



ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc.

1791 Tullie Circle, NE • Atlanta, Georgia 30329-2305 ☎ 404-636-8400 • Fax 404-321-5478

TC/TG/TRG MINUTES COVER SHEET

TC/TG/TRG NO.: TC 9.01 ISSUE DATE: Jun 27, 2017

TC/TG/TRG TITLE: Large Building Air-Conditioning Systems

DATE OF MEETING: January 31, 2017 LOCATION: Las Vegas

MEMBERS PRESENT		MEMBERS ABSENT		ADDITIONAL ATTENDANCE
John Vucci Chair Alonzo Blalock Vice-Chair Jay Eldridge, Sec./ Webmaster Charles Henck, Standards Sub-C Chair John L Kuempel Jr, Program Sub-C Chair Doug Cochrane Rachel Romero R.Lee Millies, Jr Dennis Wessel John Molnar Phil Trafton		Kelley Cramm Lynn Werman		<u>Corresponding Members:</u> Steve Duda, Research/Honors and Awards Sub-C Chair Harris Sheinman William Artis Andrew Welch <u>Liaisons / Staff / Ex-Officio Members:</u> Krishnan Gowri <u>Guests:</u> Steve Elkin Jairam Fenton Melvin T. Garrett

NOTICE: These Draft Minutes have not been approved and are not the official, approved record until approved by this committee.
June 2017



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TC 9.01 Large Building Air-Conditioning Systems
Meeting Minutes

Meeting: Tuesday, January 31, 2017, 1:00 – 3:30 pm PST
Las Vegas, NV

Call to Order

1. **Call to Order** (Vucci)
2. **Welcome / Introductions** (Vucci)
3. **Determination of Quorum**
 - a. Voting Members = 12 + 1 Member non quorum (Trafton)
 - b. 9 members present = quorum achieved
4. **Minutes from St Louis, 2016 Annual Meeting** (Vucci)
 - a. Motion to approve Molnar, Trafton Passed 8 0 0 CNV
5. **Agenda Comments and Updates** (Vucci)
 - a. ASHRAE is looking for Peer reviewers
6. **Chairman's Comments and Section 9 Report** (Vucci)
 - a. John was not able to attend.
 - b. Seminars for Long Beach are due next week.
7. **ASHRAE Liaison Reports:**
 - a. Society (e.g., TAC, Standards, Research, Handbook)
 - b. Staff
 - i. Krishnan – Section head – 9: Board of directors is interested in knowing how many people are attending and not paying for the technical session.
8. **TC Subcommittee Reports:**
 - a. **Programs** (Kuempel)
 - i. Presented best of Engineers Notebook
 - ii. Future Meetings: Long Beach, Chicago, Houston
 - iii. Long Beach will be a forum based on guideline 22 likes and dislikes.
 - iv. Chicago discussed bringing case studies back – Why not turn off AC when it is occupied. Passive thermal storage



b. **Honors and awards (Duda)**

- i. Report attached

c. **Membership / Upcoming Roster Revisions (Vucci)**

- i. Will address after meeting.

d. **Standards (Henck)**

- i. **Guideline 22** – The group met in Las Vegas and in St Louis. Revising title, purpose a scope a little. Std 184 is published. Field testing of cooling devices. There will be a forum on it in Long Beach. .
- ii. **ASHRAE Guideline 16-2014** (Selecting outdoor return and relief dampers for air-side economizers) Reaffirmation or update? John Vucci said that there were references that were not included in the print version. Some references are out of date. Need a sub-committee to update the references and graphs from the handbook.

1. **Motion to Reaffirm – Henck, Trafton passes 8,0,0 CNV**

e. **Handbook Subcommittee (McKew / Sheinman):**

Chapter 1 to 5 for completion publication 2019 – Reviewers Primary / Secondary

Chap 1 – HVAC Analysis & Selection	McKew / Trafton / Bill Artis
Chap 2 – Decentralized Heat & Cool	Charlie Henk / John Kuempel
Chap 3 – Central Heat & Cool Plants	Jay Eldridge / Dennis Wessel
Chap 4 - Air Handling & Distribution	Steve Duda/ Doug Cochran
Chap 5 – In Room Terminals	Co-written by FC TC / Phil Trafton

f. Harris Sheinman spoke to the TC. He confirmed the reviewers and chapters. All of the reviewers were at the sub-committee meeting except 2. To stay on schedule the scopes will need to be confirmed by the committee. McKew comments. Include renovations, security, zero energy, controls should be reviewed to include modern controls and remote control capability.

- i. Everyone on the TC has access to the authoring tool. It does not lend itself to having a lead reviewer. You need to be online to do the work. Note - Never accept the changes on the review, or it will hide changes. We can use base camp for the files since we extracted them before the transfer to the authoring tool.
- ii. Need revisions completed by Jan 2019.

g. Gary S. TC 9.11 Clean Room Committee addressed the committee to see if there was interest in getting the committees to coordinate together more. It is an issue on the Handbook, but it could be a very large undertaking for the complete committees. The group felt that we should communicate, but did not feel that they should be joined together.



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9. Research Subcommittee Breakfast Report. (Duda)

- a. Only 3 RTARs (All accepted) were submitted and 4 work statements. (1 conditional accepted)
- b. The research chair meeting discussed how the PMS needs to keep the research on track. They need to review and keep things on track and look at it with a critical eye.
- c. We need some topic ideas
 - i. Opportunity with 10.2 co-sponsor an RTAR on ice rinks. TC 10.2 is going to do it them selves.
 - ii. Refrigerant migration between rooms was not accepted.
 - iii. Steve is looking for ideas on research and asked that the handbook reviewers send any thoughts to him as they go through the chapters.
 - iv. Dennis Wessel noted that the ASHRAE Life members are now donating 30K / year to research.

10. Professional Development Committee (Henck)

- a. Looking for new programs. They are working on one for engineering essentials.

11. Publications (open)

- a. Request for new a committee to review the “Air-Conditioning System Design Manual” 1st Edition: 1993, 2nd Edition 2007. Is the TC interested in developing a 3rd edition? McKew is interested in looking at rewriting. Dennis Wessel said that he would be interested in assisting.

12. Website (Eldridge) - A question was raised by Harris if we could add a page for internal members only. Jay to check and get back to the committee.

TC/PC Liaison Reports

- TC 4.03 – Ventilation & Filtration (S. Duda)
 - RP - 1747 – Close to final report on CO2 demand control for VAV with multiple zones.
 - RP 1450 Transport of contaminants in garages – Mostly residential. Single family and small appartments. Research is done and submitted.
- SSPC-202 Commissioning Process for Building & Systems (Blalock) - Committee overviews all docs. Out for public review before Long Beach. Guideline 1.4 for constructing a systems manual. One on training is also in the works.
- TC 5.1 – Fans (Eldridge) – Developing a wire to air energy rating that includes the fan, motor, vfd/drive.
- TC 5.06 – Control & Smoke (P Trafton) - Working on a guideline for how to test fire dampers and combination fire/smoke dampers. Field testing.
- TC 6.01 – Hydronic and Steam Heating Equip. and Sys. (K. Cramm) No report

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- TC 7.01 Integrated Building Design - no report
- TC 7.09 – Building Commissioning (Blalock) - Same as what is in 202.
- TC 8.07 - Variable Refrigerant Flow (J. Vucci) - Bill Artis reported that they are submitting on two seminars for long beach. TC 9.8 co-sponsor with applications on VRF in large buildings. Std 15.3 – Limiting risk with VRF applications.
 - Guideline 41 – Design for installation and commissioning of VRF systems. Completed draft by the summer meeting. Looking for end users to join the committee.
- TC 9.08 – Large Building Applications (Artis) – Working on Seminars for Chicago with thermal storage.
- TC 9.09 Mission Critical – (M. Pavol) no report
- TC 9.10 – Laboratory Systems (open) RP-1573 replacement gas
- TC 9.12 – Tall Buildings (Wessel) - No met on Sunday 12:15 Going to present in Chicago with a fire chief to see how they respond. Doing testing on contaminants outside tall buildings to see if they change with elevation.
- SSPC 15 Mechanical Refrigeration Safety (Vucci / Johnson) Focused on Addendum and H mased on public review and 2L refrigerants. They will be sending out a second public review. They are going to re-write to make it easier for users to use.
- SPC 188 Legionella in HVAC (Milles) - No report

13. Old Business

- a. ASHRAE 2005 Equipment Service life information (Johnson) - Nothing.

14. New Business

15. Next Meeting (June 27, 2017, 1:00 pm EDT in Long Beach, CA)

16. For Good & Well Being

17. Adjourn Motion to adjourn. Passed Vucci/Trafton passed unanimously

I. Attachments:

- a) TC 9.01 Honors & Award Report

End of Minutes

Respectfully submitted by:

Jay Eldridge, Secretary



TC 9.01 Honors & Awards Report

2017 Winter Meeting, Las Vegas, January 2017

Deadlines that occur *before* the next meeting (June 2017 Long Beach) are listed in **red** below.

George B. Hightower Award:

- *Recognizes excellence in volunteer service in the area of Technical Committee, Technical Group, and Technical Research Group activities, excluding Research & Standards (which have separate awards).*
- On behalf of TC 9.01, J. Vucci and I nominated **John Kuempel** this year. The award is competitive, meaning only one is chosen among all nominees. TAC has chosen a different candidate from among the nominees this year, so our selected nominee did not win.
- Past winners from TC 9.01: Stephen Duda (2016); Howard McKew (2008).
- Nominations for the next award cycle are due September 1, 2016. Desirable qualities include include Seminar and Conference Paper programs, Handbook & Program subcommittee work including officer positions, and service as TC officer.

Service to ASHRAE Research Award:

- *Recognizes excellence in volunteer service in the area of Society research. Desirable qualities include authorship of RTARs and Work Statements, participation or chairing of multiple PMS and PES, and Research subcommittee work including Research Subcommittee Chair. This award is for a volunteer in support of Research, not a paid researcher and not a donor to ASHRAE Research.*
- TC 9.01 did not have a nominee this cycle. Nominations are due September 1 each year, and I would like to submit our strongest candidate each year.

ASHRAE Fellow:

- *Recognizes distinction in the arts relating to the sciences of heating, refrigeration, air conditioning or ventilation, or the allied arts and sciences, or in the teaching of major courses in said arts and sciences, or who by reason of invention, research, teaching, design, original work, or as an engineering executive on projects of unusual or important scope, has made substantial contribution to said arts and sciences, and has been in good standing as a full grade Member for at least ten (10) years is eligible for election to the grade of Fellow.*
- On behalf of TC 9.01, I formally nominated **Phil Trafton** last year, and his nomination was approved. Induction is being held at the Saturday Plenary of this Conference. **Congratulations, Phil!** His accomplishments that were cited include helping the Los Angeles Courthouse to save 50% of their previous HVAC energy use during the cooling season, and directing the repurposing of a historic hospital facility to an apartment complex using 35% less energy than dictated by the California energy code. In addition, he helps establish approved guidelines and ordinances through volunteer work with code-writing and code-enforcement agencies including the City of Los Angeles. He has lectured on mechanical systems at California State University, UCLA, and the AIA.
- Additionally, **Krishnan Gowri** (our TC's Section Head) was also elevated to Fellow at the Saturday Plenary of this Conference. **Congratulations, Krhishnan!**
- In addition, I formally nominated another one of our TC 9.01 Members for this honor this year (name confidential until confirmed), and that nomination is pending. If selected, the award is presented at the Plenary of the 2018 Winter Conference in Chicago.



- New nominations are due December 1 of each year. Please help me identify suitable candidates from this TC, including yourself if you feel you are eligible.

Distinguished Service Award:

- *Recognizes members who have served ASHRAE faithfully as a member of committees or otherwise giving freely of his/her time and talent on behalf of the Society.* Lifetime cumulative points-based system with a minimum of 15 points required.
- The points tally sheet is available on the ASHRAE website or directly from me.
- **New nominations are due May 1 each year.** Self-nominations are permitted. Please help me identify additional suitable candidates from this TC, including yourself if you feel you are eligible and have not yet received this award. There is no quantity limit for nominees nor honorees.

Exceptional Service Award:

- *Recognizes members who have served the Society faithfully and with exemplary effort, far in excess of that required for the Distinguished Service Award.* Lifetime cumulative points-based system with a minimum of 45 points required (with at least 7 points in 3 different categories).
- The points tally sheet is available on the ASHRAE website or directly from me.
- **New nominations are due May 1 each year.** Self-nominations are permitted. Please help me identify additional suitable candidates from this TC, including yourself if you feel you are eligible and have not yet received this award.

Other Awards on my Radar: Send any suggested nominations for the following to Steve Duda.

- **Standards Achievement Award.** *Recognizes excellence in volunteer service for developing ASHRAE Standards and/or Guidelines.* This is a competitive award, with a maximum of one chosen per year. Nominations are due December 1 each year.
- **Andrew T. Boggs Service Award.** *Recognizes a past Exceptional Service Awardee for continued, unselfish, dedicated and distinguished service to the Society.* This is a competitive award, with a maximum of one chosen per year. To be eligible, one must already have won the Exceptional Service Award. **New nominations are due May 1 each year.**
- **Louise & Bill Holladay Distinguished Fellow Award.** *Recognizes a Fellow of the Society who continues preeminence in engineering or research.* This is a competitive award, with a maximum of one chosen per year. To be eligible, one must already be a Fellow of the Society. **New nominations are due May 1 each year.**
- **F. Paul Anderson Award.** *Honors a member for notable achievement, outstanding work or service in any field of the Society. This is ASHRAE's highest honor.* This is a competitive award, with a maximum of one chosen per year. New nominations are due December 1 each year.

Respectfully submitted by:

A handwritten signature in blue ink that reads "Stephen W. Duda".

Stephen W. Duda

TC 9.01 Honors & Awards Chair

January 25, 2017