

**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. _____ 10.7 _____ DATE
7/25/2014

TC/TG/MTG/TRG TITLE _____ Commercial Food and Beverage Refrigeration
Equipment
DATE OF MEETING _____ June 30 2014 _____ LOCATION _____ Seattle,
WA _____

| MEMBERS PRESENT | YEAR APPTD | MEMBERS ABSENT | YEAR APPTD | EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE |
|--------------------|---------------|-------------------|---------------|--|
| Brian Fricke | 2012 | Masood Ali | 2011 | |
| Robert Sperl | 2010 | David Demma | 2012 | |
| Charles Hon | 2012 | Cynthia Gage | 2012 | |
| Cesar Lim | 2010 | Maryline Rassi | 2011 | |
| Massoud Neshan | 2011 | | | |
| | | | | |
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DISTRIBUTION

| <i>All Members of TC/TG/MTG/TRG plus the following:</i> | |
|--|--|
| TAC Section Head: | Ken Cooper |
| TAC Chair: | Walter Grondzik |
| All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters: | ALI: Hugh McMillan CTTC: Gerald Hartford RAC: John Shonder STD: Cecily Grzywacz |
| Manager Of Standards | Stephanie Reiniche |
| Manager Of Research & Technical Services | Mike Vaughn |

**ASHRAE TC 10.7
Commercial Food & Beverage Refrigeration Equipment
Minutes of 2014 Summer Meeting
Seattle, WA - June 30, 2014**

1. Welcome & Introductions

Chairman Brian Fricke welcomed the members and guests and called the meeting to order at 2:18 pm. Members and guests introduced themselves. The Agenda was distributed, and a sign-in sheet was circulated (attached). Fricke reminded everyone that the ASHRAE Code of Ethics must be adhered to by those doing ASHRAE business whether or not the participant is an ASHRAE Member. The Code of Ethics can be found at <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>

2. Review and Revise Agenda

The agenda was reviewed. No new items were identified.

3. Determination of Quorum

Quorum was established with five of nine voting members present.

4. Scope / MBO's

For the benefit of guests, Fricke read the TC's scope. He referred participants to the Agenda to find details of the TC's objectives.

5. Liaisons & Announcements

- Committee Liaisons were acknowledged and brief announcements were given.
- Refrigeration Committee liaison Cesar Luis Lim provided an update stating that TC 10.7 will be helping with the handbook review of the refrigeration chapters which have not been reviewed in some time.

6. Membership

Fricke thanked the two voting members who were rolling off the committee as of this meeting, Robert Sperl and Cesar Lim, for their service. The committee reviewed the updated list of voting members for the 2014-2015 year and Fricke introduced Lauren Zelinski as Secretary and Shitong Zha as Research Chair. Maryline Rassi was replaced as a voting member with Lauren Zelinski and three new voting members were also identified: Carl Roberts, Jon Murray, and Tim Anderson.

7. Review Draft Minutes from the 2014 Winter Meeting in NYC, NY

Minutes were reviewed and there was no discussion. Motion was made and duly seconded to approve the minutes. 5-0-0-4 CV

8. Subcommittee reports

A. Program Subcommittee (Caleb Nelson)

Nelson reported on the discussion from the Program Subcommittee meeting. Several topics were discussed for future conference sessions. The seminar from Refrigerant manufacturers on 404a retrofits was declined for Seattle. The committee decided to resubmit it with revisions for Chicago seminar. Fricke reported that TC 3.1 would co-sponsor this and Nelson will chair the resubmission efforts. Other topics discussed were a technical paper from 1467-RP, Walgreens program transcritical site with geothermal which may be a site tour during Chicago conference,

and possible CO₂ discussion in Chicago as well. Heat reclaim was discussed as an Atlanta seminar topic as well. Two additional topics for the Chicago meeting, proposed by the Refrigeration Committee, were discussed in detail and the committee voted to co-sponsor these sessions. These topics were: Best practices in installing and servicing refrigeration and air conditioning systems and Retrofit or not? A life cycle analysis of R-22. The committee was asked for volunteers to present and bios should be sent to Georgi Kazachki. **(Action item 1)**

Demand defrost, Energy modeling and how it is being leveraged for codes and regulations, frost mitigation in abstract design and modeling accuracy and significant consequences for the industry were also topics presented to the group. It was decided that demand defrost/frost mitigation seminar will be submitted by R. Faramarzi for the Chicago meeting.

B. Research (Daryl Erbs, Shitong Zha)

Erbs handed the research chair responsibilities over to Shitong Zha. Fricke will distribute section 10 research ideas topics for review and submission of RTARs on anything 10.7 may be interested in. Shitong gave an update of the 10.7 research subcommittee meeting.

- RP 1467 - needs one last tech paper to receive final sign off and funds. Caleb Nelson to follow up. **(action item 2)**
- RTAR 1706 - Erbs will resubmit **(action item 3)**
- RTAR 1722 - Carl Roberts to review comments and resubmit **(action item 4)**

The following new topics were discussed for development in Research Projects:

Support SSPC 72 for standard revisions and support. Explore magnitude of instrumentation and measurement between labs for testing variants. Three buckets were suggested as instruments, components, and test stand/sampling. Carl Roberts and Mike Stem volunteered to work on and develop an RTAR. It was suggested that CO₂ secondary case test method could also be tied into this. Future RTAR suggestions - Case and efficiency test, Optimization of anti-sweat heater, Smart Air curtain design- reduce energy input, Development of new infiltration model of walk-in openings, and Heat reclaim. **(action item 5)**

C. Handbook (Dave Demma)

The 2014 Refrigeration Handbook was just published so there are no current revisions necessary.

D. Standards subcommittee (Van Baxter)

- **SPC-29** (Daryl Erbs)
Erbs reported that the committee would meet later that afternoon and the hope was to complete the draft during this meeting. The committee would then send the standard for public review and vote.
- **SPCs 32.1 and 32.2**
The members attending the ASHRAE meetings in Seattle met in an unofficial meeting on Sunday to discuss progress. Teleconferences will be scheduled to continue updates before Chicago.

- **SPC-72** (Charlie Hon)
SPC 72 was made into a standing committee (SSPC) for continued updates to the standard. The committee unofficially met as they did not meet quorum requirements and there are a few pending applications which were deferred to September as the vote was being taken on making this an SSPC. The Standard is currently at ANSI level for final approval and publication.
- **SPC-210** (Kristina Kamensky)
Kamensky reported that the committee met and discussed the scope and purpose. These will be submitted for review. Kamensky announced that she can no longer serve as Chair and Lauren Zelinski was nominated to take over this position.

Baxter also reported that SSPC-147 is being reviewed. It was suggested that more details be added regarding brazing and Robert Sperl said he would bring this to the attention of the committee. Standard 18 was reaffirmed last year. **(action item 6)**

E. website (Kyle Larson)

Larson reported that the website is up to date and asked that if members had item to contribute that they please contact him.

9. Adjournment

The meeting adjourned at 3:53 pm.

TC 10.7 ACTION ITEMS

Summer meeting 2014

| ACTION # | Responsibility | Summary of Action | Status |
|-----------------|-----------------------|--|---------------|
| 1 | Nelson | Resubmit 404a retrofit seminar with revisions for Chicago | |
| 2 | Nelson | RP 1467 follow up on final paper | |
| 3 | Erbs | Resubmit RTAR 1706 | |
| 4 | Roberts | Review comments and resubmit RTAR 1722 | |
| 5 | Stem, Roberts | Develop new RTAR as discussed in section 8B | |
| 6 | Sperl | Advise SSPC 147 to address brazing in greater detail during update | |

TC Sign-in Sheet

Meeting Info: TC 10.7Date: 30 JUNE 2014

| Name | Affiliation | E-mail | Member (VM, CM, Guest) | YEA Member? |
|--------------------|------------------------|---|---------------------------|----------------|
| BRIAN FRICKE | ORNL | FRICKEBA@ORNL.GOV | VM | N |
| Lauren Zelinski | AHRI | lzelinski@ahrinet.org | CM | Y |
| Luis Escobar | ACCA | luis.escober@acca.org | Guest | Y |
| Timothy Woerner | ARCOM | twoerner@arcomnet.com | Guest | N |
| Charles Hon | True mfg | chond1@truemfg.com | VM | Y |
| Van Baxter | ORNL | vd@ornl.gov | CM | |
| Jon murray | Structural concepts | jmurray@structural concepts.com | VM | Y |
| Mike Stem | ETL | mike.stem@intertek.com | Guest | |
| Don Cleland | Morsey Uni. | d.cleland@morsey.ac.uk | Guest | N |
| Sun Oung | BR Labs | sun.oung@gmail.com | Guest | N |
| Christopher Rogers | PECI | crogers@peci.org | CM | N |
| Bill Mohs | SCOPE | mohsxo24@uina.edu | Guest | N |
| Kyle Larson | VaCom Tech. | klarson@vacomtech.com | CM | N |
| BOB JONES | SPORLAN | BOB@SPORLAN.COM | GUEST | N |
| Daryl Stauffer | CAREL | daryl.stauffer@carel.com | Guest | N |
| Robert Squillace | CAREL | Robert.Squillace@carel.com | Guest | N |
| MATT RITTER | ARKEMA | matthew.ritter@arkema.com | GUEST | N |
| Randy Haseman | UL | randall.j.haseman@ul.com | Guest | N |
| Mazyar Amin | Miami Univ | aminm@miamioh.edu | Guest | N |
| SAMIR TRABOULSI | Thermotrade | traboulsi.samir@gmail.com | CM | N |
| Yang Zou | CTS | yang.zou@creativethermalsolutions.com | Guest | |
| CHAD BOWERS | CTS | CHAD.BOWERS@CREATIVETHERMAL SOLUTIONS.COM | CM | |
| Stefan Elbel | CTS/ULI | stefan.elbel@creativethermal solutions.com | CM | N |
| Shenghan Jin | Univ. of Illinois | sjin8@illinois.edu | Guest | N |

TC Sign-in Sheet

Meeting Info: 10.7 Date: 6/30/14

| Name | Affiliation | E-mail | Member (VM, CM, Guest) | YEA Member? |
|-------------------|----------------------------------|----------------------------------|---------------------------|----------------|
| Mark Spatz | Honeywell | mark.k.spatz@honeywell.com | CM | N |
| Ammar Bahman | Purdue Univ. | abahman@purdue.edu | guest | N |
| Christian Bach | Purdue Univ. | christian.leonard.bach@gmail.com | guest | N |
| Joshua Hughes | DuPont | joshua.hughes@dupont.com | Guest | N |
| BOB SKORUPSKY | DAIKIN | b Skorupsky@daikin-america.com | GUEST | N |
| M. Neshan | Southern | neshan@gmail.com | VM | N |
| TIM ANDERSON | HUSSMANN | tim.anderson@hussmann.com | CM | N |
| CURT LAWSON | DuPont | Curtis.Lawson@dupont.com | CM | N |
| CESAR MUIS LIM | SON MICHAEL CORP. | cesardll@mydestiny.net | VM Q | N |
| Ramin Faramarzi | SCE | ramin.faramarzi@sce | CM | N |
| Daryl Erbs | Manitowoc Foodservice | daryl.erbs@manitowoc.com | CM | N |
| ROBERT SPERL | WEGMANN | ROBERT.SPENL@wegmanns.com | CM | N |
| Georgi Kazachki | DPGI | kazachki@comcast.net | CM | N |
| Shitong zha | Hill phoenix | shitong.zha@hillphoenix.com | CM | N |
| CALEB NELSON | CTA | celebn@cta-group.com | VM | N |
| DENIS LIVCHAK | PAGE FOOD SERVICE TECH CENTER | DLIVCHAK@FISHNICK.COM | GUEST | N |
| Kristina Kamensky | Prismitech LLC | kristina@prismitechLLC.com | CM | N |
| Carl Roberts | Zone Zone | carl.roberts@zero-zone.com | CM | N |
| Jon McHugh | MEC | jon@mcughenergy.com | guest | N |
| John Shonder | ORNL | shonderja@ornl.gov | RAC Liaison | N |
| Ken Cooper | Re-Tired | dad@coopshome.us | TAC | N |
| Pradeep Bansal | ORNL | vpb@ornl.gov | RAC | N N |
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