



ASHRAE American Society of Heating, Refrigerating and Air-Conditioning Engineers Inc.

1791 Tullie Circle, NE • Atlanta, Georgia 30329-2305 ☎404-636-8400 • Fax 404-321-5478

TC/TG/TRG MINUTES COVER SHEET

TC/TG/TRG NO.: TC 9.01 ISSUE DATE: September 20, 2013

TC/TG/TRG TITLE: Large Building Air-Conditioning Systems

DATE OF MEETING: June 25, 2013 LOCATION: Denver, CO

MEMBERS PRESENT	TERM END	MEMBERS ABSENT	TERM END	ADDITIONAL ATTENDANCE
Kelley Cramm, Chair	6/30/2013	Warren Hahn,	6/30/2013	<u>Corresponding Members:</u> Alonzo Blalock Steve Nicklas R.Lee Millies, Jr. Kasey Worthington Gareth Nelson <u>Liaisons / Staff / Ex-Officio Members:</u> Not Present <u>Guests:</u> John Holman Dave Dorste Andrew Wengerd
John L Kuempel Jr, Vice Chair	6/30/2014	Publication Liaison		
Howie McKew, Secretary	6/30/2015	Quinn Hart, Member	6/30/2014	
Bill Klock, Research Sub-C Chair	6/30/2013	Gene R Strehlow	6/30/2014	
Charlie Henck, Standards Sub-C Chair	6/30/2013	ALI/PDC Coordinator		
Steve Duda Honors & Awards Sub-C Chair	6/30/2016	Phil Trafton, Non- Quorum Member	6/30/2014	
Mark Fly, Web Master	6/30/2013			
Lynn Werman, Membership Sub-C Chair	6/30/2013			
Doug Cochrane, Member	6/30/2013			
Jay Eldridge, Member	6/30/2015			
John I Vucci, Member	6/30/2015			
Jeff Traylor, Member	6/30/2016			
Hollace Bailey, Member	6/30/2013			
Ken Gill, Member	6/30/2016			

DISTRIBUTION

ALL MEMBERS OF TC/TG/TRG

TAC COMMITTEE CHAIR: Charles Culp

TAC SECTION HEAD: Thomas M Lawrence

LIAISONS:

CEC Liaison: Dennis Wessel (NP) Publications Liaison: Warren Hahn (NP) Special Pubs Liaison: Francis Mills (NP)
 Handbook (Section Head): Thomas M Lawrence (NP) Research Liaison: Carl Huber (NP)
 Professional Development Liaison: Don Brandt (NP) CTTC Liaison: Jay Cederberg (NP)
 Staff Liaison/Research/Technical Services: Michael R Vaughn (NP) Manager of Standards Liaison: Stephanie Reiniche (NP)
 Standards Liaison: Cecily M Grzywacz (NP)

** NP Not Present

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 January 2014



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ASHRAE TC/TG/TRG ACTIVITIES SHEET

ISSUE DATE: May 23, 2013

TC/TG/TRG NO.: T.C. 9.01 TC/TG/TRG TITLE: Large Building Air-Conditioning Systems

CHAIR: Kelley Cramm

VICE-CHAIR: John Kuempel Jr

SECRETARY: Howie McKew

TC/TG/TRG MEETING SCHEDULE

Location - Past 48 Months	Date	Location - Planned Next 36 Months	Date
Orlando, FL	1.26.2010	New York, New York	1.18.2014
Albuquerque, NM	6.29.2010	Seattle, Washington	6.28.2014
Las Vegas, NV	2.01.2011	Chicago, IL	1.24.2015
Montreal, PQ (Canada)	6.28.2011	Atlanta, GA	6.27.2015
Chicago, IL	1.24.2012	Orlando, FL	1.23.2016
San Antonio, TX	6.23.2012	St. Louis, MO	6.25.2016
Dallas, TX	1.26.2013		
Denver, CO	6.22.2013		

TC/TG/TRG SUBCOMMITTEES

Function	Subcommittee Chair
ALI/PDC Coordinator	Gene Strehlow
Handbook	Howard McKew
Honors and Awards	Steve Duda
Membership	Lynn Werman
Programs	John Kuempel
Publications	Warren Hahn
Standards	Charlie Henck
Research	William Klock
Standards Issues	No Assignment
Webmaster	Mark Fly

RESEARCH PROJECTS – CURRENT

Project Title	Contractor	Monitoring Comm. Chairperson	Report Made At Mtg.
<i>NONE</i>			

LONG RANGE RESEARCH PLAN

Rank	Title	W/S Written	Approved	To RAC
	<i>1684 RTAR: Dispersion of Refrigerant to Connecting Spaces via Transfer Openings</i>	Under development		

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ASHRAE TC/TG/TRG ACTIVITIES SHEET (continued)

HANDBOOK RESPONSIBILITIES				
Year & Volume	Chapter Title	Chapter No	Reviser & Mentor-Reviser	Reviewer
2016 Systems & Equip	HVAC System Analysis and Selection	1	Mark Fly/Kasey Worthington	/ /
2016 Systems & Equip	Decentralized Cooling and Heating	2	Gene Strehlow/Steve Nicklas	John V/ /
2016 Systems & Equip	Centralized Cooling and Heating	3	Steve Duda/ Dan Leath	/ /
2016 Systems & Equip	Air-Handing and Distribution	4	Lynn Werman/ Rachel R	Andrew W/ /
2016 Systems & Equip	In-Room Units and Distribution	5	Bill Klock/Robby Tefft	/ /
STANDARDS ACTIVITIES - List and Describe Subjects				
STD 15-2004 <i>Safety Standard for Refrigeration Systems</i> – Continuous Maintenance, Cognizant TC is 9.01, Steve Duda is liaison. Guideline 0-2005 <i>The Commissioning Process</i> – TC 9.01 is co-cognizant. Guideline 16-2003 <i>Selecting Outdoor, Return, and Relief Dampers for Air-Side Economizer Systems</i> – Cognizant TC is 9.01. Guideline 22—2008 <i>Instrumentation for Monitoring Central Chilled-Water Plant Efficiency</i> - Cognizant TC is 9.01				
TECHNICAL PAPERS from Sponsored Research – Title, when presented (past 3 yrs. present & planned)				
1. None.				
TC/TG SPONSORED TRANSACTION SESSIONS – Title, when presented (past 3 yrs. present & planned) & Chair				
1. Conference Paper – Rehab for DDC at Corporate National Training Center – Three Years of Therapy - Winter, 2011 – Las Vegas, Blalock 2. Conference Paper - Application of ASHRAE Standard 15-2010 with Respect to Multi-Evaporator Split Air-Conditioning Systems – Summer 2011 – Montreal, Duda				
TC SPONSORED SEMINARS – Title, when presented (past 3 years, present, & planned) & Chair; Speaker, Speaker, Speaker				
1. <i>Retrofitting HVAC in Older Buildings for Higher Efficiency</i> (2010 Annual-Albuquerque) Kuempel, Duda, Cramm 2. <i>High Performance Run Around Energy Recovery Systems</i> (2010 Annual – Albuquerque) Niederer 3. <i>HVAC Security- Less we forget</i> (2011 Winter-Las Vegas) McKew; Cogley, Dobbs, & Campbell 4. <i>Case Studies: New Equipment & Applications to Improve Energy Efficiency</i> (2012 Winter-Chicago) Cramm; Kuempel, McKew, & Schwedler 5. <i>When Integrated Controls Are Not Integrated</i> (2012 Summer-San Antonio) Cramm; Rimmer, McKew, & Conlan 6. <i>Smart Methods to Prevent Electrical Harmonics Problems in Buildings</i> (2013 Winter-Dallas TX) 7. <i>Hydraulic Modeling</i> (2013 Winter-Dallas TX) Klock; Simmons & Stinson 8. <i>Sky High Efficient Case Studies</i> (2013 Summer-Denver CO) Cramm, Madigan, Duda, Kuempel 9. <i>How to certify an Energy Star Building</i> (planned 2104 Winter-New York NY) Eldridge, Kuempel, Newell				

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ASHRAE TC/TG/TRG ACTIVITIES SHEET (continued)

TC/TG SPONSORED FORUMS
1. None.
JOURNAL PUBLICATIONS
1. No publication articles between June 2012 and January 2013 by TC 9.01 Members

1. None.

1. No publication articles between June 2012 and January 2013 by TC 9.01 Members



TC 9.01 Large Building Air-Conditioning Systems
Meeting Minutes

Meeting Date: June 25, 2013
Denver, CO

I. Call to Order

- a) Chair Kelley Cramm called the meeting to order at 1:00 PM local time,

II. Introduction of Members And Guests

- a) Self-introductions of members and guests were made around the table as the attendance roster was circulated. Chair welcomed all members and visitors. A quorum was verified.

Voting Members: 13 Present 4 Absent, Quorum achieved_(1-more joined meeting later)
Voting Non-Quorum Members: 0 Present 1 Absent
Corresponding Members: 5 Present
Society Liaisons: 0 Present
Staff Liaisons: 0 Present
Guests: 3 Present

Note: Voting Non-Quorum members are voting members if present, but do not count against quorum if absent.)

III. Minutes from Dallas Texas Winter Meeting 2012

- a) Jeff T moved that the meeting minutes be approved and Mark F seconded.
- b) Motion carried 12-0-0-0-0

Secretary’s Note: All votes recorded herein are formatted as (Aye-Nay-Abstain-Chair not voting-Absent).

IV. Agenda Comments / Updates (K. Cramm)

- a) No Additions to Agenda requested.

V. Chair’s Comments and Section 9 Report (K. Cramm)

- a) Kelley and John K attended section meeting.
- b) Roster update has been distributed.
- c) A discussion occurred about multi-disciplined technical groups
- d) TAC had presentation on “talking to your local Chapter” as to what TC’s do
- e) Request that Bio’s be updated on the ASHRAE web site.
- f) It was recommended that TC’s have balanced skills within the group (e.g., design engineers, facility engineers, etc.)



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VI. ASHRAE Liaison Reports

- a) None Present

TC 9.01 Subcommittee Reports

a) Membership (Werman): Lynn could not attend the meeting so Kelley C noted there are 17 voting members and 1-non quorum member with Rodney Lewis retiring as an ASHRAE participant. Kelley sent out an email to all corresponding members asking if they want to continue to be a corresponding member and if “no response” the name(s) would be removed from the roster. Effective July 1st, 2013, the TC 9.1 Members and Corresponding Members are as follows:

- 7-rolling off to Corresponding Members: K. Cramm, W. Klock, C. Henck, W. Hahn, L Werman, M. Fly, H. Bailey, & D. Cochran,
- Joining as Voting Members: R.L. Millies & A. Blalock
- Steve Nicklas will become secretary July 1st

b) Handbook (McKew): 2016 Systems and Equipment Handbook revision has started and all 5-chapters have Revisers. Howie to schedule a conference call with the 5-Revisers before the winter conference.

Standards (Henck): Guideline 16 had been approved

c) Research (Klock):

- There is money available for research projects
- RTAR-1684 - “Dispersion of Refrigerant Releases to Connecting Spaces via Transfer Openings” update was provided by Steve D. and noted that TC 9.1 is the lead sponsor for the research.

d) Program (Kuempel): Jay Eldridge is taking over the Program Subcommittee Chair from John Kuempel.

- TC should consider proposing a seminar for New York City “How to Certify a Building” and the title was Moved by John K and seconded by Ken G. Motion carried 14-0-0-3.
- Seminars should be considered for Seattle annual meeting

e) Professional Development (G. Strehlow): Gene was not available to attend so Kelly provided an update

- Lots of courses are available with 6-full day courses and 16 half day courses

f) Honors & Awards (Duda):

g) Honors & Awards report was issued addressing each award, due date, and latest candidates. Publications (Hahn): Warren was not available to attend

h) Website Report (M. Fly):

- Steve Nicklas to take over web site
- Kelley to send the latest roster to Steve to post.



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VII. TC/PC Liaison Reports

- a) TC 1.12 – Moisture Management (H. Bailey) No new news. Very limited activities
- b) TC 4.03 – Ventilation & Filtration (S. Duda) will report back after TC 4.03 meets
- c) TC 5.06 – Control & Smoke (P Trafton) No new news.
- d) TC 6.01 – Hydronic and Steam Heating Equipment and Systems (K. Cramm) There is a proposed code change for hydronic systems.
- e) TC 6.02 - District Energy () No news.
- f) TC 7.05 – Smart Building Systems (G. Strehlow) No new news.
- g) TC 7.07 - Testing & Balancing (H. Brickman) No new news.
- h) TC 7.09 – Building Commissioning (J. Traylor) Standard 202 Standard for Commissioning is now an official document. Federal standards want commissioning and so those referencing federal standards will require commissioning.
- i) TC 8.07 - Variable Refrigerant Flow (S. Duda) Addressed by Steve D earlier.
- j) TC 9.06 – Healthcare (J. Traylor) No new news.
- k) TC 9.08 – Large Building Applications (S Nicklas) Possible forum to determine any missing applications.
- l) TC 9.09 - Mission Critical Facilities (K. Gill) No new news.
- m) TC 9.10 – Laboratory Systems (K. Cramm) TC is addressing certifying ASHRAE 110 with agent tracer gas being phased out
- n) TC 9.12 – Tall Buildings (L. Werman) Tall Building design guide is being revised.
- o) SSPC 62- Indoor Air Quality (Open) No report
- p) SSPC 15 Mechanical Refrigeration Safety (Duda) TC is looking to rewrite SSPC 15 without changing the technical content.
- q) TG-2- HVAC Security (McKew) No new news.
- r) TRG-7 Under-Floor Air (D.Wessel) A new design guide is in the ASHRAE library.

VIII. Old Business

- a) Group should consider having subcommittee meetings via conference calls before the next meeting. The ASHRAE point-person to coordinate conference calls is Mike Vaughn.

IX. New Business

- a) TC e-meeting can be helpful for smaller TC's.



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X. Adjournment

- a) Next Meeting: Tuesday, January 21, 2014 at 1:00 pm EST in New York City, NY
- b) Meeting adjourned at 3:30 PM. Moved by John Kuempel and seconded by Jeff Traylor.

XI. Attachments:

- a) TC 9.01 Honors & Award Report
- b) ASHRAE Notes

End of Minutes

Respectfully submitted by:

Howard McKew, Secretary



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SUMMARY OF MOTIONS:

Secretary's Note: All votes recorded herein are formatted as Aye-Nay-Abstain-Chair Not Voting-Absent.

Motion: Jeff Traylor

Second: Mark Fly

Text: Approve the Dallas Meeting Minutes.

Vote: Motion Carried 12-0-0-0-0

Motion: John Kuempel

Second: Ken Gill

Text: Proposed Seminar for NYC: How to Certify a Building

Vote: Motion carried 14-0-0-0-0.
