

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING
ENGINEERS, INC.
1791 Tullie Circle, N.E./Atlanta, GA 30329
404-636-8400**

TC/TG/MTG/TRG MINUTES COVER SHEET

(Minutes of all Meetings are to be distributed to all persons listed below within 60 days following the meeting.)

TC/TG/MTG/TRG
No. 6.10 DATE 12/30/2014

TC/TG/MTG/TRG TITLE FUELS AND COMBUSTION
DATE OF MEETING 7/01/2014 LOCATION SEATTLE, WA

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Paul Sohler (VM-chr)	6/2013	Tom Butcher (VM-vchr)	7/2010	Diane Jakobs
Tom Neill (VM-sec)	6/2014	Earl Rightmier (VM)	7/2013	Steven Sill
Jennifer Guerrero (VM-hb)	4/2014	David Bixby (CM-std)		Sebastian Raisanen
Bill Roy (CM-re)		Shamel Kassab (VM)	7/2010	Brandon Oyer
Larry Brand (VM)	6/2014	Hall Virgil (VM-NQ)	7/2010	
Mehdi M Doura (VM)	6/2014	Peter Novak (CM)		
George Kusterer (CM)				
Cory Weiss (CM)				
Aykut Yilmaz (CM)				

DISTRIBUTION

All Members of TC/TG/MTG/TRG plus the following:

TAC Section Head: Mark Hegberg (mhegberg@comcast.com)	ADDITIONAL DISTRIBUTION: TCStaff@ashrae.net
TAC Chair: Eric Adams (TACchair@ashrae.net)	
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters:	ASHRAE LIAISONS: Lane Jackins (PL6@ashrae.net) Lawrence Markel (RL6@ashrae.net)
Manager Of Standards Manager Of Research & Technical Services	Stephanie Reiniche (MOS@ashrae.net) Mike Vaughn (MORTS@ashrae.net)

ASHRAE TC6.10 Meeting Minutes

Date: July 1, 2014

Location, Seattle, WA

Chair: Paul Sohler

1. Call to order – Meeting was called to order at 3:32 pm
2. Sign-in and Quorum Determination – Initially a quorum was not established, but later was with the arrival of a 5th voting member.

Review and Approval of New York Minutes - Motion was made and seconded to approve the New York Minutes by a vote of 4-0-0 after a quorum was established.

- 3.
4. Liaison Reports- Paul Sohler provided a brief report on the Section 6 Chair breakfast meeting held on the morning of June 29th.

Handbook – Jennifer Guerrero reported on the 6.10 Handbook meeting held on June 30th. Eight members attended that meeting. . The TC is tasked with updating Chapter 31 and 35 in *Systems and Equipment* and Chapter 28 in *Handbook of Fundamentals*. Chapter 31 is due April 11, 2015. Goal is to have it ready for approval in Chicago. Jennifer reported that Tom Butcher will write up a paragraph on solid fuels by October. Bill Roy reported that David Herrin will write some paragraphs on combustion driven oscillation to be included in Chapter 31. Chapter 31 needs lots of work and any help in reviewing would be appreciated. Chapter 35 is ready for approval. A motion was made and seconded to approve Chapter 35 for publication. 4-0-0

Chapter 28 of Fundamentals is due April 2016. There have been some comments about the need for bio fuel coverage in this chapter, but no one has volunteered to work on this thus far. Feedback on the use of Dropbox was solicited. No problems were reported, so it will be continue to be used for chapter review.

Mehdi Doura has agreed to take over as Handbook Chair at the expiration of Jennifer's term.

5. Research – Paul Sohler has corresponded with Earl. Rightmier who has not been able to attend meetings of late. Mr. Bill Roy has volunteered to take over the position of research chair.

Mr. Sohler reported speaking to Section 6.6 at the New York meeting about co-sponsoring a follow-up to RP 1517, which would evaluate the combustion driven oscillation model developed in

RP1517 on water heaters. Some interest was expressed by Frank Myers, a member of TC6.6, on working with TC6.10 on this project.

Bill Roy agreed to contact Frank Myers about working together on an RTAR for this project. . Scope will investigate if the methodology established for boilers is valid for tank type water heaters. A question was asked about expanding the scope to fire tube boilers, drum and single tube water heaters. A general discussion took place regarding noise associated with combustion noise based on the geometry and that water heaters generally have different geometry than boilers. It was noted that the previous boiler testing found a low frequency rumble associated with low CO₂ rather than a high pitched sound associated with High CO₂. The suggestion was made not to restrict the scope to of this project to water heaters, but apply the project to combustion noise in general. .

Some design guidelines were presented in the original paper for avoiding combustion driven oscillation however, there were no distinct rules of thumb. Software was not developed; this could be a new project opportunity.

Common venting of condensing appliances was also suggested as a possible research topic. This could include common venting an atmospheric water heater with a condensing appliance using Type B vent, or vent systems designed for multiple condensing appliances. One deliverable from such a project could include updating the ASHRAE handbook chapter on chimneys to include design guide lines for common vented Category III or Category IV appliances.. It was agreed that the first step in such a project would be to identify the barriers to common venting condensing appliances. . It was also reported that CSA is working on a research project looking at common venting. A working group consisting of Tom Neill, Bill Roy, Larry Brand, Paul Sohler, and Aykut Yilmaz was formed to look at possible common venting research topics, and possibly draft an RTAR.

6. Website – Paul Sohler spoke with Tom Butcher regarding updating the roster on the website.. Jennifer Guerrero offered to co-chair the web site. Bill Roy indicated that some tabs do not end up where you would expect and said that he would send Paul Sohler a list of website issues that he thinks need to be addressed. Sebastian Raisanen also volunteered to assist with the Web site.

Action Item: Paul Sohler will talk to Tom Butcher about assistance with the Web Site updating the look and functionality

7. Programs – It was reported that the Portable combustion analyzer program submitted for New York had been rejected Comments regarding rejection were that it did not fit in with the ASHRAE scheme of things for seminars. After some discussion, it was agreed to resubmit this program for Chicago. In addition, it was decided to propose a tour of the Gas Technology Institute (GTI) lab in Chicago, possibly co-sponsored with TC6.3.. Paul Sohler agreed to follow up with Mark Hegberg regarding information on tours, deadlines etc.

8. Standards – David Bixby is currently standards subcommittee chair, but has been unable to attend recent meetings. Paul Sohler indicated that he will contact David to see if he is still available to continue in this position.
9. It was suggested that future TC agendas include a list of ASHRAE standards which are relevant to fuels and combustion and that the Chair identify people attending the TC meeting, who are in a position to report on these standards. Some examples of such standards are SPC155, SPC103, and SPC124.
10. Membership – Paul Sohler provided an update on membership changes going into effect on July 1st. These included:
 - Mr. Craig Girder, Ms. Diane Jakobs, and Mr. Anuj Mistry added as corresponding members.
 - George Kusterer, Bill Roy, and Tom Neill rolling on as voting members (VM),
 - Larry Brand and Shamel Kassab are rolling off as voting members..
11. Old Business – None
12. New Business – None
13. Next Meeting – Chicago 2015

Chicago Program Tracks are:

- **Systems and Equipment:** The proper selection of HVAC&R for a job is critical. This track covers considerations for a proper functioning system.
- **Fundamentals and Applications:** Basic HVAC&R principles are key in any project. Knowing what they are helps to apply in specific projects. This track covers a broad array of pertinent information.
- **New! Industrial Facilities:** Manufacturing and processes can have different requirements for HVAC&R. This track explores design and practices for industrial buildings.
- **New! Large Buildings: Mission Critical Facilities and Applications:** Facilities like data centers have different characteristics. This track looks at what is required for these unique applications.
- **Energy Efficiency:** Energy efficiency is on everyone's mind as energy costs continue to rise. This track covers an array of considerations to help drive toward net zero energy.
- **New! Life Safety:** This encompasses egress, sprinklers, alarms, emergency lighting, smoke barriers and special hazard protection. This track provides the tools for all the factors to consider in life safety and lessons learned.
- **New! Design of Energy and Water Efficient Systems:** The trend is to green sustainable buildings. This track looks at what works and what doesn't to attain these efficient systems.
- **New! Hospital Design and Codes:** Healthcare design takes into account some unique aspects. This track explores design and code requirements to ensure patient comfort.

14. Adjournment – Meeting Adjourned 5:05 PM