

**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 3.8 DATE January 17, 2019

TC/TG/TRG TITLE Refrigerant Containment

DATE OF MEETING January 14, 2019 LOCATION Atlanta, GA

MEMBERS PRESENT		MEMBERS ABSENT		EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Rob Yost (Chair)	VM	Greg Chilcote	VM	Mark Adams (Research)
Danny Halel (Vice Chair)	VM			Karim Amrane
Dan Miles (Secretary)	VM			John Senediak
Ivan Rydkin (Webmaster)	VM			Jian Sun-Blanks
Glen Steinkoenig	VM			Steve Kujak
Eric Albrecht	VM			Jon Cygonik
				Nick Stojkovski
				Brad Boggess
				John Atkinson

DISTRIBUTION

All Members of TC 3.8 plus the following:

Technical Activities Committee Chairman:	Thomas Justice
Technical Activities Committee Section 3 Head:	Barbara Minor
Committee Liaisons As Shown On TC 3.8 Roster:	Tracey Jumper – Chapter Tech Transfer Stephen Kujak – Research Liaison Frederick Betz – 2022 Handbook – Refrigeration
Staff Liaison (Research / Technical Services)	Mike Vaughn

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

Minutes – TC 3.8 Refrigerant Containment
Atlanta Meeting – January 14, 2019

Call to Order

Rob Yost, Chair, called the meeting to order at 4:15 PM on Monday, January 14, 2019. After the distribution of agendas and introduction of members and guests, a quorum was verified.

Attendance

At the call to order 6 of the 7 voting members were present. Voting members present establishing quorum were:

Rob Yost	(Chair)
Danny Halel	(Vice Chair)
Dan Miles	(Secretary)
Ivan Rydkin	(Webmaster)
Eric Albrecht	
Glen Steinkoenig	

Voting members not in attendance:

Greg Chilcote

Approval of Minutes

The Houston 6/25/2018 meeting minutes as submitted by Mr. Miles were distributed by email to committee members on 12/28/2018. Mr. Halel moved (with a second by Mr. Rydkin) that the minutes, as submitted, be accepted. The motion passed with 5 votes in favor, 0 votes against, and 1 abstention. Mr. Steinkoenig stated that he was abstaining as he was unable to attend the meeting in Houston.

Research

With Mr. Kujak, Research Liaison in attendance, a discussion regarding the status of SPC 196 and the potential need for research to support SPC 196 was opened by Mr. Yost. Mr. Miles briefly reviewed experimental data he has presented to SPC 196 indicating that saturated R-410A vapor and saturated R-410A liquid will flow through the same “large” defect at significantly different rates. The experimental data also indicates that a “small” defect will flow steadily with superheated R-410A vapor and it will quickly plug when exposed to saturated R-410A vapor. This experimental data has the members of SPC 196 questioning some of the specifics in the M.O.T. that they are working on and questioning if they should suspend work until further research can be performed. There was discussion of a possible RTAR submission to do further research into the behavior of leaks, what an appropriate scope of work would be, and the value of the potential research results to SPC 196. At the suggestion of Mr. Yost, the plan to submit an RTAR was tabled until Mr. Domanski, the Chair of SPC 196, has an opportunity to comment. (Mr. Domanski, an employee of NIST, was unable to attend the Atlanta meeting due to the shutdown of the federal government.) Chairman Yost will follow up with Mr. Domanski when the opportunity arises – both serve on SPC 196.

Mr. Adams, Research Subcommittee Chair, volunteered to fill the opening for a TC3.8 member on the joint ASHRAE/AHRI research project named “*Assess Refrigerant Detector Characteristics for Use in HVACR Equipment*”. Mr. Adams will serve on the Project Management Subcommittee. Mr. Rydkin expressed an interest in joining that same effort and plans to make contact with Mr. Phillip Johnson who is also involved since both are affiliated with the same employer.

Standards

TC 3.8 is the cognizant TC for the following with regards to Standards:

- Standard 173-2012 – “Method of Test to Determine the Performance of Halocarbon Refrigerant Leak Detectors”. The TC reaffirmed the standard in 2015. No action was reported on regarding Standard 173 at this meeting.
- Standard 147-2013 – “Reducing the Release of Halogenated Refrigerants from Refrigeration and Air Conditioning Equipment and Systems”. Mr. Halel is Chair of the Standing Standard Project Committee (SSPC) and he commented that SSPC 147 is meeting at 8AM on 1/15/2019 and all are welcome to join in. Currently the committee has 5 voting members and a quorum is anticipated to be in attendance to address 9 change proposals that are before this SSPC that is responsible for the “continuous maintenance” of Standard 147.
- SPC 196 - “Method of Test for Measuring Refrigerant Leak Rates” The Standard Project Committee (SPC) met on Sunday evening 1/13/2019, and is progressing with developing this M.O.T. standard. The leak behavior described during the Research portion of this TC3.8 meeting has this SPC questioning some of the specifics in the M.O.T. that they are working on and questioning if they should suspend work until further research can be performed. Mr. Domanski, the SPC Chair and an employee of NIST, was unable to attend the Atlanta meeting due to the shutdown of the federal government.

Handbook

Mr. Miles reported that there had been no activity since completing the review and edit of Chapter 9 for the 2018 Refrigeration Handbook. Mr. Miles requested relief from the Handbook Subcommittee Chairman duties prior to the lead up to the 2022 Handbook. Mr. Rydkin volunteered to take on the duties of Handbook Subcommittee Chairman going forward. Initiating the formation of a Handbook Subcommittee for the 2022 Handbook is likely to take place at the Kansas City meeting in June 2019.

Programs

There were no TC3.8 sponsored programs scheduled at this ASHRAE meeting in Atlanta. There was discussion of future programs that focused on the benefits of containment towards reducing emissions and safety, especially in regards to the leakage of flammable refrigerants. There was further discussion of Mr. Miles presenting the experimental R-410A leak data that he has presented to SPC 196, and discussion of Mr. Halel presenting a review of Standard 147 as a part of the “HVAC&R Systems and Equipment in the Built Environment” track at the Kansas City meeting in June 2019. Mr. Halel made a motion for TC3.8 to sponsor a seminar in Kansas City entitled “Observations on the Behavior of R-410A Leaks and a Review of ANSI/ASHRAE Standard 147-2013”. Mr. Yost volunteered to serve as Chair and submit the proposed seminar to ASHRAE staff. The motion received a 2nd from Mr. Steinkoenig and passed with 6 votes in favor, 0 votes against, and 0 abstentions. Mr. Miles and Mr. Halel are to submit abstracts to Mr. Yost on or before 2/1/2019 so that he can submit a request for a seminar prior to the 2/8/2019 deadline for Kansas City.

Website

Mr. Rydkin reported that the TC 3.8 website was up and running. Recent meeting agendas and minutes are posted there. The home page is located at <http://tc0308.ashraetcs.org>.

Committee Membership

Chairman Yost reviewed the current roster. Mr. Miles and Mr. Harel are scheduled to roll off on 6/30/2019. Mr. Chilcote will be resigning from TC3.8 due to a recent change in his job responsibilities. Mr. Amrane expressed interest and a willingness to come on as Voting Members of TC3.8. Mr. Senediak was encouraged to join as a non-voting member. Mr. Yost is to follow up with these individuals and work with them to make this change in status take effect.

Chairman's Breakfast Comments

Chairman Yost reported on the Chairman's Breakfast. He mentioned a number of subjects of interest to TC3.8, including the fact that requests for Programs from TCs were accepted for the Atlanta meeting with an 80% success rate.

Old Business

None

New Business

Mr. Yost outlined ASHRAE's plans to reduce the number of meetings that take place at each January and June society gathering. At each meeting there are approximately 110 Function Groups and 180 Sub Groups that gather, resulting in the need for space and time for 290 meetings to take place. This large number of meetings limits possible venues for ASHRAE meetings to take place. ASHRAE leadership is also concerned that the number of meetings can make it difficult for attendees with committee responsibilities to take in the Program offerings. Combining TCs is one proposed method to reduce the number of Function Groups. There was discussion among the TC3.8 members of suggestions that TC3.8 combine with TC3.1 as a possibility. Attached to these minutes is a Feedback Form that TC3.8 members are being asked to complete and return to Chairman Yost. Chairman Yost requests that completed feedback forms come back to him electronically at ryost@refrigerants.com or at tc0308@ashrae.net by mid-February so that he can be prepared for a conference call with TAC Section 3 Head Barbara Minor in late February to discuss this subject.

Adjournment

Mr. Steinkoenig made a motion to adjourn the meeting and a second was received from Mr. Yost. The meeting was adjourned at 6:15 PM.