

ASHRAE TC 10.7

Commercial Food & Beverage Refrigeration Equipment 2016 Summer ASHRAE Meeting Agenda for Monday, 27 June 2016, 2:15 pm - 4:15 pm St. Louis MO Room 223 (2)

Note: The ASHRAE Code of Ethics is to be adhered to by those doing ASHRAE business whether or not they are an ASHRAE member. <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics>

1. Welcome & Introductions – Sign-In Sheets

2. Review and Revise Agenda

3. Determination of Quorum

4. Review Scope / MBO's

TC10.7 Scope: TC 10.7 is concerned with the application and performance of equipment and systems for the refrigeration of food and beverages in commercial operations. This includes commercial equipment such as refrigerated merchandisers and storage cases, walk-in freezers and coolers (<3000 sq. ft.), beverage vendors and dispensers, commercial ice makers, and water coolers.

TC10.7 MBO's (Objectives):

- The pursuit of technological advancement of commercial food and beverage equipment and systems to enhance overall performance through improved food safety, food quality, energy efficiency, and reduced environmental impacts.
- To provide engineering design, application knowledge, and technical expertise to effectively support research and the Refrigeration handbook chapters and standards for which we are responsible.

5. Recognition of Liaisons & Announcements:

Committee Liaisons:

- Section Head Jim Tauby
- Program Committee Liaison Kevin Gallen
- Research Committee Liaison John Shonder
- Handbook Committee Liaison Scott Fisher
- Chapter Technology Transfer Committee Liaison Gerald Hartford
- Standards Committee Liaison Cecily Grzywacz
- Refrigeration Committee Liaison Cesar Luis Lim
- ALI/PDC Liaison Hugh McMillan
- MTG Low GWP Liaison..... Brian Fricke

Announcements

6. Membership:

Current TC10.7 Management Team

- Chair Charles Hon (VM 6/17)
- Vice Chair Timothy Anderson (VM 6/18)
- Secretary Lauren Zelinski (VM 6/18)
- Research Subcommittee Chair Shitong Zha (VM 6/19)
- Standards Subcommittee Chair Van Baxter
- Program Subcommittee Chair Caleb Nelson (VM 6/18)
- Handbook Subcommittee Chair Dave Demma (VM 6/16)
- Webmaster Kyle Larson
- Additional Voting Members:Cynthia Gage (6/16), Jon Murray (6/18), Carl Roberts (6/18), Pradeep Bansal (6/19), Patti Conlan(6/19), Cesar Lim (Non-Quorum 6/19), Gustavo Pottker(6/19)

Rotating off after this meeting Cynthia Gage and Dave Demma

Additional voting members Starting 7/1/2016 Daryl Erbs (6/20) and Massoud Neshan (6/20)

7. Review Draft Minutes from the 2016 Winter Meeting in Orlando FL

8. Subcommittee Reports:

A. Program Subcommittee (Caleb Nelson)

Meeting: Sunday 5:15pm-6:00pm, Room 120 (1)

St. Louis Program

SEMINAR 33 Innovation in a Commercial Refrigeration System with

Natural Refrigerants and Low GWP Synthetic Refrigerants

Tuesday 8:00 – 9:30 am Room: 221

Sponsor: 10.07 Commercial Food and Beverage

Cooling Display and Storage, MTG Low GWP

Chair: Shitong Zha, Ph.D., Member, HILLPHOENIX, Conyers, GA

SEMINAR 13 Advancements in Compressor Design, Testing and Performance Modeling for New Efficiency Standards and Alternative Refrigerants

Sunday 1:30 – 3:00 pm Room: 221

Sponsor: 08.01 Positive Displacement Compressors, Refrigeration Committee

Chair: Georgi Kazachki, Ph.D., Fellow

B. Research Subcommittee (Shitong Zha)

Meeting: Sunday, 6:00pm-6:45pm, Room 120 (1)

Project 1467 – Balancing Latent Heat Load between Display Cases & Store Comfort Cooling

RTAR 1706 – Minimum Refrigerant Charge Attainment for Commercial Refrigeration Systems ([Follow-up with TC 10.6](#))

RTAR 1722 – Optimizing Air Curtains for Refrigerated Display Cases with Glass Doors

WS 1615 (TC7.5, with TC 10.7 co-sponsor) - Fault Detection and Diagnostic Methods for Supermarkets

New Project Ideas:

ASHRAE has added a new MTG.IAST, Impact of ASHRAE Standards on Technology on Energy Savings/ Performance-T-TAC-MTG.IAST

[Checked with TC 10.8 with WS refrigeration facility doorway infiltration air energy reduction should considering working with 10.8 on this. Shitong to forward to VMs to review and provide feedback to 10.8](#)

Development of a new infiltration model for walk-in openings

Method of test for secondary fluids with two phase flow entering and/or leaving a display case

Demand profile characterization for heat and service hot water in supermarkets

Optimization of air curtains in vertical display cases, incorporating horizontal air streams

Standard for rating evaporators with high glide refrigerants (with TC 8.4) [Contact TC 10.4 for collaboration on High glide refrigerants sizing in evaporative condensers](#)

[Defrost and coil coating technologies](#)

[Ramin and Daryl to submit RTAR. It was decided that a study of penalty of frost formation and defrost on refrigeration system would be beneficial to the industry as there is not much currently published on frost. Ramin volunteered to write an RTAR on this topic.](#)

o Others Ideas?

Ad-Hoc Group – New technology assessment and application for energy efficiency in display cases (J. Murray, C. Roberts, R. Faramarzi) ([Update](#))

C. Handbook Subcommittee (Dave Demma)

Meeting: Sunday, 6:45pm-7:30pm, Room 120 (1)

Refrigeration, Chapter 15 – Retail Food Store Refrigeration and Equipment

Refrigeration, Chapter 16 – Food Service and General Commercial Refrigeration Equipment

D. Standards Subcommittee (Van Baxter)

TC10.7 is the Cognizant TC for the following standards:

Standard 18-2006, Methods of Testing for Rating Drinking-Water Coolers with Self-Contained Mechanical Refrigeration ([Update](#))

Standard 29-2009, Methods of Testing Automatic Ice Makers

Standard 32.1-2004, MOT for Rating Vending Machines for Bottled, Canned and Other Sealed Beverages

Standard 32.2-2004, MOT for Rating Pre-Mix and Post-Mix Beverage Dispensing Equipment

Standard 72-2005, MOT Open and Closed Commercial Refrigerators and Freezers

Standard 210-Method of Testing for Rating Commercial Walk-in Refrigerators and Freezers

SPC 220P: Method of Test for Small Commercial Blast Chillers, Chiller/Freezers, and Freezers

Meetings

SPC-32.2 Meeting *MOT for Rating Pre-Mix and Post-Mix Beverage Dispensing Equipment* (Daryl Erbs)

Meeting: Tuesday (6/28) 8:30 am – 11:30 am Pershing (CL)

SSPC-72 MOT Open and Closed Commercial Refrigerators and Freezers (Jon Murray)

Meeting: Sunday (6/26) 1:00 pm – 5:00 pm 220 (2)

(Informational) SSPC-147 Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment Meeting: Monday (6/27) 6:30 pm – 9:30 pm Lindell (CL)

SPC 210 Meeting MOT/for Rating Commercial Walk-in Refrigerators and Freezer

Meeting: Monday (6/27) 8:00 am – 12:00 pm 275 (2)

[SPC 220P MOT Small Blast Chillers Update](#)

E. Website (Kyle Larson, Webmaster)

TC10.7 Website Address: <http://tc107.ashraetcs.org>

[Kyle Larson has agreed to stay on as Webmaster of 10.07](#)

9. New Business

Notes:

ASHRAE Winter Meeting Jan. 28 – Feb. 1, 2017 Las Vegas NV

ASHRAE Annual Meeting June 24-28, 2017 Long Beach CA

ASHRAE Winter Meeting Jan. 20-24, 2018 - Chicago, IL

ASHRAE Annual Meeting June 23-27, 2018 - Houston, TX

ASHRAE Winter Meeting Jan. 12-16, 2019 - Atlanta, GA

ASHRAE Annual Meeting June 22-26, 2019 - Kansas City, MO

10. Adjournment

Action Items from last meeting