

# Meeting Minutes

## TC 9.9 Building Commissioning

Toronto Sheraton Centre  
21 June, 1998

The meeting was called to order at 3:05 P.M. with vice-chair W. David Bevirt presiding. Everyone introduced themselves. A roll call was made: 9 of 14 voting members were present. The meeting agenda is attached (attachment 1).

### Review of Action Items (AI) Status:

1. Handbook Review--David Bevirt distributed copies of the Handbook to the voting members several weeks before the meeting. Additional copies were made available for other meeting participants on-site.
2. David Bivert will assign a Journal Liaison--This has been determined to be unnecessary since two voting members are already active on the Journal Insights committee (D. Bivert and C. Lawson).
3. Cedric Trueman and Walter Grondzik need to submit "Potential Sources of Bias and Conflict of Interest" forms to Janice Peterson. Cedric submitted his at the meeting and Walter's is expected later in the day.
4. Janice will submit the forms from Action Item #3 to David Bevirt--done.

All Action items were completed.

### Review of Previous Meeting's Minutes

The minutes of the last meeting (San Francisco, 1/98) were reviewed.

**Motion 1:** Motion to accept the minutes from SF meeting

Motion:	Carl Lawson,	2nd:	Wayne Dunn
Vote: For:			9
Against:			0
Abstain:			0
Not present:			5

**Motion passed**

### Chair Announcements--W. David Bevirt

1. New assignments: The new committee roster, dated 9 June 1998, lists the voting and non-voting members and new committee position assignments. Kristin Heinemeier was assigned the position of Research Subcommittee Chairperson. Carl Lawson suggested removing William Dillard from the list of voting members since he is taking a leave of absence from ASHRAE.
2. Liaison Reports:

- Journal--Carl Lawson announced that there has been a great improvement in the journal over the past 6 months. They would like to see more articles pertaining to Commissioning from Section 9 because they may dedicate an entire month to this topic.
- Research Advisory Council--Harvey Brickman
  1. The Research Chair is invited to attend the Section breakfast meeting (7- 8:30 AM).
  2. A one page statement about what the research plan is about was provided and is attached (attachment 2 was included in hard copy materials sent to TC members). The research plan is due after this meeting.
  3. The April issue of Insights included a request for research topic ideas. More than 200 responses were received. Bill Seaton has listed these recommendations for each section (attachment 3 was included in hard copy materials sent to TC members). The research recommendations for TC 9.9 were "Installed flow station accuracy (air and water)", "The effect of turbulence on fan performance" and "Cost savings due to commissioning".
  4. It has been proposed that the project scope limit for research committee approval be raised to \$150K. Anything above this limit must be approved by tech council and the board of directors.

### **Subcommittee Reports:**

#### **I. Program - Wayne Dunn**

1. Toronto (June 1998)
  1. Joe Scolaro chaired a Seminar for TC9.9 titled "Owner Views of Building Commissioning. Speakers were Tom Bartlett, Paul Tseng, Harvey Brickman and Jay Thompson. The Seminar was very well done and feedback was strongly favorable.
  2. Carl Lawson is scheduled to chair a Seminar on "Preparing Your Facility for the 21st Century: Part 1 (Gary Avery, Harold Crowder, Robert Cox, Walter Janus and Rodney Lewis) and Part 2: (Gwendolyn Newman, Charles Dorgan, Gary Prather, Paul Tseng and Richard Tyler on Monday morning, 22 June 1998)
2. San Francisco (January 1998):
  1. Kathleen Radke chaired a Seminar titled "The Hot Zone  $\frac{3}{4}$  Commissioning Laboratories that Handle Hazardous Materials"
  2. Wayne Dunn chaired a Seminar on "Building Guides and Practices", which was very well attended and appreciated. Attendance at the Building Guides and Practices Seminar was four times the number of audience members anticipated (approximately 320 attendees).
3. Chicago (January 1999):



Vote: For:	8
Against:	1
Abstain:	0
Not present:	5

**Motion passed**

**III. Research - Kathleen Radke**

Research subcommittee meeting attendees included: Robert Cox, Jim Gartner, Kristin Heinemeier, Eli Howard, Gerald Kettler, Kathie Radke, Dave Shipley, J.B. Singh and Karl Stum.

The TC9.9 Building Commissioning Research Subcommittee met on Saturday June 20th, 1998 from 1:00-3:00 PM. After a welcoming statement and brief introductions we reviewed our objectives and began the meeting. The first topic of discussion was the draft web page for TC 9.9 that was design and developed by Dave Shipley from the Energy Center of Wisconsin. The web site, currently at <http://www.ecw.org/tc99/>, has already been very useful to the committee as it contains the latest versions of our research plans, work statements and contact information for the committee members. We expressed highest gratitude to Dave for the time and effort he put into developing and maintaining this web site. It is assumed that the web site will have a hot link from the [www.ashrae.org](http://www.ashrae.org) web site after the draft site is approved by TC9.9.

Next we reviewed the research plans and work statements on our research docket. There was significant discussion about the newly drafted work statement (WS) for "Identification of ideal monitoring data points for commissioning support during HVAC design". The author, Dave Shipley, took note of suggested modifications for the next draft of the WS. Jim Gartner agreed to bring this WS to TC 1.4 and TC 4.6 to rally their co-sponsorship support for this WS and Karl Stum will do the same with TC 1.7. All revision suggestions should be submitted to Dave Shipley, [shipley@marbek.ca](mailto:shipley@marbek.ca), by July 24th. He will then compile the suggestions and develop the next draft of the WS by July 31st. This WS will be provided to all TC9.9 voting members so that we can conduct a vote by letter ballot by August 7th so that we can submit our research plans and work statements to ASHRAE headquarters before the August 15th deadline. After reviewing all of the write ups we reprioritized our research topics as follows:

1. "Identification and preservation of building design and commissioning information", co-sponsored with TC1.5 (their lead)
2. "Identification of ideal monitoring data points for commissioning support during HVAC design", co-sponsored with TC1.4, TC4.6, and TC1.7 (our lead)
3. "The building automation system's role in commissioning of HVAC systems", co-sponsored with TC1.4 (our lead)
4. "The impact of commissioning HVAC systems on life cycle costs", co-sponsored with TC1.8 and TC1.7 (our lead)

5. "Diagnostic tools for maintenance, operating and commissioning cost optimization", co-sponsored with TC1.8 (lead?)

We also decided to combine "The building automation system's role in commissioning of HVAC systems" and "Case studies: effectiveness of ongoing building commissioning support using building and energy management system data" into a single research topic. The full list of prioritized research topics for TC9.9 is attached along with the Research Plans and Work Statements in their most recent form (attachment 5).

Kathie Radke will not be available to attend the ASHRAE 1999 Winter Meeting. Dave Shipley volunteered to serve at the Research Subcommittee chair in her absence.

#### **IV. Long Range Planning - Carl Lawson/Karl Stum**

Karl Stum, Eli Howard and Gerald Kettler met on Saturday, June 20th, 1998 to continue development of the Long Range Plan.

1. Gerald reported on conversations with Carl Lawson on ASHRAE's disposition to re-open GPC-1 and support the National Institute of Building Sciences (NIBS) in compiling a whole building commissioning guide from multiple industry players.
2. The group discussed the Department of Energy Draft National Strategy on Building Commissioning (attachment 6 was included in hard copy materials sent to TC members). Review comments from TC9.9 are requested.
3. There is a need for more qualified commissioning agents as the commissioning market grows.
4. Karl mentioned the official formation of the Commissioning Association in the Northwest.
5. Ken Sufka, K Street in Washington, DC, Executive Director for a few organizations like: AABC, NAFA Filtration, duct cleaners, etc. is also thinking about starting a commissioning association.

#### **V. Membership - Elia Sterling**

Elia is working on processing paperwork for new members. Forms were provided for everyone to update their information for ASHRAE records.

#### **VI. Standards - Dave Bevirt**

Dave Bevirt identified Rodney Lewis as the Liaison to Standards beginning at the end of this meeting.

#### **VII. Total Commissioning Guideline - Carl Lawson**

Last year, Carl submitted a Title, Purpose and Scope with the help of the manager of standards. The standards committee in San Francisco defeated this proposal 0-

17-1. Carl believes that it was defeated because ASHRAE doesn't want to get involved with AIA and FPA, and because with the two standards that they already have (62 and 90.1) they didn't want to get involved with any others. In February 1998, the National Institute of Building Sciences (NIBS) contacted Carl asking if we could put together a Total Building Commissioning guideline under the auspices of NIBS. NIBS has asked Carl to chair the total project and he has agreed to do this with the permission of George Jackins, the new ASHRAE president. They will be going out to each individual organization (ASHRAE, NFPA, IEEE, AIA, etc.) and they are going to develop their own commissioning document which they can market and copyright. Then, if anyone wants to buy the total document, they will be able to purchase it from NIBS or their member organization. The total document will hopefully be finished in 3 years. Carl met with the PPIS standards committee on Friday and they approved re-energizing GPC-1 to get the ASHRAE document written. On Saturday, the standards committee approved the plan (17-0-1) to re-energize GPC-1-1996R to implement the revisions that staff took out when we wanted to revise GPC-1 the last time. Carl is asking that TC9.9 re-energize our activities with Chuck Dorgan as chair of GPC-1-1996R. One of the objectives will be to add back the parts that he was forced to take out in 1996, including why, where, when and how for topics like indoor air quality, energy, sample specification and contract language.

Rick Causault and Karl Stum expressed some concerns about the generation of non-unified versions of total building commissioning standards. One of the great advantages of our document is that the commissioning approach can be applied to any system. We don't want to lose that. Carl indicated that NIBS is starting with GPC1 as a framework.

**Motion 4:** Motion to have TC9.9 re-energize GPC-1-1996R for revision with Charles Dorgan, P.E., PhD serving as chair.

Motion:	Carl Lawson,	2nd:	Gerald Kettler
Vote: For:			9
Against:			0
Abstain:			0
Not present:			5

**Motion passed**

**Motion 5:** Motion to recommend Chuck Dorgan as the ASHRAE representative to the NIBS Total Building Commissioning effort providing he is approved as the GPC 1 chair.

Motion:	Carl Lawson,	2nd:	Gerald Kettler
Vote: For:			9
Against:			0
Abstain:			0
Not present:			5

**Motion passed**

## **Liaison Reports:**

### **I. *SSPC-62 Ventilation for Acceptable IAQ* - Elia Sterling**

Proposed changes were submitted to SSPC-62. A great deal of discussion during SSPC-62 meetings have dealt with air classification and smoking area signage.

### **II. *SSPC 90.1 Energy Efficient Design of New Buildings* - Cedric Trueman**

The ASHRAE Board of Directors voted in San Francisco to put Standard 90.1 into continuous maintenance no later than July 1, 1999. If, at this Toronto meeting, it appears likely that a revised Standard 90.1 will not be recommended for publication by SSPC 90.1 before July 1st, 1999, then the motion provided that Standard 90.1-1989 would be put on continuous maintenance effective July 1st, 1998.

In his June 12th, 1998 report to the Standards Committee SSPC 90.1 chair, Ron Jarnigan recommended that Standard 90.1 not be put on continuous maintenance on July 1st, 1998. Never-the-less, on June 19th, 1998 SPLS (a standards subcommittee) approved a motion recommending that Standard 90.1 be put on continuous maintenance immediately. This recommendation will be considered by the Standards Committee at its meeting on June 24th, 1998, in Toronto.

### **III. *SSPC 90.2 Energy Efficient Design of New Low Rise Residential* - Walter Grondzik**

No report.

### **IV. *SPC 111 Test and Balance for HVAC & R Systems* - Gerald Kettler**

About two years ago, this standard was submitted for public review. It has been hung up in ASHRAE Standards since then. Gerald has heard that it has now been released, but does not know when it will be available.

### **V. *SPC 129P Method of Testing/Air Change Effectiveness* - Ted Cohen**

No report.

### **VI. *G10P Criteria For Achieving Acceptable Indoor Environment* - Gerry Kettler**

Still doing basic research.

### **VII. *GPC 11P Performance Testing and Verification Control Systems* - Gerald Kettler**

The format has been defined and most sections are done. The goal is to have something ready for submission for public review to the Standards Committee at the Chicago meeting.

### **VIII. *GPC 13P Specifying Direct Digital Control Systems* - Gerald Kettler**

This document addresses the commissioning and testing of the control system by the controls contractor, acknowledges the interface with a possible commissioning agent, and describes what the controls contractor should do to cooperate with the testing and balancing firm. This document has already gone out for public review. There were 15 responders with about 35 comments that are being answered. This





chair.

- II. Karl Stum - The US Dept. of Energy has recognized the value of commissioning and is in the process of developing a national strategy to promote commissioning. They are well coordinated with various entities throughout our industry. The DOE has tasked PECI with developing a draft strategy for commissioning. That draft is available and PECI would like comments from TC9.9 membership (attachment 6 was included in hard copy materials sent to TC members). It is also on their web site at [www.peci.org](http://www.peci.org). Gerald Kettler, Carl Lawson and Wayne Dunn agree to review the document and provide feedback.
- III. Rick Cassault - A group in the Northwest has formed the Building Commissioning Association, Northwest. Their intent is to take the first step in developing a national professional organization to set standard and raise standards for the performance of building commissioning. They are not ready to take membership yet, but they have a website at: [www.bca-nw.org](http://www.bca-nw.org). Dave Shipley will add this to the list of related web links on the TC9.9 web page.
- IV. Robert Simmons - Robert is the Program Chair for TC2.7, Seismic Restraint Design. TC2.7 membership often sees deficiencies in thorough inspection and proper installation procedures for seismic restraint equipment. They are trying to determine how to resolve these issues and would like to initiate discussions with Building Commissioning. They would like to invite TC9.9 membership to participate in their meetings to support discussion of these topics.
- V. Joe Scolaro - Tom Bartlette, JC Penney, would like to become a full member of TC9.9. D. Bivert will coordinate with Elia and evaluate the situation. They will make a decision after reviewing the membership list and levels of participation in meetings.
- VI. Charles Keffer - The Construction Industry Institute (CII), sponsored by the University of Texas, has just published a document titled "Planning for Startup". They are interested in establishing a dialog with TC9.9. Gerald Kettler asked about how to get copies of the document. Dave Blevin recommended establishing a liaison with GPC 1 in the future and asked Charles to keep us informed of their Building Commissioning related activities in the future.

**Adjournment:**

**Motion 7:** Motion to adjourn.

Motion: Carl Lawson,

2nd: Kathie Radke

**Motion passed on voice vote**

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By: Kathleen Radke

Attachments not provided as links were distributed to committee members in hard copy form by ASHRAE.