

**AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING
ENGINEERS, INC.
6001 Destination Pkwy/Orlando, FL 32819
407-313-4300**

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 TBD

TC/TG/MTG/TRG TITLE Transportation Air Conditioning
DATE OF MEETING 1/25/16 LOCATION Orlando

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
6		3		

DISTRIBUTION

<i>All Members of TC/TG/MTG/TRG plus the following:</i>	
TAC Section Head: Krishnan Gowri	
TAC Chair: Richard Fox	
All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters:	
Manager Of Standards Manager Of Research & Technical Services	Stephanie Reiniche Mike Vaughn

TC 9.3 Transportation Air Conditioning Committee Meeting
ASHRAE Annual Meeting
Orlando, FL
Orlando Hilton, Lake Eola A
Monday, January 25th, 2016
2:15 – 6:30 pm

TC 9.3 Meeting Minutes

Total Attendees: 23. 6 Voting Members present of 9 Voting Members. There is a quorum.

Voting Members Present

Paul Lebbin- Term Expires 6/2016
G.D. Mathur - Term Expires 6/2018
Richard Fox - Term Expires 6/2017
Byron Jones - Term Expires 6/2018
Kenneth Hesser - Term Expires 6/2019
Jerome Johnston - Term Expires 6/2019

Voting Members Not Present:

Andreas Bezold - Term Expires 6/2019
James J Bushnell - Term Expires 6/2019
Kevin Glover - Term Expires 6/2019

Non Voting Members and Guests Present

Lubos Forejt – Non Voting Member
Ken Warren – Guest
David Space – Guest
Donald LeBlanc - Non Voting Member
Medhat Hanna – Guest
Daniel Reimers – Guest
Karen Galanyk – Guest
David Rod – Guest
Ben Thiesse – Non Voting Member
T.J. Farrell – Guest
Ann Louise Sumner – Non Voting Member
Robert Kennedy
Qiao Lu – Guest
Aaron McFarlane – Guest
Thaddeus Rogowski – Guest
Michael Levin – Guest
Pavel Doubek

2:15 - Combined Opening by Richard Fox

Membership & Roster – Roster was overhauled and updated to reflect current levels of committee participation. On-going search for a replacement Chair after Richard Fox's term is over.

2:35 – Ken Mead Presentation - CDC/ NIOSH Research Activity: Application of in-flight engineering controls to reduce risk of infectious disease transmission on commercial airline flights

- Early stages of research project, requesting industry feedback
- Isolation zone with slightly negative pressure and increased barrier protection within the aircraft cabin

Meeting Minutes – Byron Jones moves to approve Atlanta, GA (6/29/15) meeting minutes. G.D. Mathur seconds the motion. TC 9.3 Atlanta, GA (6/29/15) meeting minutes unanimously approved with 6 of 9 voting members present.

3:00 – Ann Louise Sumner – RP 1262-2 Preliminary Presentation

- Ann Louise Sumner from Batelle presented the preliminary statistical results from RP 1262-2, in preparation for submitting the final report.
- Goal of the study was to relate Air Quality to perception of passenger/ crew symptoms.
- 130 Flights with 9206 surveys were collected and analyzed.
- 83 Flights with both measurements and survey results.
- Comment to separate results for airplanes with and without ozone converters.
- Comment to group results by airplane type (as opposed to by airline, since airlines have mixed fleets).
- Analysis of the data is still on-going and narrowing the scope to focus on specific parameters was recommended.

4:00 – Break

4:20 – Research Sub-Committee

- 6 million dollars in reserve funds.
- RP 1306 closed out
- RP 1262-2 going to project monitoring committee next
- Updated RTAR form, find on ASHRAE website

4:25 – Handbook Sub-Committee

- Deadline to review handbook is 7/1/16
- Draft any new sections by 2/1/17
- In the next 2 years more committee time will need to be devoted to working the handbook

4:35 – Standards Report Out

- Richard Fox gave a brief overview of the activity in SPC 161

4:40 – Programs Report Out

- Lubos Forejt gave the program report out
- Technical sessions are still open
- Technical papers for Las Vegas meeting still open
- There are 2 technical sessions scheduled for RP 1262-2
- To request a technical session, an abstract is needed

4:45 – Break Into Sub-Committees

Aviation Subcommittee-

- Discussion of RP 1603 closure. Potentially narrow the scope of the proposed project for future success.
- Further Discussion of RP 1262-2 and suggestions for data analysis. Future project could be combining this data with other in-service studies.
- Ken Warren from the Port of Seattle is interested in Air Quality research at airports. Airport AQ is a concern for flight line personnel. More research is needed.
- Paul Lebbin from NRC Canada discussed several research projects they have on-going. Measurements on a Falcon 20 with Pratt & Whitney engines. “Rain in the Plane” research on a 737-200. LED lighting study.
- On ground bleed contaminant monitoring. Byron Jones and David Space discussed high level VIPR results.

6:10 – Re-convene for Sub-Committee Report Outs

Aviation Subcommittee-

- Final GPC document finished and pending release. There were 45 comments, mostly editorial.
- Discussion on Continuous versus Periodic maintenance. Chose continuous maintenance, SPC needs to vote.
- Discussed research, program, and handbook.

6:20 – Old Business

6:21 – Adjourned