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**DRAFT**

**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. 8.3 DATE 6/24/24

TC/TG/MTG/TRG TITLE Absorption and Heat Operated Machines

DATE OF MEETING 6/24/24 LOCATION JW Marriott , Meeting Room 107 (1)

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Jay Kohler	2020	Douglas Davis	2021	
Chris Keinath	2020	Saeed Moghaddam	2023	
Brian Fronk	2021			
Haotian Liu	2023			
Amit Vasta	2023			

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

TAC Section Head:	SHx@ashrae.net Where x is the section number
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters (Research, Standards, ALI, etc.)	See ASHRAE email alias list for needed addresses.
Steve Hammerling, Assistant Manager of Research & Technical Services	AMORTS@ashrae.net

Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.

# Minutes

## 1. Call to Order

B. Fronk

The meeting was called to order at 1:05 PM.

## 2. Review Scope

B. Fronk

Technical Committee 8.03 is concerned with the design, performance and application of equipment energized by a heat source and using a thermodynamic cycle to provide an air-conditioning, refrigerating or heating function; with the properties of absorbent solutions or special working fluids used in these cycles; and with components of the cycle requiring specific design characteristics.

## 3. ASHRAE Code of Ethics Commitment

B. Fronk

“In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests.” See full ASHRAE Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>

## 4. Introduction of Members and Guests

All

- Determination of quorum

H. Liu

*Voting Members for 06/24/2024 Meeting*

	<i>Name</i>	<i>Rolling Off Date</i>
1	Chris Keinath	06/2024
2	Jay Kohler	06/2024
3	Douglas Davis	06/2025
4	Brian Fronk, Chair	06/2025
5	Haotian Liu, Vice Chair	06/2027
6	Saeed Moghaddam	06/2027
7	Amit Vasta	06/2027

The TC presently has 7 voting members. A roll call of the voting members was taken, and a quorum was established with 5 of 7 Voting Members present.

Total Attendees: 15 (In person) and 9 (online); 0 new member; YEA members: 2

## 5. Approval of Minutes from 2024 Winter Meeting Chicago

S. Kowalski

A motion to approve the meeting minutes from the 2024 Winter Meeting in Chicago was made by Chris Keinath and seconded by Jay Kohler.

The motion passed. (4-0-0, CNV)

## 6. Agenda Additions

All

None were requested.

## 7. Chair's Report

Fronk

Chair Brian Fronk noted that he attended the Chair's Breakfast during which there were no new items discussed, except for some items about research that he proposed to discuss during this portion of today's meeting.

## 8. Liaison Report's (as they arrive)

### Liaisons

- Section 8 Head – TAC
  - No report.
- Section 8 Head – RAC
  - RAC is working on a web portal for the submittal of RTARs and work statements. It is planned to be online by the end of 2024. A slide presentation should have been sent to research chair this morning.
  - Mike Vaughn (head of R&T) has retired. A new person will take this role.
  - No RTARs voted on for us on Saturday, but Carl asked for updates on our two open RTARs. Brian replied that Saeed will revise the WS for 1971, then will submit to Carl. Another has been dropped. Brian will find the old WS and let Carl know which one it is.
- Handbook
  - The Handbook liaison confirmed that he saw a request from Zhiyao Yang. Zhiyao replied that the handbook chapter is being revised and that the form was due by this meeting.

K. Nawaz

C. Huber

## 9. Membership/Roster

### D. Davis

- Thank you to rolling off members.
- Rolling on members starting 07/2024 are Bill Ryan and Stephen Kowalski
- Secretary position is filled by Stephen Kowalski starting 07/2024.
- Webmaster positions is filled by Matthew Blaylock starting 07/2024.
- Standards subcommittee chair is filled by Amit Vatsa starting 07/2024.
- New members should join committee at link [www.ashrae.org/joinatc](http://www.ashrae.org/joinatc)
- Need to determine a new vice-chair by 2025 Winter meeting to update roster. Vice-chair will move to Chair after 2-year term of H. Liu.

## 10. Subcommittee Reports

### Programs

### W. Ryan

- We have one program tomorrow at 8 am –
  - Seminar 33, "LIVESTREAM: Mitigating Electrification Pitfalls with Thermally Driven Heat Pumps" scheduled for Tuesday 06/25 8:00 AM to 9:30 AM EDT in JW Marriott – Indianapolis, 3, Grand Ballroom 4 (four presenters, W. Ryan chair)
  - The speakers will be Gunther Berthold, Amit Vatsa, Rajesh Sinha, and Bill Ryan. This will be the fourth conference in a row where we have sponsored a program. This program will be livestreamed.
- Here are the tracks for the 2025 Winter Conference in Orlando:
  1. Fundamentals and Applications
  2. HVAC&R Systems and Equipment
  3. Refrigeration and Refrigerants
  4. Energy Storage and Grid Resiliency
  5. Pathways to Building Decarbonization
  6. Artificial Intelligence
  7. Industrialized Construction: Opportunities and Challenges
  8. Ventilation and Indoor Environmental Quality
  9. Future-Proofing the Built Environment
  - The program submission deadline is 08/02/2024, while the conference paper abstract deadline was 05/29/2024 (past).
  - For Orlando, we discussed proposing a session on "Decarbonization with Heat Activated Systems with Alternate Fuels".
  - Paul Glanville committed to present, and Gunther Berthold has also been asked.
  - Bill noted that the subject may be too restrictive.
  - During the subcommittee meeting, we had been planning on applying for Track 5 - Pathways to Decarbonization. We had a further discussion of which track is appropriate and what types of applications

would be appropriate to present. Bill suggested that adding "and Waste Heat" to the title of the program may be appropriate.

- Amit then agreed that he would be able to present.
- Brian suggested "Utilization of alternative fuels in heat activated systems". Brian asked for motion to put forth a seminar with a title that is TBD. The motion was made by Amit and seconded by Jay Kohler. During discussion of the motion, Jay asked if we need exact wording. We agreed that we don't, but we have a general idea of the subject. The results of the vote were 4-0-0 CV. Bill noted that he wouldn't be able to chair as he won't be able to travel. Brian volunteered to chair the session.
- Brian asked for any more ideas. None were brought up.

### **Research**

**S. Moghaddam**

- Review of Research Subcommittee Chair Breakfast (Monday 6/24 7:00-9:30 AM ET) - Saeed was not able to attend this meeting, but Haotian attended the breakfast today. Brian gave a summary of the announcements from the meeting.
- Update on RTAR 1971 "Assessment of operation and efficiency of next generation ultra-efficient absorption cooling systems Phase I: absorbents characterizations, cycle configuration, and thermodynamics efficiency": The RTAR was submitted and accepted with comments regarding how to improve. Saeed is working with the Section 8 research liaison to get the wording improved, then we'll need to write a research statement. Brian asked for help with research statement. Haotian and Steve volunteered to help if needed.
- The other RTAR that the committee is working on is 1796, which requests funding to update the Yellow Guide. Brian noted the timeline. The RTAR was also accepted with comments, but the work statement was dropped due to no activity. Currently, the RTAR is still valid, and the TC can submit a new work statement if we're interested. We'd need volunteers to revise the WS and identification of potential bidders. The latter is not a requirement yet but would be helpful. If no one wants to do the work, there's no need to resubmit. Jay noted that costs were a big part of the information that would be required. Brian noted that the value would be to practitioners. Jay also noted that much of the equipment in the current manual is no longer available. Bill also noted that we removed "waste heat" from the description. We asked if there is any demand for the book. Amit noted that there should be a return for ASHRAE funding the update. Amit also noted that people outside of US may be willing to update the document. Brian asked if the CHP guide has a chapter on absorption. Amit replied that it does have a chapter. Michael Garrabrant of SMTI brought up that waste heat will become increasingly important, which would lead us to continue with the update to the Application Guide. We discussed that the work may only require \$71,000 compared to \$140,000. Representative from Enertek may be interested in bidding. Brian finally suggested writing a note to the whole committee soliciting volunteers and who could bid on the work. The author of the combustion turbine inlet cooling guide may be interested also.

### **Handbook/Publications**

**Z. Yang**

- Update on Application Guide for Absorption Cooling/Refrigeration Using Recovered Heat (1995) – We discussed this during the Research portion of the meeting. See above.
- Update on Chapter 18 (Absorption) in 2026 Refrigeration Handbook
  - Submitted handbook chapter review form with suggestions for small revisions.
  - Zhiyao noted that some figures need to be updated. He'll submit the review form tomorrow and the revisions will be due in 2025.

### **Standards**

**J. Kohler**

- Standard 40 (Unitary Method of Test) – Committee has organized into six specific working groups to be submitted for public review 2023. Standard 40 has been submitted to the research committee to go out for public review. The chair noted that there have been significant changes from the last version. They used the format of standard 37 this time. Jay asked the SPC 40 chair to inform Brian when it goes to public review so he can update everyone. Last version is 2014, which was a reaffirmation. It will also be an ANSI standard, which required extra work.
- Standard 182 (Chiller Method of Test) – Amit noted that standard 182 has formed a committee but was not able to meet in Chicago. Jay also noted that the committee must have balance. Ken Schultz of Trane will

join. Two other members are not from manufacturers – one is from an EPC and another is a consulting engineer. We agreed that the goal will be to increase the scope to heating pumping at large capacity.

**Website**

**C. Keinath**

- Chris reported that he had a session with Matthew Blaylock to show him how to update the TC 8.3 website.

**11. Old Business**

**All**

- No other old business was brought before the committee.

**12. New Business**

**All**

- It was noted that Brian and Davide both received the Distinguished Service Award on Sunday.

**13. Adjourn**

- Jay moved to adjourn; Amit seconded.