

## TC 1.2 – Instruments and Measurements: Winter 2018

### Meeting Minutes - Main Committee Meeting

1:00 – 3:30 PM, January 23, 2018; Palmer House – Montrose 2 (7)

*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>	
Steve Idem	Tennessee Tech Univ.	<a href="mailto:sidem@tntech.edu">sidem@tntech.edu</a>	Voting
Frank Spevak	Energy Conservatory	<a href="mailto:fspevak@energyconservatory.com">fspevak@energyconservatory.com</a>	
Mike Wegenka	Trane	<a href="mailto:mwegenka@trane.com">mwegenka@trane.com</a>	Voting
Terry Beck	Kansas State Univ.	<a href="mailto:tbeck@ksu.edu">tbeck@ksu.edu</a>	
John Scott	Natural Resources Canada.	<a href="mailto:john.scott@canada.ca">john.scott@canada.ca</a>	
John Neel	Johnson Controls/Frick	<a href="mailto:john.l.neel@jci.com">john.l.neel@jci.com</a>	Voting
Dr. David Yuill	University of Nebraska	<a href="mailto:dyuill@unl.edu">dyuill@unl.edu</a>	Voting
Dr. Amir Jokar	Exponent, Inc. (Thermal)	<a href="mailto:ajokar@exponent.com">ajokar@exponent.com</a>	
Eric Anderson	Anderson Engineering	<a href="mailto:eanderson@aenpi.com">eanderson@aenpi.com</a>	
Craig Bradshaw	Torad Engineering	<a href="mailto:craig.bradshaw@toradengineering.com">craig.bradshaw@toradengineering.com</a>	Voting
Hongmei Liang	Carrier	<a href="mailto:hongmei.liang@carrier.utc.com">hongmei.liang@carrier.utc.com</a>	Voting
Stephen Wage	Intertek	<a href="mailto:stephen.wage@intertek.com">stephen.wage@intertek.com</a>	
Eric Brinkman	Oklahoma State Univ		Visitor
Dr. Som Shrestha	Oak Ridge National Lab	<a href="mailto:shresthass@ornll.gov">shresthass@ornll.gov</a>	
Robert A Moss	Dwyer Instruments	<a href="mailto:rmoss@dwyermail.com">rmoss@dwyermail.com</a>	
Brandon Kelley	AAON	<a href="mailto:BWKelley34@gmail.com">BWKelley34@gmail.com</a>	
Steven Rogers	The Energy Conservatory	<a href="mailto:srogers@energyconservatory.com">srogers@energyconservatory.com</a>	Visitor

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

- 1. Call to order/introductions/establish quorum: David Yuill**  
6 of 8 voting members are present. Quorum of 4 was established.  
5 YEA members present.

Attendance:

**VM (Present):** Michael Wegenka, Hongmei Liang, Steve Idem, David Yuill, Craig Bradshaw, John Neel

**VM (Absent):** Huojun Yang, Lloyd Le

- 2. Review of the agenda and ASHRAE Code of Ethics**

David read the ASHRAE Code of Ethics.

David reviewed the agenda.

- 3. Review and approval of minutes from the Long Beach summer meeting**

Motion to approve minutes by Mike Wegenka and seconded by Hongmei Liang. Motion carried: (8-0-0-2 Chair not voting).

#### **4. TC Chair's breakfast –David Yuill**

Notes from TC Chair Section 1 Meeting

Sunday 1/21/18– Palmer House – Chicago, Ill.

Notes of significance to TC 1.2 Instruments and Measurements:

- Hightower Award recipient is Art Halstrom
- 125<sup>th</sup> year anniversary of ASHRAE will occur in 2 years. Technical papers are being asked to be submitted in part of the celebration.

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#### **5. Liaison reports**

Section head: Amir Jokar came and requested that we give him any comments to take back to the Section head meeting on Wednesday. He went over several of the same issues that David had discussed from the section head meeting. He also brought up the new website capabilities.

#### **B. Standards – Jim Douglas**

Jim gave a report on SSPC 41. A written report is included as an Annex B to these minutes.

The vote at Las Vegas was passed to withdraw the standard (8,0,0,1 chair voting). Jim will notify Mark Weber of the action. Jim will follow up to confirm this was approved by ASHRAE standards.

#### **C. Handbook – Terry Beck**

The committee's handbook section has been completed and submitted to ASHRAE.

We will start the process of reviewing it again for the next update.

Terry will be submitting a new spreadsheet to the TC1.2 committee to sign up for the next update work.

#### **D. Research – Frank Spevak**

Frank gave a report on the research subcommittee chairs' breakfast. A written report is appended to these minutes in Annex A.

- 1) We voted to co-sponsor with TC8.11 an RTAR #1824 for research work to determine the "Barometric Pressure Impacts on Psychrometric Performance testing of Unitary Air-Conditioning and Heat Pump Equipment". The Work

statement will need to be reviewed when completed. We will need to have at least one technical reviewer from our committee involved on the review process.

- 2) Discussion of future project about Bell Grid capture hood was discussed and the possibility of co-sponsoring it with TC 7.7 – Test and Balance

**E. Programs Subcommittee Chair's report – Steve Idem**

Nothing was formally reported but a discussion about the following was done.

Flow measurement technics for capture hoods seminar was approved and will be given on Tuesday afternoon in Chicago. Steven Rogers and Robert Moss will be the presenters. Title “How Accurate is Your Air Flow Capture Hood Measurement?”

TC1.3 requested we join them in a seminar on Advanced Measurement techniques by Melanie Derby. We were asked to supply people to contribute to the speakers at the seminar. Also Steve Idem will review the request with Melanie for more details.

**F. Membership – David Yuill/ Jim Douglas gave the update.**

Voting members rolling off as of 6/30/18:  
Mike Wegenka

Voting members rolling on as of 7/1/18:  
Jim Douglas  
Terry Beck  
Conner Hayes  
Victor Cincola

This will bring the voting membership to 9 and 1 non quorum.

**As of 7/1/18:**

David Yuill: Chairman  
Victor Cincola: Vice Chairman  
Jim Douglas: Secretary/ Standards  
Frank Spevak: Research  
Craig Bradshaw: Webmaster  
Stem Idem: Programs

**Voting membership for the summer meeting:**

David Yuill  
Steve Idem  
Craig Bradshaw – non quorum  
Mike Wegenka  
Lloyd Le  
Hongmei Liang  
John Neel  
Huojun Yang

Quorum will be set at 4 (7 members and one non-quorum voting member)

Some attendees had interest in becoming members.

**G. Website status report – Michael Wegenka**

Mike will be retiring prior to the next meeting and Craig Bradshaw will become the new webmaster for the committee.

**H. New/Unfinished business:**

Committee thanked Mike Wegenka for his over 20+ years of service to ASHRAE.

**I. Adjournment:**

Michael Wegenka motioned to adjourn. Meeting concluded at 2:52 PM.

## **Annex A: Research Report – Frank Spevak**

Notes from Research Subcommittee Chair Breakfast Chicago 2018 January 22, 2018

The recipient of the Service to ASHRAE Research Award was presented to Brian Silvetti of TC 6.7.

ASHRAE Research has increased the frequency of submissions for RTARs and Work Statements. Additional deadline is March 15 along with May 15, August 15 and December 15.

A Project Monitoring Subcommittee training webinar was held on November 1 and had 88 attendees. Another webinar will be scheduled for Spring 2018.

ASHRAE is looking to increase the technology transfer of research. Reminder that each research project requires a disposition form that asks what will happen to the research such as presentation, publication and more. Want more participation with CTTC and Research Promotion. ASHRAE Marketing team will try to provide help.

### At this meeting-

2 RTARs considered – both accepted with comments

2 WS considered but both returned with comments

Voted to release 11 TRP on Sunday and will consider 4 more on Wednesday.

### Awards –

The recipient for the Homer Adams award has been selected and will be announced soon

Selected 6 finalists for the Innovative Research Grant proposal

New investigator award will be reviewed and selected in the next few months as there were 40 proposals submitted

### Reminders –

Full votes of sponsoring AND co-sponsoring TCs on RTARs and WS must be included on submission forms

PES and PMS need to ensure multi-disciplinary interaction – members from the co-sponsoring groups need to be represented

Conditionally approved RTARs must acknowledge how the conditions have been met

WS must include milestones that act as a stage gate process

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

SSPC41 met of Sunday, January 21 from 1 to 3 p.m. at the Palmer House Hotel. Room number - Clark 3 on the 7<sup>th</sup> floor. The subcommittee reviewed the progress of all of the 41 series standards that are currently in progress as well as those that will be coming up for periodic maintenance.

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

41.1-2013 revision subcommittee met to review the latest working draft on Tuesday, January 23rd, from 10:00 AM to noon in Clark 10 on the 7th floor of the Palmer House. The proposed 41.1 Title, Purpose, and Scope (TPS) changes were approved by the ASHRAE Standards Committee yesterday (January 20, 2018). Good progress was made in the standard and the committee got through the standard to Section 8. New members and guests are always welcomed. (1<sup>st</sup> Draft is expected after the summer 2018 meeting)

#### **Subcommittee 41.2, Standard Methods of Air Velocity and Airflow Measurement – T. Beck**

The third 41.2 ISC PPR began on November 10, 2017 and concluded on December 25, 2017. There were no public review comments from the third 41.2 ISC PPR, so ASHRAE staff will proceed with the publication of Standard 41.2-2018. This new version is a significant update of the previous version, and now includes air velocity measurements in addition to airflow measurements. (As of this date this standard is out for publication)

#### **Subcommittee 41.3, Standard Methods for Pressure Measurement – D. Collings**

41.3-2014R revision subcommittee met earlier today to review the latest working draft with progress being made on the first half of the standard. Action assignments were assigned. New members and guests are always welcomed.

Goal of the first PPR is in summer 2019.

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

41.4-2015R revision subcommittee met to review the latest working draft on Monday, January 22nd, from 4:15 to 6:15 PM in Clark 10 on the 7th floor of the Palmer House. Committee was hoping to accept and finish current draft to submit to the SSPC41 for voting but after additional reviewing the committee decided to work more to clarify the draft prior to submitting it to the SSPC41 for PPR vote. New estimate to finish is by summer 2019. New members and guests are always welcomed.

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

41.6-2014R revision subcommittee met to review the latest working draft on Monday, January 22nd, from 10:00 AM to noon in Clark 10 on the 7th floor of the Palmer House. New members and guests are always welcomed.

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

41.7-2015 is due for periodic maintenance. Consequently, SSPC 41 is being asked to vote to Reaffirm, Revise, or Withdraw this standard. John Scott recommends Reaffirmation because:

- All of the references are still current or can be updated during reaffirmation.
- This standard is technically correct.
- This standard meets ASHRAE's mandatory language requirements.

**Motion:** *SSPC 41 recommends that ASHRAE Standards Committee Reaffirm 41.7-2015.*

Motion to reaffirm was made by John Scott and seconded by Mike Wegenka. Vote was taken and passed (18,0,1,1) at the meeting. Rick Hall will send a continuation letter ballot to all of the SSPC 41 voting members who were not present at this meeting. Final results will be added after the letter ballot result.

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

41.8-2016 will be due for periodic maintenance in January 2019.

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

In November, the SSPC 41 voting members approved a letter ballot recommending that the ASHRAE Standards Committee approve the proposed first 41.9 Publication Public Review (PPR) draft for public

review. The ASHRAE Standards Committee approved the first 41.9 PPR draft yesterday (January 20, 2018).

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

41.10-2013 revision subcommittee I met to review the latest working draft on Tuesday, January 23rd, from 8:00 AM to 10:00 AM in Clark 10 on the 7th floor of the Palmer House. The proposed 41.10 Title, Purpose, and Scope (TPS) changes were approved by the ASHRAE Standards Committee yesterday (January 20, 2018). The committee reviewed over half of the standard and assigned action items for the next meeting. New members and guests are always welcomed.

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

41.11-2014R revision subcommittee was held on Monday, January 22nd, from 2:15 to 4:15 PM in Clark 10 on the 7th floor of the Palmer House. The committee reviewed most of the standard and assigned action items for the next meeting. New members and guests are always welcomed.