

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS,  
INC.**

**1791 Tullie Circle, N.E./Atlanta, GA 30329  
404-636-8400**

**TC/TG/TRG MINUTES COVER SHEET**

**(Minutes of all TC/TG/TRG Meetings are to be distributed to all persons listed below within 60 days following the meeting.)**

TC/TG/TRG NO 3.3 DATE August 3, 2012

TC/TG/TRG TITLE Refrigerant Contaminant Control <http://tc33.ashraetcs.org/>

DATE OF MEETING June 26, 2012 LOCATION San Antonio, TX

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Danny Halel – Chair	VM	Doug Gildehaus	VM	Alan Cohen, Don Bivens
Rosine Rohatgi	VM	Debra Kennoy	VM	Chris Reeves, Mark Spatz
Scott Gustafson	VM	Ray Thomas-Research	VM	Ed Hessel, Brad Boggess
Sonny Sundaesan	VM	Alice Reimer – IM	VM	Dale Carr, Chris Seeton
Joe Karnaz – Program	VM			Maryline Rassi, Glen Steinkoenig
Julie Majurin	VM			John Senediak, Marc Scancarello, Rob Yost, Tom Leck, Dan Miles
Frank Nagy - Secy/Membership	VM			Michael Foster, Jay Field
				Roberto Urrego, Amanda Hickman
				Hewitt Gaudin, Ken Lilje
				Ramon Pons, Scott Wujek
				Knut Petry, Warren Clough
				Brett Van Horn, Corey Anderson

**DISTRIBUTION**

*All Members of TC/TG/TRG plus the following:*

TAC Section Head:	<b><u>Bill Murphy</u></b>
TAC Chair: TAC Vice-Chair:	<b><u>Charles Culp</u></b>
All Committee Liaisons As Shown On TC/TG/TRG Rosters:	Raymond Cohen, Don Bivens – RAC Ramon Pons – Handbook Doug Abramson – Standards William Fleming – Special Pubs C Brian Wandling – Program Mark Tome – CTTC
Manager Of Standards Manager Of Research & Technical Services	Stephanie C Reiniche Mike Vaughn
Admin Asst – Technical Services	Tara Thomas

Note: "These draft minutes have not been approved and are not the official, approved record until approved by this committee."

## 1) Call to Order

Danny Halel (Chair), called the meeting to order at 3:30 pm on Tuesday, June 26, 2012. The meeting was held at the Convention Center (103A), San Antonio, TX. After introduction of members and guests, a quorum was confirmed with 7 / 11 voting members present. There were no changes or additions to the minutes;

**MOTION #1:** to approve the minutes was made by Scott Gustafson and seconded by Rosine Rohatgi. Motion passed 6-0-0 (Chair Not Voting).

## 2) Report on TC 3.0 Chair Breakfast Meeting – Danny Halel

- Over the past several years ASHRAE has been using a new means to communicate expertise on a particular subject, these are called Multidisciplinary Task Groups (MTG's). Two new ones have been formed on
  - Alternative Lower Global Warming Potential Refrigerants
  - Energy Efficient Air Handling Systems for Non-Residential Building
- TC Volunteers willing to support content development and Quality Control for Society Technical Program at Society Meetings
  - Provide your Section Head after each Society meeting a list of qualified volunteers from your TC that are potential Technical Session chairs and reviewers of session papers that are related to TC's scope for use by the Conferences and Exhibitions Committee (CEC) in developing technical content for future technical programs.
- CEC implemented changes
  - Speaker registration fee
    - Beginning in the Dallas Meeting and moving forward for future conferences, a speaker registration fee is being implemented as a part of an overall Society evaluation of registration fees for the purpose of lowering registration fees for other attendees. For the meeting in Dallas a fee of \$95 Member/Non-member Speaker registration fee.
- Thank you Letters to Employers
  - ASHRAE President – Ronald E. Jarnagin – has offered to send letters to the employers of TC volunteers this year thanking them for supporting their employee's service on an ASHRAE TC during the Society year 2011-2012. If requested the letter will be sent in late July.
- Option for TC Subcommittee Meetings via Conference Calls and Web Meetings
  - More and more TCs are taking advantage of a Society service that allows TCs to hold Subcommittee meetings by phone and/or web. Many Tc's are finding this to be a more efficient way for them to conduct business. If you have a need for this service, please contact MRTS, Mike Vaughn at [mvaughn@ashrae.org](mailto:mvaughn@ashrae.org) or [MORTS@ashare.net](mailto:MORTS@ashare.net)

### Liaison Comments:

Handbook-next revise is due June 8, 2013. Chapter 7 is moving to Chapter 12. Committee Chair position was filled via Brad Boggess.

Research-Mark Spatz will be taking over as liaison; Danny Halel thanked Don Bivens for his help and accomplishments.

## Sub-Committee Reports

### 3) Program – Joe Karnaz

- Forum entitled “What contaminants do we need to consider in lower GWP refrigerants?” with Rob Yost as moderator was rejected. As a result, a Forum (Rob as Chair) followed by a Seminar (afterwards) was discussed for Dallas.
- Seminar entitled “Acid Number & Other Health Indices for Sustainable System Performance” for San Antonio was rejected; however, will be re-submitted for Dallas by August 13 (Sonny Sundaresan to Chair; have 2 speakers).
- **MOTION #2:** Forum entitled “Safety issues with counterfeit refrigerants” for Dallas with TC-3.2 as co-sponsor was made by Joe Karnaz and seconded by Julie Majurin (with Rob Yost as Chair) passed 7-0-0 (Chair Voting). This would be an open forum in the convention center for better exposure with a 15-20 minute information / presentation given prior.
- **MOTION#3:** Seminar entitled “Safety issues with counterfeit refrigerants” for Dallas with TC 3.4 as co-sponsor at the end of the scheduled TC-3.4 meeting and continued through the beginning of the scheduled TC-3.3 meeting should the MOTION #2 Forum (above) be rejected for Dallas by Joe Karnaz and seconded by Frank Nagy passed 7-0-0 (Chair Voting). **Chair Action Item:** do we need letter ballot via TC-3.4 & 3.3 to change ASHRAE meeting times in Dallas if rejected?
- The following seminars all pertaining to contaminant control will be combined for Dallas and chaired by Sonny Sundaresan; speakers include Chris Reeves (additional speakers still needed):
  - “History of System Chemistry Part II & Contaminant Control” (previously for San Antonio)
  - “History of Contaminant Control” (previously for San Antonio)
  - “Lessons Learned in Contaminant Control” (previously for San Antonio)
  - “System Contaminant Control & Retrofits” (previously postponed for further discussion in Chicago)

#### 4) Handbook – Brad Boggess

- Danny Halel thanked Brad Boggess for taking over as Subcommittee Chair.
- Subcommittee members are: Danny Halel, Sonny Sundaresan, Alan Cohen, Bob Woods, Joe Longo & Jay Field.
- Handbook is in good shape for most part; TC to vote in Summer of 2013 (June 8 is due date).

#### 5) Standards – Rob Yost

- SPC 35-2010 – “Method of Testing Desiccants for Refrigerant Drying” Complete & published June 2010; no action required until 2014.
- SPC 63.1 – “Method of Testing Liquid Line Filter Driers” Reaffirmed in 2004; subcommittee chair Bob Woods had a meeting in Chicago with some changes made which will be redistributed electronically to sub-committee members. (Members: Jorge Cabrera, Chris Reeves, Alan Cohen, Jay Field).
- SPC 63.2 – “Method of Testing Liquid Line Filter Drier Filtration Capacity” Reaffirmed in 2009; is current with no action required until 2013.
- SPC 78 – “Method of Testing Flow Capacity of Suction Line Filters and Filter Driers” Reaffirmed in 2006. (Juan Flores was appointed sub-committee chair for review / revision at the Las Vegas meeting; Marc Scancarello will check on Juan’s status.)
- “MOT for Expansion Device Clogging” – Marc Scancarello has taken over as chair (sub-committee members are Sonny Sundaresan, Rob Yost, Julie Majurin, Brad Boggess & Warren Clough). Marc will write the TPS post San Antonio meeting. (TPS attached to minutes.)
- SPC 63.3 “Method of Testing Acid Filters” in limbo and not approved. John Senediak, sub-committee member, was volunteered to write a TPS for “MOT for capturing organic acid in liquid line filter dryers” for Dallas.

#### 6) Research – Alan Cohen for Raymond Thomas

- TRP 1495 – “Effect of Oil on Distribution of Moisture between Vapor and Liquid Phases of Refrigerants” (Authors: Alan Cohen, Raymond Thomas, Rob Yost, Liz Dixon): TC 3.2 and TC 3.4 are co-sponsors. This is

an extension of Refrigeration Handbook Chapter 6, Table 2 data for pure refrigerants revised by Research Project 1239. TRP-1495 deals with the effect of oil. Final draft was written; sub-committee has yet to vote on it. (There is little effect noted with POE and MO with R-134a & R-22; whereas, PAG was more noticeable.) Phase 2 of TRP-1495 was deleted (no longer appropriate).

- TRP 1641– “Effect of Unsaturated Fluorocarbon Contaminants on the Reliability and Performance of HVAC&R Equipment” – work statement approved (ready for bidding in the Fall).
- New RTAR – “Adsorption of HF on Desiccants” – Alan Cohen has been working with Chris Seeton and Joe Karnaz; final draft will go out for review / email ballot via Alan.
- Rob Yost will write an RTAR: “Determine maximum allowable level of impurities in natural (non-fluorocarbon) refrigerant systems.” (Rob is still working on it – jointly with AHRI 700).
- RTAR-“Breakdown of Lubricants at High Discharge Temperature in Transcritical Systems”-Sonny Sundaresan to write RTAR for discussion from Las Vegas meeting continues to be on hold as sharing of information difficult.
- RTAR-“Reactivity of R-40” work statement to fast track research was approved. (There is a safety concern with the reactivity of R-40 contaminant in R-134a primarily with aluminum.)

#### 7) **Webmaster – Alan Cohen**

- Website is in compliance (<http://tc33.ashraetcs.org>).
- Our template does not reference any links / other information; please let Alan know if you have any suggestions.

#### 8) **Membership – Frank Nagy**

- Update your ASHRAE bio.
- New Corresponding Member information was given to Danny Halel (Chair).
- As of July 1, 2012: new Voting Members will be: Glen Steinkoenig, Joe Longo, Bob Woods, Rob Yost & Marc Scancarello. Rolling off will be: Danny Halel & Rosine Rohatgi.
- Committee positions as of July 1, 2012: Rob Yost (Chair & Standards), Raymond Thomas (Research), Joe Nigro (Program), Alan Cohen (Webmaster), Brad Boggess (Handbook); Vice Chair has yet to be determined.

#### 9) **Old Business**

- None

#### 10) **New Business**

- Bill Murphy, TAC Liaison thanked Danny Halel for his service as Chair and issued a certificate of appreciation.

11) **Adjournment-MOTION #4:** to adjourn meeting was made by Joe Karnaz & seconded by Julie Majurin; meeting was adjourned at 4:58PM.

Respectfully submitted,

Frank Nagy  
Secretary TC 3.3