC 1.5 Public Web site:** <http://tc15.ashraetcs.org/>

TC 1.5 ListServ (mailing list) : 'tc105\_all\_lst@listman.ashrae.org' (contact chair or vice chair to be added)

TC 1.5 Members-only Site: <https://sites.google.com/site/ashraetc15/> (contact chair or vice chair for access)

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Monday, January 31, 2011, 6:30 – 9:00 pm

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#### Main Committee Meeting

Monday 6:30-9:00 p.m.

(LVCC) N262

1. **Call to Order-** Meeting called to order at 6:30 PM
2. **Welcome – Introductions**
  - a. Pouchak notes we have internet access
3. **Roll Call –** List of Voting members from 2010-2011 1.5 Roster
  - a. Pouchak, Roth, Kennedy, Xiaohou,,No Branson, Crosby, Grondzik, Nelson
4. **Review of Agenda**
  - a. No additions or corrections.
5. **Approval Of Minutes**
  - a. Orlando
    - i. Grondzik move second by Nelson to approve Orlando, no discussion.
      1. Approved unanimous
  - b. Albuquerque
    - i. Grondzik moves to approve Albuquerque minutes w. modifications
      1. Modification is adding handbook subcommittee minutes
      2. Second by Xiaohou
      3. No discussion
      4. Approved 8-0-0.
6. **Review Action Items from 2010 Annual Meeting in Albuquerque**
  - a. Roth- submit program by due date
    - i. Status- complete
  - b. Pouchak- Letter to ECC
    - i. Status- complete
  - c. Pouchak- chair to request room for 1468PMS before handbook committee
    - i. Status- complete

## 7. Chair's Report

- a. Dinner plans- Gordon Biersch- 7 attending
- b. Announcements-
  - i. Pouchak has notes from TC Chairs meeting
    - 1. each TC must post MBO's (management by objective)
    - 2. (insert list of items from TC Chairs agenda, 1-16)
      - a. 11- put URL in minutes
- c. Step-up-to-the-plate awards- ?

## 8. Subcommittee Reports

- a. Handbook – *Steven Rosen*
  - i. Meeting ran from 6:10 to 6:30
  - ii. Approved minutes from last meeting
  - iii. Posted new draft version of Ch39 on Google site
  - iv. 2 action items
    - 1. TC Chair to find out what the process is to maintain online edition
    - 2. ??? 2<sup>nd</sup> not discussed
  - v. New Business- ask for volunteers to review latest draft, either wholly or by section.
    - 1. requests updates by next meeting.
    - 2. Pouchak assigns members to Handbook Update Review Team (HURT)
- b. Research – *John Kennedy*
  - i. 1468 meeting was yesterday- there is progress. Meeting w/I a month with BIM vendors.
  - ii. Solicited group for ideas for RTARs.
    - 1. Pouchak and Roth, and Branson will pursue ideas and may have RTARs
    - 2. Lewis has RTAR 1609 BIM for O&M- wants TC 1.5 to cosponsor. Will be one of the first RTARs to incorporate GPC20 methodology.
    - 3. Pouchak requests motion to support
      - a. Kennedy motions to support
      - b. Rosen seconds
      - c. Discussion- Welle asks who is first TC? - 7.3.
      - d. Vote- 8-0-0.
      - e. Kennedy will be liaison if necessary.
    - 4. Kennedy attended breakfast- new 5 year strategic goals- members should review goals. New multi-organizational research goals, including 1\$.5M from NIST.
    - 5. Less funding now- will be more next FY (July 1)
- c. Emerging Applications – *Xiaohui Zhou*
  - i. 15 people attended
  - ii. Reviewed Action Items
    - 1. Zhou update website
      - a. Status Not Comp
    - 2. Pouchak write a draft RTAR
      - a. Status- complete
    - 3. Crosby RTAR- not completed yet
      - a. Seminar proposal- seminar rejected
    - 4. Roth- RTAR, follow on to 1468 but for equipment
      - a. Status in progress, draft complete but needs update
    - 5. Zhou two tech papers
      - a. Status- part 2 needs revision, part 1 has no decision yet.



- b. Needs champion to follow up. Glen Remington? From 7.5 is familiar? with topic.
            - i. *was not accepted for this, was too late to resubmit-will submit for next available meeting*
  - 6. Discussion on changing the charter and scope of subcommittee.
    - a. Primary mission should include identify new tech. publishing articles in ASHRAE Journal is a good way to educate the general public.
    - b. Members suggested add “but not limit to” to the scope listed.
    - c. Members suggested adding technologies (add list from emerging apps minutes). And
      - i. Multidisciplinary design optimization (MDO)
        - 1. automate a design workflow, for example from Revit to Energy Plus.
      - ii. Welle notes TG-1 optimization might be relevant.
  - 7. Member suggested changing TC 1.5 from computer application to computing application.
- d. Program – *Stephen Roth*
  - i. TC15 is sponsoring 2 programs in Las Vegas, Seminar 36, cosponsor w. TC 1.4 controls for chillers
  - ii. Dwyer suggested seminar for Montreal- examples of using BIM or other tools to remodel historic bldg.
  - iii. Carried forward suggestions from previous meetings
    - 1. from Crosby- BIM, why can’t we all get along.
    - 2. 1 from Schaeffer- BIM- what I wanted, what I got.
  - iv. Submissions due by Feb 14.
- e. Web Page – *Steven Rosen*
  - i. Nothing to report.
    - 1. Pouchak notes we shouldn’t put info on subcommittee pages that changes too often, for example Standards .
    - 2. Action Item- Galler and Pouchak to review “Guide to TC 1.5” page.
  - ii. Pouchak- we don’t post e-mail address or company info in minutes or on web site.
- f. T&P – *Dave Branson*
  - i. Branson not present.
- g. ACTION ITEM
  - i. Motion to ask chair to write letter to TAC to congratulate them on finally getting internet access.

## 9. Liaison Reports

- a. GPC-20
  - i. Renamed SGPC20
  - ii. NOT disbanding.
- b. IAI/BIM Society Subcommittee Report
  - i. No update
- c. Others
  - i. Vic Penar- we’re doing a great job w website, thanks for helping other sc’s with their websites. Keep up the good work. Roster changes due tomorrow. ASHRAE is supporting websites. TC’s need 6 voting members for quorum.

## 10. Old Business

- a. None.

**11. New Business**

Add section for MBO's by TC 1.5

Pouchak makes motion to use MBO's (available from TC 1.4 website)

TC 1.5 will enhance... (insert MBO's)

Motion from Nelson, second Grondzek, vote unanimous.

Review TPS for TC

Rollover- Galler and Billedeaux added as voting member for next meeting.

Step up award to Joe Xiaohui.

**12. Next Meeting Times** – Montreal (June 25-29)

**13. Adjournment** adjourned 9:00

Appendix A- Roll Call

- a. Non voting: Rosen, Carpenter, Grondzik, Bournside, Xiaohui, Nelson, Welle, Giese (?? from carrier), Crosby, Roth, Kennedy, Billedeaux, Galler
- b. Voting:
  - i. Pouchak (1) present
  - ii. Schaeffer (2) absent
  - iii. Joe zhou (3) present
  - iv. Dwyer (NQ) present
  - v. Branson (4) absent
  - vi. Grondzik (5) present
  - vii. Nelson (6) present
  - viii. Peppers (7) present

Appendix B- Action Item

Actor	Due Date	Description
Pouchak	Before next meeting	Chair to write letter to TAC to congratulate them on finally getting internet access.

*Notes taken by Mike Galler Vice-Chair/Secretary*

## Attachment 2: Agenda

### AGENDA

ASHRAE 2010 Winter Conference – Las Vegas, NV

### TC 1.5 Computer Applications

**TC 1.5 Public Web site:** <http://tc15.ashraetcs.org/>

TC 1.5 ListServ (mailing list) :tc105\_all\_lst@listman.ashrae.org (contact chair or vice chair to be added)

TC 1.5 Members-only Site: <https://sites.google.com/site/ashraetcs15/> (contact chair or vice chair for access )

**Main Committee Meeting**

**Monday 6:30-9:00 p.m.**

**(LVCC) N262**

#### **Wireless Meeting setup –**

**Step 1.** Connect to wireless meeting “TCPaperlessMeeting” (uses WPA2 – personal security )– there is a password required ! The password for access is ashraetc15.

**Step 2.** After you connect to the TCPaperlessMeeting wireless network, open your internet browser program and go to the following link: <http://192.168.1.102> - You should see a screen with links to TC 1.5 minutes for Albuquerque & Orlando. Once you download your files, please disconnect from the TCPaperlessMeeting wireless network to allow others to use the wireless connections – there is a performance issue if there are too many users on the wireless network.

#### **1. Call to Order**

##### **2. Welcome – Introductions**

##### **3. Roll Call – List of Voting members from 2010-2011 1.5 Roster**

##### **4. Review of Agenda**

##### **5. Approval Of Minutes from 2010 Annual Meeting in Albuquerque**

##### **6. Review Action Items from 2010 Annual Meeting in Albuquerque**

##### **7. Chair’s Report**

- a. Dinner plans
- b. Announcements
- c. Step-up-to-the-plate awards

##### **8. Subcommittee Reports**

- a. Handbook – *Steven Rosen*
- b. Research – *John Kennedy*
- c. Emerging Applications – *Xiaohui Zhou*
- d. Program – *Stephen Roth*
- e. Web Page – *Steven Rosen*
- f. T&P – *Dave Branson*

##### **9. Liaison Reports**

- a. GPC-20
- b. IAI/BIM Society Subcommittee Report
- c. Others

##### **10. Old Business**

##### **11. New Business**

12. Next Meeting Times – Montreal (June 25-29)

### 13. Adjournment

#### TC 1.5 Meeting Schedule

**TC 1.5 Computer Applications (25/25)(Screen) Monday 6:30-9:00p (LVCC) N262**

*Sponsoring: Seminar 36: HVAC Software Applications for Smart Phones and Tablet Computers*

**TC 1.5 Emerging Applications (6/10)-Sunday 5:00-6:00p (H) Pavilion 2**

**TC 1.5 Research (15) -Sunday 6:00-7:00p (H) Pavilion 2**

**TC 1.5 Program (15) -Sunday 7:00-8:00p (H) Pavilion 2**

**TC 1.5 PMS 1468 -Monday 4:15-6:00p (LVCC) N262** NOTE CHANGE! New time: Sunday, January 30 from 10:00-11:45 a.m. in Room N232 (LVCC)

**TC 1.5 Handbook (15) -Monday 6:00-6:30p (LVCC) N262**

Codes for meeting locations: (H) = Las Vegas Hilton; (LVCC) Las Vegas Convention Center

#### TC 1.5 Programs Schedule

**Tuesday, February 1, 2011, 9:45 AM-10:45 AM**

**Seminar 36 (Intermediate)**

**HVAC Software Applications for Smart Phones and Tablet Computers**

*Track: HVAC Fundamentals and Applications*

*Room: Pavilion 3*

**Sponsor: 01.05 Computer Applications**

*Chair: Stephen Roth, P.E., Member, Carmel Software, San Rafael, CA* -Smart phones and tablet computers are being used more frequently by HVAC mechanical engineers, technicians and architects to perform analysis in the field or to monitor and control building automation systems. This panel includes speakers from companies that have developed popular applications for the Apple iPhone/iPod touch/iPad and Android that are specifically geared toward HVAC mechanical engineers, technicians and home owners.

##### **1. Smart Apps for HVAC System and Building Analysis**

*Stephen Roth, P.E., Member, Carmel Software, San Rafael, CA*-Stephen will be discussing smart phone software that is geared toward HVAC mechanical engineers, technicians, and architects including the following subtopics: 1) What types of HVAC software tools are available on mobile smart phones today. 2) How do these software tools differ from those available on desktop computers. 3) Discuss the advantages/disadvantages of using software tools on smart phones versus those on desktop computers. 4) New types of HVAC software that could only be created for smart phones. 5) How ASHRAE is developing specialized applications for smart phones for their various standards and tools. 6) The future of smart phones.

##### **2. Smart Apps for Home Building Automation Systems**

*Stuart Lombard, Ecobee, Toronto, ON, Canada* -Stuart will be discussing smart phone applications that are used to remotely control and monitor home automation systems. He will address the following subtopics: 1) A description of how this type of software works and the required features and functionality. 2) How the user interface differs on a smart phone versus a desktop computer. 3) The advantages/disadvantages of using smart phone software to monitor home automation systems. 4) The types of comments and feedback customers have provided regarding using this type of software. 5) How software for smart phones increases sales for accompanying hardware

**Sunday, January 30, 2011, 11:00 AM-12:30 PM**

**Seminar 8 (Intermediate)**

**Controls for Central Chiller Plant Optimization**

*Track: Low Energy Design*

*Room: Pavilion 10*

**Sponsor: 01.04 Control Theory and Application, TC 9.1, TC 9.8, TC 10.8, 01.05 Computer Applications** *Chair: Frank Shadpour, P.E., Fellow ASHRAE, Shadpour Consulting Engineers, Inc., San Diego, CA*

This seminar addresses how optimization techniques can be used to improve the energy efficiency and performance of central chiller plants. Growing trends on energy conservation has placed a spotlight on the optimization of central plants. Control strategies and proper sequence of operation has significant effect on the operation and efficiency of the central plants. The presentations cover the unique challenges, lessons learned and critical do's and don'ts associated with optimization of central chiller plants.

##### **1. Optimized Control Sequences for An All-Variable Speed Chilled Water Plant**

*Steven Taylor, P.E., Taylor Engineering LLC, Alameda, CA*

##### **2. Achieving Ultra-Efficient Chiller Plants with Relational Control**

*Thomas Hartman, P.E., The Hartman Company, Georgetown, TX*

##### **3. Managing a Complex Central Plant Designed for the Life of a Facility**

*Tim Jacoby, Rady Children's Hospital, San Diego, CA*

## *Meeting Minutes*

ASHRAE 2011 Winter Meeting – Las Vegas, NV

### **TC 1.5 Computer Applications Emerging Application Subcommittee**

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**Sunday January 30<sup>th</sup>, 5:00pm -6:00pm (Hilton) Pavilion 2**

**14. Call to Order @ 5:05pm**

**15. Welcome – Introductions: Attendee List:**

- a. 1. Mike Pouchak
- b. 2. John Kennedy
- c. 3. Xiaohui (Joe) Zhou
- d. 4. David Branson
- e. 5. Mike Galler
- f. 6. John Bade
- g. 7. Matt Biesterveld
- h. 8. Bruce Billedeaux
- i. 9. Norm Bourassa
- j. 10. David Bornside
- k. 11. Bing Dong
- l. 12. Rob Hitchcock
- m. 13. Yan Lu
- n. 14. Andrew Mitchell
- o. 15. Karl Peterman
- p. 16. Mary Piette
- q. 17. Eric Sturm
- r. 18. Benjamin Welle

**16. Approval of Minutes from Previous Meeting:**

- a. No comments/change on the previous (Albuquerque) emerging application subcommittee minutes.

**17. Review Action Items from Previous Meeting**

- a. Zhou: Website has not been updated with new content yet, but it is open for comments/discussion at this meeting
- b. Pouchak wrote a draft of RTAR about collecting user feedback using social voting mechanism – will be discussed in Research meeting

- c. Crosby is not present. Don't know the status about the on-line collaboration server and the seminar proposal status: Integrated Project Delivery. Don't know the status on potential RTAR: Generative design of energy modeling – rule based parametric design
  - d. Roth wrote a draft of RTAR on Creating BIM for HVAC equipment – will discuss on Research meeting
  - e. Zhou: two technical papers submitted for ASHRAE Transaction in September 2010: “A Plug and Play Framework for Air Handling Unit and Temperature Sensor Auto Recognition Technique, Part I and Part II”, the Part II paper had a decision and it needs revision – mostly editorial changes. The Part I paper has not been decided. This may be a potential Seminar based on technical papers? Will not do RTAR for now.
18. **Chair's Report:** Mainly the discussion on the change of subcommittee Charter and Scope/Examples that will be updated on the subcommittee website. The existing and proposed content are attached at the end of this meeting minute. Member comments include:
- a. The primary mission of this committee should include “identify” new technologies. Members believe publishing articles on ASHRAE journal is a good way to educate general public. Also “research” was added as a way to identify and educate public on emerging technologies.
  - b. Members generally agree with the proposed change on the “scope”. Add “but not limit to” the scope listed.
  - c. Discussion on the examples of current technologies members interested. Suggested additions to the proposed modifications:
    - i. Augmented Reality, GPS & GIS Applications
    - ii. Cloud-based Computing
    - iii. Virtual BIM
    - iv. Game Theory
  - d. Members suggested changing TC 1.5 name from “Computer Application” to “Computing Application”. Because many new technologies may not involve individual computers but network-based. For example, cloud-based computing.
19. **New Business**
- a. Brainstorming new technologies / ideas in computer application – moved to Research and Program meetings following this meeting as this subcommittee meeting's time is up.
20. **Next Meeting Time** – June 25 - 29, 2011 at Montreal, Quebec Canada
21. **Adjournment @ 6:05pm**

## **CHARTER**

This subcommittee of TC 1.5 will focus on new and emerging computer technologies, and its primary mission will be to educate the society on emerging technologies with potential for significant impact on ASHRAE and, where appropriate, to demonstrate their application to the needs of the HVAC industry. The range of activities of this subcommittee are expected to be quite broad and are expected to continually evolve as technologies change and as member interests change. The Emerging Applications Subcommittee will be responsible for developing and taking program and research proposals forward to the Program and Research subcommittees. This subcommittee will serve as successor to the KBS and Computer-Aided Design Subcommittees and will inherit responsibility for ongoing research and program activities of those two subcommittees.

## **SCOPE**

Application areas that are of interest to this subcommittee as they apply to the HVAC industry include

- advanced design tools
- contracting and business
- education and training.
- engineering design productivity
- operating procedures and diagnostics.

Examples of current computer technologies that are of interest to this subcommittee include

- case-based reasoning
  - data exchange and interoperability
  - data mining and knowledge discovery
  - evolutionary computation
  - fuzzy logic
  - genetic algorithms
  - knowledge-based systems
  - multimedia
  - neural networks
  - virtual reality.
-



## **CHARTER**

The TC 1.5 Emerging Application Subcommittee focuses on new and emerging computing technologies that have potential for significant impact on ASHRAE. Its primary mission is to identify and educate the society on these technologies through research and articles published on ASHRAE Journal and, where appropriate, to demonstrate their applications to the needs of the HVAC industry. The range of activities of this subcommittee is expected to be quite broad and continuously evolve as technologies change and as member interests change. The Emerging Applications Subcommittee will be responsible for developing and taking program and research ideas forward to the Program and Research subcommittees.

## **SCOPE**


Application areas that are of interest to this subcommittee as they apply to the HVAC industry include but not limited to:

- Advanced Design Tools
- Contracting and Business
- Education and Training
- Engineering Design Productivity
- HVAC system, Equipment, and Component Optimization
- Operating Procedures and Diagnostics

Examples of current computer technologies that are of interest to this subcommittee include

- Augmented Reality, GPS & GIS Application
- Building Information Modeling (BIM)
- Cloud-based Computing
- Data Exchange and Interoperability
- Game Theory
- HVAC Applications for Smart Phones and Tablet Computers
- HVAC System Modeling Using Data Mining and Knowledge Discovery
- Optimal Control Using HVAC System Model based on Data Mining Approach
- Multi-disciplinary Design Optimization
- Multimedia
- Virtual Reality / Virtual BIM

*Subcommittee minutes submitted by Xiaohui Zhou*



Handbook Subcommittee Minutes

*Subcommittee Meeting Minutes*  
ASHRAE 2011 Winter Meeting – Las Vegas, NV  
**TC 1.5 Computer Applications Handbook Subcommittee**

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**Monday 6:00pm -6:30pm (LVCC) N262**

1. **Call to Order at 6:10pm by S. Rosen**
2. **Welcome – Introductions**
3. **Roll Call – Attendance:**
  - Steve Rosen - Chair
  - John Crosby
  - Mike Pouchak
4. **Review of Agenda**
5. **Approval of Minutes from 2010 Summer Meeting – Approved unanimously.**
6. **Review Action Items from 2010 Summer Meeting – Done.**
7. **Chair’s Report**
  - ✚ Chair reported Chapter 39 was submitted to Mark Modera on 7.14.10 and thanked everyone for their final email comments on the last reviewed and voted upon revision.
  - ✚ Chair reported that he attended the Handbook Training as requested by the TC Chair on Saturday at 8:00am. The online Handbook is available to members for \$49 per year (\$249 for non-members).
8. **New Business Action Items**
  - ✚ TC Chair suggested enlisting TC members to review Chapter 39 for review comments and update suggestions – since chapters will now be on continuous maintenance. Chair gratefully accepted the proposal and awaited the joyously embracing of this task that will be assigned at the main TC meeting.
  - ✚ Chair shall review with ASHRAE staff the procedure and process for updating a Chapter between publishing dates.
9. **Next Meeting Time – Monday, June 27, 6:00pm -6:30pm, Montreal**
10. **Motion to adjourn by S. Rosen, meeting adjourned at 6:30pm.**

*Subcommittee minutes submitted by Steve Rosen*

Program Subcommittee Minutes

## *Subcommittee Meeting Minutes*

ASHRAE 2011 Winter Meeting – Las Vegas, NV

### **TC 1.5 Program Subcommittee**

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#### **TC 1.5 Programs Minutes ASHRAE Meeting – Las Vegas, NV January 31, 2011**

1. Programs sponsored by TC1.5 at Las Vegas
  - a. Seminar 36, HVAC Software Applications for Smart Phones and Tablet Computers (chaired by SBR, SBR is speaker 1, Stuart Lombard is speaker 2)
  - b. Seminar 8, Controls for Central Chiller Plant Optimization (TC1.5 was co-sponsor)
2. Mike P. mentioned that TC has poor record of getting programs approved (only 1 this meeting). It is imperative that programs fall under the new “track” method
3. Program submittals no longer have to be prioritized by TC. Instead, they can be submitted directly to the programs website. The due date for Montreal is February 14, 2011.
4. Several ideas for future programs were suggested including:
  - a. Tim Dwyer: The idea is to seek out and display some outstanding examples of using modeling tools (CAD) to maintain/improve historic (older than 50 years) buildings.

A few examples may be:

- i. Modeling of new lighting solutions to transform use of building
- ii. Undertaking CFD analysis to develop natural/hybrid ventilation systems
- iii. Modeling of historic facades for environmental purposes.
- iv. Fire/smoke modeling
- v. Tools to develop environmental ratings/energy ratings for historic buildings

Tim said he would begin getting commitments from potential speakers.

JFK suggested contacting someone from GSA (national building museum) to speak

- b. "Emerging BIM applications Outside Standard AE Practice" (Roth);
- c. "Why can't we all just get along (BIM collaboration, IPD)?"  
Crosby submitted for Vegas, but was not accepted; is going to resubmit for Montreal;
- d. "BIM for Retrofit" (originally proposed by Branson a couple meetings ago, and Roth mentioned it again).
- e. The most interest appears to be the BIM collaboration/IPD by Crosby

5. The tracks for Montreal are:

Track 1: Refrigeration

Track 2: HVAC Systems

Track 3: HVAC Fundamentals and Applications

Track 4: Net Zero Energy Buildings

Track 5: Professional Skills


Track 6: Engineering Tools

Track 7: Commissioning

Track 8: Alternative Technologies

**Submitted by Stephen Roth, February 2, 2011**

*Subcommittee minutes submitted by Stephen Roth*



Research Subcommittee Minutes

## *Subcommittee Meeting Minutes*

ASHRAE 2011 Winter Meeting – Las Vegas, NV

**TC 1.5 Computer Applications Research Subcommittee**

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**Sunday January 30<sup>th</sup>, 6:00pm -7:00pm (Hilton) Pavilion 2**

### **Agenda**

1. Call to Order
2. Introductions
3. Roll Call
4. Agenda Items
5. Previous Minutes Approval
6. Actions from previous meeting
7. Chairs report
8. New Business
9. Next meeting
10. Adjournment

### **Attendees**

Mike Pouchak  
John Bade  
Rob Hitchcock  
Norm Bourassa  
Dave Branson  
John Kennedy  
David Bornside  
Mike Galler  
Andrew Mitchell  
Xiah Zhon

### **Minutes**

Minutes reviewed with no additions or changes.

#### **Current RPs**

1468 – Dave briefed the attendees on today’s meeting. Indicated that they have been narrowing the focus of the contractor to the SOW of the contract. A no cost extension is likely. BIM vendor meeting will be held in the next month to review and suggest deliverable format to ensure its will meet their need.

Remove 1354 from web site as it is completed.

## **RTARs**

New RTAR proposed in Alb.,NM

Mike P., “System information sharing and feedback definition for HVAC&R controls and thermal comfort“, approach for cataloging system components and experts who have used the system in a collaborative social network. Conducting a forum was suggested for getting feedback on the proposed RTAR. Proposed language was read and attendees were not clear on the RTAR. Suggested to review RAP and strategic research direction to see if this fits.

Newly proposed

Stephen Roth has written a proposed RTAR, “Development of Reference BIM for standardization of Virtual Equipment and Device Creation” and will circulate it to the attendees for comment.

Dave Branson described a proposed RTAR for developing logic for selecting system type from BIM data. He will write up a draft.

*Subcommittee minutes submitted by John Kennedy*