TC Cover Sheet
TC 6.3, Central Heating and Cooling

February 8, 2005

Attendance (ending year of membership)

Members Present
John Andrews (06)
Paul Francisco (06)
Roger Hedrick (05)
Chuck Gaston (05)
Mark Modera
Evelyn Baskin (08)
James Cummings (07)
Mark Olsen (06)
William Rittelmann (07)
Bryan Rocky (07)
Jeff Siegel (07)
Steven Tice (07)
Iain Walker

Members Absent
Gary Nelson (07)
Martin Petchul (06)
Arun Vohra (07)

Corresponding Members Present
Keith Temple
Diane Griffiths
Frank Jakob
Steve Kowalski
Cyrus Nasseri
Michael Lubliner
Dave Delaquila
Alex Lekov
Paul Haydock

Guests
Hall Virgil
Byron Horak
Carl C. Radcliffe
Peter Biermayer
Collin Olson
LaVonne Burke
Erv Bales
Matthew Ward
Michael Martin
Craig Wray
Bert Phillips
John Talbott

Distribution

All entries shown on committee roster

ASHRAE TC6.3
Central Forced Air Heating and Cooling

Minutes of Meeting
February 8,2005
Orlando, Florida

Call to Order

The meeting began at 1:05 p.m. in Salon IX of the Windsor Ballroom of the Grosvenor Hotel. A quorum was present and introductions were made.

Announcements

Chair John Andrews discussed various items from the TC Chairs breakfast. There have been some changes in the procedures for approval of research projects. Both RTARs that TC 6.3 had submitted were rejected.

Minutes of Last Meeting

Minutes of the Nashville meeting were distributed for review. Moved by Roger Hedrick and seconded by Jeff Siegel to accept the minutes. Motion passed 10-0-0.

Subcommittee Reports

Programs

Keith Temple distributed a program plan (Attachment 1). Keith pointed out that this meeting was the first in two years where the TC did not have a symposium, having presented symposia at the last four meetings. In Orlando, the TC is presenting a seminar. For Denver, a symposium is scheduled, as well as a seminar and two forums.

The seminar, "How Should Thermal Distribution Efficacy be Defined?" chaired by Bill Rittelmann, has four speakers: Paul Francisco, Mark Modera, Bill Rittelmann, and Jim Cummings. Abstracts are due by February 18, 2005. Motion to approve the seminar as the number 1 priority by Hedrick, second by Olsen, motion carried 11-0-0.

The number two priority is a forum, "What Often Ignored Factors Affect Performance of Residential Forced-Air Systems?" Moved by Chuck Gaston, second by Jeff Siegel to approve the forum. Carried 11-0-0. Erv Bales asked whether the TC was interested in cosponsorship with TC 9.5. TC 6.3 affirmed it's interest in such support.

The number three priority was a forum , "The Role of Forced-Air Systems During Extraordinary Events," to be chaired by Jeff Siegel. Moved by Paul Francisco, second by Mark Olsen, carried 12-0-0.

A planned symposium for Orlando was not presented because papers were not received on time. Paul Francisco is optimistic that papers will be submitted in time for the symposium to be held in Chicago.

For Chicago, the TC has planned two seminars. One is on "Performance of Multizone Residential Forced Air Systems," to be chaired by Bill Rittelmann. The other is on "Field

Degradation of HVAC System Performance," which currently does not have a chair. Jeff Siegel volunteered to make a presentation on coil fouling.

John Andrews discussed his desire to work more closely with other TCs who have similar scopes, particularly TC 9.5 and 8.11. Bryan Rocky proposed a forum, "A Look Back from 2020 at Heating and Cooling Develoments."

Handbook

Steve Kowalski discussed handbook activities. The TC is responsible for Chapter 28, Furnaces, of the 2004 HVAC Systems and Equipment Handbook, which will be reissued in 2008. Steve is looking for anyone who has ideas on what changes should be included. The TC included extensive revisions of Chapter 9 of the 2004 handbook including some approaches for moving ducts inside the conditioned space. Other approaches are to move the envelope outside the ducts, which Mike Lubliner is discussing with TC 4.4 on including those approaches in the envelope chapters of the Applications Handbook.

Research

Mike Lubliner distributed the Research Subcommittee agenda. He discussed the ASHRAE Strategic Plan, which did not include residential buildings, which is a problem because RTAR evaluation includes factors of how the project relates to the strategic plan. Mike hopes that his comments at the meeting will cause residential to be included in the plan.

ASHRAE is making changes to accelerate the evaluation of RTARs to reduce the time required to get research projects approved.

The subcommittee heard a report on the PNW Heat Pump project. Frank Jakob discussed with the subcommittee the need for research related to Standard 103. He will seek volunteers from SPC 103 to write RTARs.

Jim Cummings discussed the rejection of the RTAR on "Energy Efficiency and Cost Assessment of Latent Cooling Options," which was rejected based in part on overlap with other pending projects. In particular, there is a project which addresses commercial buildings. Jim investigated the differences between the two projects, which he believes will allow the TC to prepare an RTAR that will be approved.

Mike Lubliner discussed the comments received when RTAR 1378, "Effect of Equipment Parameters on Residential (HP) Forced-Air Systems," was returned to the TC. The objectives of the project needed to be clarified, and there were concerns about the focus on the Northwest U.S. He would like to remake the RTAR to focus on new, higher efficiency heat pumps coming into the market, and extending the data collected in the Northwest to the nation as a whole.

Erv Bales asked whether the TC was interested in cosponsorship of RTAR 1378 from TC 9.5. TC 6.3 affirmed its interest and Erv volunteered to help prepare the revised RTAR.

Standards

Mark Modera reported on the Standards Subcommittee meeting.

Several concepts for new standards were discussed. In the end, the subcommittee came up with ideas for five new standards activities:

1. Update of Standard 152 to include various residential issues

2. Extension of Standard 152 to light commercial buildings
3. Duct system efficacy
4. Air handler performance (from the factory)
5. Measuring flow hood accuracy

The subcommittee ranked the concepts in priority order as numbered above. 1 and 2 had nearly equal scores, as did 3 and 4. Relative to the flow hood concept, there is some activity on the part of the manufacturers to come up with a standard of their own.

The subcommittee will continue to work on developing ideas for airhandler performance related standards. Jim Lutz, through Michael Martin, expressed interest in chairing an SPC on air handler performance. Jim Cummings will provide the TC with information on portions of the Florida code related to air handler efficiency.

Web Site

Stephen Kowalski reported that the website is up on the new server. ASHRAE is encouraging webmasters to become familiar with the new computer systems at headquarters.

ASHRAE Learning Institute

Nothing to report.

New Business

No new business. John Andrews was awarded the "Terrell Owens Award for Playing Hurt," based on his being quite ill on Monday, except John is not a big loser.

Adjournment

The meeting adjourned at 2:50 p.m.

ATTACHMENT 1a

TC 6.3 – Program Plan
February 2005

Meeting	Symposium	Seminar	Forum
Orlando February 2005		***Proposed Priority 1:*** *What do we know about Standard 152? (4 speakers - Francisco)*	***Proposed Priority 2:*** *What Often-Ignored Factors Affect Performance of Residential Forced-Air Systems (Gaston)* ***Proposed Priority 3:*** *How Should Thermal Distribution System Efficacy be Defined? (Vohra)*
Denver June 2005 program due 2/18/05	HVAC Systems and Performance in Building America Homes (3 authors – Vohra/Lubliner)	*1. How Should Thermal Distribution System Efficacy be Defined? (Rittelmann)*	*2. What Often-Ignored Factors Affect Performance of Residential Forced-Air Systems (Gaston)*
			3. The Role of Forced-Air Systems During Extraordinary Events (Siegel)
Chicago January 2006 papers due 4/1/05 program due 8/5/05	Managing Return Air in Residential and Small Commercial Buildings (4+ potential authors – Francisco)	*Performance of Multi-Zone Residential Forced Air Systems (Rittelmann)*	*Standard 103 Issues (Jakob)*
		Field Degradation of HVAC Systems Performance (**)	
Quebec City June 2006 papers due 9/23/05 program due 2/10/06	*HVAC System Improvements in Manufactured Housing (**)*		
	Field Degradation of HVAC System Performance (Vohra)		

ATTACHMENT 1b

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)	