

**MINUTES**  
**ASHRAE TECHNICAL COMMITTEE 6.3**  
**RESIDENTIAL AND LIGHT COMMERCIAL CENTRAL FORCED AIR HEATING AND COOLING SYSTEMS**  
**TC 6.3 Forced Air Heating and Cooling,**

**Tuesday, June 22, 2021**  
**1:00 p.m. – 4:00 p.m. ET**  
**Webinar (in lieu of Phoenix, AZ)**

**1. Call to Order – Review Title, Scope and Purpose of TC 6.3**

TC 6.3 is concerned with those central forced air systems used for residential and light commercial building comfort heating and cooling. Responsibility covers the design and performance of the entire system, including equipment, controls, ducts and the interactions of the system with building heating and cooling loads.

*The new title is pending approval from ASHRAE management.*

**2. ASHRAE Code of Ethics – Chair reviewed**

**3. Review Agenda - *brief***

**4. Roster – Chair reviewed the attendance; confirmed 7 voting members present.**

Anuj Mistry (Chair) – Daikin  
Diane Jakobs – Rheem  
Eric Berg – Lennox  
Jon Winkler – NREL  
Paul Haydock – Carrier  
Roy Crawford – JC  
Larry Brand – Frontier Energy

- Roster review ahead of July position changes.

**5. Minutes Approval from Chicago (Virtual) 2021 – No changes**

Motion to approve / 2<sup>nd</sup>: Roy Crawford / Eric Berg

Vote:       **7 – 0 – 0**

**6. Announcements**

- Updates from TC Chairs Breakfast and meeting
  - o [asktac@ashrae.net](mailto:asktac@ashrae.net)
  - o TAC approval of 5 TC mergers:
    - 3.2 & 3.3
    - 8.10 & 8.12
    - 9.4 & 9.8
    - 7.3 & 7.8
    - 10.1 & 10.3
    - More to come
- Section 6 Liaisons – Dawen Lu

## 7. Subcommittee Reports

- a. Handbook (Diane Jakobs)
  - Suggestion to include use of renewable natural gas and hydrogen to furnaces chapter. A number of resources are available including AHRI and CSA research projects. (P Haydock)
  - Add technical aspects of Ultra Low NO<sub>x</sub> furnaces to furnaces chapter. Include aspects of insulation, and the effects of ambient conditions on Low NO<sub>x</sub> performance (July 7<sup>th</sup> meeting). (D. Jakobs)
  - Information – challenges associated with TSM programs for HP systems. Include AHRI 1380 Standard description to the handbook chapter.
  - Miscellaneous – ASHRAE has formed a Decarbonization Task Force. One of the working groups is Grid Building Interactions. (David)
- b. Program (Scott Creamer)
  - Suggestions for programs on alternate fuels. Suggest the impact of Hydrogen as a fuel. Reminded (Alex) that 6.10 has had 2 seminars on the advancement of hydrogen as a fuel to decarbonize where NG is currently being used. GTI is doing a lot of research on hydrogen and the environmental impact.
  - Suggestion made that 6.3 can co-sponsor on future programs for alternate fuels.
  - Suggestion – Appendix M1 – What is the impact on furnace operation and performance? M1 can have an impact on furnace ratings and A/C matchup which can potentially change compliance
  - Las Vegas – Winter 2022 (Jan. 29 – Feb. 2)
    - o [www.ashrae.org/conferences/2022-winter-conference-las-vegas](http://www.ashrae.org/conferences/2022-winter-conference-las-vegas)
    - o Program tracks:
      - 1: HVAC&R Systems and Equipment
      - 2: Fundamentals and Applications
      - 3: Refrigerants and Refrigeration
      - 4: Buildings at 360°
      - 5: Energy System Integration
      - 6: Environmental Health and IEQ in the International Arena
      - 7: HVAC for Industrial and Commercial Purposes – Challenges and Opportunities
      - 8: Refrigerants, Safety, Performance
      - 9: (mini-track, TBA)
    - o Deadlines
      - July 12, 2021: conference papers due
      - Aug 6, 2021: Revised conference papers / final technical papers due
      - Aug 23, 2021: Conference paper accept/revise/reject notifications
    - o Need resubmittal of Thermostat program from previous year (Larry Brand, chair)
- c. Research (Roy Crawford)
  - RTAR, now Work Statement (RP 1910) - Evaluation of Standard 103 Transient Components and Thermostat Cycle Times on the Resulting AFUE
    - o New RAC liaison
    - o Co-funding from AHRI if ASHRAE approves in time.
    - o No money at this time in ASHRAE; review in Las Vegas
  - 62.2 mechanical ventilation in buildings – forced air/mechanical equipment
  - Load based testing
    - o Co-sponsor 8.11 RTARs on load based testing
    - o Scott Creamer is Secretary for 8.11; Eric Berg is Research Chair of 8.11
  - Air distribution and potential to reduce transmission of air borne contaminants (Craig)

- Room air distribution – TC 5.2/5.3
    - Writing guidance on air movement in a room
    - Recommended 6.3 to work with 5.2 / 5.3
    - Need to continue this discussion in future meetings.
  - Optimization of dual-fuel heating
    - Along the lines of decarbonization using HP technologies in northern climates
- d. Standards (Mark Olsen)
  - ASHRAE 103 –
    - Waiting for SRS for consideration (Craig Wray to check on status)
    - Public review ongoing
  - ASHRAE 193
    - Pending response to public comments
  - ASHRAE 152
    - Meeting scheduled to address mandatory language
    - Rewrites to be sent for letter ballot
- e. Website (George Yaeger) – no report
- f. Low GWP – MTG Report (Roy Crawford)
  - Last meeting in April
    - RP 1884 – Adding odorants into low GWP refrigerants
    - RP 1806 – Post ignition risk assessment
    - RP 1855 – Combustion byproducts – literature review
- g. MTG.VIC (Kevin Mercer) – no report
- h. Economizer Subcommittee progress report
  - Meeting held in March.
  - Suggest doing a joint handbook chapter with another TC
  - Consideration for changing the committee name
  - Considering potential research
- i. TC 8.11 Load Based Testing Subcommittee report

## **8. ASHRAE Epidemic Task Force**

## **9. Future Roadmap - MTG – VIC Report**

## **10. Old Business**

## **11. New Business**

- New officers
  - Chair – Eric Berg
  - Vice Chair – Andrew Hjortland
  - Secretary – Paul Haydock

Informative Attendance List:

- Anuj Mistry
- Larry Brand
- Alex Fridlyand
- Paul Haydock
- David Yuill
- Scott Creamer
- Byron Horak
- Caroline Henley
- Diane Jakobs
- Eric Berg
- Jeff Munk
- Jon Winkler
- Michael Coomber
- Roy Crawford
- Skip Ernst
- Steve Kowalski
- Andrew Hjortland
- Jeromy Snyder
- Bill Roy
- Brian Dougherty
- Jason Makowski
- Mark Olsen
- Nicolas Aouad
- Wayne Kraft
- Antonio Romeo
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