T.C. 6.8 FULL COMMITTEE MEETING MINUTES - DRAFT
Tuesday, January 15th, 2019
3:30-6:00PM

<table>
<thead>
<tr>
<th>Members Present</th>
<th>Year Apptd</th>
<th>Members Absent</th>
<th>Year Apptd</th>
<th>Ex-Officio Members And Additional Attendance</th>
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<tbody>
<tr>
<td>Scott Hackel Chair</td>
<td>18-20</td>
<td>Derek Birdsall</td>
<td>18-22</td>
<td>Corresponding Members</td>
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<tr>
<td>Steve Hamstra Vice Chair</td>
<td>18-22</td>
<td>Dr. Harrison Skye</td>
<td>18-21</td>
<td>Craig Buscher Webmaster</td>
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<td>Dennis Koop Sec.</td>
<td>18-22</td>
<td>Cary Smith</td>
<td>18-21</td>
<td>Lisa Meline Std. Sub Com.</td>
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<td>Mike Filler</td>
<td>16-19</td>
<td>Dr. Shaojie Wang</td>
<td>16-20</td>
<td>Dr. Jeffrey Spitler Chair</td>
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<td>Hugh Henderson</td>
<td>18-22</td>
<td>Bruse Baccel MNQ</td>
<td>16-20</td>
<td>Research Sub Committee</td>
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<td>Dr. Piljae Im</td>
<td>18-22</td>
<td>Ed Lohrenz MNQ</td>
<td>16-20</td>
<td>Dr. Xiaobing Liu Res. Sub</td>
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<td>Michael Kuk</td>
<td>18-19</td>
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<td>Trey Austin</td>
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<td>Dr. Bill Murphy</td>
<td>16-20</td>
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<td>Dee Brower</td>
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<td>Kay Thrasher ALI</td>
<td>16-20</td>
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<td></td>
<td>Steven Carlson</td>
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<td>(9 Voting)</td>
<td>(4 Voting, 2 Voting-NQ)</td>
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<td>Dr. Chris Gray</td>
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<td>Carl Huber</td>
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<td>Dr. Steve Kavanaugh</td>
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<td>Robert Koschka</td>
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<td>Howard Newton</td>
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<td>Greg Tinker</td>
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TAC Section Head: Mr. Dawen Lu, PE
Handbook Liaison: Dr. Prakash R. Dahamshala / Ms. Suzanne LeViseur, PE
Research Liaison: Dr. Omar A. Abdelaziz
Standards Liaison: Mr. Erick A. Phelps
Staff Liaison: Mr. Michael R. Vaughn, PE

These draft minutes have not been approved and are not the official, approved record until approved by this committee.
1. Call to Order
   - Welcome, Introductions, and Sign-In
   - Visitors Welcomed: 1st timers and YEA
   - Reviewed Voting Members & Determination of Quorum
     - Quorum achieved at 3:40.

2. Approval of minutes from Annual 2018 (Houston 2018)
   - Motion Dr. Bill Murphy
   - Second Kay Thrasher, 8-0-0-CN

3. Announcements from ASHRAE
   - Section Head – Dawen Lu – no report
   - Liaisons
     - Staff – No report
     - Standards – Erick Phelps- No report
     - Research – Dr. Omar Abdelaziz – No report
     - TAC – Thomas Justice- No Report
     - ALI/PDC – Bochat- No Report
     - Codes: Steve Ferguson- No Report

4. Announcements from the Chair
   - Topics from Chair
     - ASHRAE plans to reorganize the TCs by consolidating committees and wants each TC to offer suggestions about a new grouping.
     - Reorganization suggestions were discussed... see in New Business
     - Health and Wellness in Buildings is a new MTG
     - Residential Section wants to Co-sponsor research
     - New Professional Development topics are being requested by ALI
     - “Basecamp” internet software is being considered for sharing documents by the TC... more in New Business

5. Subcommittee Reports:
   - KTM Award – Lisa Meline
     - New 2018 Award Winner recipient Antash Najib was recognized for his contributions in developing a ground heat exchanger.
   - Handbook -
     - Geothermal – Harrison Skye 2019 Handbook / Looking for Chair for next cycle
       - ASHRAE HQ sends chapter proof to TC by March 15
       - Handbook volume sent to printer April 1
       - Handbook mailed May 15
     - Applied Heat Recovery – Mike Filler
       - Chapter on applied heater recovery did not make changes this cycle. Good interest in chapter with 6 attending Jan 14 meeting. 2020 will need updates and will start working on this; need more volunteers and feedback, please send suggestions to Mike.
   - Standards – Cary Smith/Lisa Meline
     - Nothing to report
   - Programs - Harrison Skye/Michael Kuk: Atlanta, Kansas City, Orlando
     - Meeting held Sunday January 13th. 20 in attendance
     - Two Seminars at Atlanta meeting on Jan 14th; Refrigeration and Common system Issues and Misapplication.

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TC 6.8 Geothermal Heat Pump and Energy Recovery Applications

Atlanta, GA 2019 Winter Meeting
Location: Georgia World Congress Center A305

- TC 6.8 Sponsored a Seminar about Ground-Source heat Pumps that had 85 attendees, and we thank Chair Mike Kuk, Dr. Steve Kavanaugh, and Lisa Meline for outstanding presentations about Ground Source Heat Pumps: You can’t always get what you want.
- Lisa Meline presented another seminar about Ground-Source Heat Pump Design for a moderate Residence in Northern California on Jan 14th.

- 2019 Kansas City MO – Summer Conference Dates: June 22-26, 2019
  Track 3: Optimization in HVAC&R
    Needs a Chair
    Three presentations are suggested with a Feb 8 2019 deadline for Program Proposals
  Track 4: Commissioning new & Existing Buildings
    TC (commissioning) offered to create presentation on Cx/Rcx of GHP systems if TC 7.9 is looking for speakers. Offered TC 6.8 co-sponsorship.
  Track 5: Occupant Health & Safety
    Dr. Kavanaugh has a potential presentation, but needs others to participate.
  Track 7: Professional Development
    Lisa Meline will look into presenting
    Dr. Kavanaugh suggested case studies for mid-small GHP Design Firms to help the Sell Ground-Source heat Pump Systems.

  Track 1: HVAC&R Fundamentals and Applications
  Track 2: Systems and Equipment
  Track 3: Refrigeration and Refrigerants;
    CO2 idea will send to H. Skye
  Track 4: Cutting Edge Approaches
    3 ideas applying ground source heat pumps
  Track 5: High Efficiency Design and Operation
  Track 6: Big Data and smart Controls
  Track 7: Ventilation, IAQ and Air Distribution Systems
  Track 8: Standards, Guidelines and codes
    L. Meline may have proposed ISO changes
March 18, 2019 Deadline for Conference Paper Abstracts
June 17, 2019 Website Opens for Seminar Proposals

- Research - Dr. Jeff Spitler: Work statements and RTARs
  - Sub meeting Monday January 14th 10 attendees
  - Work statement 1817 "Long term temperature change of ground heat exchangers.
    - RAC reviewed and returned for changes to better define Go - No Go - Stop
    - May require 2nd vote.
    - Approval for TC 6.8 to Co-Sponsor
      - Motion Steve Hamstra
      - Second Dr. Bill Murphy, 7,0,0,CNV

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