

TC Cover Sheet
TC 6.3, Central Heating and Cooling

June 27, 2007

Attendance (ending year of membership)

Members Present

Paul Francisco (08)
Roger Hedrick (10)
Steven Tice (07)
Jeff Siegel (07)
James Cummings (07)
Keith Temple (09)
Iain Walker (08)
Michael Lubliner (09)
Dianne Griffiths (10)
Mark Modera (08)
William Rittelmann (07)

Members Absent

Evelyn Baskin (08)
Charles Gaston (10)
Gary Nelson (07)
Bryan Rocky (07)
Harvey Sachs (10)
Arun Vohra (07)

Distribution

All entries shown on committee roster

Corresponding Members Present

Mark Olsen

Guests

Jon Douglas
Mark Cherniack
David Springer
Collin Olson
Bruce Wilcox
Byron Horak
George Yaeger
John Talbott
Sunil Nanjundaram
David Hales

ASHRAE TC6.3
Central Forced Air Heating and Cooling

Minutes of Meeting
June 27, 2007
Long Beach, CA

Call to Order

The meeting began at 1:05 p.m. in room 201A of the Long Beach Convention Center. A quorum was present. Copies of the agenda and the Dallas minutes were distributed and introductions were made. The voting membership was reviewed. There will be seven members rolling off at the end of the society year, with some replacements. There will be 13 members for the next society year.

Minutes of Last Meeting

Walker moved, Lubliner second, to approve the minutes, with the revision that the attendance list be checked and possibly corrected. Motion passed 11-0-0.

Announcements

Chair Paul Francisco discussed various items from the TC Chair's breakfast. Everyone needs to check their bio and bias forms. There was reportedly a problem with the bio and bias database at ASHRAE. The TC website needs to be updated as it is seriously out of date.

There is money available for research, so it is a good time to get research projects submitted.

The research liaison reported that Tech Council rescinded a prohibition that work statement authors are not allowed to bid on projects.

Subcommittee Reports

Handbook

The two chapters for which the TC is responsible, 9 and 28 of Systems and Equipment, need to be turned in now. Chapter 9 was revised last time, and the TC is concentrating on Chapter 28. There have been some extensive changes lately, so the version that was circulated last time is not what is currently in the chapter.

Walker moved, Siegel second, to approve Chapter 9 for republication without revision. Lubliner noted that some of the material should be updated because Standard 152 had not been published when the chapter was last revised. He recommended that changes be prepared for subsequent electronically published revisions. Motion carried 11-0-0.

On the Chapter 28 material, most of the changes since the last distribution were cleanup, removing outdated references, and fixing up language. Cummings moved, Temple second, to approve Chapter 28 as revised for publication. It has been reviewed or edited by about 7 or 8 members of the committee. Motion carried 10-0-1 (Modera, since he has not reviewed it).

Programs

Keith Temple circulated the program plan. Iain Walker discussed the Tuesday morning Transaction session, which had attendance of about 25. There were four papers, which made for a tight time line. He suggested that ASHRAE needs to focus more attention on manufactured housing. Mike Lubliner discussed the seminar scheduled for Wednesday morning on heat pump systems. There is also a Wednesday morning forum on air distribution system commissioning in small commercial buildings.

The program plan (Attachment 1) includes two seminars and a forum for New York. The seminar on Climate Optimized Cooling is proposed as the number 1 priority, and was discussed by Mark Cherniack. This relates to looking at cooling system designs which are optimized for humid or dry climates. The seminar is cosponsored by TC 9.5. The other seminar is listed as priority 2 and is about what is being learned from weatherization programs about HVAC systems. This session is cosponsored by SSPC 62.2. Both seminars have 3 speakers scheduled. The forum on leaky air handlers is priority 3. The forum is also cosponsored by SSPC 62.2. Tice moved, Lubliner second to accept the program plan for New York. Carried 11-0-0.

The program plan for Salt Lake City includes four sessions. Paul Francisco discussed the proposed Transaction session. He has been struggling to get papers submitted. The title was revised to, "Measured Performance of Small Forced-Air HVAC Systems." Moved by Temple, Lubliner second, to approve the transaction session for SLC. Carried 11-0-0.

Mike Lubliner asked for an additional presenter on Forced Air Distribution Systems in the Conditioned Space. Bill Rittelmann briefly discussed the other seminar for SLC on High Altitude Applications and System Performance.

The program subcommittee was concerned about ASHRAE's scheduling practices. The transaction session had four papers in 90 minutes, which was too short. The subcommittee proposed that a letter be written to ASHRAE to complain that available time slots do not include one that is suitable for a four paper session. Iain Walker pointed out that this session looked like it might only have two papers until late in the process. Mark Modera asked what action ASHRAE should take. Paul Francisco stated that he would like to see that all sessions have at least 30 minutes per speaker. Mike Lubliner and Mark Modera pointed out that there has been a decline in the number of transaction papers, and there was discussion of why this might be occurring. Temple moved, Siegel second, that the TC support a letter to be prepared by Paul Francisco, with the proviso that it be written to be constructive. Carried 11-0-0.

Research

Mike Lubliner discussed the Research Subcommittee meeting. The project on latent cooling options will be cosponsored by ARI (\$50,000). John Andrews had been preparing the paperwork for the project, but was absent due to illness. The discussion in subcommittee generated a number of issues that need to be included in the work statement, so the subcommittee will work with John to revise the draft work statement. The hope is that it can be sent out for letter ballot approval in time for submission to RAC by August 15 so a project can be approved in the fall.

An RTAR on heat pump performance is on hold pending related work being done at Purdue.

Bill Rittelmann discussed an idea for research related to room-air diffusion performance of high sidewall diffusers in heating. The subcommittee hopes to get an RTAR out for letter ballot for submission to RAC on the same August 15 timeline.

Mike Lubliner also solicited any ideas for research that anyone might have. He also requested ideas for research related to the new Standard 193P on MOT for air-handler leakage.

Paul Francisco reported on the meeting of the research chairs for TCs related to residential and light commercial buildings. This group is trying to develop a scope document for an AEDG (Advanced Energy Design Guide) on existing residential buildings, including multifamily.

In Dallas, the TC voted to recommend a service award for John Andrews. Paul reported on the progress through ASHRAE of that recommendation.

Standards

Mark Modera described the standards meeting. The TC has two active SPCs, 193P and 152. Iain Walker will be moved forward as chair of SPC 152. Potential committee members have also been identified. Jim Cummings mentioned that there had been interest in possibly including commercial buildings in the standard, although he was not enthusiastic about this. The differences between residential and commercial buildings which create problems for developing a single standard were listed.

The membership roster for SPC 193P was approved by Standards Committee over the weekend. Mike Lubliner is the chair. He discussed what occurred at the SPC meeting and the plans for the standard. Iain Walker presented a draft of the standard to the SPC to provide a starting point. Mike hopes to have a publication public review in the spring.

In Dallas, Mark was given an action item to check on the status of Standard 103. He reported that the standard has galley's completed and it is ready to be published. There are unresolved commenters on the standard.

John Talbott reported on the development of Standard 119, which will set standards on acceptable building leakage. Mike Lubliner asked about the scope. It was reported that the Standard is really about leakage, rather than flow.

Web Site

The website is out of date, and material should be forwarded to Steve Kowalski.

ASHRAE Learning Institute

Chuck Gaston was not present.

Old Business

No old business.

New Business

No new business.

Adjournment

The meeting adjourned at 2:45 p.m.

**TC 6.3 – Program Plan
June 2007**

Meeting	Symposium	Seminar	Forum
Long Beach June 2007 Natural Resource	HVAC System Improvements in Manufactured Housing (Walker) 4 papers Tues 11:00	Heating with Forced Air Heat Pump Systems – Past, Present and Future (Lubliner) 4 speakers Wed 9:15	What is Needed to Commission Air Distribution Systems for Small Commercial Buildings (Wray) Wed 8:00
New York January 2008 Net Zero Energy program due 8/3/07		<i>1. Climate Optimized Cooling: Reality and Future Directions (Cherniack) 3 speakers, TC 9.5 cosponsor</i>	<i>3. Leaky Air-Handlers and Furnaces – Who Cares? (Gaston) 62.2 cosponsor</i>
		<i>2. Lessons about HVAC Systems from Weatherization Programs (Francisco) 3 speakers 62.2 cosponsor</i>	
Salt Lake City June 2008 Benchmarking papers due 9/28/07 program due 2/8/08	<i>Measured Performance of Small Forced-Air HVAC Systems (Francisco)</i>	<i>High Altitude Applications and System Performance (Rittelmann) TC 6.10 cosponsor</i>	<i>Humidity Control Options and Costs</i>
		<i>Forced-Air Distribution Systems in the Conditioned Space (Lubliner)</i>	
Chicago January 2009 Sustainable Urban Design papers due 4/08 program due 8/08		<i>Should Building Cavities be allowed to be used as part of the HVAC Distribution System? (Cummings)</i>	<i>Duct and HVAC Insulation: sweating, noise, energy etc. (Lubliner)</i>
Louisville June 2009 Optimal Air Quality papers due 9/08 program due 2/09		<i>Building and HVAC Pressure Imbalances</i>	
		<i>Standard 193</i>	

Other Potential Topics:

HVAC System Improvements in Modular Homes

Results of ARTI Research Projects

Changes to Standard 152

Energy Tax Credits for Residential HVAC – Is It Working and What Does It Cost? (Rocky) approved for Long Beach

ATTACHMENT 1

TC 6.3 – Past Programs

Meeting	Symposium	Seminar	Forum
Minneapolis June 2000	Field Validation of ASHRAE Standard 152P (Andrews) 21 Attendees	Depressurization and Venting Issues for Residences (Hemphill) 44 Attendees	Residential HVAC in Cold Climates (Jakob) 11 Attendees
Atlanta January 2001		Exploring Alternative Energy Efficiency Factors (Temple) 30 attendees	Residential Cooling and Dehumidification in Hot and Humid Climates (Jakob) 35 attendees
Cincinnati June 2001		Update on Standards for Residential and Light Commercial Central Systems (Haydock) 50 attendees	Experiences with Residential HVAC in HUD-Code Manufactured Homes (Lubliner) 22 attendees
Atlantic City January 2002	Depressurization and Venting Issues for Residences (Jakob) 37 attendees		
Honolulu June 2002		Uncontrolled Airflows in Small Commercial Buildings (Kweller) 50 attendees	
Chicago January 2003	Advances and Issues in Residential Thermal Distribution System Efficiency (5 speakers - Andrews) 35 attendees		What should the “Design of Small Forced Air Systems” Chapter of the Handbook include on Duct Design? (Temple) 7 attendees
Kansas City June 2003	Advances and Issues in Residential Thermal Distribution Efficiency (5 speakers - Temple) 35 attendees	Impacts of Duct Systems on Indoor Air Quality (5 speakers - Siegel) 50 attendees	
Anaheim January 2004	Factors Influencing the Energy Performance of Forced-Air Systems (3 speakers -Lubliner) 60 attendees		
Nashville June 2004	Forced Air Distribution System Performance (5 speakers - Andrews) 60 attendees	Best Choice Cooling System Airflow Rates for Different Climates (5 speakers - Cummings)	
Orlando February 2005		What can ASHRAE Standard 152 Tell Us About Conditioning Our Houses? (4 speakers - Francisco) 20 attendees	
Denver June 2005	HVAC Systems and Performance in Building America Homes (Vohra) 50 attendees	How Should Thermal Distribution Efficacy be Defined? (Rittelmann) 40 attendees	What Often Ignored Factors Affect Performance of Residential Forced-Air Systems (Gaston) 15 attendees
Chicago January 2006	Managing Return Air in Residential and Small Commercial Buildings (3 authors - Francisco) 50 attendees		A look forward to 2020 for small forced-air H and C systems (Rocky) 21 attendees
Quebec City June 2006			The Role of Forced-Air Systems During Extraordinary Events (Siegel) 30 attendees
Dallas January 2007		Design Considerations for Multi-zone Residential Forced-Air Systems (Rittelmann) 50 attendees	

