

TC 1.2 – Instruments and Measurements: Virtual/ In Person
Las Vegas, NV 2022

Meeting Minutes - Main Committee Meeting

1:00 – 3:30 PM, February 1, 2022

Location: Teleconference and Caesars Palace Roman II

These draft minutes must be approved by this committee to be the official record

Attendees

Name	Affiliation	Email Address	Status
Jim Douglas	Imagineering and More	jim.douglas.imagineering@gmail.com	Voting
John Neel	Johnson Controls Inc.	john.l.neel@jci.com	Voting
Craig Bradshaw	Oklahoma State Univ.	craig.bradshaw@okstate.edu	Voting
John Scott	Natural Resources Canada.	john.scott@canada.ca	Voting
Brandon Kelley	AAON	BWKelley34@gmail.com	Voting/ YEA
Dr. Som Shrestha	Oak Ridge National Lab	shresthass@ornl.gov	Voting
Terry Beck	Kansas State University	tbeck@ksu.edu	Voting
Connor Hayes	Daikin Applied	Connor.hayes@daikinapplied.com	Voting
Hongmei Liang	Carrier Corporation	hongmei.liang@carrier.com	PCM
Patrick Collins	TFE	pec2315us@gmail.com	PCM
Alex Schmig	Trane	alexander.schmig@trane.com	PCM/ YEA
Eric Anderson	Anderson Engineering	eanderson@aenpi.com	CM
Brian McClintock	.Daikin Applied Americas	Brian.McClintock@daikinapplied.com	PCM/ YEA
Peter Foster			Visitor
Ian Wright			Visitor
Chris Lesnar	Daikin Applied	christopher.lesnar@daikinapplied.com	PSVM

A. Administrative:

1. Call to order/introductions/establish quorum: Brandon Kelley/ Jim Douglas

8 of 12 voting members (one non-quorum) were present. Quorum of 6 was established.

3 YEA members present (number established only from attendance list)

Attendance:

VM (Present): Brandon Kelley, Jim Douglas, Terry Beck, Steve Rogers, Craig Bradshaw, John Scott, Connor Hayes, and Som Shrestha

VM (Absent): Frank Spevak, John Neel, Robert Moss, and Stephen Idem

2. Review of the agenda and ASHRAE Code of Ethics

Victor read the ASHRAE Code of Ethics.

Victor reviewed the agenda.

Victor also pointed out the scope of the TC1.2 committee.

3. Review and approval of minutes from the Summer 2021 meeting

Motion to approve minutes by John Scott and seconded by Craig Bradshaw.

Motion carried: (6-0-2-4 CV).

4. TC Chair's breakfast –Brandon Kelley

Notes from TC Chair Section 1 Meeting

Notes of significance to TC 1.2 Instruments and Measurements:

- ASHRAE is still expecting to hold the summer meetings in person and virtual. ASHRAE is stressing committees to have more meetings outside of the two main conference meetings to streamline the conferences to allow members more time to attend the conference sessions.

5. Liaison reports

No report was given since no section head attended the meeting

B. Standards – Jim Douglas

Jim reported on the SSPC41 standards. A written report is included as an Annex A to these minutes.

C. Handbook – Terry Beck

Terry reported that the ASHRAE Fundamentals Handbook was published and sent out to the membership. He will be sending out a participation spreadsheet for TC1.2 members to participate in the revision of Chapter 38.

D. Research – David Yuill

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The Research Subcommittee had not had their meeting so no report was given.

E. Programs Subcommittee Chair's report – Steve Idem

Steve was not present at the meeting and no report was submitted but all seminar presentations must be submitted to ASHRAE by August 2

F. Membership – Victor/ Jim Douglas gave the update.

Voting members rolling off as of 6/30/22:

Jmaes Douglas
Terry Beck
Connor Hayes

Voting members rolling on as of 7/1/22:

Pat Collins
Hongmei Liang

This will keep the voting membership to 12 including 1 non quorum, creating a quorum level of 6 technically after 7/1/22.

As of 7/1/21:

Brandon Kelly: Chairman
Victor Cincola: Vice Chairman
James Douglas: Secretary/ Standards Chairman
David Yuill: Research Chairman
Craig Bradshaw: Webmaster
Stem Idem: Programs Chairman
Terry Beck: Handbook Chairman

Voting membership for the summer meeting in Toronto, Ontario:

Craig Bradshaw – non quorum
James Douglas
John Scott
Terry Beck
Steve Idem
John Neel

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Brandon Kelly
Steve Rogers
Robert Moss
Frank Spevak
Conner Hayes
Som Shrestha

Quorum will be set at 6 (11 voting members and one non-quorum voting member)

Attendees were offered the opportunity to become members.

G. Website status report – Craig Bradshaw

Craig Bradshaw reported that the website is up to date.

H. New/Unfinished business:

No new or old business was presented

I. Adjournment:

Craig Bradshaw motioned to adjourn. Meeting concluded at 2:00 PM.

Annex A – Standards Subcommittee Report – Jim Douglas

NOTE: Due to the COVID-19 pandemic the Las Vegas 2022 winter meeting was a hybrid meeting with many attending virtually and some in person.

Subcommittee Chair's Reports:

Subcommittee 41.1, Standard Methods for Temperature Measurement – E. Anderson

Standard 41.1-2020 Addendum a. is being prepared for publication. Standard 41.1-2020 will be due for periodic maintenance during the 2023 ASHRAE Winter Conference. Approval to revise 41.1-2020 at the meeting was reached so that: (a) the 41.1-2020 Addendum a. changes and (b) the results of ASHRAE Research Project RP-1733 (airstream mixing methods) can be incorporated into the next revision of 41.1 as soon as practical. Eric Anderson was also approved as the Chairman of the revision committee. 9 members present in the meeting volunteered to assist with the revision effort.

Subcommittee 41.2, Standard Methods for Air Velocity and Airflow Measurement – P. Collins

The 41.2-2018R public review process ended on 1/2/22 and the Final Publication Draft was submitted to ASHRAE on 1/3/22. ASHRAE staff are now preparing the revised version of 41.2-2018 for publication.

Subcommittee 41.3, Standard Methods for Pressure Measurement – R. Hall

The 41.3-2014R public review process ended on 12/6/21 and the Final Publication Draft was submitted to ASHRAE on 12/7/21. ASHRAE staff are now preparing the revised version of 41.3-2014 for publication.

Subcommittee 41.4, Standard Methods for Measurement of Proportion for Lubricant in Liquid Refrigerant – J. Douglas

Subcommittee 41.4-2015R will not meet during this conference. However, subcommittee 41.4-2015R will meet virtually on February 17th from 1:30 to 2:30 PM ET to review the test results from the newest lubricant sampling apparatus.

COVID has delayed this revision past the original expected completion date. If you want to participate in this 41.4 subcommittee meeting, email Rick Hall and he will send you an invitation.

Subcommittee 41.6, Standard Methods for Humidity Measurement – M. Shows

Standard 41.6-2021 has been published. Congratulations to Michael Shows and the members of his subcommittee.

Subcommittee 41.7, *Standard Methods for Gas Flow Measurement* – J. Scott

Standard 41.7-2021 has been published. Congratulations to John Scott and his subcommittee.

Subcommittee 41.8, *Standard Methods for Liquid Flow Measurement* – J. Scott

Subcommittee 41.8-2019R met virtually on 1/12/22 from 10:30 AM to 12:00 PM ET to review the latest working draft. The goal is to reach consensus on a Publication Public Review draft at the 2022 ASHRAE Annual Meeting.

Subcommittee 41.9, *Standard Methods for Refrigerant Mass Flow Measurement Using Calorimeters* – M. Perevozchikov

Standard 41.9-2021 has been published. Congratulations to Michael Perevozchikov and his subcommittee.

Subcommittee 41.10, *Standard Methods for Refrigerant Mass Flow Measurement Using Flowmeters* – J. Neel

Standard 41.10-2020 Addendum a. is in the queue to be published. Addendum b. is in the queue for public review. Standard 41.10-2020 will be due for periodic maintenance during the 2023 ASHRAE Winter Conference. Approval to revise 41.10-2020 at this meeting to incorporate the changes from Addendum a. and Addendum b. plus other recent 41-series changes was achieved.

John Neel is retiring on February 1st, and is also ending his participation in ASHRAE at the same time. We want to thank John for all of his many contributions to SSPC 41.

Brandon Kelley was also approved to be the new chairman of the revision committee. 8 members present at the meeting volunteered to assist in the revision effort.

Subcommittee 41.11, *Standard Methods for Power Measurement* – M. Todd

Standard 41.11-2020 will be due for periodic maintenance during the 2023 ASHRAE Winter Conference. The current plan was to seek approval to revise 41.11-2020 at this meeting to incorporate the 41.11-2020 Addendum

a. changes sooner. Also note that a 41.11-2020 Errata Sheet was published on 1/10/22. The committee did approve the early start to revise the standard with Michael Todd as the chairman and 5 members present volunteered to assist in the revision effort.

Subcommittee 41.13, *Standard Methods for Fuel Higher Heating Value Measurement* – J. Lutz

Subcommittee 41.13P met virtually on 1/19/22 from 10:00 AM to 11:30 AM ET to review the latest working draft. The goal is to reach consensus on a Publication Public Review draft at the 2023 ASHRAE Annual Meeting.