



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

1791 Tullie Circle, N.E./Atlanta, GA 30329

404-636-8400

TC/TG/TRG DRAFT MINUTES COVER SHEET

TC/TG/TRG TITLE: TC 8.7 Variable Refrigerant Flow

DATE OF MEETING: 4:15 PM to 6:15 PM

LOCATION: NY, NY

DISTRIBUTION

<i>All Members of TC/TG/TRG plus the following:</i>	
TAC Section Head: Steve Duda	SH8@ashrae.net
TAC Chair: Craig Way	TACCHAIR@ashrae.net
ASHRAE Manager of Technical Services:	MORTS@ashrae.net
All Committee Liaisons as shown on TC/TG/TRG Rosters:	Program: PL8@ashrae.net Special Publications: PUBCHAIR@ashrae.net Handbook: HBS8@ashrae.net CTTC: CTTC8@ashrae.net RAC Research: RL8@ashrae.net PDC: PDCCHAIR@ashrae.net
Additional Distribution	
ASHRAE Manager Of Standards	MOS@ashrae.net

1. Call to Order

Chris Bellshaw called meeting to order

2. Welcome/Introductions

- Announcement made: To become a corresponding member—put your ASHRAE number on the attendance list being passed around & put CC next to your name.

3. Minutes Approval

Minutes approved (acclamation)

Handbook Liaison (Patrick Marks)

Our chapter (18) needs to be revised/edited & re-approved . Submission deadline July 31, 2015. Paul D. is handbook chair. Print version is still the official version. Some enhancements to the on-line version are coming in the next year. We are free to & encouraged to use the enhanced features.

4. Agenda Review/Updates:

No updates to Agenda

- **5. Chair's Comments** (Bellshaw)

Chair's breakfast.:

Now an award for the outstanding TC. There will be scoring based on activity, website, handbook, etc. Prize is a handshake & a pat on the back.

Hospitality event for YEA (mixer) to encourage the TC chairs to mix with the young engineers.

Reminder—look up the code of ethics for ASHRAE.

Last time we discussed the MTGs (cold climate multi task group) a new MTG was formed for HOT climates. Any one interested contact Frank Mills (Chair).

Reviewing of technical papers – members names were passed on to ASHRAE. If you want to continue, ASHRAE will hold your name. If you want to roll off, contact ASHRAE.

We didn't have any sessions in this meeting---in Seattle, we must.

Pam discussed the ASHRAE forum online & Chris encouraged its use.

On your website bio, please update.

Brian B suggested that a reminder email is sent out to members to do so.

Jun Furuta has stepped off the committee.

We can now request from ASHRAE to participate in conference call meeting for attendees who cannot attend.

Feb 13—proposals for Seattle sessions are due.

All presentation files are due June 2 to ASHRAE.

A list of upcoming conferences will be included in the minutes.

6. Subcommittee Reports

- Handbook Chapter (Doppel)

Handbook revision for Chapter 18 (systems & equipment) is due July 31, 2015

Paul suggests we need to have a “workshop” at ASHRAE to get industry feedback about the current chapter. He will take the lead on arranging for Seattle.

We hope to have a revised chapter by the following winter meeting in Chicago.

- Membership

Membership

Some voting members needed to step off for various reasons.

Paul Solberg, sitting vice chair, has stepped down.

Brian B. will take over as vice chair.

Several members will roll off after the summer meeting. If anyone is interested, they should contact Chris.

- Program (Heckler)

Feb 13 is deadline for Seattle. 9 tracks:

Indoor equipment

Health

Research Summit

GSHP state of the art

HVAC & R Sys & equip

HVAC & R

Maintenance

Installation Commissioning & Operation

Professional Skills

TCs can now submit for a "WORKSHOP". It is a semi-official program which uses part of the TC meeting time for a workshop.

Dermott suggests a conference call to plan Seattle program. Need follow up to this meeting to make sure it goes forward.

Pam suggests that we establish a PROGRAM subcommittee meeting. Chris & Dave H. have had a similar discussion.

Suggested another session on water source or seminar on commissioning...

Looking for ideas for programs...Dave will arrange a conference call for next week.

Pam has a project on net-zero, GSHP/VRF that may fit into the water source program proposal.

- Research

John Molner)

Work statement 1684. Debate about what type of opening constitutes a “connection” to the adjacent space.

We are co-sponsor with TC 9.1 & Standard 15.

Standard 15 position is that they want to model a catastrophic event—all refrigerant instantly appears in the room.

Paul—update on standard 15’s position. Some members in 15 offered to aid in making sure the scope was “appropriate”

We’ve been waiting on an example “work plan”...

We need to encourage members from the three entities (9.1, 8.7 & 15) to meet and discuss fundamental issues. Primary issue is the catastrophic leak.

Our learnings through this process have uncovered other needs—like determining leak rates from various pipe diameters under various conditions.

Meeting to discuss the RTAR is tomorrow (TC 9.1)

Steve Duda —hard & fast deadline 8-15 to have a work statement written. We are stalled over the instantaneous leak issue. Steve believes there’s some progress to have a time dependant leak rate (over ~4 minutes). Suggests there is a small subcommittee from 15, 9.1 & 8.7 to figure it out... We would have interim meetings to write the work statement.

For research to be valid, it needs to produce something that can feed into the ASHRAE 15 standard and benefit engineers, etc. Committee will have 1-2 reps from each interested group (15, 9.1 & 8.7).

Research liaison (Dave Yashar) from ASHRAE affirmed that Aug. 15 was a deadline.

Primary research is to determine how refrigerant transitions from one room to another during/after leak.

- Standards & ASHRAE Learning Institute (ALI)

ALI (Bob S.)

Nothing major to report. Looking for folks interested in participating. Should plan a small sub-committee. Some volunteered:

Bob Skorupsky
John Cummings
Keith Reihl
Chris Bellshaw

- Webmaster

Website is going well. Suggestion—we should put suggested ideas for programs on the website.

Chris—we should make further use of the website—programs, general info & articles on VRF. Maybe create a Q&A area on the website.

Pam—suggest links to VRF ASHRAE Journal articles, etc. on the website

7.0 Liaison Reports:

Section 8 TAC liaison (Steve Duda). Emphases on roster—make sure TC is in good shape.

Sh8@ashrae.net (Steve's email at ASHRAE)

90.1 (Andrew Moore)

Doug Tucker will take over from Andrew.

Reminder it is a minimum standard. Discussion that there is a limit to efficiency

Committee approved 40% improvement in 2016 from 2004. 2013 edition was published last October. VRF table 6.8.1-9---IEER values are incorrect in doc. An eratta was produced to correct.

Approved Addendum D—Hotel guest room controls & changes in room ventilation when unoccupied.

Addendum E—remove economizer table for computer room units.

15—(Doppel)

There are some issues related to how future refrigerants will interface with the path of Standard 15.

62.1 & 62.2 (Doppel)

New version was finalized & published. Nothing that greatly affects TC 8.7. MERV 8 is now required in 62.1. Some need to clear up cooperation between 62.1 & 62.2 (MERV 6 vs MERV 8).

8 Old Business:

None.

New Business:

John Cummings: AHRI has had some requests for improving minimum efficiencies. Related to 2016 standard.

Paul: Economizers appear to be competitive ground for different codes. We should be aware.

Perhaps consider an RTAR on economizers...Paul & Doug will check with ASHRAE Section 8 related to economizers.

Ron: Load based testing has interest bubbling up in industry.

Paul: (standard 206 has been published—testing of complex systems (water heating & HVAC). Oklahoma State was awarded the research from TC 8.11 (project 1608).

Chris: another subcommittee was formed—social—Dermot M is leading effort for Seattle.

Meeting Adjourned...