



1791 Tullie Circle, N.E./Atlanta, GA 30329
404-636-8400

TC/TG/MTG/TRG DRAFT MINUTES COVER SHEET

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

TC/TG/MTG/TRG No. TC 7.7 DATE February 3, 2020

TC/TG/MTG/TRG TITLE TESTING AND BALANCING

DATE OF MEETING Feb 3, 2020 LOCATION: Lake George B, Hilton, Orlando, FL

MEMBERS PRESENT	YEAR APPTD	MEMBERS ABSENT	YEAR APPTD	EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE
Byron Hagan	2016	Frank Spevak	2019	John Hamilton
Robert Moss	2017	Richard Rose	2016	Gus Faris
Darryl DeAngelis	2019			Gerald Kettler
Tom Schlachter	2017			Jason Hauska
Gerald Kettler	2019			Larry Felker
Mark Hegberg	2017			Justin Garner
Michael Langton	2019			Tom Cappellin
				Harris Sheinman
				Jeffrey Martin
				Mark Goodrich
				Derick Ramos
				Jeffrey Schools
				Amber Ryman
				Jon Sheppard
				Wesley Roberts
				Yusuf Bhetasi
				Scott Sligowski
				Gaylon Richardson
				Derek Edwards
				Tiffany Suite

DISTRIBUTION: All Members of TC/TG/MTG/TRG plus the following:		
TAC Section Head	Craig Messmer	craig@unicosystem.com
TAC Chair	Thomas Justice	justfilter@yahoo.com
ALI / PDC Liaison	James W Bochat	jim.bochat@cxconcepts.com
Chapter Tech Transfer Chair	David Ballard	daballard21@gmail.com
2019 HVAC Applications	Bryan Becker	beckerb@umkc.edu
Research Liaison	Bill Murphy	
Standard Liaison	Rick Heiden	rheiden@trane.com
Manager of Standards	Stephanie Reiniche	sreinichie@ashrae.org
Staff Liaison	Mike Vaughn	MORTS@ashrae.net

Note: These draft minutes have not been approved and not the official, approved record until approved by the TC.

**DRAFT MINUTES
TC 7.7 TESTING AND BALANCING
Winter Meetings
MONDAY – February 3, 2020 (2:15 – 4:15 pm)**

1. CALL TO ORDER

Chairman Schlachter asked all guests to provide contact information on the sign-in sheet that was being passed around.

- Attendance: 27 including 7 VM, 6 CM, 2 PM, and 12 Guests
- Quorum is present (7 of 9 VM present)
- Chairman reviewed the ASHRAE Code of Ethics

2. INTRODUCTIONS

Chairman Schlachter asked those attending to introduce themselves and identify the organization or company they represent

3. APPROVE MINUTES FROM LAST MEETING

Minutes from the meeting were e-mailed out prior to this meeting. Minutes accepted 7-0 to be posted on TC webpage <http://tc0707.ashraetcs.org/>

4. RECOGNIZE LIAISONS

- Bill Murphy Research – Monday morning research committee chair breakfast. Bill noted a there is a new procedure for PTAR (Publication Topic Acceptance Request) – special publication acceptance review process shall include Background and Public need information to support. More information to come.
- Craig Messmer, Section Head - checking in, verified we do not have any questions – TC 7.7 agree we have received all appropriate information, He states attendance looks good.

5. DISCUSS ISSUES FROM TC BREAKFAST

Chairman Schlachter:

- Programs is receiving more submission, and due dates to getting program in for next meeting Feb 10. Looking for TCs to present long range for future meetings. Title, abstract, and 10 learning objectives- first stage is to get accepted, then there is time to write full description.
- New process for membership. There are some problems. One time to submit, we had people listed on roster twice, tried to take one off and both came off. Left the roster as is and will follow up with membership liaison.
- Activity form is now computerized, will be sent in after this meeting/
- Once a year as a committee, we are supposed to have a formal vote to determine if we are going to continue as a committee, merge, or dissolve
- 8 TCs are going to merge and become 4 – They did this on a voluntary basis. ASHRAE is currently determining a process. The 8 that merged were low attendance with similar activities or subject matter. We are a healthy TC with just under 40 members and with active participation.

6. SUBCOMITTE REPORTS

A. Handbook - Mark Hegberg

- Published 2019 – nothing new – Chairman 2023 handbook vote by April 5 2022

B. Program – Jason Hauska

- Starting March 10 we can start to put in ideas for the next Winter meeting - There is a dedicated Commissioning tract Chicago that would suit 7.7
- See attached Program Sub-Committee Report Handout tracks for Austin –
 - i. Water balance PICV valves
 - ii. Instrument and tolerance (discussion about things discovered in 111) Changes made to handbook – and a seminar to highlight changes to significant overhaul of 111.
 - iii. Lab controls – Venturi testing currently tested at EAB lab – Now there are new players in the industry - Previous testing was blade vs venturi – suggestion to have a seminar on what was discovered during this . – Chicago Look to get TC 9.10 Labs as co-sponsor and TC 7.9 Cx
- Gerry Kettler – TAB currently putting together a new standard for commissioning – experience says lack of knowledge of design engineers to adequately evaluate a TAB report – J. Hamilton is looking for further information. Is the situation currently “tail wagging dog?” – we should educate engineers what to look for, the TAB scope needed, and the benefit to engineers. Benefits to writing a good TAB specification – what to ask for and what to look for – how it effects efficiency of building? (ie – identify key points to look for, such as determining which damper / valve is the critical one (wide open valve). M. Hedberg – what education material does an engineer currently reference?
- Guy Faris – stated a topic at the ASHRAE president breakfast was on how expand influence and to communicate with owners / operators. Suggest as another possible track? Generally, TAB should represent owner.

C. Membership – Robert Moss

- Chairman Schlachter noted Robert Moss has been assigned Vice Chair and Membership Chair, noted Mr. Hagan Mr. Rose are rolling off. Anyone who is interested to become a VM contact the chairman after the meeting want to join.

D. Research – Byron Hagan

- We co-sponsored with TC 4.7 1741-RP modeling FCU – the reports are done voted to be accepted by TC 5.3 - There are 2 papers (825 test points) to presented in Austin. Information related to energy models part loads – mapping performance rather than single point. (There was a detailed discussion of how AHRI and manufacturers select test point temperatures; 80/67, 73/65 and how this research will open up performance selection at part loads)

E. Journal –

- No report

F. Standards - Gaylon Richardson

- Standard 111 – We had to send back for review for a 3rd time. 1ST submission sent back for numbering issues, 2nd issue was because graphics had to be sent in .jpg and sent separately.

G. Education –

- No report

H. Web Master – Jason Hauska

- We are up to date on website -

7. LIASON REPORTS FROM OTHER TC'S OR ORGANIZATIONS

TC 1.2 Instruments & Measurements – Jason Hauska

- SPC 43.1 standard on pressure measurement is going out for public review

TC 1.4 Control Theory & Application – Mark Hegberg

- Stated the research started with 1711-RP that resulted in high performance VAV sequence of operation G36 continues to expand through 1819-RP CO2 DCV.

TC 5.2 Duct Design – Guy Faris

- Interest in 90.1 on duct leakage (act HVAC system leakage) – in handbook leakage taken at elevated pressure. He did a presentation (consultant to mech Sub)– G.F also presenting to 5.2 where duct leakage is taking place. Standard 215 testing an operating – not supported Already have something in 90.1 but looking to see if there is value to getting leakage down. What is real cost of leak and what is cost to repair?

TC 5.3 Room Air Distribution - Byron Hagan.

- There are currently 4 different standards open

TC 5.6 Control of Fire & Smoke – Larry Felker

- Noted a potential research project on verifying smoke damper leakage

(LIAISON REPORTS FROM OTHER TC'S OR ORGANIZATIONS...continued)

TC 6.1 Hydronic & Steam Heating Equipment & Systems –

- No report

TC 7.9 Building Commissioning - Justin Garner

- Working on potential guidelines for continuous maintenance. 1.5, 1.6, 1.7

TC 9.10 Laboratory Systems – Gaylon Richardson

- A couple of research energy wheels, looking for comments on lab classification guideline

AABC – Gaylon Richardson

- AABC held their annual conference last October. Presentation topics included Sensor-less Pumps, Arch Flash Safety and Chilled Beam testing.

NEBB – Jeffrey Schools

- Noted a new training center in FL; Continue to offer CA T24 acceptance test technician certification; They offer 2 new certifications compound pharmacy and clean rooms

NBC - Scott Sligowski

- Updated TAB forms and certification; Revamped online training, adding online training and a water certification.

SMACNA – No liaison

- No report

ACCA – No liaison

- No report

TABB – John Hamilton

- Another 35 training centers.

8. OLD BUISNESS

- No report

9. NEW BUISNESS

- TC 7.7 Vote to continue: passed 7-0
- Engineered Air Balance Co. announced the completion of its 8000 sqft training center – for TAB Cx, air and hydronics

10. ADJOURN

Motion to adjourn was made @ 3:30pm by Mr. Schlachter, seconded

NEXT MEETING:

Austin, TX

Monday, June 29, 2020

2:15 – 4:15 pm