

## TC 1.2 – Instruments and Measurements: Virtual Phoenix, AZ 2021

### Meeting Minutes - Main Committee Meeting

1:00 – 3:30 PM, June 22, 2021; On Line Zoom Virtual Meeting

***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	<a href="mailto:jim.douglas.imagineering@gmail.com">jim.douglas.imagineering@gmail.com</a>	Voting
Victor Cincola	AccuTrol LLC	<a href="mailto:vcincola@mchsi.com">vcincola@mchsi.com</a>	Voting
Craig Bradshaw	Oklahoma State Univ.	<a href="mailto:craig.bradshaw@okstate.edu">craig.bradshaw@okstate.edu</a>	Voting
Hongmei Liang	Carrier Corporation	<a href="mailto:hongmai.liang@carrier.com">hongmai.liang@carrier.com</a>	Voting
Dr. Som Shrestha	Oak Ridge National Lab	<a href="mailto:shresthass@ornl.gov">shresthass@ornl.gov</a>	Voting
Robert A Moss	Dwyer Instruments	<a href="mailto:rmoss@dwyermail.com">rmoss@dwyermail.com</a>	Voting
Jeffrey Wilms	JCI	<a href="mailto:jeffrey.wilms@jci.com">jeffrey.wilms@jci.com</a>	PCM/ YEA
Kyle Gluesenkamp	Oak Ridge National Lab	<a href="mailto:gluesenkampk@ornl.gov">gluesenkampk@ornl.gov</a>	PCM
Patrick Collins	TFE	<a href="mailto:pec2315us@gmail.com">pec2315us@gmail.com</a>	PCM
Alex Schmig	Trane	<a href="mailto:alexander.schmig@trane.com">alexander.schmig@trane.com</a>	PCM/ YEA
John Scott	Natural Resources Canada.	<a href="mailto:john.scott@canada.ca">john.scott@canada.ca</a>	CM
Eric Anderson	Anderson Engineering	<a href="mailto:eanderson@aenpi.com">eanderson@aenpi.com</a>	CM
John Neel	Johnson Controls Inc.	<a href="mailto:john.l.neel@jci.com">john.l.neel@jci.com</a>	CM
Shilei Ma	Dwyer Instruments	<a href="mailto:sma@dwyermail.com">sma@dwyermail.com</a>	Visitor

#### **A. Administrative:**

##### **1. Call to order/introductions/establish quorum: Victor Cincola/ Jim Douglas**

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

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

Attendance:

**VM (Present):** Jim Douglas, Hongmai Liang, Robert Moss, Craig Bradshaw, Victor Cincola, and Som Shrestha

**VM (Absent):** Brandon Kelley, Terry Beck, Frank Spevak, Lloyd Le, Steven Rogers, and Connor Hayes

**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 Winter meeting**

Motion to approve minutes by Robert Moss and seconded by Som S Shrestha.

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

**4. TC Chair's breakfast –Victor Cincola**

Notes from TC Chair Section 1 Meeting

Notes of significance to TC 1.2 Instruments and Measurements:

- ASHRAE is still expecting to hold the winter meetings in person and virtual. Subcommittee meetings will all be virtual and scheduled at a time decided by the committee chairman. A final decision will be issued prior to the winter meetings based on national health status.

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**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 was absent due to health issues and no report update was submitted.

**D. Research – David Yuill**

The Research Subcommittee had not had their meeting so no report was given. Annex B of these minutes contain the results of the Research committee meeting held on June 29, 2021.

**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 6/30/21:

Victor Cincola

Lloyd Le

Hongmei Liang

Voting members rolling on as of 7/1/21:

John Scott

Steve Idem

John Neel

This will keep the voting membership to 12 including 1 non quorum, creating a quorum level of 6 technically after 7/1/21.

**As of 7/1/21:**

Brandon Kelley: 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 winter meeting in Las Vegas, NV:**

Craig Bradshaw – non quorum

James Douglas

Victor Cincola

Terry Beck

Lloyd Le

Hongmei Liang

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:**

Robert Moss motioned to adjourn. Meeting concluded at 1:48 PM.

## **Annex A – Standards Subcommittee Report – Jim Douglas**

NOTE: Due to the cancellation of the Phoenix Summer meeting, the creation of several virtual “Zoom” summer meetings were held at various times, I have updated the Standards report to include the information known as of 1/09/22.

### **1. Subcommittee Chair’s Reports:**

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

Standard 41.1-2020 has been published. This standard will be up for periodic maintenance at the 2023 ASHRAE winter conference. An error was detected in the standard and is being addressed by the issuing of an addendum. Standard 41.1-2020 Addendum a. is being prepared for publication. However, the current plan is to seek approval to revise 41.1-2020 at the Las Vegas winter meeting 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. The SSPC 41 subcommittee will be voting on this on February 1, 2022.

#### **Subcommittee 41.2, Standard Methods for Air Velocity and Airflow Measurement – Pat Collins**

Standard 41.2-2018 was up for periodic maintenance at the 2021 ASHRAE winter conference. The committee met on 11/17/2020 and worked to agree on the needed changes to the standard and have sent the 1<sup>st</sup> PPR draft to ASHRAE. 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 is now preparing the revised version of 41.2 for publication.

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

The 41.3-2014R subcommittee reached consensus on the first 41.3-2014R PPR draft at Orlando. That draft included changes to the Title, Purpose, and Scope (TPS). Since then, the ASHRAE Standards Committee has approved the proposed 41.3-2014R TPS changes. The next step was for the SSPC 41 voting members to recommend that the ASHRAE Standards Committee approve the first 41.3 PPR draft which was voted on at the Austin meeting. There were several errors found in the PPR so a second ballot was sent out to approve the necessary corrections in September. This ballot was approved on 10/23/20 and sent to ASHRAE. SPLS approved the PPR at the 2021 winter meeting.

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

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

SSPC 41 Subcommittee 41.4-2015R will meet virtually in February (2022) to review the test results from the newest lubricant sampling apparatus.

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

Standard 41.8-2016 (RA 2019) met on 1/19/21 and reached consensus of the main body of the draft. The uncertainty section was completed and the finished 1<sup>st</sup> public review draft will be reviewed by the committee and voted on at a virtual meeting to be held on 1/12/22.

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

Standard 41.9-2021 is a published standard. Congratulations to Michael Perevozchikov, the 41.9-2018R revision subcommittee chair and the members of his subcommittee.

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

Standard 41.10-2020 is being published. This standard will be up for periodic maintenance at the 2023 ASHRAE winter conference.

Standard 41.10-2020 Addendum a. is being published and can be downloaded at no cost from the ASHRAE website. Standard 41.10-2020 Addendum b. is currently in the queue for public review.

However, the current plan is to seek approval to revise 41.10-2020 at this meeting to incorporate the 41.10-2020 Addendum a. and Addendum b. changes sooner.

Present chairman, John Neel, will be retiring in February so the committee will need to appoint a new chairman at the Winter meeting.

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. However, the current plan is to seek approval to revise 41.11-2020 at the Las Vegas Winter meeting to incorporate the 41.11-2020 Addendum a. changes sooner.

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

Subcommittee 41.13P will meet virtually on 1/19/22 from 10:00 AM to 11:30 PM ET to review the latest working draft. Goal: PPR draft at 2023 Annual Conference.

## **Annex B: Research Report – David Yuill**

TC 1.2 – Instruments and Measurements  
2021 Annual Meeting (virtual) Research Report  
Developed by David Yuill, Research Subcommittee Chair  
June 29, 2021

TC 1.2 does not have any current RTARs, WSs, or ongoing research projects, as far as I know. I asked our research liaison to confirm this, but didn't get an answer.

Society Research Administration Committee (RAC) Communication  
We have had no communication from RAC or our research liaison since February 8, and no Research  
Breakfast meeting was held during the Annual meeting in June, 2021.

At the February meeting, RAC reported that:  
Research funding is severely limited because of loss of revenue from the winter expo, and reduced fundraising related to the pandemic. They prioritized ongoing projects, and held off funding new projects, grants, grants-in-aid, and scholarships. Nevertheless, they encouraged us to continue development of RTARs and WSs, so that they are ready to bid when funding becomes available.

A new process is in place for funding development of publications. The publication topic acceptance request, PTAR, is similar to RTARs, but intended for publication development.