



**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: January 10, 2019

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

DATE OF MEETING: June 26, 2018 LOCATION: Houston, Texas

MEMBERS PRESENT	TERM END	MEMBERS ABSENT	TERM END	ADDITIONAL ATTENDANCE
Alonzo Blalock Chair	2019	Jeff J. Traylor John Molinar Lynn Werman	2021 2019 2018	<b><u>Corresponding Members:</u></b> Bill Artis Mark Fly John Vucci Mark Pavol Andy Manos Kevin Teakell
Jay Eldridge, Vice Chair	2020			<b><u>Liaisons / Staff / Ex-Officio Members:</u></b>
Steve Duda, Research/Honors and Awards Sub-C Chair	2021			<b><u>Guests:</u></b> Ratnesh Tiwari
Charles Henck, Standards Sub-C Chair, Secretary	2018			
John L. Kuempel Jr, Program Sub-C Chair	2020			
Doug Cochrane	2018			
Rachel Romero, Webmaster	2019			
Kelley Cramm	2018			
Dennis Wessel	2020			
Phil Trafton	2019			

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

TAC Section Head: Vance Payce vpayce@mail.ashrae.org

**Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)**

Mr Michael R Vaughn PE, Manager Of Research & Technical Services MORTS@ashrae.net

Mr Michael S Heinrich CTTC Chair michael.heinrich@westplainsengineering.com



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## **TC 9.01 Large Building Air-Conditioning Systems**

### *Meeting Minutes*

**Meeting Date: June 26 2018**

Houston, Texas

#### **Call to Order**

Chair Alonzo Blalock called the meeting to order at 1:01 PM local time,

#### **Welcome and Introduction of Members and Guests**

Self-introductions of members and guests were made around the room as the attendance roster was circulated. The Chair welcomed all members and visitors. A quorum was achieved.

Voting Members:	10 Present, 2 Absent, Quorum was achieved
Voting Non-Quorum Members:	1 Absent
Corresponding Members:	6 Present
Society Liaisons:	0 Present
Staff Liaisons:	0 Present
Guests:	1 Present

*Note: Voting Non-Quorum members are voting members if present, but do not count against quorum if absent.)*

We have 10 of 12 members – quorum achieved

#### **ASHRAE Code of Ethics:** The chair reviewed the Code of Ethics

In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.)

#### **Minutes from Chicago 2018 meeting were reviewed**

- a) One correction under G Publications ASHRAE Maintenance Guide not Design Guide.
- b) Chicago Minutes – A motion was made and second – 7/0/1 CNV motion passed

#### **Agenda Comments / Updates (Blalock)**

No Additions to Agenda requested.

#### **Chair’s Comments and Section 9 Report (Blalock)**

- a. Call for papers for the next meeting – August 3 date for Seminars for Atlanta
- b. Reviewers are needed – call Tiffany Cox at ASHRAE

#### **TC 9.01 is the responsible committee for the development of Handbook Chapters;**

- a. Chapter 1 – HVAC Analysis & Selection
- b. Chapter 2 – Decentralized Heating & Cooling
- c. Chapter 3 – Central Heating & Cooling Plants



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- d. Chapter 4 - Air Handling & Distribution
- e. Chapter 5 – In Room Terminals

**ASHRAE Liaison Reports**

None

**TC 9.01 Subcommittee Reports**

a. **Programs (Kuempel)**

- i. Engineer’s Notebook for Atlanta.
- ii. Steps for Meeting Net Zero at a Naval Base.
- iii. Indoor Grow Room – co-sponsor with TC 9.08.
- iv. Future program ideas.
- v. Air Cooled verses Water Cooled Chillers.
- vi. Heat Recovery verses Economizer – When to use each?

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

- i. Distinguished service and exceptional service are points based, but are not automated at this point. – Attached is Steve’s report.

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

- i. AB has updated the roster.
- ii. 4 members roll off and 4 new voting members.

d. **Standards (Henck)**

- i. ASHRAE Standard 16-2014 Reaffirmation in June 2017
- ii. Guideline 22 – John is Chair – goal is January 2019 release for public review.

e. **Handbook Subcommittee (McKew): (Need to vote by Jan 2019)**

- i. Chapters 1 to 5 for publication 2019 – Reviewers Primary / Secondary
  - Chap 1 – HVAC Analysis & Selection    McKew / Trafton / Bill Artis
  - Chap 2 – Decentralized Heat & Cool    Charlie Henck / 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
- ii. Chapter 1-5 were reviewed for status and we appear to be on time for the handbook.
- iii. John Vucci agreed to help Howie with the handbook details.
- iv. Each chapter revisor shall put the chapter on Base Camp.
- v. Final reviewed documents will be on Base Camp by November 30 so all TC members can review before the vote in Atlanta.



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f. **Research Subcommittee Breakfast Report.** (Duda)

Reviewed the Research committee meeting.

- i. RP 1711 Standard Sequences of Operation (water side) for High Performance Buildings.

g. **Publications**

- i. Nothing new to report.

h. **Website (Romero)**

- i. Website has been updated.
- ii. Base Camp will be set up.

**Old Business:** ASHRAE developing an app on service life.

**New Business:** General discussion of what PDC is doing and what they need.

**TC/SSPC Liaison Reports**

- TC 4.03 – Ventilation & Infiltration (Duda) – two research projects are finished RP 1635 and 1450
- SSPS 300 – Committee overseeing all commissioning for ASHRAE.
- TC 5.01 – Fans (Eldridge) - Working on inlet and outlet conditions for fans.
- TC 5.06 – Control & Smoke (P Trafton) - discussing blower door testing.
- TC 6.01 – Hydronic and Steam Heating Equip. and Sys. (K. Cramm) - no report
- TC 7.01 Integrated Building Design (Romero) – new chapter will be added in the next handbook.
- TC 7.09 – Building Commissioning (Blalock) - Changes have been made to 189.1 to chapter 10 commissioning. Have to buy the latest 189.1 through ICC.
- TC 8.07 - Variable Refrigerant Flow (Artis) – There is a Working Group on connected spaces
- TC 9.06 – Healthcare (Blalock) - No Report
- TC 9.08 – Building HVAC Applications: (Kuempel / Molnar) – Grow Room subcommittee started. There will be several programs in Atlanta.
- TC 9.09 Mission Critical (Pavol) - Data Centers. Several research projects. There is a psychometric chart with boundaries of where to operate Data Centers. Standard 90.4 was published.
- TC 9.10 – Laboratory Systems (Kuempel/Duda) - Had one program on blade verses venturi valves. Doing research on a replacement fluid for hood testing.
- TC 9.12 – Tall Buildings (Wessel) - Had one program at this meeting. Proposing research on climatic data on high rise climate variations with height of building.
- SSPC 15 Mechanical Refrigeration Safety (Vucci / Johnson) - New Standard 15.2 on residential refrigerants. Several addendums have been issued on Standard 15.
- SPC 188 Legionella in HVAC (Milles) – No Report.

**Next Meeting** (Jan 15, 2019, 1:00 pm EDT in Atlanta, GA)

For the Good and Well Being...



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Adjournment at 3:30 PM

**I. Attachments:**

- a) TC 9.01 Honors & Award Report

**End of Minutes**

Respectfully submitted by:  
Charlie Henck, Secretary