

**ASHRAE**  
**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:	TC 7.9
TC/TG/TRG/TITLE:	Building Commissioning
DATE OF MEETING:	June 13 <sup>th</sup> , 2020
LOCATION:	Online

**MEMBERS**

PRESENT	MEMBER NAME	TERM	PRESENT	MEMBER NAME	TERM
<input checked="" type="checkbox"/>	Justin Seter – Chair	2016 - 2020	<input type="checkbox"/>	Bradley Brooks	2017 - 2021
<input checked="" type="checkbox"/>	Mina Agarabi – Vice Chair	2019 - 2022	<input checked="" type="checkbox"/>	Wade Conlan	2017 - 2021
<input checked="" type="checkbox"/>	Dave Shipley – Secretary / Research / Web	2019 – 2022	<input type="checkbox"/>	Roger Lautz	2018 - 2022
<input checked="" type="checkbox"/>	Walter Grondzik	2019 - 2023	<input checked="" type="checkbox"/>	Justin Garner	2018 - 2022
<input type="checkbox"/>	Ole Teisen	2016 - 2020	<input checked="" type="checkbox"/>	Jim Vallort – Programs & Handbook	2018 - 2022
<input type="checkbox"/>			<input type="checkbox"/>		

**NON-VOTING MEMBER SUBCOMMITTEE CHAIRS**

PRESENT	NAME
<input type="checkbox"/>	Tom Cappellin – Membership

**EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE**

See Attached sign in sheet

**DISTRIBUTION**

<b><i>All Members of TC/TG/TRG plus the following:</i></b>	
TAC Section Head:	Craig Messmer
TAC Chair:	Jay Kohler
All Committee Liaisons As Shown On TC/TG/TRG Rosters:	Steve Hammerling
Manager of Standards	Connor Barbaree
Manager of Research & Technical Services	Michael R. Vaughn

## 1. Call To Order / Scope / Introduction

- Justin Seter (Chair) called the meeting to order at 8:05 AM. All who were present provided self-introductions, including their name and affiliation.

## 2. Voting Member Roll Call

- There were 7 voting members present out of a total of 10 voting members. A quorum of voting members was present for the meeting.

## 3. Approval of Kansas City Minutes

- The draft minutes from Orlando were reviewed. They were published in draft before the end of the last conference and have been on the website since then. Motion was made and seconded to approve draft minutes as published.
  - Wade Conlan moved to approve, Justin Garner seconded.
- Motion passed: 7 – 0 – 0 (Yea – Nay – Abstain)

## 4. ASHRAE Administrative Matters / Issues from TC Chairs Breakfast

### TC Chair's Breakfast Notes:

1. TC streamlining was a topic. TAC has approved four TC mergers, out of 105 TCs. Those will be going forward. There is a list of which 8 TCs are merging into 4 merged TCs. This is in the interest of reducing the time commitment of volunteers attending ASHRAE meetings.
2. The roster date has changed because of the spread out TC meetings. They will not be finished until late in July, so the roster will not change until July 21.
3. Mina will take over as chair at that point and Dave will be vice-chair. Mike Amstadt has volunteered to take over as secretary.
4. Please go to ASHRAE.org to update your bio and check whether you're on the roster for the committee.
5. There is only one way to update your information and make sure you're getting emails. You have to log into the website and update your bio.
6. Reminder about Hightower Award nominations. They are due Sept 1.

## 5. Correspondence / Announcements

Most correspondence has pertained to things like journal reviews and paper reviews.

Other ways of getting involved in commissioning at ASHRAE include participating in the subcommittees. The SPC 300 committee is the umbrella committee for all commissioning-related standards and guidelines.

Standard 90.1 as of 2019 now requires that the commissioning agent verifies the energy efficiency.

## 6. Society Liaisons

Craig Messmer thanked Justin, who is rolling off as chair. He would like to get the committee's opinion on how the online meeting went and whether we would like to do it again, possibly in between the conferences. ASHRAE needs to take up the issue of allowing guests to attend TC meetings more easily. Sarah Maston said TAC

is taking up the issue of how to accommodate TC meetings in between conferences and how to post information about them. Craig indicated that he's receptive to feedback and questions.

## 7. Sub-Committee Reports

- Membership..... Tom Cappellin
  - 250 people on the roster
  - 10 voting members (one non quorum)
  - 59 provisional corresponding members
  - 173 Corresponding members
  - 27 YEA
  
- Program ..... Jim Vallort
  - We have some information for program and we still have a track (#9, not yet named), and Lee Riback is also chairing a track that connects with our area, as well as some other tracks.
  - Communication has been slow, but there are still some deadlines to meet. We have not heard if any of these deadlines are changing, with the meeting spread over several weeks.
  - There was a chair's breakfast. There is now a basecamp where a lot of that information is available. Justin will talk about this under chair's notes.
  - Open submissions system in two days and the papers are due July 8<sup>th</sup>. Website closes August 3<sup>rd</sup>.
  - We don't have many conference paper abstracts going through.
  - Chicago format is still to be decided, but we do have until the August deadline to get material in.
  - Challenge is to stir up activity when we're all virtual.
  - Brad Elkins started a discussion of commissioned buildings having failure. Possibility of a topic on commissioning as related to varying skills and abilities of the people delivering the commissioning services. What are the sources of failure? Who is doing the commissioning? Contractors? Independent? Titles: "Can a Design Engineer Commission Their Own Design?", "Not all Commissioning is Created Equal", "Why Did My Building Fail After Commissioning?"
  - Seminar Chair is the person who helps the speakers get their stuff done by the deadline and at the session introduces the speakers and keeps time. It's less work than writing a paper or producing a set of slides, but requires organization.
  - "Can a Design Engineer Commission..." could be a debate or forum
  - Do people have case studies of interesting commissioning projects they'd like to present? Could go beyond HVAC to electrical or IT systems. Hydronic systems as opposed to air side systems. Each paper could talk about a different system. Session on commissioning one type of system probably should not be all case studies, but should include presentations on the specification of the commissioning or the process. Jim will try to assemble a session on a large Chicago project case study.
  - We put an earlier program topic together on Mission Critical Commissioning.
  
- Research..... David Shipley
  - Dave Shipley distributed an agenda.
  - The RTAR most likely to move ahead soon is on testing the new SPC 207 standard for method of test of FDD systems. It is in the hands of TC 7.5. Dave will continue to monitor and support it and will bring it back to the TC if TC 7.5 requests co-sponsorship.
  - There is no immediate action required from the TC.
  - Mina posted a presentation on how to write a successful RTAR or work statement.
  - Brad Elkins wondered about something on modular commissioning. Where certain types of equipment are commissioned in the factory before they arrive on site. Particularly appropriate for modular buildings.

- Discussion of qualifications and certifications. There is a presentation at this conference on RP 1650 Training Requirements for Sustainable High Performance Building Operation. Maybe there is a possible research topic related to this.
- Mina will send Dave info on the ASHRAE meeting room comfort topic area and he will try to write an RTAR on the topic.
- Idea for a research topic from Tommaso Dallavalle: Spreading of Covid-19 in Commissioned Buildings vs Non-Commissioned Buildings. There is a task force that Wade Conlan is involved in, looking at whether the viruses are getting into the duct work. Results of that probably are needed, and this would become a phase 2. Also might want to broaden it or look at a different infectious agent whose properties are better understood.
- Handbook (Applications - Chapter 43)..... Open
  - Jim is interim chair of Handbook, but needs to hand it to others.
  - He has identified two people who are interested in being the handbook subcommittee chair. The plan is that they will be co-chairs. He has the training material for them. We also have a draft with markups.
  - David Lewis of CLAYCO and Ted Leonard of Ross & Barruzzini are the proposed co-chairs.
  - Harris Sheinman, Handbook Liaison, spoke. There was training yesterday. Final deadline is May 2022. We should be completing our review and assigning lead and secondary authors at this time. The print or pdf volume is still the official version and can be the legal standard of care. The online version can be updated in between by official TC vote, but it does not change the legal version.
- Standards ..... Walter Grondzik
  - Role is to provide a link between the standards committee and the TC. There are no current proposals in the pipeline for new standards or guidelines related to commissioning. Walter can help people navigate the process if there is a need for a new guideline or standard. He can also help with special pubs going through the PTAR process.
  - There is an effort to request that ASHRAE adopt an ISO standard on enclosure commissioning. It is working its way through SPC 300, not through TC 7.9.
- Web Site..... David Shipley
  - Website: <http://tc0709.ashraetcs.org/>
  - Lots of great content that goes back over 20 years
  - Forward all content that should be on website to Website Subcommittee Chair i.e. Meeting Minutes, Programs
- Journal and Insights ..... Bradley Brooks
  - Bradley Brooks was not present.
  - We have been asked to review some journal articles and that is going ahead.
- Honors & Awards ..... Walter Grondzik
  - There are a variety of awards, but Walter does not know who all the people are who might be good candidates. If anyone knows of someone (or is someone) who deserves an award, Walter can help navigate the process of applying.

## 8. Cognizant Committee Liaison Reports

- ALI Commissioning Courses..... Walter Grondzik

- There are a number of courses offered through ALI. ALI has asked for two previously offered courses related to commissioning to be merged. That has happened.
- There are two additional proposed courses that Walter and Sarah Maston have submitted, but those are in limbo.
- ALI has asked for a one-hour course on the existing building commissioning process.
- ALI has also asked him to develop a 6-hour course on navigating ASHRAE’s certification process. It has not been formally approved, and seems to be in limbo.
- The training and education approach at ASHRAE is looking at new delivery mechanisms, such as a series of short videos that are part of an overall course.
- SSPC 300 The Commissioning Process ..... Jerry Kettler
  - Jerry did not provide a report.
- GPC 1.2 ..... Tom Cappellin
  - Tom was not present.
- GPC 1.3 ..... Justin Seter
  - This is proposed to go into continuous maintenance.
- GPC 1.4 ..... Tom Cappellin
  - Tom was not present, because of a conflict with this GPC.
- GPC 1.6..... Wade Conlan
  - Meeting this afternoon. They have some sections that they are reviewing and hoping to sign off on today.

**9. Other Committee Liaison Reports**

- SPC-90.1 “Energy Efficient Design of New Buildings” ..... Jay Enck
  - Already covered under the report on SSPC 300.
- SPC-90.4 – Energy Efficient Design of Data Centers ..... open
  - Standard 90.4 2019 version was published. It is available at the bookstore.
- TC 7.1 “Integrated Building Design” ..... David Allen
  - David Allen not present. May need to remove this item from the agenda.
- TC 7.3 “Operation and Maintenance Management” .....Mina Agarabi
  - They will have a workshop at the virtual conference, on 30 June, sponsored by 7.3 and 7.6.
  - They are on the same handbook cycle as 7.9. There is a section of their chapter on commissioning, and the language in it hasn’t changed in a long time.
  - 7.3 and 7.8 are merging after this meeting. They will have a joint meeting. New title will be Operation, Maintenance, and Cost Management.
- TC 7.7 Testing and Balancing ..... Justin Garner
  - Not meeting at this session.
- TC 9.6 “Healthcare” ..... Roger Lautz
  - Roger was not present.
- TC 1.6 “Terminology” ..... Roger Lautz
  - Roger was not present.
- TC 9.10 “Laboratory Systems” ..... Wade Conlan / Mike Amstadt

- No report.
- AEDG “Advanced Energy Design Guidelines” ..... Jay Enck
  - No report

## 10. Other Association Reports

- BCA ..... Tom Poeling
  - No report
- NEBB: ..... Curtis Anthony
  - No report.
- ACG ..... Jim Magee
  - Cx Energy 2020 in San Diego, CA on April 6 – 9.
    - Became virtual and kicked off April 23<sup>rd</sup>. Just ended last Thursday.
  - Completed a membership survey in early 2020 and are now working on strategic planning based on that. The survey was done before Covid so there may need to be some changes.
  - ACG and BCA are trying to work together more. The Energy Management Association is helping with this.
  - EMA is also working on webinars for energy resilience in developing countries.
  - ACG guideline committee met with ASHRAE to do some liaison on the guideline they are writing, which is to reference ASHRAE Standard 202. Jay Enck facilitated a meeting on this. They will add review levels to make sure there is consistency.
- CxEnergy ..... Jim
  - CX Energy is in San Diego this year. There are a number of training opportunities being offered in conjunction.
  - A membership survey is underway.
- AABC ..... Justin Garner
  - No report.
- ASTM ..... H. Jay Enck
  - No report.
- Section 7 Head – Update ..... Craig Messmer
  - See above under Society Liaisons.

## 11. Old Business

- The JR Anderson Scholarship is now fully funded in perpetuity, for young engineers to attend a meeting like this. A first award has been made. More contributions are welcome. Information will be attached to the minutes. Sarah Maston will be working to identify some people to serve on a selection committee.
- A copy of the scholarship application form is provided at the end of these minutes.
- There is an ASHRAE strategic plan. You can find it on the website.

## 12. New Business

- We welcome special topic ideas for discussion in our TC meeting. For example, we can do presentations that were not accepted as part of the formal conference.
- One idea would be to do a presentation on how to write an RTAR. Maybe have a guest speaker from RAC. Michael Bobker from 7.3 does a lot of research and might be a good speaker. Could get as basic as describing what research is, for those who don't follow it closely.

- Another topic: conversion of health care facilities into pandemic response health facilities. Emre Ozmen is doing work commissioning these facilities in Turkey. Also could cover conversion of sports facilities and conference centers to serve as emergency pandemic care spaces. Also the conversion of spaces within hospitals to serve as quarantine wings.
- Mina is seeking moderators for a workshop. Check Basecamp. If you are having trouble accessing Basecamp, get in touch with Mina.

### **13. Next Meeting**

- TBA, either in Chicago or online.

### **14. Adjournment**

- Meeting adjourned at 10:57 A.M. EST

### **15. Action Items**

- No Items.

### **16. Motions**

- Motion for meeting minutes for Orlando approval – PASSED

## **END OF MINUTES**

### **Attachments**

- Notes from TC Chair's breakfast meeting
- Research subcommittee meeting notes
- Application form for JR Anderson Scholarship

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

## Virtual Annual Meeting 2020

### A. NEW!

#### 1. Discuss and confirm that TGs, TRGs, and MTGs in section will continue in 20-21 Society Year

From TC MOP:

##### 1.5. Review

- 1.5.1. Once a year, preferably at, or prior to, each Annual meeting, the Committee Chair and Committee Membership shall evaluate their progress in accomplishing the purpose for which they were constituted and recommend one of the following actions to their Section Head:
- a) Continue as a TC, TG, MTG, or TRG
  - b) Convert from a TG to a TC
  - c) Convert from a TRG to a TG or TC
  - d) Merge with a TC/TG/TRG and submit a revised scope for the merged committee
  - e) Dissolve the TC, TG, MTG, or TRG.
    - i) If a TC/TG/TRG/MTG votes to disband, it must establish whether any current responsibilities should be continued and, if so, recommend existing TC/TRG/MTG(s) to assume responsibility and obtain those committee's written concurrence

#### 2. TC Meeting schedule and protocols

TC committee meeting schedules posted at [www.ashrae.org/conferences/ashrae-2020virtual-conference](http://www.ashrae.org/conferences/ashrae-2020virtual-conference). Access to virtual committee meetings will be sent to committee members from either their staff liaison or committee chair.

If you wish to join a committee as a guest, please contact [meetings@ashrae.org](mailto:meetings@ashrae.org) no later than the close of business the day before the scheduled meeting with the name of the committee, date and time and log-in information will be sent to you.

#### 3. 20-21 Roster Rollover

Remember, the current 2019-2020 roster for your TC, TG or MTG is in effect until after they meet for the ASHRAE Virtual Conference. Rosters will roll over to 2020-2021 at that point.

#### 4. Interim TC Meeting Procedures

TAC is encouraging TC's to meet in between ASHRAE Meeting. TAC will implement the following:

- Maintain a listing of the interim meetings on the Technical Committees webpage ([www.ashrae.org/technical-resources/technical-committees](http://www.ashrae.org/technical-resources/technical-committees)), similar to the listing done for Standards.
- TC interim meetings should be posted (by emailing the alias [TCmeetings@ashrae.net](mailto:TCmeetings@ashrae.net)) two weeks before an online meeting and four weeks before a face-to-face meeting. The person emailing should also include the meeting call-in info/ link for posting.
- To keep our members apprised of the meetings, we will add a notice in the ASHRAE Journal Newsletter (bimonthly) to remind our members to check the listing and to provide a link to the list.

#### 5. New Section Head/TC leadership Basecamp

A new Basecamp (<https://3.basecamp.com/3106353/projects/15520814>) is set up to communicate and transfer documents between TAC Section Heads and TC leadership (Chairs, Vice Chairs, Secretary) at TC members can participate at <https://3.basecamp.com/3106353/join/8MHSS5gveaLg>.

## 6. TC Re-Org update

TAC has a subcommittee to implement recommendations of TC Re-Org Ad Hoc final report. For those TC's that have decided to merge, you need to:

- Vote on the revised Title & Scope. Any combining TC's need to be voting on the same TPS.
- Proposed leadership and voting roster need to be completed.
- Please work closely with your Section Head.
- So far, TAC has approved 4 TC mergers – 3.2 & 3.3, 8.10 & 8.12, 9.4 & 9.8, 7.3 & 7.8.

For those TC's still in the discussion phase, please keep your Section Head aware of your discussion status.

## 7. MTGs that have been formed since Orlando

- **MTG.CYB** (Cybersecurity for HVAC Systems and Related Infrastructure)

### 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) )

## B. VIRTUAL ANNUAL MEETING

### 1. Training Options

- TC/TG/TRG/MTG Chair's Training Topic - "There is Change in the Air "** The training is part of TC Chair's Breakfast virtual meeting. Draft slides sent via email.

- RAC's Research Subcommittee Chair's Breakfast**

RAC has scheduled section Research Subcommittee Chair Breakfasts in July. See [www.ashrae.org/conferences/ashrae-2020-virtual-conference](http://www.ashrae.org/conferences/ashrae-2020-virtual-conference) for schedule details or below for details. Contact [meetings@ashrae.org](mailto:meetings@ashrae.org) to request access to this meeting as a guest by close of business the day prior to the meeting. 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.

- TC Program Subcommittee Chair Training**

Sunday, June 7<sup>th</sup>, 1:00 PM – 2:00 PM EDT. Contact [meetings@ashrae.org](mailto:meetings@ashrae.org) to request access to this meeting as a guest by close of business the day prior to the meeting.

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.

## C. UPCOMING DEADLINES

## 1. TC Activity Forms for the 2020 Virtual Annual Meeting are due to Your Section Head before Tuesday 7/21/2020

TC/TG/TRG Activity Feedback Form (Excel) can be downloaded from the TAC Section and TC Leadership Basecamp - [www.ashrae.org/standards-research-technology/technicalcommittees/tc-forms-and-documents](http://www.ashrae.org/standards-research-technology/technicalcommittees/tc-forms-and-documents). Section heads can also provide an electronic copy of the form if requested.

2. **Seminar and Forum proposals for Chicago are due by Monday, August 3, 2020.** Please visit the following site to submit your proposal:

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

3. **2020-2021 Hightower Award Nominations by Tuesday, September 1st** TAC wishes to encourage TCs to make nominations for the 2020-2021 *George B. Hightower Technical Achievement Award*. Nominations are due to Section Heads by September 1, 2020 or sooner. 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>

### D. REMINDERS

#### 1. 20-21 Roster Rollover

Remember, the current 2019-2020 roster for your TC, TG or MTG is in effect until after they meet for the ASHRAE Virtual Conference. Rosters will roll over to 2020-2021 at that point.

2. **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>

3. **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: [www.ashrae.org/about-ashrae](http://www.ashrae.org/about-ashrae).

4. **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.

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

If not, please ask your webmaster to at least post the latest minutes and the Kansas City 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. Please note a listserv is available to TCs to communicate with rostered members and all interested in keeping track of TC activities.

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 Mark Owen for review and approval ([mowen@ashrae.org](mailto:mowen@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 <http://www.ashrae.org/tcs>). 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 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](mailto: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.
- 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.

## 9. TC E-mail Position Aliases available

SY 19-20 TC Position e-mail alias addresses for the mandatory positions of the Technical Committee management team (Secretary, Standards Sub. Chair, Program Sub. Chair, Handbook Sub. Chair, and Webmaster) will stay in effect until July 22nd. The 19-20 E-mail Alias list with these 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*.

## 10. Restructured TC MOP (Manual of Procedures)

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*.

## 11. 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*.

## 12. 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.

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.

## 13. 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 on-line 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/communities/committees/standing-committees/electroniccommunications-committee>) and scroll down to the section titled *Basecamp Guidance*

### E. RECENT ANNOUNCEMENT

- 1. 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 Chicago 2021 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 Orlando meeting.

## 2. 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.

### 3. 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 [PDCchair@ashrae.net](mailto:PDCchair@ashrae.net) with your course ideas.

### 4. ASHRAE Certification Committee seeking ideas from TCs for possible professional certification programs

Certification Committee seeking ideas from TCs for possible professional certification programs related to 1) support adaptability, resilience and recovery of buildings and communities, 2) promote understanding of indoor environmental quality (IEQ) among practitioners). Representatives from the Certification Committee will meet with TCs in Orlando that expressed an interest or had ideas.

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

##### 1. Austin Annual Conference - June 27 – July 1, 2020

Conference Website: [www.ashrae.org/austin](http://www.ashrae.org/austin)

Conference Program Chair: Bing Liu

Program Focus at Austin Annual Conference: i. Track 1:  
Fundamentals and Applications

ii. Track 2: HVAC&R Systems and Equipment

iii. Track 3: Research Summit

iv. Track 4: Professional Development

v. Track 5: Grid-Interactive Efficient Built Environment

vi. Track 6: Multifamily and Residential Buildings

vii. Track 7: Resilient Buildings and Communities

viii. Track 8: Zero Energy Buildings and Communities: Opportunities and Challenges

##### 2. Chicago Winter Conference – Jan. 23 – Jan. 2, 2021

Conference Website: <https://www.ashrae.org/chicago> Conference Program Chair: Maggie Moninski

Program Focus at Chicago Winter Conference

i. Track 1: HVAC&R Fundamentals and Applications

ii. Track 2: Systems and Equipment

- iii. Track 3: Refrigeration & Refrigerants
- iv. Track 4: Environmental Health through IEQ
- v. Track 5: Building Performance and Commissioning for Operation and Management
- vi. Track 6: Energy Conservation
- vii. Track 7: International Design
- viii. Track 8: Standards, Guidelines and Codes
- ix. Track 9 (mini-track) based on Chuck Gulledge's Presidential Theme (to be announced and not accepting papers).

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

### **1. 2020**

- i. 2020 Building Performance Analysis Conference & SimBuild Co-organized by ASHRAE and IBPSA-USA – August 12-14, 2020 – Chicago, IL - [www.ashrae.org/conferences/topical-conferences/2020-building-performanceanalysis-conference-simbuild](http://www.ashrae.org/conferences/topical-conferences/2020-building-performanceanalysis-conference-simbuild) (Virtual Conference)
- ii. IAQ 2020: Indoor Environmental Quality Performance Approaches: Transitioning from IAQ to IEQ – September 14-16, 2020 – Athens, Greece - [www.ashrae.org/iaq2020](http://www.ashrae.org/iaq2020)
- iii. 4th International Conference on Efficient Building Design: Materials and HVAC Equipment Technologies – October 1-2, 2020 – Beirut, Lebanon – [www.ashrae.org/beirut](http://www.ashrae.org/beirut).

### **2. 2021**

- i. AHR Expo 2021 – January 25-28, 2021 – Chicago, IL - <https://ahrexpo.com/>
- ii. Ventilation 2021: 13th International Industrial Ventilation Conference for Contaminant Control – August 15-18, Toronto, Canada - [www.ashrae.org/conferences/topicalconferences/ventilation-2021](http://www.ashrae.org/conferences/topicalconferences/ventilation-2021).

## TC 7.9 Research Subcommittee Meeting Minutes

2020 Annual Meeting

Saturday, June 13<sup>th</sup>, 8:00 – 11:00 am, Online

Meeting is held as part of TC Meeting

### 1. Call to Order: David Shipley

**Present:** The subcommittee meeting was held as part of the main TC meeting, because there was no separate online session booked for the subcommittees.

### 2. Planned Research Activities

Priority	Title	Author	Documents	Most recent status
1	Evaluation of ASHRAE Standard 207P	David Shipley	Draft RTAR available upon request (from author)	<p>June 2020: This RTAR is now in the hands of TC 7.5. Dave will continue to follow and support it and will seek a response from TC 7.9 if TC 7.5 requests co-sponsorship.</p> <p>February 2020: This draft RTAR will be discussed in the FDD subcommittee and the research subcommittee of TC 7.5 (Smart Buildings). We are hopeful that someone from 7.5 will take it on and modify it appropriately before it gets submitted. 7.5 is the natural home for the RTAR and should have the expertise to improve it substantially. Dave will not attend TC 7.5's FDD subcommittee, because it meets during TC 7.9's main meeting (and Dave is taking over as TC secretary at this meeting). Dave will get to the 7.5 research subcommittee and the main TC meeting and will monitor the progress of this RTAR. If it proceeds as hoped, we can offer to co-sponsor it.</p> <p><i>June 2019: Draft RTAR from 207P. Dave asked whether the group would like to review this RTAR if it becomes more ready for submission, to consider whether TC 7.9 should co-sponsor it. The consensus was that we should consider it.</i></p>
	Identification and Collection of Performance Metrics for Building Construction Projects	Kristin Heinemeier		<p><i>January 2019: Kristin has had some discussions with reviewers of the RTAR on whether the initial study is to include both commissioned and non-commissioned buildings. The study that compares two groups of buildings may be more attractive to research topic reviewers. The downside is that it would be more complicated to collect data on both commissioned and non-commissioned buildings. The study would collect metrics from construction projects that may potentially be affected by commissioned, to establish a baseline in non-commissioned buildings. There has been a white paper from BCA/LBNL (recently redone) that presents some of the costs and benefits of commissioning. One idea would be to try to make our study, in addition to what else we collect, compile a dataset of metrics BCA/LBNL used to serve as a control group for that study. We could look for the largest subset of their dataset, in terms of building type and region, and focus our study on the same building type and region. Kristin will change the topic to "Identification and Collection of Performance Metrics for Building Construction Projects." In a lot of places, people are now commissioning minimally, only</i></p>

**Note: All the current RTARs and work statements will be made available on the TC website. Please go and download anything you need.**

Priority	Title	Author	Documents	Most recent status
				<p><i>because they are forced to by regulation. Should we change the study to compare buildings that are commissioned only to code versus buildings that are commissioned more thoroughly? Kristin will review the LBNL report to figure out how we can provide some linkage between that and our study, so we can provide some kind of control group for that study. She will rewrite the RTAR, with help from Dave Shipley, Reinhard Seidl. She will reach out to Elliott Crowe, who led the LBNL study. Mina Agarabi is providing Kristin the contact information for Ole Teisen. He has been working on quality management and digitalization for building performance. The draft RTAR will be distributed to the group for consideration by November.</i></p> <p>June 2018: The challenge of this project is that the only way it can provide a statistically valid sample for comparing against the commissioned buildings we might collect in a subsequent study, you would probably need a much larger number of buildings. 12 of each building type will have too much variability to provide a good baseline. It might be better to narrow this down to one building type or one region, in order to reduce the variability and get better statistical validity for the same study. You need sample size to overcome the noise in the data.</p> <p><i>January 2018: Kristin has drafted the start of an RTAR. The current working title is "Identification and Collection of Performance Metrics for Non-Commissioned Building Construction Projects." She will not be attending the meeting, but would like the group to discuss this draft and provide feedback. Others who are interested in the topic would be welcome to help develop it. Contact Dave Shipley or Kristin Heinemeier to obtain a copy of the draft. Dave will send this draft to Reinhard Seidl and Chuck Dorgan, so they can provide feedback to Kristin.</i></p> <p>June 2017: Nothing has happened on this project since the idea was first suggested in June 2016. Kristin has not made any progress yet, but will commit to moving it forward. Ideally this would identify the difficulties with buildings that are not commissioned.</p> <p><i>January 2017: Dave should move this up into the current research ideas. Nothing has happened on it since June, as far as we know.</i></p> <p>June 2016: What can ASHRAE do about alleviating the one big barrier to the widespread adoption of commissioning? What is that? Probably convincing the owner that commissioning is required to obtain a building that works properly. The owner thinks he is already paying for a building that works properly and doesn't understand why he needs to pay more for commissioning in order to get that.</p> <p>Problem of the cost of an "epidemiological" study of buildings commissioned versus non-commissioned. Can we find a metric that is cheap to collect, to be able to quickly assess the</p>

**Note: All the current RTARs and work statements will be made available on the TC website. Please go and download anything you need.**

Priority	Title	Author	Documents	Most recent status
				<p>cost of not commissioning a building? Can we find a quick way of assessing the commissioning of a building?</p> <p>Kristin will volunteer to work on an RTAR on this topic. John Gibbemeyer will review whatever Kristin drafts.</p>

### 3. Completed Research Projects

Title	Author	Documents	Most recent status
WS 1587: Improved Tools for Control Loop Performance Measurement and Evaluation	Steve Taylor, TC 1.4		June 2017: This project is complete. The final report is available on the ASHRAE website.

### 4. Other Items

- Mina Agarabi posted a presentation on how to write a successful RTAR or work statement.
- Brad Elkins wondered about something on modular commissioning. Where certain types of equipment are commissioned in the factory before they arrive on site. Particularly appropriate for modular buildings.
- Discussion of qualifications and certifications. There is a presentation at this conference on RP 1650 Training Requirements for Sustainable High Performance Building Operation. Maybe there is a possible research topic related to this.
- Mina will send Dave info on the ASHRAE meeting room comfort topic area and he will try to write an RTAR on the topic.
- Idea for a research topic from Tommaso Dallavalle: Spreading of Covid-19 in Commissioned Buildings vs Non-Commissioned Buildings. There is a task force that Wade Conlan is involved in, looking at whether the viruses are getting into the duct work. Results of that probably are needed, and this would become a phase 2. Also might want to broaden it or look at a different infectious agent whose properties are better understood.



## SOCIETY TRAVEL & CERTIFICATION AWARD SCHOLARSHIP APPLICATION

I am applying for:

JR Anderson Travel Award (Student or YEA member)

JR Anderson Building Commissioning Certification Award (YEA member)

**PERSONAL DATA** *(Please type or print in ink)*

\_\_\_\_\_  
Last Name, First, MI Preferred Telephone No. E-mail

\_\_\_\_\_  
Student's Home Address

\_\_\_\_\_  
City State or Province Country Zip Code

\_\_\_\_\_  
Student's Campus Address (if applicable)

\_\_\_\_\_  
City State or Province Country Zip Code

\_\_\_\_\_  
Birthplace Date of Birth Citizenship Gender

**EDUCATION**

\_\_\_\_\_  
College or University Attending (or did Attend) Location Major Program of Study

\_\_\_\_\_  
Cumulative Grade Point Average Class Rank ( \_\_\_ of \_\_\_ ) What is the base of the GPA at your school? (What number does "A" represent?)

\_\_\_\_\_  
No. of Terms to Complete College Degree (excluding current term) Anticipated Month & Year of College Graduation

**PROFESSIONAL GOALS** – What is your particular interest in the field covered by ASHRAE? Do you have a special interest in HVAC&R equipment or systems (i.e. commissioning, installing, designing, testing, troubleshooting, teaching, etc)?  
*(Answer 100 to 200 words)*

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**REFERENCES** *(Please list three references – A personalized signed letter of recommendation is required from each, excluding family members)*

1. Instructor or Faculty Advisor \_\_\_\_\_ E-mail/Phone Number \_\_\_\_\_

2. Former or Current Employer/Co-worker \_\_\_\_\_ E-mail/Phone Number \_\_\_\_\_

3. Other \_\_\_\_\_ E-mail/Phone Number \_\_\_\_\_

Scholarships for the JR Anderson Travel Award are awarded based on the following and are for the ASHRAE Winter Conference, which is typically held in late January/ early February. If applying for the JR Anderson Building Commissioning Certification Award, applicant should follow the requirements to take the exam, and then apply for the award as a reimbursement.

1. A cumulative grade point average (GPA) of at least 3.0 on a scale where 4.0 is the highest and/or a class standing of no less than the top 30% evidenced by an official transcript of grades or written statement from a school administrator.
2. Three letters of recommendation, including one from an instructor or faculty advisor, a current or past employer, and another character reference. In the case of schools with an ASHRAE student branch, a letter from the faculty advisor of that branch may be one of the three letters of recommendation.  
Visit <https://www.ashrae.org/communities/student-zone/student-branches> for a list of ASHRAE student branches.
3. Potential service to the HVAC and/or refrigeration profession.
4. Excellence, Character, Leadership (Fully describe academic achievement and other leadership roles)
5. Service to community & others (Detail participation in the arts/music, athletics, volunteerism, environmental/humanitarian groups, or other service organizations)

Visit [www.ashrae.org/scholarships](http://www.ashrae.org/scholarships) for complete eligibility requirements & list of scholarships

**IMPORTANT:** Submit completed application with the following supporting documents on or before the application deadline: for students, an official transcript of grades, letters of recommendation. Official transcripts must be mailed and received in a separately sealed envelope postmarked on or before the application deadline. Reference letters must be signed.

\_\_\_\_\_ Date

\_\_\_\_\_ Signature of Applicant

**ANNUAL APPLICATION DEADLINES:**

**January 10: JR Anderson Travel Award**

**Anytime: JR Anderson Building Commissioning Certification Award, upon "passing" grade on exam**

Submit one application & all supporting documents on or before the application deadline to:

Sarah Maston: [sarah@greenfootprints.com](mailto:sarah@greenfootprints.com)