

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

**1791 Tullie Circle, N.E./Atlanta, GA 30329
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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 January 29, 2013

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

DATE OF MEETING January 29, 2013 LOCATION Dallas, TX

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Rob Yost – Chair & Standards	VM	Joe Longo	VM	Joe Nigro – Program
Debra Kennoy	VM			Brad Boggess - Handbook
Scott Gustafson	VM			Chris Reeves, Mark Spatz
Sonny Sundaresan	VM			Dale Carr, Danny Halel
Joe Karnaz – Program	VM			Maryline Rassi, Steve Kujak
Julie Majurin – Vice Chair	VM			Hewitt Gaudin, Amanda Hickman, Tony Korba, Adam Wood, Ed Hessel, Mark Baker, Kris Crosby
Frank Nagy – Secretary & Membership	VM			Michael Foster, Bianca Hydutsky
Ray Thomas - Research	VM			Roberto Urrego, Rosine Rohatgi
Alice Reimer - IM	VM			Ramon Pons, Knut Petry
Glen Steinkoenig	VM			Warren Clough
Marc Scancarello	VM			

DISTRIBUTION

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

TAC Section Head:	<u>Bill Murphy</u>
TAC Chair: TAC Vice-Chair:	<u>Charles Culp</u>
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

Rob Yost (Chair), called the meeting to order at 3:30 pm on Tuesday, January 29, 2013. The meeting was held at the Sheraton Conference Center Lone Star Ballroom (C2), Dallas, TX. After introduction of members and guests, a quorum was confirmed with 12 / 13 voting members present. There were no changes or additions to the minutes.

MOTION #1: to approve the minutes was made by Sonny Sundaresan & seconded by Ray Thomas passed 10-0-2. Motion passed 6-0-0 (Chair Not Voting).

2) Report on TC 3.0 Chair Breakfast Meeting – Rob Yost

Young Engineers in ASHRAE – we have two in attendance. There is a special meeting set at each ASHRAE meeting to introduce new Engineers to ASHRAE to its membership. ASHRAE asks that each TC have a representative come to this meeting and introduce their specific subject and invite them to their TC meeting.

A new section has been added to your ASHRAE Bio - Employment Discipline is now asking for more specific information about what each member does so that the TC's can get a better understanding of the membership of the TC. Please fill out as requested when doing your next update.

Online TC meeting is continuing to be experimented with, in the future we may be able to participate in this.

More discussions on why seminars, forums etc. are not accepted by Programs. Our programs need to meet the requirements of the Tracks set for each of the Meetings. Incomplete information seems to be the main reason for rejection.

TAC is looking to institute another award. Best TC of each Section.

Upcoming meetings

- Denver June 22-26, 2013
- New York City January 18-22, 2014

Liaison Comments:

Handbook-next revise is due June 1, 2013.

Section Head-appreciate your company support.

Sub-Committee Reports

3) Program – Joe Nigro

- Forum 6 entitled “What contaminants do we need to consider in lower GWP refrigerants?” with Rob Yost was conducted. Over 70 people attended. A seminar in follow up to be conducted at a future meeting.
- Seminar entitled “Acid Number & Other Health Indices for Sustainable System Performance” was rejected again; Sonny Sundaresan recommended to withdraw it.
- **MOTION #2:** Forum entitled “Safety issues with counterfeit refrigerants” for Dallas, with TC-3.2 as co-sponsor, was rejected; instead a seminar was discussed for Denver (have 2 speakers already).
- The following seminars all pertaining to contaminant control (rejected in past) will be combined for New York:
 - “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)

It was proposed to shorten TC 3.4 & 3.3 meetings for New York and conduct the seminar in between them as TC 9.9 had done in Dallas.

4) Handbook – Brad Boggess

- To be published 2014 with final draft due June 1.
- Subcommittee members are: Danny Halel, Sonny Sundaresan, Alan Cohen, Bob Woods, Joe Longo, Amanda Hickman & Jay Field.
- There was concern is removing some outdated refrigerants (ie R-11); new refrigerants will be added (ie R-744 etc).

5) Standards – Rob Yost

- SPC 35-2010 – “Method of Testing Desiccants for Refrigerant Drying”
MOTION #3: to reaffirm was made by Bob Woods & seconded by Alice Reimer passed 12-0-0.
- SPC 63.1 – “Method of Testing Liquid Line Filter Driers”
In final stages of revision per subcommittee chair Bob Woods; members are: Jorge Cabrera, Chris Reeves, Alan Cohen & Jay Field).
- SPC 63.2 – “Method of Testing Liquid Line Filter Drier Filtration Capacity”
MOTION #4: to revise and nominate Glen Steinkoenig as subcommittee chair was made by Julie Majurin & seconded by Sonny Sundaresan passed 11-0-1.
- SPC 78 – “Method of Testing Flow Capacity of Suction Line Filters and Filter Driers”
MOTION #5: to revise and nominated Chris Reeves as subcommittee chair was made by Glen Steinkoenig & seconded by Frank Nagy passed 12-0-0.
- “MOT for Expansion Device Clogging” – how to better define the use of ethe standard will be discussed further next meeting. Marc Scancarello is subcommittee chair; members are: Sonny Sundaresan, Rob Yost, Julie Majurin, Brad Boggess & Warren Clough.
- SPC 63.3 “Method of Testing Acid Filters” in limbo and not approved. Glen Steinkoenig will forward aTPS for “MOT for capturing organic acid in liquid line filter dryers” to Frank Nagy (Secretary) to be attached to the minutes for review and committee comment for Denver. (TRP1028 was completed many years that also provided a MOT but was not formally turned into an ASHRAE Standard.)

6) Research – 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. **MOTION #6:** to accept the final report was made by Ray Thomas & seconded by Sonny Sundaresan passed 12-0-0. (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 and went out for bid with no bidder replies; **MOTION #7:** to modify the work statement to also include alternative means in addition to sealed glass tube testing was made by Debra Kennoy & seconded by Glen Steinkoenig passed 12-0-0.
- New RTAR – “Adsorption of HF on Desiccants” – Alan Cohen reviewed this with Ray Thomas, Chris Seeton, Rob Yost and Amanda Hickman; additional revisions will be made and issued for email ballet.

- RTAR: “Determine maximum allowable level of impurities in HC (non-fluorocarbon) refrigerant systems”- Rob Yost stated this was on hold until specific needs are better defined.
- 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. Sonny recommended that this be removed.
- TRP-1665-“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.) Bidders were reviewed and selection was made.
- New RTAR-“ Distribution of Water between Vapor and Liquid Phases of HFO Refrigerants ” to be written by next meeting via Brad Boggess, Steve Kujak & Amanda Hickman.

7) Webmaster – Frank Nagy for Alan Cohen

- Website is in compliance (<http://tc33.ashraetcs.org>).

8) Membership – Frank Nagy

- New Corresponding Member information was given to Rob Yost (Chair).
- As of July 1, 2013: new Voting Members will be: Danny Halel & Rosine Rohatgi; rolling off will be: Ray Thomas, Scott Gustafson & Sonny Sundaresan.
- Committee positions as of July 1, 2013: Rob Yost (Chair & Standards), Raymond Thomas (Research), Joe Nigro (Program), Alan Cohen (Webmaster), Brad Boggess (Handbook); Frank Nagy (Secretary & Membership); Julie Majurin (Vice Chair).

9) Old Business

- None

10) New Business

- None

11) **Adjournment-MOTION #8:** to adjourn meeting was made by Frank Nagy & seconded by Joe Karnaz; meeting was adjourned at 5:09PM.

Respectfully submitted,

Frank Nagy
Secretary TC 3.3