ASHRAE Meeting – Dallas  
TC 10.1 Custom Engineered Refrigeration Systems  
Monday January 28, 2013  2:15 to 4:15 PM  
City View 8, Sheraton Dallas  

MINUTES

1. Meeting called to order at 2:14pm

2. Self Introduction & Sign Roster - Members, Visitors, and Guests

3. Quorum Established (9 voting members; 5 present)
   Daniel J Dettmers, Donald L Fenton, John J Sluga, Andrew B Pearson (Non-Quorum), Ronald P Vallort, Jim Caylor, Dennis I Halsey, Eric M Smith, James W Young

4. Changes and additions to Agenda
   None

5. Approval of Minutes from San Antonio
   Moved Sluga, seconded Young 4-0 CNV

6. Chairman’s Report from Section 10 Chair Breakfast
   ASHRAE Standard of Ethics; request to update your employment discipline online; free wi-fi in future meetings

7. Liaison Reports
   a) Refrigeration Committee (Doug Scott)
      i) Awards for Refrigerants Conference to Piotr Domansky & Tony Giometti
      ii) 1634-TP Guide for Sustainable Refrigerated Facilities and Refrigeration Systems nearly ready to start, delays on agreements with UNEP & ASHRAE
      iii) Programs issues with this meeting, more discussion later
      iv) Action Item: Dan Dettmers to request Richard Royal assign a formal Refrigeration Committee liaison
      v) CTTC requests more refrigeration related programs with “excellent speakers” on broad topics with wider appeal, and more “excellent speakers” applying for Distinguished Lecturers (2 year term).
      vi) Refrigerant Management Program ad-hoc exploratory committee. Program to minimize direct emissions of synthetic refrigerant over their life-cycle. Initial phase is in US only focused on HVAC&R.

   b) IIAR (Eric Smith)
      i) IIAR-5 – Almost ready to publish, delayed by an additional public review & comments.
      ii) IIAR-7 – Guidelines for writing operating procedures. Close to completion.
      iii) IIAR-2 – 50% to finish major review, to expand current coverage of following topics (but not limited to these):
          (1) Shunt tripping
          (2) Alarms & detection
iv) Bruce Badger is retiring as IIAR President and this is his last meeting. Thanks & acknowledgement of Bruce’s work at IIAR & ASHRAE.

v) Annual Meeting in Colorado Springs in March. Encouraged TC10.1 members and guests to attend.

vi) Carbon Dioxide Training course in coordination with the IIAR Annual Meeting. Brian Marriot coordinating.

c) Research Committee (Pradeep Bansal)
   i) Requesting more submission from TC10.1
   ii) Funds are available
   iii) Simplified RTAR approval process

d) Handbook Committee (Don Fenton)

e) Other Liaison Reports and Announcements

8. Review of Action Items from San Antonio

   None

9. Subcommittee Reports

a) Membership – Fenton/ Dettmers
   i) Establish membership for 2013-14 Society year
      (1) Dettmers rolling off, add Tom Wolgamot, Wayne Borrowman, Gregory Scrivener
      (2) Increased membership to 11, quorum to 6
   ii) Call for corresponding member interest
   iii) Dettmers to Program, Borrowman to Vice Chair, Jekel remains Secretary, Griffith remains Standards, Wolgamot remains Research, Sluga remains Handbook, Hoest remains Webmaster

b) Research – Wolgamot
   i) Review of Research breakfast
      (1) Looking for broader topics
      (2) Action item: Request clarification from RAC (Pradeep & Eric at TAC) on the URP recommendation: convert this URP in cooperation with the TC into a Work Statement
   ii) 1513-WS – “Liquid/Vapor Separating Velocities for Industrial Refrigeration Systems” (TC 10.3 lead)
   iii) 1514-WS – “Thermal Energy Recovery from Industrial Refrigeration Systems”
      (1) Doug Scott editing
      (2) Pradeep recommended re-titling and resubmitting as a workstatement
      (3) Don Fenton & Eric Smith to assist
      (1) Contracts getting signed, work started
   v) 1448-RP – “Ventilation Requirements for Refrigeration Machinery Rooms” (TC 4.3)
      (1) Complete
      (1) Complete
   vii) 1602-RP - “Thermal-Fluid Behavior of Mixed Refrigerants for Cryogenic Applications”
(1) Meeting during TC 10.1 Cryogenic Refrigerants - Executive Boardroom (Sheraton Dallas), Sunday 3-5 pm ... rescheduled...will be online

(2) Work started, construction of experimental apparatus underway, expecting data by Denver

(3) Action item: Dettmers to find a time and submit for a room at Denver.

viii) Co-sponsor with TC 10.3 proposed on research into hydraulic shock. Originally RTAR-1569. Idea reworked and being resubmitted as a work statement. (Loyko)

1. Title: *CFD Study of Hydraulic Shock in Two Phase Anhydrous Ammonia*.
2. Also asked to coordinate with TC 4.10 (CFD) by RAC but they showed no interest.
3. Requested Loyko send the TC10.3 vote to Dettmers and, if approved, Dettmers would send out a letter ballot.

ix) MTG Alternative Lower GWP Refrigerants (Scott)

1. Dallas, Saturday, January 26, 2013, 6:00 – 7:30 PM, State Room 2 on the 3rd Floor, Sheraton Conference Center

x) Future research priorities and volunteers for RTAR development

1. Component balancing (moving Chapter 5 in the *Refrigeration Handbook* to computer methodologies)

c) Program -- Borrowman

i) Dallas meeting – Shut out

ii) Denver Meeting


2. From CEC to Dettmers “…proposed a "research summit" at the Denver Conference as a way to focus/call attention to research and encouraging more papers at ASHRAE conferences.”

d) Handbook -- Sluga

i) Volunteers chapter responsibility:


2. Component Balancing in Refrigeration Systems (5) – needs fundamental change in the future. Sluga moved to approve chapter as written. 5-0-4 CV, abstentions are absent


4. Concrete Dams and Subsurface Soils (45) Sluga moved to approve chapter as written. 5-0-4 CV, abstentions are absent


6. Terminology of Refrigeration (50)

   a) IIAR Standard 1


7. Cryogenics (47) Comments pending, vote pushed until Denver.


9. Biomedical (49) Sluga moved to approve chapter as written. 5-0-4 CV, abstentions are absent

e) Standards -- Griffith

i) See attached report from Griffith

ii) Review/Comments on Standards from other organizations

1. BSR/UL 427-201x, Standard for Safety for Refrigerating Units (revision of ANSI/UL 427-2011)

   a) Comment deadline: December 31, 2012
10. Old Business
   a) Objectives
      i) MBO #1 – Develop programs
      ii) MBO #2 – Support sustainability efforts
      iii) MBO #3 – Increase research activities
   b) Web site updates – Hoest
      i) Complete prior to meeting
   c) Promote Awards: Hightower, Milt Garland, Comfort Cooling Awards
   d) Request for more refrigeration articles for ASHRAE Journal

11. New Business
   a) Report on Refrigeration Commissioning Guide 50% review – Siller/Vaisman with Scott
      i) See attached copy of guide for review
      ii) Peer review schedule: January 21, 2013 through February 8 COB
      iii) Comments should be placed on attached review sheet and sent to Lilas Pratt <LPratt@ashrae.org>
   b) Standard 189.1 Standard for the Design of High-Performance Green Buildings looking for comments on revised commercial refrigeration efficiency table
      i) Monday 4:30 to 5:30 pm: Dallas Sheraton 4th floor - City View 7
   c) AIRAH requesting comments on DRAFT DISCUSSION PAPER: TRANSITION TO LOW EMISSION HVAC&R ISSUES AND SOLUTIONS
      i) See attached copy
      ii) Comments by 5pm Friday 1st February 2013 to vince@airah.org.au

12. Announcements
   a) Cryogenics Refrigerants Subcommittee: Sunday 3:00-5:00p, Executive Boardroom (Sheraton)
      i) May include PMS for RP-1602
   b) MTG Alternative Lower GWP Refrigerants: Saturday 6:00 – 7:30 PM, State Room 2
   c) All other 10.1 subcommittee meetings: Sunday 5:00-7:00p, Executive Boardroom (Sheraton)
d) Std 189.1 Revised Commercial Refrigeration Efficiency Table meeting: 4:30-5:30, City View 7 (Sheraton)

13. Next meeting June 22-26, 2012 in Denver

14. Adjourn at 4:12pm (Sluga moved, Smith seconded, 5-0 CV)