AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.

1791 Tullie Circle, N.E./Atlanta, GA 30329 404-636-8400

TC/TG/TRG MINUTES COVER SHEET

TC/TG/TRG NO: TC 7.3 DATE: February 1, 2011 LOCATION: Las Vegas, NV

TC/TG/TRG TITLE: Operation and Maintenance Management

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MEMBERS PRESENT	YEAR APPTD	ADD'L ATTENDEES		YEAR APPTD	MEMBERS ABSENT	YEAR APPTD
Michael R. Brambley (v)	2006-11	Dan Veronica			Charles E. Dorgan	1984
Shailen Verma (v)	2008-12	William Ryan			Joseph A. Driscoll	2000-02
Thursten D. Simonsen (v)	2008-13	Chariti Young			Ecton English	2005-06
Michael E. Khaw (v)	2006-12	Christopher F. Benson			Richard D. Goulet	2007
J. Davidge Warfield (v)	1994-13				Ashok N. Kadakia	2006
Chuck Dale-Derks (v)	2006-11	MEMBERS ABSENT			Michael J. King	1998
Richard A. Danks (v)	1998-13	Richard H Rooley (v-int'l)		1992-11	Sung Brian Kong	2000
Angela M. Lewis (v)	2009-14	Richard J. Dames (v)		2008-12	Anthony P. Lolas	1991
Robert G. Baker	2001-10	Robyn Ellis (v)		2008-14	Zoltan Magyar	2003-07
Sonya M. Pouncy	2009	James W. Gartner (v)		1994-11	Alex Martinez	1994
Thomas E. Cappellin	2006-10	Manoj K. Khati		2009-11	William J. McCartney	1986-10
Kevin Fallin	2010-12	Joseph R. Anderson		2005-09	Gene M. Meyer	1993
Michael Mamayek	1997-09	Linda M. Austin		1993-03	James P. Miller	1993
ADD'L ATTENDEES		Christopher J. Becker		1994-00	Ross D. Montgomery	2000-02
Wayne Webster		Steven L. Blanc		1998-03	Matthew E. Mullen	1996
Mike Gallagher		Michael F. Bobker		2009	Brian A O'Donnell	1992-06
Dan Veronica		Kirk M. Bond		1994-02	Thomas M. Reinarts	2001-02
J. Patrick Carpenter		Laurence K. Brink, Jr		1980-00	John A. Rieke	1991-95
Amanda E. McKew		James A. Carelock, Jr		1997	T. David Underwood	2002-06
Robert L. Bates		James A. Carlson		1993	Cedric S. Trueman	1986-90

Call to Order/Scope/Introductions

Michael Brambley called the meeting to order at 1:02 PM. The scope of the committee was read. Attendees in the room introduced themselves. An attendance sheet was circulated.

Voting Member Roll Call

Thursten Simonsen took roll call of the voting members. Eight (8) voting members were present of the eleven plus one international (11+1). A quorum was established.

Approval of the Agenda

The agenda for the meeting was presented for approval. There were no requests for revision to the agenda.

Society Liaison and Guest Presentations

None

Approval of Albuquerque, NM Meeting Minutes

The draft meeting minutes from Albuquerque, NM were reviewed. Angela Lewis made a motion to approve the minutes, seconded by Chuck Dale-Derks. In discussion, Angela Lewis made two corrections to the minutes. A name was corrected in the ALI Sub-Committee report, and the current RTAR authors were corrected in the minutes. Angela Lewis withdrew her motion. Angela Lewis made a new motion to approve the minutes as revised, seconded by Chuck Dale-Derks. Approved 7-0-0 (chair not voting).

ASHRAE Administrative Matters/Correspondence/Announcements

- 1. Section 7 TC Chairs Breakfast
 - 2010-11 Hightower Award recipient is Dr. Gary Phetteplace nominated by TC6.2/6.8
 - TC7.3 made a nomination for the Hightower award. The TC was encouraged to continue to submit for this award in the future. Michael Brambley recommended that the TC resubmit the previous nomination for the coming year.
 - Roster update for next society year is due tonight. Michael Brambley will be finalizing.
 - The revised Advanced Energy Design Guidelines are in development, and will be out for public review throughout the spring 2011, with very short review periods. TC members are encouraged to participate in the reviews. Check the AEDG section of the ASHRAE website for further updates.
 - If you need forms, the best place to go is the ASHRAE website. Please check there before contacting headquarters.
 - New type of committee added, an MTG multi-disciplinary technical group.

- Badge scanning has been implemented at this meeting for the first time to track
 continuing education credits. Nearly all sessions at this meeting qualify for NY PDH
 credits, and the CEC hopes to include USGBC credit in future meetings.
- Future meetings will include two general tracks for HVAC Systems and HVAC Applications.
- Eight tentative tracks for the 2012 annual meeting in San Antonio have been announced.
- CEC has volunteered to work with TC Program Chairs on the program abstracts to help improve the quality of the abstract and encourage acceptance of the program into the meeting tracks.
- Google groups are available and encouraged for deliberation and discussion within TC's.
- There is a new Help Wanted section being added to the ASHRAE website for TC's. This is a place for TC's to post to this site, such as requests for volunteers, web administers, etc.
- There is an option for TC's to utilize web meetings, especially for sub-committee meetings and interim meetings. This is sponsored by ASHRAE, and TC's are encouraged to utilize web meetings to reduce face to face meetings where possible. Submit requests to Mike Vaughn. Michael Brambley asked that each of the sub-committee chairs consider using web and tele-conferencing between meetings to move work along, and potentially reduce the time allotted to sub-committee meetings at the winter and annual meetings.
- 2. Upcoming Events Michael Brambley reviewed upcoming events and meetings, and sent information around the table for attendees to copy down details. Additional details may be found on the ASHRAE website under Events.
- 3. Upcoming meeting dates:
 - Montreal, Canada June 25-29, 2011, theme is 'Net Zero Buildings'
 - Chicago, IL January 21-25, 2012
 - San Antonio, TX June 23-28, 2012

Sub-Committee Reports

ALI Sub-Committee – Chair: Davidge Warfield

Davidge Warfield reported on ALI. Several years ago ALI was to do a program on O&M, and several committee members worked on this. At the end of last year, the project was shelved.

Angela Lewis added that Bradley Brooks and herself wrote a 10-chapter module on operations and maintenance for the ASHRAE Learning Institute. They expected it would be published by this meeting, but it is now on schedule to be published by the Montreal meeting.

Richard Danks moved that the subcommittee report be approved, Michael Khaw seconded. Approved by unanimous voice vote (chair not voting).

Research Sub-Committee – Chair: Tom Cappellin

Attended by Davidge Warfield, Michael Brambley, Thursten Simonsen, Shailen Verma, Sonya Pouncy, Angela Lewis, Michael Khaw, William Ryan, Dennis Alejandro, Richard Danks, Cedric Trueman, Jojo Castro, Michael Bobker, Tom Cappellin

Funding available for new research projects in 2011-2012 is \$1.3M. There is a healthy backlog of projects ready for delivery to a provider.

TC 7.3 is currently pursuing acceptance of two RTARs:

1574-RTAR: - authored by Davidge Warfield: "Training Requirements for Advanced Building Operation (High Performance Buildings, Green Buildings, LEED, etc.) to Optimize Sustainability and Achieving Design Expectations."

A copy of the revised RTAR will be distributed within the next two weeks, comments will be considered, and a letter ballot will be taken to approve for submission.

1609-RTAR: - authored by Angela Lewis: "Defining the Capabilities, Needs, and Current Limitations of Building Information Modeling (BIM) in Operations and Maintenance."

Angela Lewis sat in on the GPC 20 committee, and discussed the RTAR. GPC 20 is very interested in working together on this RTAR, and intends to support the effort to have it submitted and move forward. They will plan to provide input and support in the process, and voted to have the RTAR re-submitted as currently written. Chuck-Dale Derks made a motion to approve Angela Lewis to submit her latest version of RTAR 1609 (title above) to the RAC committee, seconded by Shailen Verma. Following discussion, the motion was approved 7-0-0 (chair not voting).

Future RTARS Being Considered by TC 7.3:

- 1. Considered an RTAR for how building operators could be better trained for operating their HVAC systems. Looking for a potential author who would develop this into an RTAR. There was some discussion about focusing on the design professionals, and their role in training the building Owner/Operator on the system they designed, as opposed to just creating training for the building operator.
- 2. An idea was discussed to develop education and learning models for O&M for colleges and universities, based on the ASHRAE Headquarters remodel. Angela Lewis proposed this idea, but was not able to commit to writing it. Looking for an author to work on this RTAR idea. Consideration that Guideline 1.3 may be a potential co-sponsor.

TC 7.3 Meeting Minutes

Tuesday, February 1, 2011 Las Vegas, NV, USA

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Thursten Simonsen made a motion to approve the research sub-committee report, seconded by Michael Khaw. Approved by unanimous voice vote (chair not voting).

Handbook Sub-Committee - Chair: Michael Khaw

Attended by Davidge Warfield, Michael Brambley, Thursten Simonsen, Shailen Verma, Sonya Pouncy, Angela Lewis, Michael Khaw, Dennis Alejandro, Richard Danks, Jojo Castro, Michael Bobker, Tom Cappellin

The handbook, including the TC assigned handbook chapter 38 will be out for publication in July 2011. Michael Khaw has received feedback that the submission is in the final review and edit phase for publication, and proofs will come from the editor in approximately 4-6 weeks. Michael Khaw will call on members of the handbook sub-committee to assist in a final review of the proofs.

Michael Khaw expressed thanks to all of the handbook sub-committee members for their help and hard work in revising the chapter.

Michael Khaw talked about the handbook cycle, and what to look forward to as the new revision cycle begins. The cycle for the next chapter revision will begin in July 2011.

Michael Khaw made a motion to approve the handbook sub-committee report, seconded by Richard Danks. Approved by unanimous voice vote (chair not voting).

Program Sub-Committee – Chair: Angela Lewis

Attended by Bob Baker, Davidge Warfield, Michael Brambley, Thursten Simonsen, Shailen Verma, Sonya Pouncy, Angela Lewis, Michael Khaw, William Ryan, Greg Kowalski, Dennis Alejandro, Richard Danks, Cedric Trueman, Jojo Castro

Las Vegas, NV: January 29 to February 2, 2011

Zero Energy Design

- 1) Seminar 13: "Don't Gamble with your NZEB Maintain it"
 - a. Chair Angela Lewis
 - b. Presenter Bob Baker
 - c. Presenter William McCartney
 - d. Presenter Vern Smith
 - e. Co-sponsored by TC 7.5

Montreal, Canada: June 25-29, 2011

Net Zero Buildings

1) Seminar "Has Your TRAINing Left The Station" (Track 2)

- a. Chair Thursten Simonsen
- b. Presenter from GSA (Richard Danks to contact)
- c. Presenter Marty Weiland (contact provided by Davidge Warfield)
- d. Presenter from Canada (Michael Khaw to contact)

Chuck Dale-Derks made a motion to approve the seminar "Has Your TRAINing Left The Station" chaired by Thursten Simonsen for submission to the Montreal meeting, seconded by Davidge Warfield. Approved by unanimous voice vote (chair not voting).

Chicago, IL: January 21-25, 2012

The Impact of HVAC&R on Our Daily Lives

- 1) Seminar "Coordination of O&M Resources for NZEB" (Track 5)
 - a. Chair Sonya Pouncy
 - b. Presenter Standard 180 (Richard Danks to recommend)
 - c. Presenter Chapter 38 by Michael Khaw
 - d. Presenter Guideline 32 (Michael Bobker to recommend)
- 2) Seminar "Energy Savings Through O&M"
 - a. Chair Angela Lewis (or member of TC 7.8)
 - b. Presenter USGBC rep on Energy Savings, LCA (Angela Lewis)
 - c. Presenter NEA Case Study from Facility Engineering Associates
 - d. Presenter Economic Analysis Program from Corp of Engineers (Richard Danks)
 - e. TC 7.8 to co-sponsor (Angela Lewis to inquire about interest)

San Antonio, TX: June 23-28, 2012

Theme "To Be Determined"

1) Seminar "To Be Determined"

Thursten Simonsen made a motion to approve the program sub-committee report, seconded by Shailen Verma. Approved by unanimous voice vote (chair not voting).

Standards Sub-Committee – Chair: Bob Baker

Attended by Bob Baker, Davidge Warfield, Michael Brambley, Thursten Simonsen, Shailen Verma, Sonya Pouncy, Angela Lewis, Michael Khaw, William Ryan, Greg Kowalski, Dennis Alejandro, Richard Danks

SSPC 180: The committee reviewed and moved to send several additional tables, including an updated equipment list, out for public review as new addendum. Those new addendum should be coming out this spring for public review, pending a letter ballot by the committee.

GPC 32: The committee reviewed comments from the public advisory review. Comments generated several key discussions among the committee. The committee plans to breakout several water checklists in the appendix. The committee expects to go out for public review very soon.

ASHRAE Standards Committee:

- 1) TC 7.3 needs to determine whether to revise, reaffirm, or withdraw Guideline 4, to be discussed further in New Business.
- 2) Discussed Work Plans: Three committees recently turned in detailed work plans (as much as 14 pages). Further discussion is likely to take place, specifically whether more detail should be provided in future work plans, and the benefits this may provide.
- 3) Key Standard Coordination: Discussion regarding coordination between the key standards, specifically to ensure that there are no conflicting issues in the standards. This should be considered by this committee in terms of Guideline 4, and any future revisions.
- 4) Code Interaction Sub-Committee: Standard 180 is now referenced in the IMC and UMC. It is now up to the various jurisdictions to begin referring to this model code.

New business:

1) Guideline 4: Per the Standards Committee manual of operations, the committee needs to reconsider Guideline 4, and recommend reaffirmation, revision, or withdrawal of the guideline. Those in attendance discussed the purpose and scope of the standard and its current application. The conversation indicated a great need to coordinate this guideline and operations & maintenance documentation with commissioning documents and systems manuals. Propose recommending to the committee that we postpone making a decision until the Montreal meeting, and in the meantime the sub-committee investigate how Guideline 4 relates to other standards and guidelines published and in development within the Society. Davidge Warfield volunteered to champion an effort between now and the Montreal meeting to gather more information, and specifically to visit with members of GPC 1.4 Systems Manuals, with Greg Kowalski and Michael Khaw volunteering to assist him in the effort.

Thursten Simonsen made a motion to approve the standards sub-committee report, seconded by Chuck Dale-Derks. Approved by unanimous voice vote (chair not voting).

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Old Business

Website: Chuck Dale-Derks reported that the webpage templates are over 80% edited. He is working with Michael Vaughn, and expects to have the website posted within the next month or two, pending a response by Mike Vaughn regarding the ASHRAE logo and pictures for the website. Once active, Michael Brambley asks that committee members review the website and bring feedback to the next meeting.

Michael Brambley circulated a two page table regarding a letter that the TC Chair was to write (see Albuquerque meeting minutes) to have an O&M program track added to every ASHRAE conference in future meetings. The spreadsheet was a review of program tracks for recent past conferences, and those known for future meetings. Based on the review of track topics, Michael Brambley postponed writing a letter until there was further discussion of the tracks information in the committee. The committee discussed the topic. Based on a review of topics, it appears that while O&M is not a topic in itself, there are program tracks for each meeting where O&M topics will fit in. The committee determined that a plan of action should be formed to discuss the committee's long-term plans, and Michael Bambley asked for volunteers to create a small group to work on this prior to the Montreal meeting. Patrick Carpenter volunteered, with Angela Lewis, Kevin Fallin, Sonya Pouncy, Chris Manson, and Michael Brambley participating. Any others interested, please email Patrick Carpenter or Thursten Simonsen.

New Business

A request was made for the Chair, Vice Chair, Secretary, and Sub-Committee chairs to remain in their positions for an additional year to accommodate a personal situation. Michael Brambley asked if there were any objections, and that they be expressed now or by email by this evening. Michael Brambley will submit the roster this way, unless there are significant concerns expressed.

Next Meeting

The Montreal, Quebec, Canada meeting will be Tuesday June 28, 2011, from 1:00 PM -3:30 PM. Sub-committee meetings will be held on Monday afternoon June 27, 2011 (rooms to be announced). Patrick Carpenter asked that time be allotted during the sub-committees meeting time for long-term planning.

Adjournment

Shailen Verma made a motion to adjourn, seconded by Thursten Simonsen. The chair adjourned the meeting at **3:22 PM**.