TC/TG/TRG NO   | TC 10.02   | DATE  | January 28\textsuperscript{th}, 2013
---|---|---|---
TC/TG/TRG TITLE | Automatic Ice Making Plants and Skating Rinks | | 
DATE OF MEETING | January 28\textsuperscript{th}, 2013 | LOCATION | Dallas

<table>
<thead>
<tr>
<th>MEMBERS PRESENT</th>
<th>YEAR Appointed</th>
<th>MEMBERS ABSENT</th>
<th>YEAR Appointed</th>
<th>EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE</th>
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</thead>
<tbody>
<tr>
<td>Wayne Borrowman (M)</td>
<td>2009</td>
<td>Jim Shepherd (CM)</td>
<td>1990</td>
<td>Fet Yang - guest</td>
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<tr>
<td>John Scott (M)</td>
<td>2010</td>
<td>Al Podhorodeski (CM)</td>
<td>2004</td>
<td>John Davis - guest</td>
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<tr>
<td>Donald Siller (M)</td>
<td>2007</td>
<td>Ron Strong (CM)</td>
<td>2004</td>
<td>Dan Dettmers - guest</td>
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<tr>
<td>Don Blacklock (M)</td>
<td>2010</td>
<td>Roberto Sunye (CM)</td>
<td>2004</td>
<td>Brian Blahey - guest</td>
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<tr>
<td>Paul Kozlov (M)</td>
<td>2012</td>
<td>Robert Burdick (M)</td>
<td>2007</td>
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<tr>
<td>Reinhold Kittler (M)</td>
<td>2009</td>
<td>William McCartney (CM)</td>
<td>2002</td>
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<td></td>
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<td>Mark MacCracken (M)</td>
<td>2007</td>
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<td>Jon Edmonds (M)</td>
<td>2010</td>
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<td>Ronald Vogl (CM)</td>
<td>2008</td>
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<td>Greg Scrivener (CM)</td>
<td>2012</td>
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<td>John Sluga (M)</td>
<td>2012</td>
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<td></td>
<td></td>
<td>Bill Wladyka (M)</td>
<td>2011</td>
<td></td>
</tr>
</tbody>
</table>

**DISTRIBUTION**

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

<table>
<thead>
<tr>
<th>TAC Section Head:</th>
<th><a href="mailto:SH10@ashrae.net">SH10@ashrae.net</a></th>
<th>Eric Adams</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAC Chair:</td>
<td><a href="mailto:TACChair@ashrae.net">TACChair@ashrae.net</a></td>
<td>Brian Becker</td>
</tr>
<tr>
<td>All Committee Liaisons As Shown On TC/TG/TRG Rosters:</td>
<td><a href="mailto:PL10@ashrae.net">PL10@ashrae.net</a> <a href="mailto:RL10@ashrae.net">RL10@ashrae.net</a> <a href="mailto:hbrl@ashrae.net">hbrl@ashrae.net</a> <a href="mailto:hbr6@ashrae.net">hbr6@ashrae.net</a> <a href="mailto:CTTC10@ashrae.net">CTTC10@ashrae.net</a> <a href="mailto:SL10@ashrae.net">SL10@ashrae.net</a> <a href="mailto:PubChair@ashrae.net">PubChair@ashrae.net</a> <a href="mailto:PDC@ashrae.net">PDC@ashrae.net</a></td>
<td>Dennis Wessel – Program; Hugh Henderson – Research; William (Bill) McCartney – Handbook; Al Podhorodeski – 2010 Refrigeration. Handbook; Richard des Lauriers – CTTC; Michael Beda – Standards; Mark Fly – Special Publications; Kenneth Fulk - ALI/PDC</td>
</tr>
<tr>
<td>Manager Of Standards:</td>
<td><a href="mailto:MOS@ashrae.net">MOS@ashrae.net</a></td>
<td>Claire Ramspeck</td>
</tr>
<tr>
<td>Manager Of Research &amp; Technical Services:</td>
<td><a href="mailto:MORTS@ashrae.net">MORTS@ashrae.net</a></td>
<td>Mike Vaughn</td>
</tr>
<tr>
<td></td>
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<td>Pradeep Bansal</td>
</tr>
</tbody>
</table>
### Call to Order
By **Wayne Borrowman** 4:15pm

#### Preliminaries:

- Self introduction to members and guests.
- Attendance sheet circulated.
- Quorum established - Roster shows 6 voting members, 6 present.

*Eric Adams*: e-meetings are trialed for some TCs and will be more common in near future.

#### Approval of Agenda:

- Listing and corrections to voting members.

#### Approval of Previous Minutes

- Approval of San Antonio MoM
  - Paul K motioned to accept the minutes from the Montreal meeting. John Scott seconded the motion.
  - A vote was held with 6 for/ 0 no/0 abstain/ 1 absent.
  - Minutes accepted.
  - Paul K is to circulate MoM within a few weeks from today

#### LIAISON REPORTS

- **Chairman’s Report**
  - Wayne attended the Chairs’ Breakfast. Change of name, changes to fees for speakers, standards are loaded on www, research / TCs / forms / rosters

- **Handbook Subcommittee**
  - Chair John Scott; members-Wayne Borrowman; Bill Wladyka
  - John Scott noted that the Chapters 43 and 44 are provided for review and comments / voting needs to be wrapped up in March. Deadline is in June.
  - John Scott will request Reinhold to coordinate with TC9.8 with cross reference between chapters.
  - Outstanding items on chapters: $X_i$ and $X_a$ coefficients, 6.6 to 6.1 in the humidity formula
  - Wayne was to find interested candidates amongst automatic ice making equipment OEMs, to join 10.2
  - Letter Ballot in early March for SI conversions

#### Standards Subcommittee
An update on Std 15. R717 and secondary refrigeration are proposed for elimination from this Std, but was unlikely to be satisfied. Also commercial indirect systems and industrial ammonia systems are under IA-2, not Std 15. A new editorial sub-committee and 2L refrigerants topics. Now UL is needed for equipment

TC10.1. Wayne B to approach Refrig Committee to request their representative to attend TC 10.1 and 10.2

8 Research Subcommittee
a. Discussion with Mike Vaughn on RTAR available, John Scott proposed to prepare an RTAR Development and Validation of Space Conditioning, the Method of Load Calcs. Needs to be done by March’13.
b. Topic to explore: ice sheet is segregated from HVAC systems whilst connecting the controls and design foundation there would bring the sought results on energy efficiency and reduction of the radiant loads on the ice making equipment at the cost of the increased HVAC load. Previous research project showed the improvement between 25% to 38%. There is an active program on optimum RH / DB conditioning (which one?), ice temperature controlled by the application (curling vs NHL).
c. Pradip suggested to prepare RTAR on arena space load started by Reinhold. PK, JS, wb are to assist. Seek comments in Feb. Once prepared will have to be forwarded for submission to TC 10.8, 4.1, 4.7 for further input, comments and review. Consider consulting TC on Large Bld HVAC

9 Programs Subcommittee
a. Prepare a Seminar for NY. 3 speakers / chair, co-sponsor on RH control and de-humidification in Ice Rink application. Good Eng’g Practice for Ice-Air interactions (sublimation, condensation etc) and optimized HVAC – refrigeration system. Input are sough for NY in Jan’14

10 Membership Subcommittee

a. Wayne Borrowman has submitted the roster.
b. Bill Wladyka has rolled back in. John S. moved in as voting (?) Paul K is to move from corresp to voting to prepare to roll in as a Chair in NY in Jan’14, Reinhold’s was uncertain about Denver Greg Scrivener and Dave M both roll in as voting members, Don and Bill will stay as voting members.
c. Don provided the updated roster at this meeting and is in the process of rolling off expired members and adding new Corresponding members to member status. Ongoing
d. John Scott will remain as member and Handbook subcommittee chair

e. Wayne Borrowman is moving from Chair’s role to corresponding member in June’13 or June’14
f. John Davis and Dan Dettmers moving in as corresponding members

g. Brian Blahey is to join as a corresponding (non-quorum) member
h. Don S, Reinhold and Wayne Borrowman are all stepping down to corresponding members
i. Dave Malinaskas stepped from corresponding to voting
j. Greg stepped up from corresponding to voting. Also becomes a vice-chair
NEW BUSINESS

.12 Webpage needs to be hosted by ASHRAE
    Paul Kozlov June 2013

.13 Mike Vaughn is to e-mail Paul the information required to access the website.
    Don Blacklock Feb 2013

Motion to Adjourn
John Scott motioned to adjourn at 6:10
Second Wayne Borrowman
Approved

Next meeting is to be held in Denver at the Summer Conference in 2013. Monday, June 24, 2013

These notes are considered to be an accurate account of the meeting. If any discrepancies or omissions are noted, please contact the undersigned or raise it at the meeting; otherwise these shall be deemed acceptable to all.

Secretary: Paul Kozlov