



## ASHRAE Technical Committee 1.4

### Full Committee Meeting Minutes

TC 1.4 Control Theory and Application

<http://tc0104.ashraetcs.org/>

Tuesday, June 24<sup>th</sup>, 2025 1:00 – 3:30 pm EDT Hybrid Conference

#### *Code of Ethics Commitment*

"In ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, inclusiveness and respect for others, which exemplify our core values of excellence, commitment, integrity, collaboration, volunteerism and diversity, and shall avoid all real or perceived conflicts of interest. Our culture is one of inclusiveness, acknowledging the inherent value and dignity of each individual. We celebrate diverse and inclusive communities, understanding that doing so fuels better, more creative and more thoughtful ideas, solutions and strategies for the Society and the communities our Society serves. We respect and welcome all. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>.)"

#### **1) Call to Order**

#### **2) TC 1.4 Scope**

- a) ASHRAE Technical Committee 1.4 is concerned with control theory, systems, and components (excluding refrigerant flow controls) for heating, ventilating, air conditioning, and refrigeration uses.

#### **3) Introduce Members, Guests, and Liaisons**

- a) General Introductions – In person and virtual
- b) Determination of a quorum

*VOTING MEMBERS FOR THIS MEETING (Need (5) or ½+1 for a Quorum)*

NAME	Roll-Off-Date		NAME	Roll-Off-Date	
Jayson Bursill	6/30/27	<a href="#">X</a>	Chariti Young	6/30/26	<a href="#">X</a>
JoeDon Breda	6/30/27	<a href="#">X</a>	Elise Backstrom	6/30/25	<a href="#">X</a>
Taraneh Shoorideh	6/30/27		Joe Kilcoyne	6/30/25	<a href="#">X</a>
Charlotte Dean	6/30/26	-	Paul Ehrlich	6/30/25	<a href="#">X</a>

#### 4) Voting Items

- a) [Jayson Bursill](#)~~XX~~ motioned to approve the minutes from 2025 Winter Meeting through electronic vote after this conference. ~~XX~~ [Paul Ehrlich](#) seconded. Approved ~~65~~[X](#)-0-0 (CNV).

#### 5) Announcements

**a) TAC – Technical Activities Committee – Section Head Jason Atkisson**

- i) Section 1 will have a new section head starting July 1, TC 1.4 wants to thank Jason for his support the last few years.
- ii) Upcoming conferences
  - Jan. 31-Feb. 4, 2026 – Las Vegas, NV
  - June 26-July 1, 2026 – Austin, TX
- ii) ASHRAE AI (Artificial Intelligence) Policy :
  - (1) ASHRAE prohibits the entry of content from any ASHRAE publication or related ASHRAE intellectual property (IP) into any AI tool, including but not limited to ChatGPT. Additionally, creating derivative works of ASHRAE IP using AI is also prohibited without express written permission from ASHRAE.
- iii) No new FGs formed this Current Society Year.
- iv) No FGs were disbanded this Current Society Year.
- v) 2025-2026 Hightower Award Nominations due Friday, September 5<sup>th</sup>.
- vi) CEC's Standing Request for Future Society Meeting Program Track Suggestions. Submit track suggestions to ASHRAE Staff member Tony Giometti ([giometti@ashrae.org](mailto:giometti@ashrae.org)).
- vii) CEC is seeking TC Volunteers to support content development and quality control for society technical program at society meetings. If interested, please reach out to Elise.
- viii) The Professional Development Committee (PDC) is seeking ideas for new ASHRAE Learning Institute (ALI) courses. Contact Karen Murray (ASHRAE Staff) [kmurray@ashrae.org](mailto:kmurray@ashrae.org) with course ideas.
- ix) ASHRAE Certifications Committee seeking ideas from TCs for possible professional certification programs.

**b) RAC – Research Activities Committee – Section Head Srinivas Katimapula**

- i) 1 RTAR and 2 WS approved at this meeting
- ii) 8 TRP under review
- iii) 0 RTAR in March
- iv) RAC wants more Research ideas
  - (1) RAC to investigate roadblocks to more submissions
- v) Research budget last year was \$3.9M
- vi) Research portal new to automate management of RTARs

- vii) Fundraising goal for RP was to raise \$2.68M  
(1) ~\$1.36M goes to Research
- ~~b~~viii) Research Advisory Panel (RAP) are developing a new strategic research plan this year

## 2) Sub-Committee Reports

### a) **Executive** – Elise Backstrom

#### i) 2025/2026 TC 1.4 Executive Team

- (1) Chair – Elise Backstrom
- (2) Vice Chair – Michelle Shadpour
- (3) Secretary – Jayson Bursill

ii) Voting members rolling off this year: Charlotte Dean, Joe Kilcoyne, Paul Ehrlich.

iii) Voting members rolling on July 1<sup>st</sup>: Michelle Shadpour, Greg Tayco.

iv) If you do not have access to the TC 1.4 Basecamp and need it, please reach out to Elise.

### b) **Education/YEA** – Greg Tayco

### c) **Brainstorming - Innovative and Disruptive Technologies** – Chad Moore/Chris Benson

### d) **Program** – Ariana Axelrod | vice chair

#### i) Matt Walters volunteered to be Vice-Chair of Program

~~e~~ii) 4 programs this meeting and over 10 planned to be submitted for the Winter 2026 meeting

### e) **Research** – Amanda Pertzborn | vice chair Jayson Bursill

#### i) Resources:

(1) Chris Battisti volunteered to be Vice-Chair of Research for next year

(2) Jayson Bursill rolling off as Vice-Chair to roll on as Secretary

#### ii) Active research updates:

(1) RP-1865 has been completed and awaits TC 1.4 final vote

(2) RP-1964 had initial PMS meeting

(3) WS-1927 has no champion. Currently in the parking lot.

(4) WS-1966 is looking for people that want to lead on ASHRAE Guideline 36 functional performance testing.

(5) There is a new proposed WS on control scheduling.

~~e~~(6) Relative humidity sensing evaluation may be re-done. Pending the ability to provide manufacturer information tied to evaluation results.

### f) **Handbook** – Terry Schroeder | vice chair Tara Shoorideh

i) Looking for experts on the design and application of controls for heat pumps to help with corresponding chapters.

~~f~~ii) Joe Zhou expressed some concerns about chapters that have duplicated or conflicting content between TC 1.4 and other TCs.

### g) **Standards** – Steve Taylor

- h) **Webmaster**  
i) New webmaster rolling on July 1<sup>st</sup>, Dave Roberts

**3) Liaison Reports – TC 1.4 Sponsored Functional Groups**

**a) SGPC 13 Specifying Building Automation Systems**

i) Report given by [Chris Battisti](#)

~~i~~(1) [Significant discussion about graphics – style guides and specification language.](#)

**b) SGPC 36 High Performance Sequences of Operation for HVAC Systems**

i) Report given by [Joe Zhou](#)

(1) [2024 update published about 5 months ago](#)

(2) [Working on the following addenda](#)

- [Lab VAVs](#)
- [Energy wheels for AHU](#)
- [Exhaust fans](#)

(3) [Several other addenda in public review](#)

(4) [Heat pump control sequences under development](#)

(5) [Functiona performance testing is also under development](#)

(6) [Title 24 will require ASHRAE Guideline 36 certified libraries in January 2026](#)

~~i~~(7) \_\_\_\_\_

**c) SPC 231P CDL – A Control Description Language for Building Environmental Control Sequences**

i) Report given by [Paul Ehrlich](#)

~~i~~(1) [Out for 2<sup>nd</sup> round of public review right now](#)

**d) SPC 223P - Semantic Data Model for Analytics and Automation Applications in Buildings**

i) Report given by [Ron Bernstein](#)

~~i~~(1) [In final editing before 2<sup>nd</sup> round of public review](#)

**e) SSPC 135 – BACnet - A Data Communication Protocol for Building Automation and Control Networks**

i) Report given by [Grace Bailey](#)

~~i~~(1) [SecureConnect certificate management was discussed a lot](#)

**f) MTG.CYB - Cybersecurity for HVAC Systems And Related Infrastructure**

i) Report by [Ron Bernstein](#)

[\(1\) Had meeting online prior to the conference](#)

~~i)(2)~~ [Most work in this MTG is based around collecting and sharing information from other sources.](#)

g) **MTG.EBO - Effective Building Operations**

i) Report by [Joe Kilcoyne](#)

[\(1\) Not much movement. Chair stepped away after last conference](#)

~~i)(2)~~ [Best practices documentation is under development](#)

4) **Committee Liaison Reports**

a) TC 1.5 (Emerging Computing Applications) – Mike Pouchak

~~a)i)~~ [No report](#)

b) TC 2.10 HVAC Security – Kim Barker

~~b)i)~~ [No report](#)

c) TC 7.5 (Smart Building Systems) – Joe Zhou

[i\) Several co-sponsor opportunities for ASHRAE Winter Conference program](#)

~~e)ii)~~ [Current RP for survey on MPC barriers is underway. Wraps up in 3 months.](#)

d) TC 9.10 (Laboratory Systems) – Jim Coogan

[i\) Several pieces of documentation under review including some ALI content.](#)

[ii\) The work with SGPC 36 brought to light many topics that will now be added to the relevant handbook chapters.](#)

[iii\) Collaboration between SGPC 36 and the Labs TC continues. Lab room control addendum is in public review now. Review closes on July 7.](#)

[iv\) An addendum for exhaust fan control is in early stages. We have an initial draft, but have not really discussed and refined it.](#)

[v\) TC 9.10 is close to releasing an ALI class on laboratory controls. We already have classes on lab hvac design and exhaust system design. This class on controls is meant to complement those. Current plans say we will run it the first time at Winter, 2026.](#)

~~d)vi)~~ [The TC is revising Classification of Laboratory Ventilation Design Levels to help lab designers and operators match ventilation system features to lab use and hazards.](#)

e) TC 9.11 (Clean Rooms) – Phil Naughton

f) SSPC 62.1 (Ventilation and Acceptable IAQ) – Steve Taylor

g) SSPC 90.1 (Energy Efficient Design of New Buildings) – Steve Taylor

5) **Old Business**

a) New ASHRAE Standard for Guideline 36 Method of Test – [Hwakong Cheng](#)

[i\) The proposal and justification was presented in the meeting and challenges around Guideline 36 were discussed.](#)

~~a)ii)~~ [Manufacturers provided input on whether or not to try to make Guideline 36 a standard.](#)

b)

6) **New Business**

a) Recognizing TC 1.4 Members Awards and Achievements

(1) George B. Hightower Technical Achievement Award

- Phil Naughton

(2) YEA Award of Individual Excellence

- Jayson Bursill

(3) Poster Presentation Award

- Min Gyung Yu

(4) Distinguished Service Award

- Jayson Bursill
- James Del Monaco
- Joe Kilcoyne

(5) Exceptional Service Award

- David Branson

## **7) Upcoming Deadlines**

- Las Vegas Winter Conference  
(1) Seminar, Forums, Workshops, Panels and Debates proposals are due by Friday August 1<sup>st</sup>, 2025.
- George Hightower Award Nominations – September 5<sup>th</sup>, 2025

**8) Next Meeting – 2026 ASHRAE WINTER CONFERENCE | Jan. 31-Feb. 4, 2026 | Las Vegas, NV**

**9) Adjourn [at 3:30pm MST](#)**