

# ASHRAE Technical Committee 4.3: Ventilation Requirements & Infiltration

2017 Annual Meeting

## MINUTES

Monday June 26, 2017, 4:15 pm-6:30 pm  
101B (LBCC-1)

### 1. COMMITTEE AND MEETING INFORMATION

Subcommittee Meetings:

Research: During Main Meeting

Program: During Main Meeting

Handbook: During Main Meeting

**Scope:** TC 4.3 is concerned with ventilation requirements and the analysis of infiltration, airflow around buildings, and exhaust re-entry, including their integration with indoor air quality and energy calculations for building and HVAC system design and operation.

TC Web Site: <https://tc0403.ashraetcs.org/>

### 2. CALL TO ORDER

Voting Members				
	Name	Position	Company	Roll Off June 30
1	Josephine Lau	Chair	Univ of Nebraska-Lincoln	2018
2	Martin Stangl	Vice-chair	RWDI	2019
3	John Carter	Secretary	CPP	2017
4	Brian Rock	Handbook	The University of Kansas	2017
5	Ed Light	Member	Building Dynamics	2019
6	Mini Malhotra	Program / Membership	Oak Ridge National Laboratory	2019
7	Nathan Ho	Member	P2S Engineering	2020
Non-Voting Officers				
	Steve Duda	Honors	Ross & Baruzzini, Inc.	-
	Steve Taylor	Research	Taylor Engineering	-
	Xia Fang	Webmaster	McKinstry	-

Yellow highlight signifies present

Quorum>1/2 all VM, excluding NQM; super majority >=2/3 VM present; simple majority>1/2 VM present

### 3. APPROVE AGENDA (STANGLE/MALHOTRA; 5-0-0)

### 4. APPROVE MINUTES FROM PREVIOUS MEETING (LIGHT/MAHLHORTA; 5-0-0)

### 5. ANNOUNCEMENTS (TC Chair)

- You can acquire a FREE badge at the ASHRAE Long Beach meeting. This free badge will not gain access to the conference programs, but is a great way for people to identify themselves and improve their networking
- Commitment to the ASHRAE Code of Ethics – (TC Chair): In this and all other ASHRAE meetings, we will act with honesty, fairness, courtesy, competence, integrity and respect for others, and we shall avoid all real or perceived conflicts of interests. (See full Code of Ethics: <https://www.ashrae.org/about-ashrae/ashrae-code-of-ethics.>)”



## **6. LIAISON REPORTS**

- a. Technical Activities Committee (TAC) (Dennis Wessel)
  - 1) Some issues with Roster downloading from web site. Chair has current version of Roster)
  - 2) Significant handout from TAC attached to these minutes. Includes handout from CEC with tracks for next meetings.
  - 3) TC 5.8 and 9.2 have merged into TC 9.2
- b. Standards (Cecily Grzywacz). no report
- c. Conferences and Expositions Committee (CEC). no report
- d. Handbook Committee (Harris Sheinman). no report
- e. Professional Development Committee (PDC) – (Donald Brandt). no report
- f. Special Publications (Francis Mills). no report
- g. Environmental Health Committee (Josephine Lau).
  - 1) Comparing regulated/recommended ventilation rates around the world
  - 2) similar exercise with contaminants

## **7. SUBCOMMITTEE REPORTS**

- a. Research (Steve Taylor)
  - 1) Research Subcommittee Meeting Chair Report
    - a) RAC activities at this meeting:
      - (1) 7 RTARs reviewed: 1 accepted, 3 accepted with comments, 3 rejected
      - (2) 11 Work Statements reviewed: 1 accepted, 7 conditionally accepted, 3 returned
      - (3) Innovative Research Grant selected from 5 short listed projects selected from 33 entries
    - b) URPs are now being accepted again along with new rules, to be published after this meeting
    - c) Seeking nominations for ASHRAE Research Award, based on last 4 years of activity writing WSs and RTARs, chairing or being a member of PES/PMS. Cannot have won before.
    - d) RTAR and WS forms
      - (1) Will go back to MS Word format
      - (2) Due to many complaints, e.g. no figures, unable to edit during development with tracked changes
      - (3) Still must stick with length limits listed
      - (4) Forms available after this meeting
  - 2) Active Research Project Status



Name	Project	PMS	Status
RP-1450	Transport of Contaminants from Garages Attached or Integral to Low-Rise Residential Buildings	Mike Moore (chair) Steve Emmerich	Needs technical paper draft to receive final payment. Then Mike Moore needs to complete Disposition form so it can be closed. Statement from room that draft was uploaded 2 weeks ago.
RP-1747	Implementation of RP-1547 CO2-based Demand Controlled Ventilation for Multiple Zone HVAC Systems in Direct Digital Control Systems	Dennis Stanke (chair), John Murphy Raj Daswani Heejin Cho	PMS meets tomorrow. Draft final report has been submitted.

### 3) Pending Research Project Status

Name	Project	Champion	Status
<b>Work Statement (WS)</b>			
WS-1730	Pressure Coefficients and Pressure Drop for Standard Venting Strategies and Components in Residential Attic Spaces	TC 4.4 Anthony Fontanini Mike Ratcliff	New WS from Anthony to be reviewed at this meeting. TC 4.4 has additional comments for Anthony to address before they vote. Co-sponsor vote requested when final version is ready Will circulate current draft to TC 4.3
WS - 1819	RP-1547 follow-up for systems with multiple recirculation paths	Steve Taylor /Josephine Lau	Approved for bid, but bid was delayed to December to allow RP 1747 final report to be published.
WS 1823	Improved Exhaust-to-Intake Dilution (Concentration) Calculations	Ron Petersen	Conditionally approved at this meeting by RAC. Minor comments only. Ron needs to address then we can resubmit. No TC revote needed if changes are minor.
<b>Research Topic Acceptance Request (RTAR)</b>			
RTAR (Draft)	Characterizing the Performance of Entrained Flow Stacks	Brad Cochran	Primary sponsor by TC 9.10 (Labs) with co-sponsor request to 5.1 (Fans) and 4.3.
<b>Multidisciplinary Task Group (MTG)</b>			
MTG	Idea of MTG around VOCs and VOC mixtures and what constitutes air quality.	Ed Light	Established tentative interest from four ASHRAE committees. Ed has been work through the process to develop the MTG. Draft will be circulated to the committee.
<b>New Ideas</b>			
New	Moisture Generation Rates in homes	Iain Walker	RTAR in progress
New	Infiltration vs. Pressurization impact with ERVs		Tradeoff of reduced infiltration due to reduced exfiltration vs. energy recovery from exhaust air needs champion
New	What is the right ventilation rate for x?		Work to be moved to new ACH MTG discussed below - this will drop for now.
New	Cost effectiveness of sealing between floors in multistory buildings to reduce stack effect	Marianne Tushi from University of Toronto	
New	Cost effectiveness of code requirements to reduce multi-family internal partition leakage	Gren Yuill	both pollutant transport and energy conservation no update
New	Ez research (from 1-D to 2-D)	Jordan Clark TC4.10 TC5.3	no update
	Incorporating transient wind condition in Natural Ventilation Design	Jordan Clark SSPC 62.1	RTAR is in development
	Outdoor particulate matter penetration and indoor PM removal rates in naturally ventilated commercial buildings	Jordan Clark SSPC 62.1	RTAR Will be circulated to the TC



Name	Project	Champion	Status
	Outdoor ozone in naturally ventilated buildings	Jordan Clark SSPC 62.1	RTAR Will be circulated to the TC
<b>On Hold or Inactive</b>			
Hold	Is CO2 a pollutant or an indicator?	Steve Taylor	On hold. Will let existing research mature/evolve

4) Regular deadlines: March 1 (for spring RAC meeting), May 15 (for June meeting), August 15 (for fall RAC meeting), December 15 (for January meeting)

b. Program (Mini Malhotra)

1) Long Beach program

City	Title	Type	Time	Chair/Speakers
Long Beach	It's a Breeze! Understanding the Fundamentals of Air Flow around Buildings and Its Effect on Ventilation and Air Quality	Seminar 51 (Intermediate)	Wednesday, June 28, 8:00 AM - 9:30 AM	Chair: Martin Stangl

2) Chicago Tracks

- Track 1: Systems and Equipment
- Track 2: Fundamentals and Applications

Track Chair: Kevin Marple

**Email:** [kmarple@benzco.com](mailto:kmarple@benzco.com)

Fundamentals are the foundation for understanding applications in engineering. Key components of ASHRAE fundamentals include thermodynamics, psychrometrics, fluid and mass flow, IAQ, and building envelope. This track provides opportunities for papers and presentations of varying levels across a large topic base. Concepts, design elements and shared experiences for theoretical and applied concepts of HVAC&R design are included.

- Track 3: Standards, Guidelines and Codes

Track Chair: Corey Metzger

**Email:** [corey.metzger@resourcece.com](mailto:corey.metzger@resourcece.com)

ASHRAE is known for its standards and design guidelines – and they are constantly evolving with the intent on improving the built environment and its systems. Designers, Contractors, Architects and Owners must be able to keep up with the continuing changes in the current cycle but to also be prepared for the future changes. In addition, there is a large interaction of ASHRAE with the code authorities and government to incorporate these standards and guidelines. The series of sessions in this track highlight the changes to the standards and guidelines, their projected path and optimum design techniques to meet or exceed the standards.

- Track 4: Earth, Wind & Fire
- Track 5: Transportation IAQ and Air Conditioning
- Track 6: Tall Buildings



Track Chair: Leticia Neves  
Email: [leneves@gmail.com](mailto:leneves@gmail.com)

Chicago is home to one of the tallest buildings in the world. One that stood the tallest in the world for nearly 25 years. However, today, more and more tall buildings are being designed and constructed. This track will draw upon “larger than life” case studies, as well as large building HVAC systems that can be classified as “innovative and/or 21st century” that highlight the opportunities presented and achieved by the designer, builder, and operator for facility HVAC systems throughout the world.

- Track 7: Modeling Throughout the Building Life Cycle
- Track 8: Heat Exchange Equipment
- Track 9: Refrigerant Mini Track @ Expo\*
- Track 10: Residential Mini Track @ Expo\*

Track Chair: Gary C. Debes  
Email: [gcdebbs@verizon.net](mailto:gcdebbs@verizon.net)

\*Topics, speakers, session types, etc. will be determined by the cognizant committee.

### 3) New program ideas

City	Title	Type	Chair/Speakers
Chicago	Controlling Pollutant Sources in Residential Buildings	Seminar 62.2 Co Sponsor	Steve Emmerich
Chicago	Results of RP-1747	Seminar	Steve Taylor
??	Where has my air been?	Seminar	John C, Martin/Ron/? will re-organize for IAQ track and include information about separation distances
??	62.2 update	Seminar	Iain Walker
??	Assessment of VOC mixtures	Workshop	Ed Light (with MTG)

### 4) Regular deadlines: June 2 / August 1 (for winter meeting), February 6 (for June meeting)

#### c. Handbook (Brian Rock)

##### 1) Chapter status

Volume	Chapter	Lead	Status
2021 Fundamentals	Chapter 16 Ventilation and Infiltration	Brian Rock	2017 Chapter approved last meeting. Needs a new lead for 2021 version: Jordan Clark.
2021 Fundamentals	Chapter 24 Airflow Around Buildings	Ted Stathopoulos	Ted agreed to be the lead on revising the “Airflow Around Buildings” for 2021 version.
2019 Applications	Chapter 45 Building Air Intake and Exhaust Design	Jason Urso	Looking for volunteers to help edit the chapter. Internal TC deadline February 18 Make edits through Authoring Portal <a href="https://www.ashrae.org/resources--publications/handbook/ashrae-authoring-portal">https://www.ashrae.org/resources--publications/handbook/ashrae-authoring-portal</a>

2) Base files: <https://www.ashrae.org/resources--publications/ashrae-handbook-central>

3) Base files: <https://www.ashrae.org/resources--publications/ashrae-handbook-central>



- d. Standards (Steve Emmerich)
  - 1) TC 4.3 Cognizant
    - a) 62.1 Ventilation for Acceptable Indoor Air Quality (Nathan Ho) Jordan Clark
      - (1) new working groups: personal ventilation, emission rates;
      - (2) ventilation subcommittee passed simplified procedure for multiple spaces committee
    - b) 62.2 Ventilation for Acceptable IAQ in Low-Rise Residential Buildings (Iain Walker) - no report
  - 2) TC 4.3 Co-Cognizant
    - a) 161: TC 9.3: Air Quality within Commercial Aircraft (Byron Jones) - no update, will remove from agenda
  - 3) Others Standards of Interest
    - a) 170-2013: TC 9.6: Ventilation of Healthcare Facilities (Rick Hermans) - Jordan Clark - also developing position paper on Natural Ventilation
- e. Honors (Steve Duda)
  - 1) See attached report
- a. Webmaster (Xia Fang)
- b. Membership (Mini Malhotra) - cleaning up the corresponding members list

## **8. NEW BUSINESS**

- a. Confirm current Title/Purpose/Scope: approved 5-0-0
- b. New voting members on June 30: Steve Taylor (Taylor Engineering) and Jordan D Clark (LBNL)
- c. MTG.ACR (Air Change Rate) (Steve Taylor); topic is so broad and not seeing much consensus
- d. MTG.OBB (Occupant Behavior in Buildings) (19 members) - scope is very broad, drafted a white paper to define the scope will be circulated to TC 4.3 Membership
- e. MTG. ISPAQE (Indoor swimming pool air quality and evaporation) Brad Cocran
- f. Future Meetings
  - 1) January 20-24, 2018 – Chicago, IL
  - 2) June 23-27, 2018 - Houston, TX
  - 3) Jan. 12-16, 2019 - Atlanta, GA

## **9. ATTENDANCE**

- a. Please fill out attendance sheet.

## **10. ADJOURN**

- a. Time: 5:55





## TC 4.03 Honors & Awards Report

### 2017 Annual Meeting, Long Beach

#### George B. Hightower Award:

- *Recognizes excellence in volunteer service in the area of Technical Committee, Technical Group, and Technical Research Group activities, excluding Research & Standards (which have separate awards).*
- On behalf of TC 4.03, J. Lau and I nominated Brian Rock in 2016. The award is competitive, meaning only one is chosen among all nominees. TAC has chosen a different candidate from among the nominees this year, so our selected nominee did not win.
- **ACTION ITEM:** Nominations are due September 1 each year. TC 4.03 tends to be very active in Research, and research participation is excluded from the Hightower Award because there is a separate "Service to ASHRAE Research" award. Same with Standards participation. Nonetheless, I would like to submit our strongest candidate each year. Please help me identify a qualified candidate.
- Past winner from TC 4.03: Stephen Duda (2015); John Carter (2014).

#### Service to ASHRAE Research Award:

- *Recognizes excellence in volunteer service in the area of Society research. Desirable qualities include authorship of RTARs and Work Statements, participation or chairing of multiple PMS and PES, and Research subcommittee work including Research Subcommittee Chair. This award is for a volunteer in support of Research, not a paid researcher and not a donor to ASHRAE Research.*
- **ACTION ITEM:** Nominations are due September 1 each year. Please help me identify a qualified candidate.
- Past winners from TC 4.03: Iain Walker (2014); Steve Taylor (2010).

#### ASHRAE Fellow:

- *Recognizes distinction in the arts relating to the sciences of heating, refrigeration, air conditioning or ventilation, or the allied arts and sciences, or in the teaching of major courses in said arts and sciences, or who by reason of invention, research, teaching, design, original work, or as an engineering executive on projects of unusual or important scope, has made substantial contribution to said arts and sciences, and has been in good standing as a full grade Member for at least ten (10) years is eligible for election to the grade of Fellow.*
- New nominations are due December 1 of each year. Please help me identify suitable candidates from this TC, including yourself if you feel you are eligible.

#### Distinguished Service Award:

- *Recognizes members who have served ASHRAE faithfully as a member of committees or otherwise giving freely of his/her time and talent on behalf of the Society. Lifetime cumulative points-based system with a minimum of 15 points required (with at least 3 points in 3 different categories).*
- Recipient from TC 4.03 this year: Congratulations to **Leonard Damiano!** He receives his award at the Saturday Plenary of this Conference.





- On behalf of TC 4.03, I formally nominated [Michael Blanford](#) for this honor this year, and that nomination is pending. Timetable is (a) Society Honors & Awards Committee reviews it at this Conference; (b) the Board of Directors reviews it the 2018 Winter Conference in Chicago; (c) Award is presented at the Plenary of the 2018 Annual Conference in Houston.
- The points tally sheet is available on the ASHRAE website or directly from me. New nominations are due May 1 of each year. Self-nominations are permitted. Please help me identify additional suitable candidates from this TC, including yourself if you feel you are eligible and have not yet received this award. There is no quantity limit for nominees nor honorees.

Exceptional Service Award:

- *Recognizes members who have served the Society faithfully and with exemplary effort, far in excess of that required for the Distinguished Service Award.* Lifetime cumulative points-based system with a minimum of 45 points required (with at least 7 points in 3 different categories).
- The points tally sheet is available on the ASHRAE website or directly from me. New nominations are due May 1 of each year. Self-nominations are permitted. Please help me identify additional suitable candidates from this TC, including yourself if you feel you are eligible and have not yet received this award.

Other Awards on my Radar:

- **Standards Achievement Award.** *Recognizes excellence in volunteer service for developing ASHRAE Standards and/or Guidelines.* Past winners from TC 4.03: Max Sherman (2014); Steve Taylor (2012). **ACTION ITEM:** Nominations are due December 1. Please help me identify a qualified candidate who has not already won.
- **Andrew T. Boggs Service Award.** *Recognizes a past Exceptional Service Awardee for continued, unselfish, dedicated and distinguished service to the Society.* This is a competitive award, with a maximum of one chosen per year. To be eligible, one must already have won the Exceptional Service Award. **Congratulations to Steve Taylor!** On behalf of TC 4.03, I formally nominated him for this honor last year, and that nomination was chosen. He receives his award at the Saturday Plenary of this Conference. Please join me in congratulating him on this very high honor.
- **Louise & Bill Holladay Distinguished Fellow Award.** *Recognizes a Fellow of the Society who continues preeminence in engineering or research.* This is a competitive award, with a maximum of one chosen per year. To be eligible, one must already be a Fellow of the Society. Past winners from TC 4.03: Steve Taylor (2016), Max Sherman (2006). New nominations are due May 1 each year.
- **F. Paul Anderson Award.** *Honors a member for notable achievement, outstanding work or service in any field of the Society. This is ASHRAE's highest honor.* This is a competitive award, with a maximum of one chosen per year. **On behalf of TC 4.03, I formally nominated one of our TC 4.03 members for this honor this year, and that nomination is pending.** Timetable is (a) the Board of Directors reviews it at this Conference; (b) Award is presented at the Plenary of the 2018 Winter Conference in Chicago.

Respectfully submitted by:

A handwritten signature in blue ink that reads "Stephen W. Duda".

Stephen W. Duda

TC 4.03 Honors & Awards Chair

June 19, 2017



# TC 4.3 Sign-In

Name	Company	Meeting	Long Beach	6/26/2017
			Email	Present?
<b>Voting Members &amp; Officers</b>				
Dr Josephine Lau, PhD	Univ of Nebraska-Lincoln		jla3@unl.edu	X
Mr Martin Stangl	RWDI		Martin.Stangl@rwdi.com	X
Mr John J Carter	CPP		jcarter@cppwind.com	X
Mr Steven T Taylor, PE	Taylor Engineering LLC		staylor@taylor-engineering.com	X
Mr Brian A Rock, PhD, PE, FASHRAE	The University of Kansas		hvacman@ku.edu	X
Mr Anil Parekh, M.A.Sc., PEng	Natural Resources Canada		aparekh@nrcan.gc.ca	X
Mr Steven J Emmerich	NIST		steven.emmerich@nist.gov	X
Mr Stephen W Duda, PE	Ross & Baruzzini Inc		sduda@rossbar.com	X
Ms Xia Fang	McKinstry		fangxia6@gmail.com	X
Ms Dianne M Griffiths, PE	Steven Winter Associates		dgriffiths@swinter.com	X
Mr Ed Light	Building Dynamics, LLC		elight@building-dynamics.com	X
Dr Mini Malhotra, PhD	Oak Ridge National Laboratory		malhotram@ornl.gov	X
<b>Provisional Corresponding Member</b>				
Mr James R Bailey	Building Dynamics LLC		jbailey@building-dynamics.com	
Dr Brendon Joseph Burley	Affiliated Engineers Metro DC, Inc.		brendon.burley@gmail.com	
Dr Jason W DeGraw	National Renewable Energy Laboratory		jason.degraw@nrel.gov	X
Mr Dennis E Jones	Group14 Engineering Inc		djones@group14eng.com	
Mr James (Mike) C Moore, III	Newport Partners LLC		mmore@newportventures.net	
Mr Keith D Robinson	Keith D. Robinson, P.E.		kdr@kd-robinsonpe.com	
Ms Stacie Suh	Stebbins-Duffy, Inc.		stacie@stebbinsduffy.com	
Mr Charles H Waddell	Global Plasma Solutions		charlie@globalplasmasolutions.com	
Dr. Yuebin Yu	Univ. of Nebraska - Lincoln		yuebin.yu@unl.edu	
Dr Junjing Yang	NATIONAL UNIVERSITY OF SINGAPORE		junjing.yang@gmail.com	
<b>Corresponding Member</b>				
Mr Wagdy A Y Anis, FAIA	Anis Building Enclosure Consulting		wanis@anisbeconsulting.com	
Mr Dennis C Barley	NREL			
Mr Michael D Blanford	U.S Dept. Of Housing & Urban Development		michael.d.blanford@hud.gov	
Mr Alexander Boome, IV, PE PEng	Sterling Cooper Consultants Inc		aboome@abceltd.com	
Lance R Brown	Taylor Engineering		lbrown@taylor-engineering.com	
Ms Heather L Camden	E&C Engineers And Consultants Inc		camden@eceng.com	
Mr Bernardo Cardenal, PE	Rocamar Engineering Services Inc		Bernardoc@rocamareng.com	
Dr Qingyan (Yan) Chen	Purdue University		yanchen@purdue.edu	
Mr Brad C Cochran	C P P Inc		bcocochran@cppwind.com	X
Mr Leonard A Damiano	EBTRON, Inc.		damiano@ebtron.com	
Mr Darryl W DeAngelis	Belimo Aircontrols		darryl.deangelis@us.belimo.com	
Dr Gregory Dobbs, PhD, LEED AP BEMP HPDP BESA			greg.dobbs@mail.ashrae.org	
Mr William S Dols	Natl Inst Of Standards & Technology		wsdols@nist.gov	X
Dr Helmut E Feustel	Kessler & Luch GmbH		hefeustel@tga-feustel.de	
Mr Todd D Friedman	Engenium Group		tfriedman1832@gmail.com	
Mr Richard A Grot	Lagus Applied Technology		ragrot@tracergas.com	
Dr Fariborz Haghighat	Concordia Univ		haghi@bcee.concordia.ca	
Mr Hugh M Hinson, Jr	US Army Corps Of Engineers		mhinson7@clarknexsen.com	
Dr Ali A Jalalzadeh-Azar, PhD	National Renewal Energy Laboratory		ali_jalalzadeh@nrel.gov	
Mr Ashok N Kadakia	Washington TRU Solutions		kadakia.ashok@gmail.com	
Dr Panagiota Karava, PhD	Purdue University		pkarava@purdue.edu	
Prof Shinsuke Kato, PhD	The University of Tokyo		kato@iis.u-tokyo.ac.jp	
Dr Martin W Liddament	Veetech Corp		mliddament@talk21.com	
Dr Joseph W Lstiburek	Building Science Corp		joe@building-science.com	
Dr Iain A MacDonald	National Research Council Canada		lain.Macdonald@nrc-cnrc.gc.ca	
Miss Christine C Maurer	Advanced Energy		cmaurer@advancedenergy.org	
Mr Michael J McDermott	Grumman Butkus Associates		mmcdermott@grummanbutkus.com	
Prof Mark P Modera, PhD, PE	UC Davis		mpmodera@ucdavis.edu	
Mr Bryan Morris	McKinstry		bryanm@mckinstry.com	
Mr Shuzo Murakami	Keio University		murakami@sd.keio.ac.jp	
Dr Amy B Musser, PhD	Vandemus Design, LLC		amy@vandemus.com	
Mr Victor A Neuman, PE			victor_neuman@hotmail.com	
Dr Atila Novoselac			atila@mail.utexas.edu	
Prof Bjarne Wilkens Olesen, PhD	ICIEE-DTU		bwo@byg.dtu.dk	
Dr Ronald L Petersen	CPP, Inc.		rpetersen@cppwind.com	
Mr Paul S Pinkston			paulprimeair@nc.rr.com	
Mr Donald Prather	ACCA		donald.prather@acca.org	
Mr Michael A Ratcliff	RWDI LLC		mar@rwdi.com	X
Mr James T Reardon	Institute for Research in Construction		james.reardon@nrc.gc.ca	
Mr Steven L Rosen	AHA Consulting Engineers		steven_rosen@aha-engineers.com	
Dr William A Ryan, PhD	University of Illinois at Chicago		wryan@uic.edu	
Mr David Wendell Saum	Infiltec			
Mr Lawrence J Schoen	Schoen Engineering Inc		larry@schoenengineering.com	
Ms Heather R Schopplein, PE	Haldeman Inc		hschopplein@gmail.com	
Mr Glenn D Schuyler	RWDI		gds@rwdi.com	

NON VOTE  
NON VOTE  
NON VOTE



[illegible]



## Conferences and Expositions Committee Information Items for Technical Committees 2017 Annual Conference, Long Beach, California

This “handout” includes recent updates and upcoming deadlines in the preparation of the technical program for the Winter, Annual and specialty conferences. It is being provided in advance of the conference for your information so that it does not have to be presented during the onsite TC section breakfasts. CEC will provide a short update at the TC breakfasts and answer any questions. *Jon Cohen, 2016-2017 CEC Chair, [jonc@chemtreat.com](mailto:jonc@chemtreat.com)*

### 1. 2018 Annual Conference Research Summit Call for Papers

The 2018 Annual Conference in Houston, TX features a call for papers for the Research Summit track. Please consider submitting papers or groups of papers as entire sessions from your TC for the conference. Abstracts are due August 28, 2017 and is fast approaching. This is an excellent opportunity for TC's to highlight current research and case studies at the Annual Conference next year! If you have any questions, please contact Dr. Melanie Derby, the Research Summit Track Chair at [derbym@ksu.edu](mailto:derbym@ksu.edu).

### 2. Student Authors Recognized at Las Vegas, Long Beach, and Beyond

Starting at the 2017 Winter Conference, CEC began recognizing student papers. Certificates were awarded to students at their assigned conference paper session. There were “Best Paper” and “Honorable Mention” certificates presented to graduate candidates and PhD candidates.

For the 2017 Annual Conference, one Best Paper and one Honorable Mention will be presented to undergraduate/graduate students and PhD candidates.

### 3. Invited Speakers

CEC has developed a policy to allow for invited speakers to have their speaker fee waved. The proposed invited speakers shall be submitted with the respective program submission, and will be reviewed concurrent to the submission review process. The CEC Chair, Vice Chair, and Conference Program Chair will review submissions and will accept up to five invited speakers, per Annual and Winter meeting, considering the strength of the proposal. The speaker must meet the following criteria to be considered: a.) Subject matter expert, b.) Not an ASHRAE member, c.) Will provide information that is useful to the ASHRAE membership.

### 4. Program statistics for Long Beach; for a total of 107 available slots:

#### **Conferences Papers**

- 151 conference paper abstracts submitted, 129 approved
- 71 conference papers presented
- 20 Conference Paper Sessions

#### **Seminars**

- 121 submitted
- 61 presented

#### **Debates**

- 4 submitted
- 3 presented

#### **Technical Papers**

- 27 Technical papers received
- 19 Technical papers presented
- 6 Technical Paper Sessions

#### **Workshops**

- 13 submitted
- 9 presented

#### **Forums**

- 11 submitted
- 4 presented

#### **Panels**

- 5 submitted
- 2 presented



5. **2018 ASHRAE Winter Conference in Chicago, IL:** <http://www.ashrae.org/chicago>

- a. Conference Papers are due July 7
- b. Seminar, Forum, Debate, Panel and Workshop proposals are due August 1
- c. Program notifications go out September 6
- d. Web site opens for presentation uploads on December 1
- e. All presentations due online January 8, 2018
  - **Track 1: Systems and Equipment**  
Track Chair: Carrie Ann Crawford      Email: [crawford.ashrae@gmail.com](mailto:crawford.ashrae@gmail.com)
  - **Track 2: Fundamentals and Applications**  
Track Chair: Kevin Marple      Email: [kmarple@benzco.com](mailto:kmarple@benzco.com)
  - **Track 3: Standards, Guidelines and Codes**  
Track Chair: Corey Metzger      Email: [corey.metzger@resource.com](mailto:corey.metzger@resource.com)
  - **Track 4: Earth, Wind and Fire**  
Track Chair: Ashish Rakheja      Email: [ashish.rakheja@aeonconsultants.in](mailto:ashish.rakheja@aeonconsultants.in)
  - **Track 5: Transportation IAQ and Air Conditioning**  
Track Chair: Dimitris Charalambopoulos      Email: [dimitris@ashrae.gr](mailto:dimitris@ashrae.gr)
  - **Track 6: Tall Buildings**  
Track Chair: Leticia Neves      Email: [leneves@gmail.com](mailto:leneves@gmail.com)
  - **Track 7: Modeling Throughout the Building Lifecycle**  
Track Chair: Joseph Firrantello      Email: [j.firrantello@gmail.com](mailto:j.firrantello@gmail.com)
  - **Track 8: Heat Exchange Equipment**  
Track Chair: Vikrant Aute      Email: [vikrant@umd.edu](mailto:vikrant@umd.edu)
  - **Track 9: Refrigerant Mini Track @ Expo**  
Track Chair: Gary C. Debes      Email: [gcdebes@verizon.net](mailto:gcdebes@verizon.net)
  - **Track 8: Heat Exchange Equipment**  
Track Chair: Gary C. Debes      Email: [gcdebes@verizon.net](mailto:gcdebes@verizon.net)

6. **2018 ASHRAE Annual Conference in Houston, TX:** <http://www.ashrae.org/houston>

- a. Conference Paper Abstracts due Monday, August 28, 2017
- b. Conference Papers due Friday, December 8, 2017
- c. Seminar, Forum, Panel, Debate and Workshop proposals are due Friday, February 9, 2018
- d. Web site opens for presentation uploads Monday, April 30, 2018
- e. All presentations due online Friday, June 1, 2018
  - **Track 1: HVAC&R Systems and Equipment:**  
Track Chair: Frank Schambach      Email: [frankschambach@mindspring.com](mailto:frankschambach@mindspring.com)
  - **Track 2: Fundamentals and Applications:**  
Track Chair: Dennis Alejandro      Email: [denzjac@yahoo.com](mailto:denzjac@yahoo.com)
  - **Track 3: District Energy and Cogeneration Plants:**  
Track Chair: Kimberly Pierson      Email: [kdpwildcat@gmail.com](mailto:kdpwildcat@gmail.com)
  - **Track 4: Safeguarding your HVAC&R System:**  
Track Chair: Rich Rose      Email: [richr@mticontrols.com](mailto:richr@mticontrols.com)



- **Track 5: Residential – Modern buildings in Hot and Humid Climates:**  
Track Chair: Dimitris Charalambopoulos      Email: dimitris@ashrae.gr
- **Track 6: Commissioning– Optimizing New & Existing Buildings and their Operation:**  
Track Chair: Kevin Marple      Email: kmarple@benzco.com
- **Track 7: Research Summit:**  
Track Chair: Melanie Derby      Email: derbym@ksu.edu
- **Track 8: HVAC&R Control Freaks:**  
Track Chair: Gary Debes      Email: gcdebbs@verizon.net
- **Track 9: HVAC&R Analytics (Mini-Track)**  
Track Chair: Vikrant Aute      Email: Vikrant@umd.edu

## 7. Potential Sources Bias Disclosure

Speakers will be asked to fill out a potential sources bias disclosure document that will note affiliations/ involvement with any organizations with financial or commercial interest in the subject matter to be discussed, in accordance with the ASHRAE Code of Ethics.

## 8. TC Opportunities:

- a. TC members who want to submit a program should consult the Track Chair for assistance in preparing a good abstract, learning objectives, and Q&A to help assure complete submission.
- b. TCs and Sections are welcome to suggest new presentation formats (like how the Workshop was born). Best way to present material to benefit attendee is a goal.
- c. TCs and Sections are encouraged to work with a track chair to put together a series of sessions that can be used as a mini-track.
- d. Putting together an entire track of programs in cooperation with other TCs is also encouraged; keeping in mind that track subjects are typically determined 14-15 months prior to a conference.
- e. CEC welcomes suggestions for tracks! We value your input. TAC/CEC agreed that the Comment Section on the activity form is the location for the TC to provide this information.

## 9. Speaker Ratings

About 11 speakers from Las Vegas had speaker ratings below 3.5 out of 5.0. These speakers were sent letters indicating that if they receive two additional low ratings they will be required to provide proof that they have received speaker training before they will be permitted to speak again.

## 10. Presentations

CEC has had an ongoing issue with presentations not being uploaded for commercialism review before the conference. This is problematic because it requires a “fire drill” for CEC on Saturday and Sunday to process commercial reviews for these presentations before they can be uploaded to the system. For clarification, presentation requirements include:



- a. Uploads need to be substantially complete; including the AIA Disclaimer and Learning Objectives. Blank slides and place holders do not constitute a substantially complete presentation.
- b. Recent Presentation Upload History
  - i. For Long Beach, 41 presentations had not been uploaded by the June 12 deadline.
    - 1. 6 presentations were still not uploaded as of 6/21/2017.
    - 2. 4 of those 6 were TC sponsored.
  - ii. For Las Vegas, 48 presentations were not uploaded by the final due date.
  - iii. For St. Louis, 11 presentations were not uploaded by the start of the conference.
    - 9 of these programs were sponsored by TCs

CEC needs to hold speakers accountable for making deadlines. Starting with the 2017 Winter Meeting in Las Vegas, CEC started enforcing a 3 strike policy for speakers who do not upload their presentation by the published deadline. If a speaker receives 3 strikes they will not be able to present for the following year (two conferences).

#### **11. CEC Announces a Call for Reviewers and Paper Session Chairs**

ASHRAE has a number of conferences coming up that include papers, and CEC seeks your help in reviewing them. Additionally opportunities to chair a paper session are available. Specifically, there is an immediate need for reviewers and session chairs for the 2018 Winter Conference and various specialty conferences.

Please submit your interest in reviewing a paper or chairing a paper session using the online form: [http://web.ashrae.org/cec\\_request/](http://web.ashrae.org/cec_request/). Please contact Tiffany Cox, ASHRAE Assistant Manager, Conference Programs, at [tcx@ashrae.org](mailto:tcx@ashrae.org) for more information.

#### **12. Specialty Conferences**

ASHRAE's topical conferences are focused on a particular aspect of the industry and bring together professionals for networking and professional development. Two specialty conferences are available for the remainder of 2017.

##### **2017 ASHRAE Building Performance Analysis Conference**

<http://www.ashrae.org/BuildPerform2017>

September 27-29, 2017, Atlanta, Georgia

The conference program is set and includes the third annual ASHRAE LowDown Showdown modeling competition.

##### **ASHRAE Second Developing Economies Conference** [ashrae.org/Developing2017](http://ashrae.org/Developing2017)

November 10 – 11, 2017, Delhi, India

A call for presenters is currently open through July 7. Apply through the conference Web site.



### 13. Program Types

#### Technical Paper Session:

These sessions present papers on current applications or procedures, as well as papers resulting from research on fundamental concepts and basic theory. Papers presented in these session have successfully completed a rigorous peer review. Forms for written comment are available at each session, and sent to respective authors for reply and publication in ASHRAE transactions, if received by a certain date.

#### Conference Paper Session:

These sessions present papers on current applications or procedures, as well as papers reporting on research in process. These papers differ from technical papers in that they are shorter in length and undergo a much less stringent peer review.

#### Seminar:

These sessions feature presentations on subjects of current interest. There are not papers attached to seminars.

#### Workshop:

These sessions enable technical committees and other ASHRAE committees to provide a series of short presentations on a topic requiring specific expertise. These short presentations are provided with an increased emphasis on audience participation and training in a specific set of skills. There are not papers attached to workshops.

#### Forum:

The sessions are “off-the-record” discussions held to promote a free exchange of ideas. Reporting of forums is limited to allow individuals to speak confidentially without concern of criticism. There are not papers attached to forums.

#### Panel Discussion:

Panel discussions can feature a broad range of subjects and explore different perspectives on industry related topics. This session format includes a panel of 3-4 speakers each addressing a facet of the session topic, followed by an interactive discussion lead by the session chair. Panel Discussions may be 60 minutes or 90 minutes in length and will be posted online in the Virtual Conference.

#### Debate:

Debates highlight hot-button issues commonly faced by our membership. Industry experts, either on teams or as individuals, argue opposing sides of an issue, concluding with position summaries and audience feedback. Debate sessions may be 60 minutes or 90 minutes in length and will be posted online in the Virtual Conference.



**AGENDA**  
**SECTION TC/TG/TRG CHAIR'S BREAKFAST MEETING**  
2017 Annual Meeting  
Long Beach, CA

**Sunday, June 25th**

**6:30 A.M. – 8:00 A.M. PDT**

**Renaissance Hotel – ALL Section meetings located on either 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> floor as noted below.**

**Section 1**, Bixby 1 Room – 2<sup>nd</sup> Floor  
**Section 3**, Dawson Room – 3<sup>rd</sup> Floor  
**Section 5**, Pike 3 Room – 1<sup>st</sup> Floor  
**Section 7**, Broadlind 2 Room - 2<sup>nd</sup> Floor  
**Section 9**, Pike 1 Room – 1<sup>st</sup> Floor  
**MTG Section**, Tichenor Room – 2<sup>nd</sup> Floor

**Section 2**, Bixby 2 Room – 2<sup>nd</sup> Floor  
**Section 4**, Broadlind 1 Room – 2<sup>nd</sup> Floor  
**Section 6**, Bixby 3 Room – 2<sup>nd</sup> Floor  
**Section 8**, Pike 2 Room – 1<sup>st</sup> Floor  
**Section 10**, Nieto Room - 2<sup>nd</sup> Floor

Note: The agenda and times estimated are for guidance only and should be modified to be sure the most important information is discussed and that there is adequate time to discuss things important to the committee chairs. Note that the time estimates shown allow for other important business to be conducted within the time frame allotted.

- a.1.Introduction of TC/TG/TRG/MTG Chairs, Vice Chairs, and guests (5 minutes).
- a.2.Review and approval of agenda (2 minutes). (note that you might want to solicit additions and corrections at the time the draft agenda is sent to the TC Chairs – it is almost impossible to do anything in only 2 minutes)
- a.3.Summarize discussion from last meeting and status of actions assigned, if any (5 minutes).
- a.4.Liaisons from other committees should each be given a chance to speak and distribute information pertinent to the section from their committee. An effort should be made to accommodate their schedules without major disruption of the Section meeting (15 Minutes).
  - a.4.1. Research Administration
  - a.4.2. Conference and Exposition Committee (CEC)
  - a.4.3. Handbook
  - a.4.4. Other Standing Committees
- a.5.Discuss the MBOs set for the year and how the section can work together to address them (10 minutes).
- a.6.Review summary report for the Section prepared from the TC/TG activity database and TAC (15 minutes).
  - a.6.1. Section activities and trends will be discussed relating to membership, research, programs, publications and new communication tools and services.
  - a.6.2. Do TCs prefer to go back to a paper activity form instead of MS-Excel form used now?
- a.7.Identify shared opportunities and challenges for section (10 minutes).
- a.8. Announcements and Reminders for TC/TG/TRG & MTG Chairs (Handout)
- a.9. Adjourn.



**Announcements and Reminders for TC/TG/TRG & MTG Chairs  
LONG BEACH 2017**

**A. NEW!**

- 1. Discuss and confirm that TGs, TRGs, and MTGs in section will continue in 17-18 Society Year or disband**  
TBD
- 2. 17-18 Rosters Access & Distribution** - Remember, the current 2016-2017 roster for your TC, TG or MTG is in effect until after the June meeting this year – through Friday, June 30th.

TC, TG and MTG chairs will soon receive a PDF & MS-Excel file of their new 2017-2018 roster from their Section Head or staff for distribution to the committee. In addition, each member can view all of the rosters of their committees on the ASHRAE Website once the new Society year goes into effect. Go to [www.ashrae.org](http://www.ashrae.org) <http://www.ashrae.org>, click on the "Membership & Conferences" tab in the header, click on "My Membership" text in the left sidebar, and log in (if you have not logged in lately, you might need to set up a new username and password). Click on the "Update Your Bio / View or Edit Tour Profile" link. Now, you should see your current "bio info". Click on "Committees" on the left sidebar; all of the committees you are a member of will appear. Click on the "blue" roster text at the left hand side of a committee to reveal the roster with linked contact information. Make sure everyone on your committee also knows how to access the roster once the new Society year begins.

The Provisional Corresponding Member (PCM) position is a relatively new position on TC/TG/TRG rosters. This position allows potential new members to be added by staff to the committee roster any time a request for membership is made by an individual. The position has a 2-year term on the committee. Staff will notify the chair and reissue a new roster to the committee chair any time a provisional member is added. The TC/TG/TRG chair has the option each year during the regular roster update process to convert provisional CMs that have been active participants on the committee the past year into regular CMs or voting members or drop them. If no action is taken, they will time expire from the roster and be removed by staff.

**3. Let's Celebrate ASHRAE's Technical Excellence Historically!**

ASHRAE is highly regarded for its technological advances. Consider that these advances evolved from the efforts of our predecessors and you, and the current members of ASHRAE's Technical Committees in advancing HVAC&R technology are building on a deep foundation. So, what is the historical foundation of your Technical Committee specialty? ASHRAE will be celebrating its 125th anniversary in a couple years. The Historical Committee has a project to publish articles in the ASHRAE Journal and organize paper presentations celebrating our technical heritage for the anniversary. We plan to emphasize technical advances after 1920. Can you help with an article or a



## Announcements and Reminders for TC/TG/TRG & MTG Chairs LONG BEACH 2017

paper or can your TC organize and sponsor a program session for the 2019-2020 meetings?

Here is a list of topics that TC members have already suggested.

- Development of open communication protocols such as BACNET.
- Modern improvements in psychrometrics (Goff & Gratch).
- History and effect of the Environmental movement on our technology. How technology and equipment has improved the indoor environment.
- The refrigerant revolution
- Solving the problems of “sick buildings.”
- The re-discovery of past technology and its application today (such as district energy, hydrocarbon refrigerants, off peak energy storage, “total energy” systems, etc.)
- History of the application of electronics to HVAC&R technology.
- ASHRAE’s long history in applying innovative technology.
- History and importance of frozen food technology.

All of these topics and others you may think of need to be written up and/or presented by someone.

How about YOU?

The 125th anniversary will be celebrated at the 2020 winter and Annual meetings. The Historical Committee has been charged with the responsibility of organizing Society and industry history projects for the 125th. If you would like to submit an article or a paper or organize a program session, contact Emily Sigman, Historical Committee Staff Liaison at [esigman@ashrae.org](mailto:esigman@ashrae.org).

There is a deadline – please submit abstracts or outlines before **September 30, 2017**.

#### 4. Oversight of TC websites with regard to *Technical Bulletins (White Papers)* and alignment with Society positions, policy, or opinions

TCs are allowed to develop Technical Bulletins - A Technical Bulletin does not result from a technical meeting and is a brief 1-2 page statement on a special interest HVAC&R topic that has been developed by either a technical or grassroots committee of ASHRAE. After the TC approves the Technical Bulletin, TAC is responsible for coordinating a peer review by a minimum of three persons with expertise in the field of the bulletin before it can be posted. In addition, ASHRAE’s policy for websites states the following: “**4 (3) f. Statements and presentations may not appear on web sites that state, purport, or imply that they present ASHRAE positions, policy, or opinions.**”

#### 5. Additional TC E-mail Position Aliases Now Available

New position e-mail alias addresses have now been created for each of the remaining mandatory positions of the Technical Committee management team (Secretary,



## Announcements and Reminders for TC/TG/TRG & MTG Chairs LONG BEACH 2017

Standards Sub. Chair, Program Sub. Chair, Handbook Sub. Chair, and Webmaster). The 16-17 E-mail Alias list with these new position aliases is posted on the ASHRAE website [www.ashrae.org/TCs](http://www.ashrae.org/TCs) under the heading *Procedures, Forms & Information for TCs/TGs/MTGs and TRGs*. The new 17-18 E-mail Alias list will be posted in the same location shortly after the Long Beach meeting.

### 6. New Restructured TC MOP (Manual of Procedures) issued

TAC has restructured the TC MOP so that it is easier to navigate and find information. The new TC MOP can be found on the ASHRAE website [www.ashrae.org/TCs](http://www.ashrae.org/TCs) under the heading *Procedures, Forms & Information for TCs/TGs/MTGs and TRGs*.

### 7. Distribution of TC minutes changed in TC MOP

The TC MOP and *TC/TG/MTG/TRG Minutes Cover Sheet* form have both been updated and you are no longer required to send the TAC chair a copy of your minutes after each meeting. The new minutes cover sheet can be found on the ASHRAE website [www.ashrae.org/TCs](http://www.ashrae.org/TCs) under the headings *Procedures, Forms & Information for TCs/TGs/MTGs and TRGs – Routine Forms for TC/TG/MTGs/TRGs*.

### 8. How to Import Your TC Roster Information into MS-Outlook

Detailed instructions on how to import your TC roster information into MS-Outlook has been created and an e-mail announcement will be issued to all TC chairs, vice chairs, and secretaries once these instructions and the restructured TC MOP are posted to the TC page of the website ([www.ashrae.org/TCs](http://www.ashrae.org/TCs) )

### 9. Updated TAC Presentation Template Available for TC members to use with local Chapter

TAC recently updated the standard presentation and presentation notes that TC members can use, without a lot of effort, to explain what TCs do for the Society and how that work benefits members in your local ASHRAE Chapter. You should also know that use of this presentation at a chapter meeting in SY 17-18 will earn a chapter 50 (100 points maximum) PAOE points. Additional PAOE points are also possible in SY 17-18 for a presentation(s) on the work of one specific TC.

The new presentation and presentation notes files are posted now at the following link [www.ashrae.org/tcs](http://www.ashrae.org/tcs) under the heading *General TC Information* at the top of the page in case you prefer to direct others to these files posted online. The presentation material is now also available in both English and Spanish.

### 10. Basecamp Information from ECC

More and more TCs and standing committees are making use of ASHRAE's subscription to Basecamp3 to better organize, store, and distribute online committee files that are needed for their meetings through a dedicated committee Basecamp site. If you would like to learn more about Basecamp and how to request a site for your particular committee, please go to the Electronic Communications Committee (ECC) web page:



(<https://www.ashrae.org/society-groups/committees/electronic-communications-committee>) and scroll down to the section titled *Guidance for Basecamp 3*

## **B. AT THIS MEETING**

### **1. On-Site Training Options**

#### **i. TC/TG/TRG Chair's Training Workshop Reminder**

Sunday June 25th, 9:45-10:45 AM in Room #101A, 1<sup>st</sup> Floor, in the Long Beach Convention Center. The training will start with a brief presentation on how to run Effective Meetings and then highlight some of the online resources that are available through the TAC training portal for additional training and information on a variety of topics. The training session will also have a Q&A session so that you can also get answers to your specific questions.

#### **ii. RAC's Research Subcommittee Chair's Breakfast**

Monday, June 26th, 6:30 AM – 9:30 AM in Regency room, 4<sup>th</sup> Floor, Hyatt Regency Hotel. Please encourage your Research Subcommittee Chair or another representative from the TC to attend this meeting so that your RAC Research Liaison (RL) can get an update on the TC's research activities and so that your RL can help resolve issues & questions that TC may have concerning their research program. The training portion of this meeting will focus on changes to the *Research Manual*.

#### **iii. TC Program Subcommittee Chair Training in Long Beach**

Tuesday, 6/27, 11:15 AM – Noon, Room #202C, 2nd Level, in the Long Beach Convention Center. *Don't complain about the meeting program and your TC's submissions if you have not been to training.*

A few things you might learn in training are as follows:

- Incomplete program submissions is the biggest reason for rejection now. All information is needed up front for CEC selection process.
- A packaged session on a similar topic is the best way to greatly improve your chances for acceptance.
- There is no difference in how CEC handles 60 and 90 minute program slots. 60 minute slots are just as good as 90 minute slots if complete.

### **2. Location of Section Head Mailboxes & Free Wi-Fi Access at this Society meeting**

Mailboxes are located just outside ASHRAE Headquarters Office (Seaview Ballroom B & C – Lower Level (1<sup>st</sup> floor) – Hyatt Regency Hotel).

Also, Internet access and computers for e-mail are available in the Cyber Café located in the registration area during operating hours. Please be considerate to others and limit your usage to five minutes.

Wireless internet will be available in all meeting rooms at the Hyatt, Renaissance, and Long Beach Convention Center. ASHRAE will be working with the internet provider to



manage the bandwidth so that member expectations of accessibility and speed are fulfilled. We would like to request that everyone limit their usage to functions that do not use excessive bandwidth. Applications such as Facebook, YouTube, streaming video, etc. use excessive bandwidth.

Hyatt & Renaissance Wi-Fi Access: **PSAV High Speed** is the network, **ashrae2017** is password (case sensitive).

Long Beach Convention Center Wi-Fi Access: **ashrae2017** is the network, **longbeach** is password (case sensitive).

### 3. **RPM (Remote Participation Meetings) being held in Long Beach**

The 12th RPM (Remote Participation Meeting) Capable Society Meeting, which allows some TC members to participate in the TC meeting from a remote location electronically, will occur in Long Beach and the following fifteen TCs have agreed to participate in this effort: TC 1.6, TC 1.10, TC 1.12, TC 2.1, TG2(HVAC), TC 5.8, TC 5.11, TC 6.9, TC 7.3, TC 7.9, TC 8.3, TC 9.2, TC 9.4, TC 10.3, and TC 10.6 – This represents a 25% increase over the number of TC's hosting RPM meetings in Las Vegas. A total of 43 RPM meetings will be hosted in Long Beach when you include project committee and other committee meetings. For comparison, a total of 38 RPM meetings were hosted in St. Louis last year at this time.

The chairs of those TCs participating should provide to their Section Head feedback on their RPM meeting experience before TAC meets on Wednesday morning, 6/28.

### 4. **Name Badges**

As offered in the past, members of TCs who are not registered for the Conference and plan to only attend TC meetings may receive a free, plain white name badge. The purpose of these badges is for TC members not registered for the Conference to be able to identify one another in meetings.

To receive your badge, please go to the ASHRAE Registration desk located in room 104 at the Long Beach Convention Center and look for the sign for "TC Badges." Please identify yourself as someone only attending committee meetings, not registered for the Conference, who would like a white name badge. An ASHRAE staff person will create a badge for you that includes your name, company name and city, state and country (if outside the U.S.). The badge will not have a QR code and will not allow you into the Technical Program.

However, if you'd like to register for the entire Conference you can do so in advance or onsite. We realize your time is limited, one-day registrations (\$270 for Members) are available as well as one-session registrations (\$70). If you wish to register for one day of the Technical Program you or one session, you can do so at the ASHRAE Registration desk. The One-Day option gives you access to the Virtual Conference which is viewable on-demand for 18 months. Questions? Contact [meetings@ashrae.org](mailto:meetings@ashrae.org).



**5. Retiring TC/TG/TRG/MTG Chair Certificates**

TC chairs that are completing their terms as chair at this Society meeting will be presented with a certificate of appreciation. Please coordinate with your Section Head as to when and where at the meeting you would like to be presented with the certificate (Section meeting or TC meeting).

**C. UPCOMING DEADLINES**

**1. TC Activity Forms for the Long Beach Meeting are due to Your Section Head before Wednesday, 6/28/17**

*TC/TG/TRG Activity Feedback Form (Excel)* can be downloaded from the Technical Committee webpage under the "TC Forms and Documents" page - <https://www.ashrae.org/standards-research--technology/technical-committees/tc-forms-and-documents>. Section heads can also provide an electronic copy of the form if requested.

**2. Thank You Letters to Employers**

ASHRAE President – Tim Wentz– has offered to send letters to the employers of TC volunteers this year thanking them for supporting their employee's service on an ASHRAE TC during Society year 2016-2017. If requested by the volunteer, the letter will be sent to his/her employer by the end of July or early August and the volunteer will receive a copy.

Please let your committee members know that they will be receiving an email about employer thank you letters in early July with details on how to request a thank you letter.

**3. Seminar and Forum proposals for Chicago are due by Tuesday, August 1st, 2017.**

Please visit the following site to submit your proposal:

<https://ashraem.confex.com/ashraem/w18/cfp.cgi>

For more information, go to: [www.ashrae.org/chicago](http://www.ashrae.org/chicago)

**4. 2017-2018 Hightower Award & Service to ASHRAE Research Award Nominations by Friday, September 1st**

Nominations for the 2017-2018 *George B. Hightower Technical Achievement Award* are due to you Section Head by September 1, 2017. The award recognizes outstanding technical leadership and contributions on a TC/TG/TRG during the past four years, excluding research and standards activities. Please go to the Technical Committee page of the ASHRAE website at the following link under the "Procedures, Forms..." heading: <http://www.ashrae.org/tcs>

Nominations for the 2017-2018 *Service to ASHRAE Research Award* for TC volunteer efforts in research are due to RAC research liaison by September 1, 2017. Please go to the Research page of the ASHRAE website at the following link under the "Research Grants and Awards" heading: <http://www.ashrae.org/research>



## 5. 2018 RPM (Remote Participation Meetings) Request for Chicago Meeting

ASHRAE has streamlined the process for requesting RPM meetings moving forward, which will allow us to confirm meeting information earlier in advance of the actual meeting dates.

The updated procedures are as follows:

- ALL committees that want to be considered for an RPM capable meeting in Chicago next January must turn in an *ASHRAE Meeting Room Request Form for Chicago* to the ASHRAE Meetings section.
- The request should include the reasons why you are requesting RPM meeting capability.
- RPM meeting requests for the upcoming Chicago Winter meeting should be submitted by **Monday, October 2<sup>nd</sup> or sooner.**
- Confirmation emails (verifying the requests) will be sent out in November 2017
- Requests received after the above date may not be accommodated due to high and growing demand for this service.

## D. REMINDERS

### 1. Useful TC/TG/TRG/MTG Chair Information and forms on ASHRAE website

Information for TC/TG/TRG and MTG chairs can be found on the Technical Committee page of the ASHRAE website at the following link: <http://www.ashrae.org/tcs>

### 2. Request for each TC to briefly review ASHRAE Code of Ethics at start of meeting

See the following link for the latest version of the ASHRAE Code of Ethics: <https://www.ashrae.org/about-ashrae/>

### 3. Make a Special Effort to welcome new Members, and Visitors to TC meeting

Potential new members for your committee have been encouraged to drop-by your meeting. As a result, please make a special effort to recognize and warmly welcome all visitors to your meeting – A TC can never have too many willing and able volunteers.

### 4. Option for TC Subcommittee Meetings via Conference Calls and Web Meetings

More and more TCs are taking advantage of a new Society service that allows TCs to hold subcommittee meetings by phone and/or web. Many TCs are finding this to be a more efficient way for them to conduct subcommittee business and it also allows TC members that can't travel to meetings on a regular basis a way to still contribute to the TC. Such a change can also eliminate potential conflicts with the TC's program sessions at Society meetings. Please pass your conference call/web meeting/webinar requests on to the Manager of Research and Technical Services, Mike Vaughn, at [mvaughn@ashrae.org](mailto:mvaughn@ashrae.org) or [MORTS@ashrae.net](mailto:MORTS@ashrae.net)



**5. Is Your Committee Website up to Date?**

If not, please ask your webmaster to at least post the latest minutes and the Long Beach meeting times and agenda. If your website has been neglected, add an action item for this meeting to appoint a responsible member of the TC/TG/TRG who will bring it back to life. The new TC website template has greatly simplified the duties of the TC webmaster and this form of communication is critical to the efficient operation of your committee, and for attracting new members.

The recent conversion to a new TC website platform highlighted a couple areas where a refresher of the ASHRAE rules on website maintenance is warranted. First be aware that ASHRAE Products (i.e., handbook chapters, journal articles, final reports from research projects, etc.) cannot be published on your TC's website. It is very appropriate to post the title and scope of the product and then link the reader to the ASHRAE bookstore or other location on the ASHRAE site where the product may be purchased. Any possible exceptions to this rule must be sent through Steve Comstock for review and approval ([scomstock@ashrae.org](mailto:scomstock@ashrae.org)). The second issue involves timely posting of the draft minutes. Draft minutes (and final, approved minutes from the prior meeting) should be posted to your website (or otherwise distributed to the members) within 60 days after the meeting. Please ensure that your secretary and webmaster are aware of this deadline. To assist your secretary in understanding the procedures for taking and reporting minutes, a video has been developed and posted on the Technical Committees' Training page (<https://www.ashrae.org/standards-research--technology/technical-committees/tc-training-and-presentations>). On the same page, a video has also been posted for use by webmasters to learn about the procedures and schedule to maintain the new websites.

**6. TC 2017-2018 Master Calendar – Now Available through Google** - The Technical Committee Master Calendar is now available through Google. In order to access this calendar you need to have a Google account.

Once you log into your Google account, follow the instructions below:

To add a friend's calendar, just follow these steps:

- At the bottom of the calendar list on the left, click Add and select Add a friend's calendar.
- Enter the appropriate email address (techservices1791@gmail.com) in the field provided, then click Add.

This calendar is public and will appear under 'Other Calendars' in the left column.

To set up Google Calendar Sync to your Outlook:

- Make sure you're using a supported operating system and Outlook version.
- Download Google Calendar Sync (version 0.9.3.6) at
- [http://dl.google.com/googlecalendarsync/GoogleCalendarSync\\_Installer.exe](http://dl.google.com/googlecalendarsync/GoogleCalendarSync_Installer.exe)
- Once a dialog box appears, click Save File. The downloaded file should open automatically. If it doesn't, manually open it from your browser's download window.



## Announcements and Reminders for TC/TG/TRG & MTG Chairs LONG BEACH 2017

- Click OK to confirm that you're aware this is an executable file.
- Read through the Google Calendar Sync Terms of Service, and click I Agree.
- Follow through the Installation Options and click Install to finish the set-up process.

Once Google Calendar Sync is installed on your computer, the Google Calendar Sync Settings window will appear:

In the Settings window, enter your email address and password and select the Sync Option you prefer. Read about each Sync Option.

You'll also be able to set the time interval for syncing to occur. Please keep in mind that 10 minutes is the minimum time interval allowed.

After the initial set-up, you can access the Google Calendar Sync Settings window again by double-clicking the calendar icon in your Windows System Tray.

### E. RECENT ANNOUNCEMENT

#### 1. **RAC Prioritizing Research Topics Related to the Residential Sector**

Continuing in 2017-2018, RAC will be prioritizing for bid accepted research topics that support Goal #3 below from the Research Strategic Plan.

**Goal #3:** To reduce significantly the energy consumption for HVAC&R, water heating and lighting in existing homes.

#### 2. **CEC's Standing Request for Future Society Meeting Program Track Suggestions**

The Conferences and Expositions Committee (CEC) oversees ASHRAE's annual and winter conferences and other specialty conferences and expositions globally. The CEC continually works to improve the conference experience for all attendees. To help keep a "pulse" on the technical issues facing professionals in the HVAC&R marketplace, and to create meetings that reach all of ASHRAE's constituencies, the CEC seeks ideas for tracks for the Atlanta 2019 winter meeting and annual and winter conferences beyond as well as topics for specialty conferences from TC members.

Please submit your suggestions to ASHRAE Staff member Tony Giometti ([Giometti@ashrae.org](mailto:Giometti@ashrae.org)). You can also add your track suggestion in the "Comment" section of the TC Activity form for the Long Beach meeting.

#### 3. **CEC Always Seeks TC Volunteers willing to Support Content Development and Quality Control for Society Technical Program at Society Meetings**

Provide to your Section Head after each Society meeting a list of qualified volunteers from your TC that are potential Technical Session chairs and reviewers of session papers that are related to TC's scope for use by the Conferences & Expositions Committee (CEC) in developing technical content for future technical programs.



**4. The Professional Development Committee (PDC) is seeking ideas for new ASHRAE Learning Institute (ALI) courses.**

The Professional Development Committee (PDC) is actively seeking ideas for new ASHRAE Learning Institute (ALI) courses. We need practical courses of broad interest to be presented as face-to-face seminars or short courses, instructor-led online courses and self-paced courses. Examples include courses with a focus on new technologies that need to be shared, fundamentals for engineers new to the discipline, standard applications that need explanation, and courses based on new design guides. Does your TC have a potential course idea?

Contact Karen Murray (ASHRAE staff) [kmurray@ashre.org](mailto:kmurray@ashre.org) or James Bochat (2016-17 PDC chair) [PDCchair@ashrae.net](mailto:PDCchair@ashrae.net) with your course ideas.

**F. CURRENT & UPCOMING ASHRAE CONFERENCE PROGRAMS**

**1. Long Beach Annual Conference - June 24 – June 28, 2017**

Conference Website: <http://ashraem.confex.com/ashraem/s17/cfp.cgi>

Conference Program Chair: Ann Peratt Email: [ann.peratt@gmail.com](mailto:ann.peratt@gmail.com)

Program Focus at Long Beach Annual Conference

- i. Track 1: Fundamentals and Applications
- ii. Track 2: HVAC&R Systems and Equipment
- iii. Track 3: Refrigeration
- iv. Track 4: Building Life Safety Systems
- v. Track 5: Controls: Smart Building Systems and the Security Concerns as Technology Emerges
- vi. Track 6: Commissioning: Optimizing New and Existing Buildings and their Operation
- vii. Track 7: Net Zero Energy Buildings: The International Race to 2030
- viii. Track 8: Residential Buildings: Standards and Guidelines and Codes
- ix. Track 9: Research Summit

**2. Chicago Winter Conference – Jan. 20 – Jan. 24, 2018**

Seminar and Forum proposals for Chicago are due by **Tuesday, August 1, 2017.**

Conference Website: <https://ashraem.confex.com/ashraem/w18/cfp.cgi>

Conference Program Chair: Michael Collarin Email: [Michael.Collarin@parsons.com](mailto:Michael.Collarin@parsons.com)

Program Focus at Chicago Winter Conference

- i. Track 1: Systems and Equipment



## Announcements and Reminders for TC/TG/TRG & MTG Chairs LONG BEACH 2017

- ii. Track 2: Fundamentals and Applications
- iii. Track 3: Standards, Guidelines and Codes
- iv. Track 4: Earth, Wind & Fire **NEW!**
- v. Track 5: Transportation IAQ and Air Conditioning **NEW!**
- vi. Track 6: Tall Buildings
- vii. Track 7: Modeling Throughout the Building Life Cycle **NEW!**
- viii. Track 8: Heat Exchange Equipment
- ix. Track 9: Refrigerant Mini Track @ Expo\*
- x. Track 10: Residential Mini Track @ Expo\*

### 3. Houston Annual Conference - June 23 – June 27, 2018

Seminar and Forum proposals for Houston are due by **Friday, February 9th, 2018.**

Conference Website: [https://www.ashrae.org/membership--](https://www.ashrae.org/membership--conferences/conferences/2018-ashrae-annual-conference/call-for-papers)

[conferences/conferences/2018-ashrae-annual-conference/call-for-papers](https://www.ashrae.org/membership--conferences/conferences/2018-ashrae-annual-conference/call-for-papers)

Conference Program Chair: Cindy Moreno Email: [cindym@tmmechanical.com](mailto:cindym@tmmechanical.com)

#### Program Focus at Houston Annual Conference

- i. Track 1: HVAC&R Systems and Equipment
- ii. Track 2: Fundamentals & Applications
- iii. Track 3: District Energy and Cogeneration Plants **NEW!**
- iv. Track 4: Safeguarding our HVAC&R System **NEW!**
- v. Track 5: Residential: Modern Buildings in Hot & Humid Climates
- vi. Track 6: Professional Skills
- vii. Track 7: Research Summit
- viii. Track 8: HVAC&R Control Freaks **NEW!**
- ix. Track 9: HVAC&R Analytics **NEW!**



**G. OTHER UPCOMING WORKSHOPS, CONFERENCES AND EVENTS**

**1. 2017**

- i. **Building Simulation 2017** – Aug. 7 – Aug. 9, 2017 – San Francisco, CA USA –  
Contact: <http://www.buildingsimulation2017.org/>
- ii. **ISHPC2017** – Aug. 7 – Aug. 10, 2017 – Tokyo, JAPAN –  
Contact: <http://biz.knt.co.jp/tour/2017/ISHPC2017/congress.html>
- iii. **ASHRAE Building Performance Analysis Conference** – September 27-29, 2017  
– Atlanta GA, USA – Contact: <https://ashraem.confex.com/ashraem/bpa17/cfp.cgi>
- iv. **2<sup>nd</sup> ASHRAE Developing Economies Conference** – Nov. 10-11, 2017, Delhi,  
INDIA – Contact: <https://ashraem.confex.com/ashraem/de17/cfp.cgi>



Please provide feedback on your TC/TG/TRG activities and return this form by **Tuesday night 9:00 pm** to your Section Head by email or drop off a printed copy in the Section Head's mailbox folder outside the ASHRAE Headquarters Room.

Include activities performed since the last TC meeting (e.g. any letter ballots, submissions to RAC, award nominations, etc.)

[illegible]



PLEASE DO NOT LEAVE CELLS EMPTY. ENTER 0 IN CELLS IF THERE IS NO COUNT.

**YES/NO** Questions can be answered using drop box selection or by typing in answer.

**CITY** Please enter city only without the state.

### **MEMBERSHIP SECTION**

# members/guests who are also YEA members:

Enter total number of YEA members here. Be sure that they were also included in the appropriate categories above, too.

Example: There are 18 people in the room: 6 voting members and 12 guests. Of these, one of the six voting is a YEA member and two of the guests are YEA members. Thus the count is

Voting	6
Guests	12
YEA	3

### **HANDBOOK SECTION**

# Chapters voted out this meeting

Count all handbook chapters (reviewed, revised, or developed) that were approved by the TC through a vote for submission to the handbook committee at this meeting

### **STANDARDS SECTION**

# Standards recommended

Count all standards which the TC developed a recommendation for at this meeting. (I.e. reaffirm, revise, or )

### **PROGRAM SECTION**

"Submitted" program sessions.

Count only sessions which your committee initiated and submitted for this meeting.

"Co-sponsored" program sessions

Count sessions initiated by other committees and accepted for presentation which you cosponsored.

"Sponsored" program sessions.

Count all sessions initiated by your committee and accepted for presentation, including those which you invited others to co-sponsor.



