

ASHRAE Meeting – Denver
TC 10.1 Custom Engineered Refrigeration Systems
Monday June 24, 2013 2:15 to 4:15 PM
Colorado, Sheraton Denver

MINUTES

1. Chair called the meeting to order at 2:14PM

2. Self Introduction & Sign Roster

3. Check for Quorum (8 voting members; 4 required; **Bold** indicates presence)

Daniel J Dettmers, Donald L Fenton, John J Sluga, Andrew B Pearson (Non-Quorum), Ronald P Vallort, Jim Caylor, **Eric M Smith, James W Young**

Quorum established with 5 voting members.

4. Changes and additions to Agenda

No changes or additions.

5. Approval of Minutes from Dallas

ES moved, JS seconded. Approved 4-0 CNV

6. Chairman's Report from Section 10 Chair Breakfast

- See attached file with detailed minutes.
- ASHRAE requests all members update their ASHRAE bio.
- Let Don Fenton know two (2) weeks ahead of time if unable to make the next ASHRAE meeting and would like to participate virtually (E&P).

7. Liaison Reports

a) Refrigeration Committee – Don Siller

- i) New "R" in ASHAE award for Chapter with most points for Refrigeration related activities
- ii) Looking to increase Distinguished Lecturers and involvement in Chapter activities
- iii) Seven (7) programs on refrigeration related issues at the Denver meeting. Call for more programs.
- iv) Refrigeration Management Program ad-hoc committee made contacts, created an executive summary and outline, recommended ASHRAE to proceed with the program but to work with another stakeholder that is working on a similar program.
- v) Requests assistance and involvement to review of 95% draft of Refrigeration Commissioning Guide.
- vi) Re-affirmed the Ammonia as a Refrigerant position document. Will proceed to update the document.
- vii) Winner was chosen for the Milt Garland award.

b) IIAR - Eric Smith

- i) Introduced Dave Rule, new IIAR President

- ii) IIAR-5 Start-up and Commissioning of Closed-Circuit Ammonia Mechanical Refrigerating System has been submitted to ANSI. IIAR-7 Developing Operating Procedures for Closed-Circuit Ammonia Mechanical Refrigerating Systems is close to submission. IIAR-2 is in early stages of a revision mandated by ANSI 5-year requirement.
- iii) CO₂ Handbook is hoped to be complete by the end of 2013.
- c) Handbook Committee – DF will report during Handbook
- d) Section 10 Liaison – Ken Cooper
 - i) Introduced himself as incoming Section 10 Chair.
- e) Other Liaison Reports and Announcements

8. Review of Action Items from Dallas

- a) Request an official Refrigeration Committee liaison to TC 10.1 – DD requested of Richard Royal, no liaison present. **Action item:** DD to remind and request again
- b) Request clarification from RAC on URP recommendation to convert to WS – Tom Wolgamot requested from Pradeep Bansal
- c) Time and location for PMS for 1602-RP in Denver - COMPLETE

9. Subcommittee Reports

- a) Membership – Fenton/ Dettmers
 - i) Establish membership for 2013-14 Society year
 - ii) **ACTION ITEM:** Request that DF remove Michele Friedrich per her request from membership roster.
- b) Research – Wolgamot
 - i) 1513-WS – “Liquid/Vapor Separating Velocities”
 - (1) Dropped by RAC. Can resubmit.
 - (2) Resolving CFD comments the main issue. Bruce Griffith recommended the potential bidders for the 1569-WS CFD Study of Hydraulic Shock in Two-phase Anhydrous Ammonia project co-sponsored with TC 10.3.
 - ii) 1514-WS – “Thermal Energy Recovery from Industrial Refrigeration Systems”
 - (1) Dropped by RAC. Can resubmit.
 - iii) 1569-WS – “CFD Study of Hydraulic Shock in Two-phase Anhydrous Ammonia”
 - (1) Conditionally accepted WS.
 - (2) Co-sponsored with TC 10.3.
 - iv) 1634-WS – “Guide for Sustainable Refrigerated Facilities and Refrigeration Systems”
 - (1) Contract language has been worked on, project start is held up awaiting UNEP funding
 - v) 1602-RP - “Thermal-Fluid Behavior of Mixed Refrigerants for Cryogenic Applications”
 - (1) PMS met virtually
 - vi) MTG *Alternative Lower GWP Refrigerants* – Scott
 - (1) No report.
 - vii) Future research priorities and volunteers for RTAR development
 - (1) Requested anyone with research ideas contact TW.
- c) Program -- Borrowman

- i) Tips from Wayne on successful program submission. Hilarity ensued.
- ii) Denver Meeting
 - (1) Seminar 37: *Simple Energy Efficiency Improvements In Refrigeration Systems*
- iii) NY Meeting
 - (1) Submissions due August 12. **Bold** to be submitted for meeting listed.
 - (2) Mechanical Integrity on Equipment (corrosion and erosion, vibration on rotating equipment, controls, vessels, condenser fouling, etc.). Would need speakers.
 - (3) **Panel discussion on Commissioning Guide** for NY. Doug Scott, Eric Smith, Dan Dettmers
 - (4) Panel discussion on low-GWP refrigerants with regard to safety. Would need speakers.
 - (5) **Low-charge ammonia systems** conference papers for Seattle – Pega Hrnjak to Chair
 - (6) **Ammonia Refrigeration Systems or Cold Chain Basics for YEA members** for NY – Doug Reindl to Chair
 - (7) **Brewery Refrigeration for YEA Members** for Seattle – Dan Dettmers to Chair
- d) Handbook -- Sluga
 - i) Volunteers chapter responsibility:
 - (1) Liquid Overfeed Systems (4) - **has comments to review**
 - (2) Component Balancing in Refrigeration Systems (5) – submitted
 - (3) Secondary Coolants in Refrigeration Systems (13) – **has comments to review**
 - (4) Concrete Dams and Subsurface Soils (45) – submitted
 - (5) Refrigeration in the Chemical Industry (46) – submitted
 - (6) Terminology of Refrigeration (50) – **DD to comment**
 - (a) IIAR Standard 1
 - (b) ASHRAEwiki (<http://wiki.ashrae.org/index.php/ASHRAEwiki>)
 - (7) Cryogenics (47) – submitted
 - (8) Ultralow-Temp Refrigeration (48) – submitted
 - (9) Biomedical (49) – submitted
 - ii) JS will send out chapters 4, 13 & 50 with July 19 deadline to comment. Vote will be called after deadline.
- e) Standards -- Griffith
 - i) See attached submitted report.

10. Old Business

- a) Objectives
 - i) MBO #1 – Develop programs - COMPLETE
 - ii) MBO #2 – Support sustainability efforts - COMPLETE
 - iii) MBO #3 – Increase research activities - COMPLETE
- b) Web site updates – Hoest
 - i) Complete prior to meeting
- c) Promote Awards: Briley, Hightower, Milt Garland, Comfort Cooling Awards
- d) Refrigeration articles for ASHRAE Journal

11. New Business

- a) Report on Refrigeration Commissioning Guide 90% review

12. Announcements

- a) **Cryogenics Refrigerants Subcommittee: Sunday 3:00-5:00p, Suite 3266 (Plaza)**
- b) **MTG *Alternative Lower GWP Refrigerants***
- c) **All other 10.1 subcommittee meetings: Sunday 5:00-7:00p, Suite 3266 (Plaza)**

13. Next meeting June 18-22, 2014 in New York

14. Vote to Adjourn

DF moved, JS seconded. 4-0 CNV.