

TC 1.2 Instruments and Measurements
Meeting Minutes
Anaheim, California – January 27, 2004

- I. Meeting called to order at 1:09 p.m. by Chairman, Jim Clarke.
- II. Frank Spevak moved that the committee accept the minutes of the Kansas City meeting. John Scott seconded. The minutes were approved 6-0-0.
- III. Section Head Report: Jim Clarke

Jim Clarke reported that there is a push from ASHRAE to get TC web sites up and running. Frank Spevak stated that he has the ASHRAE templates needed to set up the web site.

Improvements are needed in the ASHRAE handbook such as adding more examples. A typical example is to include actual energy consumption data with a load calculation example to enable the comparison of calculated results with performance data. Cross references must be accurate. TC's are encouraged to develop programs to improve the handbook. Results of research projects should be added to Handbook. International expertise should be utilized to improve handbook.

Terry Beck stated that he will provide a copy of the papers which resulted from the Kansas State research project on rotating vane anemometers.

- IV. Research: Frank Spevak

Priority 1 – WS 1245 - *Determine the Effect of Duct Fittings on Air Velocity Measurements.*

Frank Spevak discussed the actions of the Research Administration Committee (RAC) at the meeting in Atlanta last fall. The RAC voted 9-0-0 to accept with condition for minor revisions. The RAC asked TC 1.2 to answer 10 questions which Frank discussed.

Priority 2 - *Factors Affecting Accuracy of Airflow Measurements with Capture Hoods*

Frank Spevak stated that he has not worked on this project.

Jan Sundell asked about the use of the tracer gas method to measure ventilation rates in homes. Frank referred Jan to TC 6.2, Central Units. Charlie Wright suggested that this might be a good topic for a forum or a seminar. What is the most cost effective method for a test which does not disturb the occupants and lasts one week? Frank suggested that Standard 152P, which is scheduled to be published late in 2004 covers the efficiency of distribution systems. It attempts to deal with the house as a system. This topic could be explored in a research project.

David Yuill asked the committee if there is interest in research to determine the minimum airflow that can be measured in a VAV box.

- V. Standards: Jim Douglas

NOTE: Jim Douglas reviewed the status of TC 1.2 Standards at the Anaheim meeting but has not provided the detailed report needed for the minutes. This information will be added to the minutes when it is received.

- 1. *Standard 41.1-1986(RA2001) – Standard Method for Temperature Measurement*

Jim Clarke volunteered to serve on committee.

2. *Standard 41.3-1989R - Standard Method of Pressure Measurement*

John Scott volunteered to serve on committee.

3. *Standard 41.4-1996 – Standard Method for Measurement of Proportion of Lubricant in Refrigerant.*

Donald Sims provided names of people who may be willing to serve on committee.

4. *Standard 41.8-1989R - Standard Method of Measurement of Flow of Liquid in Pipes Using Orifice.*

John Scott asked if Standard 41.8 is needed. Is it redundant with ASME standard? Jim Douglas asked if new terminology should be submitted to ASHRAE terminology committee.

VI. Programs: Stephen Idem

- A. “Building Differential Pressure Diagnostics”
Frank Spevak will chair this Anaheim seminar and has four speakers. The title will be “Pressure Diagnostics in Commercial Buildings, Hospitals and Laboratories”.
- B. “What Changes are needed in Standard 41.1, Temperature Measurement?”
This forum was held on Sunday, January 25. Todd Hardwick stated that no new committee members were recruited and there one comment was made on Standard 41.2
- C. IAQ Symposium
This symposium will be titled “State of the Art in Air Contaminant Measurements”. Steve Idem will issue a call for papers. This symposium is tentatively scheduled for the ASHRAE meeting in Orlando, Florida.
- D. What are the Problems with Humidity Sensors?”
- E. “Validation of Instruments in Building Automation Systems”.
Charlie Wright stated that this program should remain on the list.
- F. “Chemical/Biological Sensors and Their Application”
The committee discussed the development of this program as a forum / seminar. Todd Hardwick volunteered to try to identify possible speakers. Charlie Wright suggested that F be combined with C.

VII. Handbook

Terry Beck stated that he has received feedback on five sections in the chapter. Six members of the committee met to review these sections. Comments are needed on the remaining sections (Humidity measurement, pressure measurement, airtightness, CO2 measurement, electric measurement, rotative speed measurement, sound and vibration measurement, thermal comfort measurement, etc. Terry plans to prepare a revision for email vote before May.

VIII. Membership

Steve Idem stated that he issued a call for membership but he has not received any responses to the call.

Jim Clarke stated that no voting members are rotating off the committee at the end of the Annual meeting in June.

David Yuill volunteered to become a voting member.

Xiaohui Zhou and Len Damiano requested corresponding membership effective at the end of the Annual meeting in June.

IX. Website

See Section Head report for website information.

X. New/Unfinished Business

Charlie Wright suggested that TC 1.2 schedule a standards / handbook subcommittee meeting for all future ASHRAE meetings starting with the meeting in Nashville in June. Jim Clarke stated that he will request a meeting time.

XI. Adjourn Meeting

Frank Spevak moved that the meeting be adjourned, John Scott seconded, 6-0-0. The meeting adjourned at 3:12 p.m.

Attendees:

Jim Clarke
Len Damiano
Steve Idem
Frank Spevak
David Yuill

Terry Beck
James Douglas
Ron Moncrief
Jan Sundell
Xiaohui Zhou

Donald Bivens
Todd Hardwick
John Scott
Charles Wright