

ASHRAE TC 10.1
Custom Engineered Refrigeration Systems
2015 Winter Meeting Minutes

2:15 P.M.
Monday, January 26, 2015
Palmer House Hilton, Wilson (3rd Floor)
Chicago, IL

1. Chair called the meeting to order promptly at 2:15pm
2. Introduction of Members and Guests
Voting Members: **Don Fenton** (chair), **Tom Wolgamot**, Wayne Borrowman, **Bruce Griffith**, **Todd Jekel**, **Richard Love**, Andy Pearson, **Greg Scrivener**, **Eric Smith**, **Ron Vallort**, **Jim Young** (**bold** indicates presence at the meeting). Quorum is established with 8 of 11 members, not counting the Chair.
3. Approval of Meeting Minutes (RV moved, GS seconded: 8-0 CNV)
4. Report on Section Head Meeting
5. Liaison Reports
 - a. Research – Tom Wolgamot & John Shonder
 - i. Iain Walker awarded Service to ASHRAE Research Award
 - ii. Limin Zhou (University of Kentucky) awarded Homer Adams Award
 - iii. 4 RTARs reviewed, 3 approved, 1 rejected with comments
 - iv. 8 WS reviewed, 5 conditionally approved, 2 returned, 1 rejected
 - v. RAC called for more research activity. Currently no funding issues or projects on hold.
 - vi. RAC called for comments on process.
 - vii. Recommended circulation of the Refrigeration Research Brainstorming results to all Section 10 TCs.
 - b. Refrigeration Committee – Ray Cole
 - i. MBO for liaison coverage of Section 10 TC
 - ii. Request for any issues that the TC has for the Refrigeration Committee
 - iii. DOE has cutback IIR funding by US. US has been downgraded to a Tier 3 member given the reduction in funding. Representative of IIR was asking regarding ASHRAE filling the funding gap. Refrigeration Committee is sending the request up the ASHRAE hierarchy.
 - iv. Ammonia as a Refrigerant Position Document is being updated to current ASHRAE Position Document format. No challenge to maintaining document by ASHRAE, format issue only. Rescinded the Natural Refrigerant Position

Document and incorporated it into another Refrigerants & Responsible Use Position Document.

- v. Suggesting a seminar for Atlanta on conversion of systems using R22 & a technical paper track.
 - vi. Awarded the George Briley Award to Doug Reindl, University of Wisconsin. No nominees for Milt Garland or Comfort Cooling awards.
 - 1. Milt Garland Award: [Click for more information.](#)
 - 2. Comfort Cooling Award: [Click for more information.](#)
 - c. GCCA – Ron Vallort
 - i. LEED requirement for refrigerated buildings: Submitted formal document to USGBC and examples. USGBC is satisfied and will give it a stamp of approval.
 - d. Low GMP MTG – Doug Scott
 - i. No activities that impact TC10.1.
6. Committee Reports
- a. Handbook – Levi Haupt
 - i. One external review on Chapter 4 has been received
 - ii. Soliciting for interested parties to establish a subcommittee. Brian Blahey, Igor Vaisman, Bill Brayman & Jim Young on the insulation sections in Cryogenic chapters. If you are reading these minutes & interested in helping, you can e-mail levi-haupt@fluke.com.
 - iii. Will create a tracking document to track progress
 - b. Research – Tom Wolgamot
 - i. 1569-RP (Lane Loyko) was contracted to ASCOM (Switzerland) and the project has started. Interim report was submitted in November 2014. Contractor is currently doing preliminary studies in 1- & 2-D on their software to incorporate the conditions of the project and extend it from steam/water to anhydrous ammonia.
 - ii. Tom offered to set up conference call in 6-8 weeks to develop RTAR for the highest priority idea from the Refrigeration Research Brainstorming survey results.
 - c. Standards – Bruce Griffith
 - i. See attached written report.
 - d. Programs – Dan Dettmers (absent)
 - i. Chair acknowledged Dan's work in getting the programs approved for this meeting. There was a smattering of applause. Everyone remained seated.
 - ii. Atlanta, GA – June 2015

- iii. Orlando, FL – January 2016
 - 1. Refrigeration modeling tools & their shortcomings
 - iv. St. Louis, MO – June 2016
 - 1. Commercial compressor superheat considerations (Doug Scott).
Possibly take advantage of proximity to Hussmann.
 - v. Las Vegas, NV – January 2017
 - e. Webmaster – Ryan Hoest
No report.
 - f. Membership – Don Fenton
 - i. Fenton rolls off next meeting (June 30, 2015). Committee will need a new Chair.
 - ii. Borrowman (Vice Chair) status is uncertain at this point.
 - iii. Call for interest: Kent Perkins interested in joining as a member.
 - g. ALI Coordinator – Dan Dettmers (absent)
No report.
- 7. Old Business
 - a. Action Items (from Summer 2014 Minutes, Seattle, WA)
 - i. **All Members:** Standing offer to contact Dennis Dorman or Marty Timm about Standard 15 membership. They are in need of Designer, End User or General to balance the committee membership. **Status: ongoing**
 - ii. **Dan Dettmers:** Explore and coordinate possibility of doing a Refrigeration “Lighting” seminar. 10 speakers with 3 minutes to present on a topic. **Status: progressing for Atlanta or Orlando**
 - iii. **All Members:** Call to keep the pressure on shepherding the research ideas through the ASHRAE process. Minutes of Section 10 research meeting attached with these minutes. **Don Fenton** will contact by email the committee members to review and prioritize the research ideas that are of interest to the TC 10.1. Top 5 will be discussed in a conference call between meetings. **Status: Call to respond to survey, Don Fenton will compile & send out**
 - iv. **All Members:** Call for the TC to increase refrigeration programs in future ASHRAE meetings. **Status: ongoing**
- 8. New Business
 - a. ASHRAE requested review of the FAQs on the ASHRAE website. Subcommittee of Doug Reindl, Bruce Griffith, Eric Smith, Richard Love, & Todd Jekel. **Don Fenton to send the document out electronically to subcommittee members.**
- 9. Announcements
 - a. The next meeting will be in Atlanta, GA, 2:15 PM on June 29, 2015
- 10. Adjournment at 4:16pm (BG moved, RL seconded: 6-0 CNV [RV & GS left early])

TC Sign-in Sheet

Meeting Info: TC 10.1 Date: Jan. 26, 2015

Name	Affiliation	E-mail	Member (VM,CM,Guest)	YEA Member?
Jim Young	ITW	jyoung@itwinsulation.com		N
Greg Scrivener	Cold Dynamics	greg.scrivener@coldynamics.com	VM	Y
J.BRIAN BLAHEY	JBB Eng'rs	brian@jbbengineers.com	CM	N
Richard Love	Massey Uni.	rj.love@massey.ac.nz	VM	N
Len Haupt	FLUKE	len.haupt@fluke.com	CM	Y
DANIELLE DRAGON	PG&E	dvd9@pge.com	GUEST	Y?
LANE LOYKE	PLP CORP	LEWISLANEL@AOL.COM	CM	N
TOM WOLGAMOT	DC ENGINEERING	TWOLGAMOT@DCENGINEERING.VET		N
Eric Smith	Ucar	eric.smith@ucar.org	VM	N
Igor Vaisman	Rolls-Royce Corp.	igor.vaisman@rolls-royce.com	CM	N
Bill Brayman	Brayman Insulation	brayman.bielle@att.net	CM	N
Ron Vallort	Ron Vallort 700 4330016	RONVALLORT@AOL.COM	VM	N
DOUG SCOTT	VACOMTECH	DSCTTE@VACOMTECH.COM	CM	N
ZAHID AYUB	ISOTHERM	zaid@iso-therm.com	N	N
Jim Caylor	Caylor Eng	jim.caylor@yale.com	G	N
Bruce Griffith	Johnson Controls	Bruce.L.Griffith@jci.com	VM	N
Dave Rule	IIAR	dave_rule@iiar.org	Guest	N
Kent Perkins	Colmac Coil	Kent.perkins@colmaccoil.com	CM	N
Ray Cole	Axiom Engineers	rayc@axiomengineers.com	Retiree Committee	N
Apichit L.pongpana	ITC-Thailand	apichit.lpana@itc-group.co.th		CM/N
Doug Reinell	WITRC			CM
Tobey Fowler	OEM Hussmann	tobey.fowler@hussmann.com	CM?	N
Ken Cooper	TAC Section Head			
ERIC RAMON	MYCOM	ERAMON@MAYEKAMUSA.COM	CM	N

Standards Report for TC 10.1

Chicago 2015 (Jan. 26, 2015)

Submitted by: Bruce Griffith

ASHRAE Standard 15:

- SSPC 15 met on Sunday (1/25) from 1 pm until 5 pm.
- The committee continues to work on a re-write of the Standard. The main purpose of the re-write is to structure the standard in mandatory (code) language, eliminate redundancy and develop a logical format.
- The 2013 version of Standard 15 and 34 is published and in the bookstore.
- Summary of change proposals:
 - Design Pressure for Carbon Dioxide (9.2.6) – Complete and voted to send to public review.
 - Discharge Relief Line Sizing (Table 3) – proposal to expand for higher pressures and tubing and move to normative appendix E. Additional work required.
 - Machinery room exit (8.12 d) – Eliminates the requirement for an outside door. Complete and voted to send to public review.
- The 2L ad hoc committee is working on changes for a potential advisory public review.
- ASME PV&B code is considering eliminating the 6 inch diameter requirement and using a Pressure, Volume requirement (i.e. $\text{psi} \times \text{ft}^3 > 90$) to define an ASME pressure vessel. SSPC 15 would need to evaluate any language in the Standard related to pressure vessels.

ASHRAE Standard 34:

- SSPC 34 reviewed a proposal to reduce the burning velocity limit for 2L refrigerants from 10 cm/sec to 5 cm/sec. This was voted on at the Seattle committee meeting and rejected. There is an ISO proposal to use ammonia as the base (7 cm/sec).
- There was an effort to look at the entire toxicity classification and possibly add a third class (C). The subcommittee agreed to stay with two classes. They are reviewing the requirements for A and B.
- The committee continues to receive requests for new refrigerants. There are five new applications to review at the Chicago meeting, including one 2L refrigerant.