**Agenda**

**TC 5.3 Room Air Distribution**

**2019 Annual Meeting Agenda**

**1:00-3:30 PM, Tuesday June 25, 2019**

**KCCC room 2103C**

1. Call to Order/Welcome K. Gebke
2. Introductions/Attendance Sheet K. Gebke
3. Verify Quorum M. Filler

|  |  |  |  |
| --- | --- | --- | --- |
| Member | Present? | Rolling Off Voting? | Rolling ON Voting? |
| Kevin Gebke (Chair) | Y | - |  |
| Jim Megerson | N | Roll OFF |  |
| David Johnson | Y |  |  |
| Frank Cuaderno | Y | Roll OFF |  |
| James Kline | N |  |  |
| Mike Koupriyanov | Y |  |  |
| Fred Bauman | Y |  |  |
| Curtis Peters | Y |  |  |
| Chris Lowell | N |  |  |
| Kevin Cash | Y | Roll OFF |  |
| Steven Purdie | Y |  |  |
| Arsen Melikov | N |  |  |
| Tom Rice | N |  |  |
| Lauren MacGowens (should be transferred to Jenn Kane at AHRI) | ?(get email) | Roll OFF | Roll ON?(Jenn Kane?) |
| Brandon Bates | Y | - | Roll ON |
| Bob Persechini | Y | - | Roll ON |
|  |  |  |  |

1. ASHRAE Code of Ethics Commitment K. Gebke

*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*](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ashrae.org%2Fabout-ashrae%2Fashrae-code-of-ethics&data=02%7C01%7Crzimmerman%40titus-hvac.com%7C29a68366b3c54b28f31908d4a9c25ffc%7Ca1f1e2147ded45b681a19e8ae3459641%7C0%7C0%7C636320099683702358&sdata=GRBne1hrZ4LkZQzXH58OfhS9%2FJVLk6CYjqmIzon7HIE%3D&reserved=0)*.)*

1. Review of Agenda K. Gebke
2. Approval of Atlanta Minutes K. Gebke

**Motion to accept Minutes**

**All Present– Yes (Chair withstanding)**

**0 – No**

**5 - Absent**

1. Announcements K. Gebke

TC’s will retain their same structure due to feedback to ASHRAE. The “TC Restructuring” process will be case-by-case.

1. Membership Report M. Filler

Frank C, Jim M, Kevin C, Lauren M rolling off

Bob P, Brandon B, and (Jenn K?) to roll on

Website currently says Jose P as Standard Chair. Must be switched to Randy Z.

Ryan J (Secretary) to take Membership Chair

Kevin G (Chair) to take Webmaster Role

1. Research Subcommittee Report C. Peters
2. RP-1666 – Passive Beams with Displacement Ventilation (R. Zimmerman)
3. RP-1741 – Fan Coils (B. Hagan)

Most data collection complete. Working on final report. May go out on letter ballot before Orlando, Winter 2020.
One paper will be ready for Orlando
One paper will be ready for Austin
Estimated up to 15 papers will be complete from this project.

1. RP-1819 – CO2 Demand Control Ventilation in Multiple Zone VAV Systems with Multiple Recirculation Paths (Curtis P)

Final Report expected Feb 2020

1. RP-1882 – Procedure for Estimating Occupied Space Sound Levels in Application of UFAD Air Terminals and Air Outlets

Conditionally approved with comments

Chris Burroughs and Greg M and Randy Z must develop a Work Statement.

Must hit Aug 15 2019 for Orlando; Dec 15 for Austin

1. New Research - “How diffuser type affects room air mixing in heating mode”
	* Kevin to work on Work Statement

8 other research ideas were mentioned

PMS Training on April 25, 2020 for those interested. There is new format.

1. Standards Subcommittee report R. Zimmerman
	1. Standard 70 MOT Diffusers (J. Palma)

Essentially complete. Just some voting issues. Will have changes to appendix

* 1. Standard 79 MOT Fan Coils (B. Hagan)

Main reason for re-opening is to harmonize the content on sound measurement

* 1. Standard 113 MOT Room Air Diffusion (R. Johnson)

Progress still being made.

* 1. Standard 129 Air Change Effectiveness (D. John)

David John would like to re-open this standard.

Reason would be to allow other gases.

**David Johnson Motion to “OPEN STANDARD 129”**

 **Frank Cuaderno Second**

 **All present voted YES (Chair withstanding)**

 **0 voted NO**

 Members interested in working on this standard:

 David John

 Kishur Khankari

 Michael Koupriyanov

 Dan Int-Hout

* 1. Standard 130 MOT Terminal Units (R. Zimmerman)

Aiming to vote for Public Review by Orlando, Winter 2020

* 1. Standard 200 MOT Active Chilled Beams (M. Koupriyanov)

All done. In the bookstore.

1. Handbook Subcommittee Report J. Palma

Systems and Equipment 2020 is complete. Handbook subcommittee approved.

Began working on Fundamentals 2021.

**David Johnson Motion to “ACCEPT HANDBOOK RECCOMENDATION SYSTEMS & EQUIPMENT Ch.20 DRAFT, ASSUMING TWO WEEKS FOR REVIEW AND OPTION FOR COMMENTS”**

 **Mike Koupriyanov Seconds**

 **ALL voted YES (Chair withstanding)**

 **0 voted NO**

 David John has an ASHRAE article he will publish. Will reference new ADPI tables in ASHRAE Applications 2019 Ch.58

1. Programs Subcommittee Report B. Persechini

8 seminars proposed for Orlando. Need to get information in by July 2nd for review:

1. Air Curtains
2. Chilled Beam and Fan Coil Applications
3. Chilled Beam and Commercial Applications for Educational
4. Chilled Beam System Controls
5. Correct Application and Commissioning of Chilled Beam Systems
6. How Diffusers are Tested (Brandon Bates volunteered to speak)
7. Textile Air Distribution Systems
8. Kitchens…

Seminars for Austin (Summer 2020) are due by Jan 8, 2020.

TC 4.10 is presenting on “Ventilation Metrics for Humans”. Mike Koupriyanov asks if TC 5.3 would like to co-sponsor. Kishor Khankari volunteered.

1. Webmaster Report K. Gebke

Note made: Do not “notify all” if you make an action on Basecamp

1. Honors and Awards M. Hosni

Gus Faris received ASHAE service award last year.

Recommendation made to TC to nominate members for service awards

1. Historian D. John

David is compiling pictures and old documents

1. Liaison Reports K. Gebke
	1. Standard 55 Thermal Comfort (M. Kupriyanov)

Addendum C: will be published

Presented new thermal comfort tool for an appendix

New research was presented showing greater vertical temperature stratification is allowable for thermal occupant comfort. May be implemented in future iteration of 55.

* 1. Standard 62.1 Ventilation (T. Rice)

Table for Ventilation Effectiveness has been removed. Just assumes Ev=0.75 for all applications as the current draft is written.

Ken Shifflett to be liaison for 62.1 for Orlando

* 1. Standard 90.1 Energy (J. Bade)

2019 Version is ready to be published.

Gus F says there is nothing too controversial for our committee

Gus F is putting together working group in 90.1 specifically for duct/terminal leakage. Will write a paper on where to find leakage in duct system. Open to input from TC 5.3.

* 1. Standard 170 Healthcare Facilities (M. McLaurin)
	2. Standard 215 Air Leakage (J. Bade)
	3. TC 2.6 Sound and Vibration (K. Peterman/R. Zimmerman)

Moving their meeting to Sundays 4:00pm-5:30pm

New Calculation tool for lined duct shows different results. 125,250 Hz mostly same. 1000+Hz are significantly less attenuating.

* 1. TC 5.2 Duct Design (G. Richardson)

Expect to complete duct design guide before the next conference.

* 1. AHRI - Terminal Units (G. Faris)
	2. AHRI - Fan Coils (L. Zelinski)
	3. AHRI - Chilled Beams (L. Bulookbashi)
	4. AHRI - TCoS (R. Zimmerman/K. Peterman)
	5. GPC 36 High Performance Seq of Op for HVAC Sys (C. Peters)

G. Faris – Addenda for Dynamic Sequencing of Series Boxes complete.

Four addenda went out to public review on June 18

* 1. TC 9.6 Research (Jose P)

Research is being doing on “Sterile Zones in Laminar Arrays”. It might include air curtains.

1. “Dynamics of Unidirectional Air Flow” Presentation K. Khankari

Has article in June 2019 ASHRAE Journal

1. Other business K. Gebke
2. New business K. Gebke

Frank C + David Johnson – Proposing an Air Curtain Design Guide. Already spoken to Mark Owen and Committee of Special Publications. They approved.

**Curtis Peters - Motion to “Support for development of Special Publication of Air Curtain Design Guide”**

 **Steve Purdie - Second**

 **ALL voted YES (Chair withstanding)**

 **0 voted NO**

 Fred Bauman – other committees are looking at ceiling fans and thermal comfort. Fred’s team is starting to do research. General request if TC 5.3 would be interested in co-sponsoring research on ceiling fans and room air distribution. Just to put on our radar.

1. Adjournment K. Gebke

DONE.