

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING
ENGINEERS, INC.
Palmer House Hilton – Chicago**

TC/TG/MTG/TRG MINUTES COVER SHEET

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

TC/TG/MTG/TRG No. TC 9.3 DATE 1/22/18

TC/TG/MTG/TRG TITLE Transportation Air Conditioning

DATE OF MEETING 1/22/18 LOCATION Chicago, IL

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Richard Fox (Chair)	1998			
Byron Jones (Vice Chair)	1987			
Jerome Johnston (Sec)	2015			
Andreas Bezold	2015			
Rene Beaulieu	2017			
Kevin Glover	2015			
G.D. Mathur	2003			
Aaron McFarlane	2016			
		David Bechtold	2004	
James Bushnell	1988			
		Larry Cummings	1992	
		Anthony Di Ioria	2017	
		Eugene Dianetti	1992	
		Scott Gwilliam	2009	
Ken Hesser	2007			
		Donald Leblanc	2015	
Thaddeus Rogowski	2017			
		Catherine Thibaud	2017	
Ben Thiesse	2015			
		Ken Warren	2017	

DISTRIBUTION

<i>All Members of TC/TG/MTG/TRG plus the following:</i>	
TAC Section Head: Krishnan Gowri	SHx@ashrae.net Where x is the section number
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters: (Research, Standards, ALI, etc.)	See ASHRAE email alias list for needed addresses.
Manager Of Research & Technical Services: Mike Vaughn	MORTS@ashrae.net

Meeting Attendance

Includes everyone that attended TC 9.3 and any of the subcommittee meetings. The GPC 23 committee meeting is incorporated into the TC 9.3 Rail Subcommittee meeting. Membership designation shown below relates only to TC 9.3 and does not reflect GPC 23 membership.

Richard Fox	Honeywell	rfox1956@gmail.com	voting
Byron Jones	Kansas State Univ.	jones@ksu.edu	voting
Jerome Johnston	Boeing	jerome.i.johnston@boeing.com	voting
Andreas Bezold	Airbus	Andreas.bezold@airbus.com	voting
Rene Beaulieu	Bombardier	rene.beaulieu@rail.bombardier.com	voting
Kevin Glover	Carrier	kevin.glover@carrier.ute.com	voting
G.D. Mathur	Nissan/Calsonic	gd_mathur@ck-mail.com	voting
Aaron McFarlane	Noske-Kaeser Rail	amcfarlane@nkrvz.com	voting
James Bushnell	HVAC Consulting	jbushnell@roadrunner.com	voting
Ken Hesser	LTK Engr. Services	khesser@ltk.com	voting
Thad Rogowski	Mitsubishi Electric	Thaddeus.rogowski@meppi.com	voting
Ben Thiesse	American Airlines	Benjamin.thiesse@aa.com	voting
Stephen Trent	Boeing	stephen.m.trent@boeing.com	non-voting
Lubos Foreit	Honeywell	lubos.foreit@honeywell.com	non-voting
Chris Prada	MEPPI	chris.prada@meppi.com	non-voting
Yasuyaki Sogawa	MEPPI	yasuyaki.sogawa@meppi.com	non-voting
Man-Hoe Kim	KNU	kimmh@asme.org	non-voting
Joon-Ho Choi	USC	joonhoc2@gmail.com	non-voting
John Elson	Ford Motor	johncelo@gmail.com	non-voting
Riley Barta	Purdue	bartar@purdue.edu	guest
Robert Chevasco	Shrieve	rchevasco@shrieve.co.uk	guest

Call to Order & Establishment of Quorum

Meeting was called to order by Chair Richard Fox at 4:15 p.m., January 22th 2018. Quorum was established with **12 of 20 voting** members in attendance.

Membership/ Roster

Rene Beaulieu will become Chair when Richard Fox's term ends. Richard Fox requests interested candidates for Vice-Chair. Briefly reviewed roster updates.

Old Business

Approval of Long Beach 2017 meeting minutes discussed. G.D motions to approve minutes. Andreas Bezhold seconds the motion. 12 of 12 voting members approve Long Beach 2017 minutes.

New Business

Discussion concerning Technical Research Proposal (TRP) 1830 work statement. Both Standard Committee 161 and the TC 9.3 Research Subcommittee recommend approval. Kevin Glover motions to approve TRP 1830. Ken Hesser seconds the motion. 12 of 12 voting members approve TRP 1830.

Research Committee Report

Discussion concerning the final report for research project 1262-2. Latest final report due date is February 28th, 2018. TRP 1830 submission deadlines discussed. Unsolicited Research Project (URP) to test CO2 effects at different pressure levels was discussed. Requesting ASHRAE to co-fund project.

Handbook Sub-Committee

Discussed deadlines for all four handbook chapters. CH 10 & 11, due July 5th for final approval, balloting should take place before end of May, electronic ballot will be sent for approval. CH 12, due July 12th. CH 13, due July 19th.

Automobile Subcommittee Report and Issues requiring Committee Action

Reported that team is 75% done w/ handbook. Estimated to be complete by Feb/March, and submitted by 1st week of April. No programs have been approved. Possibly time for presentations in the TC 9.3. Cabin IAQ standards are becoming more important for Auto industry. Requesting RTAR submissions. Interested in VOC or CO2 research.

Mass Transit/Rail Sub Committee Report and Issues requiring Committee Action

Discussed GPC 23. Questions about whether it is being used and if continuous maintenance is needed? Possibly ideas for a program topic would be the history behind guideline 23. Research RTAR for passenger comfort or IAQ. Sub Committee will gather comments for Doug and vote on the guideline electronically.

Aviation Subcommittee Report and issues requiring Committee Action

None. No meeting.

Ship subcommittee Report and issues requiring Committee Action

None. No meeting.

Standard/ Program Report

Standard 161 2018 version has been released with addendum. Small updates to Standard 161 were discussed. Guideline 28 will need to be re-published in 2021, updates coming.

TC 9.3 had no programs at the Chicago 2018 meeting. Programs session will be held on 1/23.

ASHRAE 150 year's anniversary papers. Abstract request, history of refrigeration, influence of refrigeration due March 2018. Houston program papers deadline is closed. Presentations due by Feb 9th. Winter 2019 meeting will be held in Atlanta, paper abstracts are due in March.

Other New Business

Desire to get more Programs approved. Able to present unapproved presentations but do not get credit or other benefits. G.D. Mather may have some items to present.

TC 9.3 has a good timeslot for presentations from 11am -12pm.

Adjournment

G.D. Mathur motions to adjourn. Jerome Johnston seconds the motion. 12 of 12 voting members approve. Meeting adjourned at 3:15pm.