AMERICAN SOCIETY OF HEATING, REFRIGERATING AND AIR-CONDITIONING ENGINEERS, INC.
1791 Tullie Circle, N.E./Atlanta, GA 30329
404-636-8400

TC/TG/MTG/TRG MINUTES COVER SHEET

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

TC/TG/MTG/TRG No. 5.10 DATE 01/30/17

TC/TG/MTG/TRG TITLE Kitchen Ventilation

DATE OF MEETING 01/30/17 LOCATION Las Vegas, NV

<table>
<thead>
<tr>
<th>MEMBERS PRESENT</th>
<th>MEMBERS PRESENT</th>
<th>MEMBERS ABSENT</th>
<th>EX-OFFICIO MEMBERS AND ADDITIONAL ATTENDANCE</th>
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<tbody>
<tr>
<td>Michael Morgan</td>
<td>Fuoad Parvin</td>
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<td>Amin Delagh</td>
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<td>*Jason Greenberg</td>
<td>Derek Schrock</td>
<td>*Tony Spata</td>
<td>Dan Mason</td>
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<td>*Jimmy Sandusky</td>
<td>Don Fisher</td>
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<td>Scott Sherwood</td>
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<td>Steve Brown</td>
<td>Steve Brown</td>
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<td>Bryan Miller</td>
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<td>*Greg Duchane</td>
<td>Tim Farrell</td>
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<td>Frank Kohout</td>
<td>Dwayne Sloan</td>
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<td>*Rich Swierczyna</td>
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<td>Mike Watz</td>
<td>Greg Gress</td>
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<td>Cherish Samuels</td>
<td>Curt Swan</td>
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<td>*Andre Saldivar</td>
<td>Bob Ajemian</td>
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<td>*Russ Robison</td>
<td>*Terry McCabe</td>
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<td>Doug Horton</td>
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*Voting Members

DISTRIBUTION

Minutes Submitted by: Andre Saldivar, 01/28/17
Minutes Approved on:
These draft minutes are not the official minutes until approved by this committee.
<table>
<thead>
<tr>
<th>All Members of TC/TG/MTG/TRG plus the following:</th>
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<tbody>
<tr>
<td><strong>TAC Section Head:</strong></td>
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<tr>
<td><strong>TAC Chair:</strong></td>
</tr>
</tbody>
</table>
| **All Committee Liaisons As Shown On TC/TG/MTG/TRG Rosters:** | Dr. Darin Nutter, PE  
James Arnold, PE  
Gerald Williams, PE  
Ricardo Esbri  
Rick Larson |
| **Manager Of Standards**                      | Stephanie Reiniche |
| **Manager Of Research & Technical Services**   | Mike Vaughn      |
1. Call to Order and Introductions
   A. Jimmy Sandusky called the meeting to order at 6:10 PM

2. Voting Members* and Balance

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Classification</th>
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<tbody>
<tr>
<td>Jimmy Sandusky</td>
<td>Halton</td>
<td>Producer</td>
</tr>
<tr>
<td>Russ Robison</td>
<td>Gaylord Industries</td>
<td>Producer</td>
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<tr>
<td>Andre Saldivar</td>
<td>SCE</td>
<td>General</td>
</tr>
<tr>
<td>Dwayne Sloan</td>
<td>UL</td>
<td>General</td>
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<tr>
<td>Rich Swierczyna</td>
<td>FSTC</td>
<td>General</td>
</tr>
<tr>
<td>Tony Spata</td>
<td>Hyatt Hotels</td>
<td>User</td>
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<tr>
<td>Terry McCabe</td>
<td>Greenheck</td>
<td>Producer</td>
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<tr>
<td>Greg Duchane</td>
<td>Trane</td>
<td>Producer</td>
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3. Quorum Call
   A. 8 of 8 Voting Members Present, Absent

4. Code of Ethics

5. Approval of Minutes from Annual Meetings in St Louis, Mo
   A. Approved unanimously by Voting members, Motion – Tony Spata, Second – Dwayne Sloan, 8-0-0-0,

6. ASHRAE Liaison Reports
   A. Ken Peet- Updates
      1. TAC- encourage online meetings between annual meetings
   B. ASHRAE staff- Connor B – General overview on Code process
      1. Code proposal can go thru TC now
      2. Smoke bombs for testing- rejected
      3. Proposal can be submitted Jan 2018

7. Announcements
   A. TC/TG Chair Breakfast Announcements
      Sunday 01/29/17, 6:30 am–8:00 am

Minutes Submitted by: Andre Saldivar, 01/28/17
Minutes Approved on:
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For Las Vegas- Winter 2017
164 Papers were submitted, 145 accepted
152 Seminars submitted, 76 accepted
18 Workshops, 7 accepted
8 Forum, 3 accepted
ASHRAE offering BASE CAMP- Collaboration area online so it accessible for edits

8. TC 5.10 Roster Update
   A. Roster updates occur after every winter meeting & are effective July 1 of that year
   B. Current Roster has about 45 people
   C. Voting Member Roll Off Dates
      1. 2017 Jimmy Sandusky
      2. 2019 Greg Duchane
      3. 2019 Andre Saldivar
      4. 2019 Terry McCabe
      5. 2019 Rich Swierczyna
      6. 2019 Russ Robinson
      7. 2019 Tony Spata
      8. 2020 Dywane Sloan

9. TC 5.10 Program Las Vegas
   A. Seminar 9: Fire Safety Operations in Commercial Kitchens (Sunday)
   B. Seminar 67: The Future of Water and Energy Efficiency in Commercial Foodservice (Wednesday)

10. Subcommittee and Standards Reports
    A. Handbook – Frank Kohout
       Monday 01/30/17, 2:00-3:30PM
       1. 2017 Topics: Continued to work on the 4 topics:
       2. Residential hoods- Cooking equipment applications, when MAU is needed,
3. Design examples-Life Cycle Cost, cost of CFM
4. Dish rooms- Sub sections were assigned – layout, air quality, heat gains, air distribution, ventilation rates, and energy efficiency measures.
5. Solid Fuel considerations- discuss Research needed to be done.

B. Research – Derek Schrock

Monday 01/30/17, 4:30-6:00PM
1. Research Process flow chart was sent out
2. RP 1614 Evaluation of UV- Went out to bid, no bidders. Will contact bidders list. Russ Robinson
3. WS 1664 Latent & Sensible loads in kitchen. Update: Steve Brown will rewrite
   a. Break into 2 separate WS
4. WS on Qualifying Makeup Air Entering Hood & Thermal Impact on Hood Performance- Derek S
5. WS 1178 for Dishroom comfort/ventilation. Develop Guideline
   a. Addressed RAC concerns, dropped Guideline, add to Scope
6. New Research Project- Fire safety and creosote
   a. Creating RTAR- Field project with 15 samples each with/out solid fuel cooking
7. Updates from Liaison- David John- New ATAR forms are available online
8. May 15th first date RTARs can be submitted
9. Would like to extend meeting time for 2 hrs

C. Program – Mike Morgan

Monday 01/30/17, 3:30-4:30PM
1. Long Beach 2017 Proposals
   i. Feb 6 - seminar, forum, workshop proposals due
2. Seminar 1 : Title: Commissioning CKV systems
   i. Frank H to chair, Mike M, Jason Brown, Don F speakers
   ii. Track 6
   iii. Co-Sponsor TC 7.9
3. Revisit last proposal- Water & Energy Nexus for Ventilation
   i. Don to chair, Rich S, Mike W, Russ R to speak
4. Seminar 3 : Title: Pollution Controls Units/Technologies
   i. Co-Sponsor 5.4
   ii. Track 4
   iii. Speakers: Russ R, Bob A, Dwyane S
iv. Chair – Derek S

4. Seminar 4: Title: Restaurant Emissions Challenges, Improving Life Safety
   v. Co Sponsor 5.4
   vi. Track 4
   vii. Speakers: Chris L, Don F, South Coast,
   viii. Chair – Mike Watz or Greg Duchane

   Sunday 01/25/16, 1:00 – 5:00 PM
   i. Liaison Ken attended and gave updates
   ii. Rewrite Title to eliminate ‘Commercial”
   iii. 14 proposals

E. UL 710 – Dwayne Sloan
   1. UL 8782 Pollution Control units now published
   2. UL 710 changes effective date is Sept 13th 2017
   3. NFPA 96 was ask to address food mobile/trucks
      • Annex B

F. Codes and Standards – Need a Chair

G. Webmaster Report – Vern Smith

H. NSF – Tom Johnson

I. STD 189 – Greg Gress
   1. Need info on: High rise building ventilation - energy/heat recovery

11. Membership
   A. The committee currently has voting, corresponding and provisional corresponding members. There can also be two non-quorum voting members, which is particularly interesting for consulting engineers with infrequent attendance.
   B. After two consecutive meeting absences, inactive members will be removed from corresponding member list. An email notice to the current distribution list will notify all members of change and that meeting agendas, minutes, etc. can be found on TC 5.10 website.
12. Old Business
   A. Establish an MTG or WG for Energy Efficient Foodservice Facilities
      1. TC 10.7 Commercial Food and Beverage Refrigeration Equipment
   B. ASHRAE Journal Article, November 2016 – Commercial Kitchen Fire Suppression Solutions by Bill Griffin, Mike Morgan.
      1. Motion to Approve- Russ Robinson, Second- Tony Spata (8-0-0-0)

13. New Business
   A. Standards Subcommittee Chair- Need Chair- MANDATORY TO HAVE
      1. Need clarification on role
   B. ASHRAE 90.1-2016. 6.5.6.1 Exhaust Air Energy Recovery language changes regarding commercial kitchen ventilation.
      1. Put under C&S subcommittee
   C. Cosponsoring seminar with TC5.4
      1. Motion- Russ Robinson, 2nd- Dwayne Sloan, (8-0-0-0).
   D. Cosponsoring seminar with TC 4.1
      1. Motion- Tony Spata, 2nd – Russ Robinson, (8-0-0-0).
   E. Fire code in NY- Field testing. To be put be on BASE CAMP for review

14. Adjourn
   A. Motion to Adjourn – Russ Robinson, Second – Tony Spata, (8-0-0-0).