

**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. 1.5 DATE 2/2/15

TC/TG/MTG/TRG TITLE: COMPUTER APPLICATIONS

DATE OF MEETING 1/27/15 LOCATION Salon

12

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Dave Branson (CH)				Krishnan Gowri
Tim Dwyer				Todd Gottshall
David Bornside				Lindsey King
Steve Rosen				Carol Lomonaw
Bruce Billedeaux				Joshua New
Steven Roth				J. Patrick Carpenter
Art Hallstrom				Mike Galler
Mike Pouchak				Supriya Goel
				John Crosby

**DISTRIBUTION**

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

TAC Section Head:	
TAC Chair:	
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters:	
Manager Of Standards Manager Of Research & Technical Services	Stephanie Reiniche Mike Vaughn

# ASHRAE 2015 Winter Conference – Chicago

## TC 1.5 Computer Applications- Minutes

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)

### Main Committee Meeting

**Monday 6:30-9:00 PM**

**Salon 12 (3)**

Sponsoring/Cosponsoring:

**Seminar 45: BIM Pays its Way: Showing Return of Investment for BIM in Real Day- to-Day Applications**

**1. Call to Order-** Dave Branson 6:36

- Electronic meeting set-up successful, Norm Bourassa attended via teleconference
- Agenda sent out Monday afternoon via listserv-check to make sure all those who want to be part of the listserv

**2. Welcome:** Introductions

**3. Roll Call:** List of Voting members from 2014-2015 TC 1.5 Roster: Billedeaux, Bourassa, Branson (ch), Dwyer (NQ), Gottshall, Pouchak, Rosen, Roth

- 2 members absent, quorum obtained

**4. Review of Agenda**

**5. Approval Of Minutes from 2014 Annual Conference in Seattle –**

- Minutes approved, 7 approved, 1 abstain (due to absence in Seattle), 0 non-response, 0 against

**6. Art Giesler, Research Liaison update:**

- From Research Subcommittee: No update/change
- To RC: Form needs to be submitted to Research Liaison by Friday 1/30 so RL can submit them next week by contract-ending date
- All projects out for bid: no projects held up due to lack in budget
- Research Advisory Board (RAB) being formed; when National society updates their strategy, RAB must update theirs in order to comply with National Society
  - If desired, we need a nomination to committee submitted by 2/15/15 (paneling in Atlanta)
- new RAP has 3 years to complete new plan
  - RTAR 1468 project completed and closed: 2 technical papers turned in but not published; asked Art where they could be, he was unaware and thinks PEC is the group to ask
  - Research meeting RTARs reviewed, if you want them reviewed by spring meeting, submit by 2/15
  - Art Giesler rolling off as our Research Liaison chair; thanks for the hard work

**Action Items from 2014 Annual Conference in Seattle:**

Responsible Member	Description	Due Date	Completion Date
Branson	Reserve Chicago Room locations-completed	November	November
Hallstrom	To create an ad-hoc subcommittee to discover industry state of high resolution commissioning software”	Before Chicago	Addressed later-done

Branson, Kennedy, Clayton	Continued- Draft letter for ASHRAE Society to send to software developers to enhance critical functionality (BEM capabilities vs. BIM capabilities)	Before Chicago	Incomplete
Subcommittee Chairs	Update subcommittee web site sections.	Continuing	1 month after mtg.
Galler	Post section announcements on web site.	Continuing	Completed

## 7. Subcommittee Reports:

### a. Handbook: Krishnan Gowri-

- Subcommittee meeting in Salon 5/8 6-6:30 PM
- Next handbook update won't need to be submitted for 3 years: Gowri wants to take new approach and "start fresh", and archive some of the old data in some of the past handbook chapters
- 3 tasks to complete: 1<sup>st</sup> : identify the new needs/technologies that need to be in the handbook, 2<sup>nd</sup>: Collect the data; 3<sup>rd</sup>: Publish
- Anyone is welcome to help out if they have ideas and/or comments

### b. Research: Todd Gottshall

- RTAR 1468 complete: 2 papers were written, but still not published (currently trying to track down these papers)
- Followed up on 2 RTARs and 1 work statement: These have all been returned with comments, passed off to the writers of said documents who all have ideas on how these will be rewritten and resubmitted
- Supriya has new RTAR idea: Collect all tools that are currently used in business lifecycle modelling (or maybe even larger scope), then develop tool/methodology to connect all of these tools
  - She is seeking assistance in determining the feasibility and underlying methodology of this RTAR, as well as looking for feedback on best way to begin RTAR
  - Comments from TC: Break up into two separate RTARs-first step is to submit RTAR by 2/15/15 that is a document search and collection of all of these tools, and then do a follow up RTAR that is a single tool that collects all of the tools currently out there
- Idea was discussed and methodology-contact Supriya with ideas or if you want to help
- Supriya next steps: Find co-sponsoring subcommittees (start with 7.1 and 7.5), needs to clarify scope first
- Spc 2201 doing something similar: How to get audits that you automatically get data from (Supriya add to list)
- Voted on Supriya new RTAR, if completed by 2/15: 8 approved, 0 abstain and 0 NR, 0 against

### c. Emerging Applications: Norm Bourassa-Art gave update on behalf of Norm

- Ashrae exchange-Blog for Ashrae-Exchange peer to peer communication-encouraging members to join in

- o Basecamp demonstration: You will receive confirmation when you have been set up. Every chapter gets their own blog (assigned by ashrae staff-1.5 already has one)
  - o Transitioning to Basecamp-Committee on the fly
  - o Flatfile Section for Documents
  - o Ideas to spread Exchange: Tutorial online, Insights Article, YouTube video (contact Judy Scott)
- d. Program: Stephen Roth
- Looking into why program acceptance rate has gone down
  - 11:00 seminar on “Bim Pays its Way” tomorrow (Tuesday), 3 speakers, write-up below
  - Atlanta: 2/9 is deadline to submit seminar idea, contact speakers tomorrow
    - o URL that you need to go to is [ashrae.org/4atlanta](http://ashrae.org/4atlanta) -- tech committee -- begin submission process (entire thing does not need to be submitted in one sitting)
    - o 3/23- TC’s find out if program was accepted
  - Ideas:
    - o Big data, bigger nightmares - Discussed idea (looking for vendors): Information using Operational Improvements for Building, Sensors collect data, Data Visualization Techniques and Data Modeling, System Integrators
    - o 3d-printing-Oakridge National Lab, first 3d printed car
    - o Commissioning Tool-Data analyzed (including data from terminal boxes, AHUs and Chillers); tool designed to be simple with complicated analysis on back end
    - o Interoperability between tools, RTAR discussed previously
    - o Thermal Imaging- Rapid Energy Modeling
    - o Data Mining
    - o Chris: legal aspects of where data resides and who owns it (Interest increases as we moving into cloud data, “what’s encrypted and who has the key?”)
- e. Web Page: Mike Galler-updated, encouraging other subcommittee chairs to send in information to keep website up to date
- f. E&P: Dave Branson-completed
8. **YEA mixer with TCs:** no presentation, attended by L.King
9. **ASHRAExCHANGE update:** Pouchak
10. **Chair’s Report:**
- a. Updates from TAC and RAC
  - b. Discussion on changes to TPS
  - c. Note to members to update ASHRAE profile when info changes
  - d. Announcements-update email on listserv
  - e. Dinner plans-10 people, Italian Village
11. **Liaison Reports:**
- a. GPC-20:
  - b. IAI/BIM Society Subcommittee Report: Steven Rosen: new chair, took a survey on what we should be doing and how ashrae handles IAI/BIM, looking at ways to improve
  - c. TC 7.3- WS 1609 - Defining the Capabilities, Needs and Current Limitations of Building Information Modeling (BIM) in Operations and Maintenance for HVAC&R
  - d. TAC
12. **Old Business**
- a. N/A

### 13. New Business

- a. TC 1.5 asked to co-sponsor College of Fellows Debate, 2015 Annual Meeting (Atlanta)
- b. Branson going to YEA forum Tuesday morning: discussing way to get young engineers the correct way to look up tools that ASHRAE offers (instead of Google or engineeringtoolbox.com)
- c. 1.5 has been asked to cosponsor debate in Atlanta on Monday on BIM (whether or not it's the attorney's best friend)
  - 7 approved, 0 abstain, 1 NR, 0 against in favor of the debate
- d. Briefing of New Emerging Applications(EA) effort on Big Data – Hallstrom
  - Discussion of results from assigned task of dynamic commissioning products in Seattle
  - Creating DBOSS subcommittee: meeting 3-4 pm before EA meeting from 4-5 pm
- e. Idea to creating subcommittee on cybersecurity- come up with recommendations to ASHRAE for cybersecurity
- f. Voted on creating 2 new subcommittees, one SC DBOSS and one for Cybersecurity
  - VM: 7 approved, 0 abstain, 1 NR, 0 no response for 2 new subcommittees

14. **Next Meeting Times:** ASHRAE Annual Conference, Atlanta, GA, June 27 – July 1, 2015

15. **Adjournment-motion approved to adjourn**

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#### TC 1.5 Meeting Schedule

TC 1.5 Computer Applications	Monday	6:30-9:00p	Salon 12 (3)
TC 1.5 Emerging Applications	Sunday	5:00-6:00p	Kimball (3)
TC 1.5 Research	Sunday	6:00-7:00p	Kimball (3)
TC 1.5 Program	Sunday	7:00-8:00p	Kimball (3)
TC 1.5 Handbook	Monday	6:00-6:30p	Salons 5/8 (3)

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#### TC 1.5 Program Schedule

Tuesday, January 27 11:00 AM – 12:30 PM, Empire (Lobby)

SEMINAR 45 (INTERMEDIATE)

**BIM Pays its Way: Showing Return of Investment for BIM in Real Day- to-Day Applications**

Track: Fundamental and Applications

**Sponsor: 01.05 Computer Applications, MTG.BIM Building Information Modeling**

*Chair: Tim Dwyer, Fellow ASHRAE, UCL Institute for Environmental Design and Engineering, The Bartlett, University College London, London, United Kingdom*

This seminar shows how building information modeling (BIM) can drive a project from concept to completion and deliver tangible benefits and profitable working in the process. The tools required at each stage are introduced by highlighting key aspects where software enables the design, thus allowing an unprecedented flow of information through the process. Examples of real-world projects are used to evidence the positive benefit of integrated BIM working.

**1. Evolution of HVAC Software and the Revolution of BIM! Projects from Concept to Completion.** Joe Simmons, P.E., Associate Member, HVAC Solution, Salt Lake City, UT

**2. BIM to SIM (Or, How do I get that Rich Data into Computer Simulations without Retyping it in Once Again?),** Drury Crawley, Ph.D., Fellow ASHRAE, Bentley Systems, Inc., Washington, DC

**3. BIM Bang Bucks: What Is the True ROI?** Steven Rosen, R.G. Vanderweil Engineers, LLP, Boston, MA

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