MEETING MINUTES
TC 1.2 Instruments and Measurements
Albuquerque, New Mexico, June 29, 2010
Place: Albuquerque Convention Center, Estancia

These minutes have been approved by TC 1.2 and are the official, approved record of the TC 1.2 meeting in Albuquerque, New Mexico. Votes cast during this meeting are in the format #for-#against-#abstain-#absent.

1. MEETING:
1.1. The meeting was called to order at 1:05 p.m. by Chairman, Pat Collins. Introductions were made and a quorum was established with 6 voting members present.

2. AGENDA:
2.1. Pat Collins reviewed the items for the meeting.

3. MEETING MINUTES:
3.1. The committee reviewed the Orlando prepared by Ron Moncrief.
3.2. Frank Spevak moved that the committee accept the minutes of the Orlando meeting with revisions. Jim Douglas seconded. The minutes were approved 6-0-0-2.

4. LIAISON REPORTS:
4.1. Rick Hall reported on the standards meeting in the absence of a standards liaison. There is a new mechanism for SPCs to get feedback from the community on controversial issues called the Advisory Review for Standards. It is a Word document which includes the Title, Purpose and Scope and an informational statement which explains the standard. Comments are informal for information only with the goal of settling controversial topics.

4.2. Victor Penar, TAC Section 1 Head, was asked about the committee roster. He stated that the roster will be published after the Albuquerque meeting. He discussed ASHRAE’s promotion of webinars for subcommittee working meetings. He also stated that website assistance is available from ASHRAE, if needed.
5. MEMBERSHIP

5.1. Pat Collins stated that he had not received the committee roster. Later Victor Penar, Section 1 Head, stated that it would be published after the meeting.

6. TC / TG CHAIRMAN’S BREAKFAST MEETING:

6.1. Steve Idem reported on the TC / TG Chairman’s breakfast. TCs are to place objectives for the upcoming year on the TC website. Input on the Strategic Research Plan was requested. TCs were asked to keep the committee website current. Thank you letters are available from the ASHRAE website and can be requested online by any ASHRAE member. Nominations for the Hightower Award are due 9/1/2010.

6.2. A TC Help Wanted section will be added to then ASHRAE website. Contact Mike Vaughn for more information. ASHRAE will set up web meetings for TCs or TC subcommittees. For casual subcommittee working meetings no minutes are required. Only technical papers can be used to fulfill a contractual requirement for a research project.

7. HANDBOOK:

7.1. David Yuill gave the handbook report in Terry Beck’s absence. David said that the CD+ no longer exists due to financial reasons. The ASHRAE Handbooks are available online to ASHRAE members for $49 per year.

7.2. David stated that research projects should generate something useful (figures, spreadsheets, etc.) which can be added to the handbook. The deadline for submittal of TC handbook chapter is May of 2012.

8. RESEARCH:

8.1. Frank Spevak stated that ASHRAE research award nominations are due. Co-funding sources for ASHRAE research projects are available from several sources including the U. S. Green Building Council, the California Energy Commission and SMACNA. ASHRAE research donations of at least $1000 may be earmarked for a specific project or research category.
8.2. The ASHRAE Strategic Research Plan has been published. All ASHRAE research must have a goal and it can be approved although it doesn’t fit the goals in the Strategic Research Plan. Any RTAR submitted before 7/1/2010 must fit the goals in the old Strategic Research Plan.

8.3. The research budget for 2010-2011 is $2,927,000. All of these funds have been committed except $300,000 which could fund a maximum of four research projects. For 2011-2012 from $1.7M to $2.2M should be available for new projects. The total research budget for 2011-2012 is approximately $3,000,000 and $800,000 has already been committed for approved research projects.

8.4. The research manual has been revised to include references to the Strategic Research Plan, and more forms (including evaluation forms).

8.5. Deliverables for ASHRAE research projects must be either a HVAC&R research paper or an ASHRAE technical paper. HVAC&R is now published by Taylor and Francis.

8.6. RESEARCH-RP 1245: Determine the Effect of Duct Fittings on Air Velocity Measurements.
   8.6.1. The RP1245 meeting was held on Monday but the principal investigator was absent to use this time to work on this project. The project is out of money. The principal investigator had proposed to end the project where it was but this proposal was rejected by the committee. Eighty percent of the data has been taken and seventy-five percent has been analyzed. Data collection should be complete by 9/1/2010.
   8.6.2. The draft report will be available at the meeting in Las Vegas in January, 2011. Frank stated that a no cost extension has been granted until June, 2011.

8.7. Since the research discussion takes a lot of the TC 1.2 meeting time, the committee decided that a separate research subcommittee meeting should be scheduled at future ASHRAE meetings. Any active research Project evaluation committees would also attend this meeting. Pat Collins stated that he would request ASHRAE to schedule this meeting.

8.8. Pat Collins discussed an idea for a future research project to evaluate humidity sensors including wet bulb aspirators. He also stated that in the near future there will be several manufacturers which will meet ASHRAE standards. James Schaefer agreed to prepare an RTAR for this project.
9. **STANDARDS:**

9.1. Jim Douglas reported that the SSPC 41 Standards Committee met on Sunday and attendance was good. Jim and others discussed the status of each 41 series standards subcommittee. For more details see the SSPC 41 minutes on the TC 1.2 website.

9.2. SSPC 41 Status Reports from Subcommittee Chairs

9.3. Subcommittee 41.1, Pat Collins, Chair, Standard Methods for Temperature Measurement:

9.3.1. Will add new information on IR temperature sensors, and clarify the use of thermopiles. James Schaefer will perform the uncertainty analysis for this standard. The goal is to have 41.1 issued for public review by January 2012.

9.4. Subcommittee 41.2, Terry Beck, Chair, Standard Methods for Airflow Measurement:

9.4.1. Pat Collins reported in Terry Beck’s absence that the Subcommittee 41.2 met and discussed whether pitot tube traverses should be included in this standard. The goal is to have 41.2 issued for public review by January 2012.

9.5. Subcommittee 41.3, Frank Spevak, Chair, Standard Methods for Pressure Measurement:

9.5.1. Frank Spevak reported that the subcommittee met with seven attending. The subcommittee completed the body of text. The two tasks remaining are to verify references and obtain drawings from ASHRAE. This standard may be ready for SSPC vote in January, 2011.

9.6. Subcommittee 41.4, Jim Douglas, Chair, Standard Methods for Proportion of Lubricant in Liquid Refrigerant Measurement:

9.6.1. Jim Douglas reported that the subcommittee met with eight attending. The subcommittee reviewed the uncertainty analysis prepared by Mike Wagenka and new reference tables.

9.6.2. A draft of this standard will be sent out to subcommittee members before the January, 2011 meeting.

9.7. Subcommittee 41.6, Pat Collins, Chair, Standard Methods for Humidity Measurement:
9.7.1. Pat Collins reported that the subcommittee met and no major decisions were made. The RP 1260 research project was discussed.
9.7.2. The goal is to complete 41.6 for public review by January 2012.

9.8. Subcommittee 41.7, John Scott, Chair, Method of Test for Measurement of Flow of Gas, and Subcommittee 41.8, John Scott, Chair, Standard Method for Measurement of Liquids in Pipes Using Orifice Flow meters:
   9.8.1. The subcommittees met concurrently with six attending. Standard 41.7 is about fifty percent and is on schedule to be completed by January, 2012.
   9.8.2. John stated that Standard 41.8 is also on schedule to be completed by January, 2012.

9.9. Subcommittee 41.9, Rick Hall, Chair, Standard Methods for Volatile Refrigerant Mass Flow Measurement Using Calorimeters:
   9.9.1. Rick Hall reported that all action items are complete, all references have been checked. A revised draft standard will be sent to the subcommittee ASAP.
   9.9.2. This standard should be ready for public review on July 23, 2010 and should be published in the spring of 2011.

9.10. Subcommittee 41.10, John Scott, Chair, Standard Methods for Volatile Refrigerant Mass Flow Measurement Using Flow meters:
   9.10.1. This standard was published in 2008 and is not actively being revised.

9.11. Subcommittee 41.11, Rick Hall, Chair, Standard Methods for Power Measurement:
   9.11.1. Rick Hall reported that a preliminary draft has been prepared but there are many voids. Action items have been assigned.
   9.11.2. Rick stated that the subcommittee is pushing to meet the public review deadline of the summer of 2012.


9.13. Jim Douglas reported that AHRI has asked him to be a liaison to report all ASHRAE 41 Series Standards action items to AHRI.
10. PROGRAMS SUBCOMMITTEE:
   10.1. Steve Idem stated that in response to the discussion on velocity measurements made regarding research project RP 1245 and other committee discussion, he would submit a request for a forum at the Las Vegas meeting. The title of this forum will be: “Does ASHRAE need a velocity measurement standard to support the development of energy efficiency standards?”

11. WEBSITE:
   11.1. Frank Spevak stated that the website is up to date.

12. OLD BUSINESS:
   12.1. None.

13. NEW/UNFINISHED BUSINESS:
   13.1. None.

14. ADJOURN MEETING:
   14.1. John Scott moved that the meeting be adjourned, Frank Spevak seconded, and the motion was approved 7-0-0-0. The meeting adjourned at 3:27 p.m.

ATTENDEES:
Patrick Collins (VM), James Douglas (VM), Steve Idem (VM), Ron Moncrief (VM), John Scott (VM), Frank Spevak (VM), Mike Wegenka (VM)
Rick Hall (CM), Charlie Wright (CM), David Yuill (CM)
James Schaefer