

ASHRAE TC1.5 Computer Applications
Draft Meeting Minutes
Anaheim Winter Meeting
January 2004

These draft minutes have not been approved and are not the official, approved record until approved by this committee.

ASHRAE TC ACTIVITIES SHEET**DATE: January 2004****TC NO. TC 1.5****TC TITLE: Computer Applications****CHAIR: M. Hydeman****VICE CHAIR/SECRETARY: R. Hitchcock****TC 1.5 MEETING ATTENDANCE**

Name	Affiliation	Email	TC	Research	Program	Applicatio	Handbook	Internet
Vikrant Aute	CEEE, University of Maryland	vikrant@wam.umd.edu		X	X	X		X
Matt Biesterveld	Trane	mbiesterveld@trane.com	X	X	X	X	X	X
Bruce Billedeaux	Armstrong Service. Inc.	bbilledeaux@armstrongservice.com	X	X	X	X	X	X
David Bornside	Siemens Building Technologies	david.bornside@siemens.com		X	X	X		X
David Branson	Compliance Services Group, Inc.	djbranson@csg.net	X			X	X	X
J. Patrick Carpenter	Kling	pcarpenter@kling.us	X				X	
Charlie Culp	Texas A&M	cculp@tamu.edu	X					
Piotr Domanski	NIST	piotr.domanski@nist.gov	X					
Tim Dwyer	South Bank University London	timdwyer@sbu.ac.uk				X		X
Mike Galler	NIST	mikeg@nist.gov	X	X	X	X	X	X
Krishnan Gowri	PNNL	krishnan.gowri@pnl.gov	X	X	X	X	X	X
Walter Grondzik	Florida A&M University	gzik@polaris.net	X					
Marty Harrington	Kele Companies	MartyH@kele.com				X		X
Rob Hitchcock	Lawrence Berkeley National Lab	rjhitchcock@lbl.gov	X	X	X	X	X	X
Hans Huff	Thermal Analysis Partners	huff@thermalanalysispartners.com				X		X
Mark Hydeman	Taylor Engineering	mhydeman@taylor-engineering.com	X				X	
Stephen Kemp	Enermodal Engineering	skemp@enermodal.com		X	X	X		X
Alison Kwok	University of Oregon	akwok@aaa.uoregon.edu	X					
Nicholas Long	NREL	nicholas_long@nrel.gov				X		X
Ron Nelson	Iowa State University	ronn@iastate.edu	X	X	X			
Bob Old	Siemens Building Technologies	bob.old@siemens.com	X	X	X	X	X	X
Vernon Peppers	Peppers Engineering	vpeppers@procompcomputer.com	X					
Michael Pouchak	Honeywell, Inc.	mike.pouchak@honeywell.com		X	X	X		X
Nick Rajkovich	Einhorn Yaffee Prescott	nrajkovich@eypae.com	X					
Steve Selkowitz	Lawrence Berkeley Laboratory	SESelkowitz@lbl.gov	X					
Pornsak Songkakul	Siemens Building Technologies	pornsak.songkakul@siemens.com	X	X	X	X		X
Noel Susskind	Arora Engineers, Inc.	noel.susskind@verizon.net		X	X	X		X
Dave Underwood	U.S. Army ERDC	D_Underwood@cecer.army.mil				X		X
Wayne Webster		wayne.webster@sympatico.ca	X					

TC MEETING SCHEDULE

Location, past 12 mo.	Date	Location, next 12 mo.	Date
Kansas City	Jun 2003	Nashville	Jun 2004
Anaheim	Jan 2004	Orlando	Feb 2005

TC SUBCOMMITTEES

Subcommittee	Chair
Emerging Applications	Pornsak Songkakul
Handbook	Mike Galler
Internet	Bruce Billedeaux
Program	Krishnan Gowri
Research	Mike Pouchak

RESEARCH PROJECTS

Project Title	Contractor	Monitoring Committee Chair	Report Made at Meeting?
TRP 1049		TC4.7	No (see attached Research Minutes)

LONG RANGE RESEARCH PLAN

Rank	Title	W/S Written	Approval	To R&T
1	"ASHRAE Technical Committee News Service" – Bruce Billedeaux	No	No	No
2	"Retooling the HVAC education process to better Use Computer-Aided Design" - Haberl	No	No	No
3	"Multimedia Database for Comparison of Design Alternatives" – Brambly	Yes	No	No

HANDBOOK RESPONSIBILITIES

Year & Volume	Chapter Title	No.	Deadline	Approval	Handbook Committee Liaison
2007 HVAC Applications	Computer Applications	38	3-8-2007		Gary Debes, (gary.debes@mail.ashrae.org)

STANDARDS ACTIVITIES

None

TECHNICAL PAPERS FROM SPONSORED RESEARCH (PAST 3 YRS, PRESENT, PLANNED)

Title	When Presented
1017 RP (Akleman and Haberl) – Jim Watts	Chicago (1/03)
1032 TRP - Interoperable Computer Applications – Dave Branson	Chicago (1/03)

TC SPONSORED SYMPOSIA (PAST 3 YRS, PRESENT, PLANNED)

Title	When Presented
Web based computer applications for Now	Nashville
Computers in HVAC Education - Nelson/ONiel	Future
Symposium: Interoperable Computer Applications – Branson	Chicago (1/03)
Symposium AC-02-9: Tools and Techniques for Calibration of Component Models - Agami Reddy	Atlantic City 1/02

TC SPONSORED SEMINARS (PAST 3 YRS, PRESENT, PLANNED)

Title	When Presented
Network Applications of Internet, Intranet and Building Automation – Pouchak	Future
We are not alone in the universe emerging applications around the world – Forrester	Future
Methods for exchanging / integrating data among different HVAC & Control systems and business information systems - Pornsak	Future
Seminar.com: Potential & Pitfalls of Moving Business to the Internet - Grondzik	Future
Internet based training - Grondzik	Future
Emerging Internet Technologies Bring New Business Opportunities - Dunn, Wayne	Future
A Day in the life of ASHRAE members in the YEAR 2010 - Culp	Future
Cool Stuff that ASHRAE Could be Doing Using the Internet - Grondzik	Future
Next generation of AEC application development - Songkakul	Future
Sustainable Design for All: The Tools on Your Desktop	Anaheim (1/04)
Emerging Web Applications for HVAC and Energy Industries	Anaheim (1/04)
Establishing Cost Effective Energy Baselines for Measurement and Verification	Kansas City (6/03)
Computer Security – Pouchak	Chicago (1/03)
Apply measured data to measurement and verification – Pornsak	Chicago (1/03)
Tools and Techniques for Sustainable Design – Dwyer	Chicago (1/03)
Experiences with Electronic Collaboration on the Teamwork 2001 Project - Dwyer/Branson	Chicago (1/03)
Terms that your new engineer knows, but you don't - Schwedler	Honolulu (6/02)
Internet technology for HVAC/R business Use IT or lose it - Dwyer	Honolulu (6/02)
Self-Configuring Control Systems: Needs, Technology and Potential Benefits - Mike Brambley	Honolulu (6/02)
Seminar 14: Uses and Benefits of Electronic Collaboration, Newsrooms and Groupware - Mike Pouchak	Atlantic City 1/02
Seminar 46: Pattern-Recognition-Based Fault Detection and Diagnostics for Building Operation - Mike Brambley	Cincinnati 6/01
Seminar 18: Internet for Global Working - Tim Dwyer	Cincinnati 6/01
Seminar 35: Future NET Gains for the AE Office - Brian Kammers	Cincinnati 6/01
Seminar 27: Interoperable Computer Applications for the HVAC Industry - Mark Hydeman	Atlanta 1/01

TC SPONSORED FORUMS (PAST 3 YRS, PRESENT, PLANNED)

Title	When Presented
Collaborative Web Based Benchmarking - Norford	Future
How Secure is your Wireless Office Place	Kansas City (6/03)
Should ASHRAE Establish Guidelines for Electronic Media that Contains Manufacturer's Product Information? - Grondzik	Chicago (1/03)
ASHRAE Research Developed Software: Should it be free? – Hydeman	Chicago (1/03)
Forum 28: What Does the ASHRAE Membership Need from the Computer Applications Handbook? - Mike Pouchak	Atlanta 1/01

JOURNAL PUBLICATIONS (PAST 3 YRS, PRESENT, PLANNED)

Title	When published
What HVAC Applications Would Benefit from Computer-Aided Instruction - Culp	TBD

SUBMITTED BY: Robert J. Hitchcock -- TC 1.5 Secretary

TC1.5 Computer Applications Main Meeting

Meeting Schedule

- Main TC 1.5: 6:30 - 9:00 PM Monday - M/Marquis NE (L)
- Internet/Emerging Applications S/C: 5:00 - 6:30 PM Sunday - H/Redondo (4)
- Program/Research S/C: 6:30 - 8:30 PM Sunday - H/Redondo (4)
- Handbook S/C: 6:00 - 6:30 PM Monday - M/Marquis NE

Main Committee Agenda

Call to order 6:30 p.m.

Chair asked for round of introductions with professional background.

Quorum: 11 voting members present (10 first half hour of meeting), see attendance list at head of minutes.

Motion to approve Anaheim Agenda: Moved by Branson, Seconded by Galler. Motion passed 9-0-0 Chair not voting.

Motion to accept Kansas City Minutes: Moved by Branson, Seconded by Billedeaux. Motion passed 9-0-0 Chair not voting.

Chair's Report - Hydeman

- Dinner Tonight at JT Schmidts brew pub at 2610 E Katella Ave. (Across the street from Arrowhead Pond). About 2.2 miles 634-9200. 15 @ 8:45pm under Hydeman.
- Mick Schwedler was unable to attend this meeting due to the illness of his son. Since he has many friends on this committee the chair encourages you to write or call him with words of support.
- A round of applause for Mike Pouchak who wins the official TC 1.5 step up to the plate award. Mike agreed to chair the research subcommittee when we lost Jim Watts. Close runners up were Dave Branson and Rob Hitchcock, Dave agreed to attend a 6:30 am Handbook Committee Breakfast and Rob volunteered to join the chair for a 6:30 Section breakfast
- ASHRAE has announced new services for ASHRAE TCs: List Services, Facilitated Discussion Groups and support for maintaining TC websites. The chair responded to Mike Vaughn that we would use the listserver and discussion group services. The chair appointed the web master, Ron Nelson, to monitor the discussion groups.
- New Publications/Education Council and Electronic Communications Subcommittee (motivated in part by the endless prodding of TC1.5).
- The ASHRAE Honors and Awards Committee is seeking names of ASHRAE members who are also members of AAAS, the American Academy for the Advancement of Science. Please forward names to Regina Stafford or send them to the chair to be forwarded to Regina
- President Rooley and the BOD have decided to revisit the decision to make the CD the official version of the handbook. It will ship with the CD enclosed.

Committee Membership

- Roll over Roster due February 6th to Section 1 liaison Jim Norman.
- Rolling off:
 - Mick Schwedler
 - Rob Hitchcock ('05)
- Rick Larson and Vikrant Aute interested in joining. Ask others for show of hands or to approach the chair at break.

Section Liaisons

- Section Jim Norman
- Handbook T David Underhill
- Research Jianshun S Zhang
- Program Jim Wolf
- Special Pubs Marilyn Listvan
- TEGA Michael Circosta
- Standards Charles W Coward Jr
- ALI Doug Hittle

Action Item Review:

- Incoming chair select restaurant for Anaheim.

DONE

- Incoming chair verify information that handbook chapter 16 was assigned to TC 1.5 and if verified then strongly recommend TC 1.5 is the incorrect committee and that TC 9.9 is the preferred choice.

Rumor only. Confirmed by Chair

- Program chair to issue a call for papers for Symposium “Web based computer applications for Now.”

Not done. Will be attended to.

- Subcommittee chairs to review their portions of the web site.

Research – chair not in attendance; Standards – chair not in attendance; Program – reviewed with comments attended to; Handbook – not done, but will happen; Internet and Emerging Apps – all current

Program presentations will eventually be posted on ASHRAE website. However, until that time, TC1.5 will continue to post on their website

- Membership role-off

Hitchcock rolling off as voting member.

Chair asked for members rolling on. Grondzik offered if no new blood.

- Comments from Liaisons

None present.

Subcommittee Reports***Programs - Gowri***

See Attached Program Subcommittee Meeting Minutes:

Anaheim Program:

- i. Two technical sessions in Anaheim.

Motion: Chair write a letter to Program Committee Liaison requesting that TC1.5 technical sessions be scheduled anytime but Wednesday (aka “the death slot”) when specifically requested: Moved Gowri, Seconded Pornsak.

Discussion: Gowri: When session chairs submit proposals they should request scheduling.

Motion passed, 10-0-0 CNV.

- ii. Current and Future Program Listing (presented by Gowri)

See spreadsheet attachment

Motion to accept Nashville programs as ranked by subcommittee. Moved by Gowri, seconded by Branson.

Discussion: Pornsak – should we submit a smaller number? Gowri – experience is that 3 have best success. Hydeman – but, more is good to cover attrition of failed programs. Grondzik – has heard that larger numbers can benefit later acceptance.

Gowri – does Program Committee ever overrule TC ranking? –Hydeman – No.

How do we handle Seminar-Forum combination? Dunn – Wants to keep together, approved or not together.

Hydeman – GPCs can submit their own program suggestions.

Gowri – Number 3 will be removed and submitted from GPC-20.

Motion passed, 10-0-0 CNV.

Motion to have TC1.5 cosponsor programs submitted for Nashville by GPC-20. Moved by Gowri, seconded by Dunn
Motion passed, 10-0-0 CNV.

- Suggestion from Hydeman to cosponsor an ALI program on distance learning “Cools ways for ASHRAE to take programs out to a broader audience.”

Motion to cosponsor this suggestion. Moved by Gowri, seconded by Branson
Motion passed, 10-0-0 CNV.

Research –Billedeaux, Acting Chair

Many topics were covered in meeting. All research was deemed out-dated and eliminated. One new topic.
One rejected RTAR – 2005-22 Multimedia Database for Examining

Action item: Billedeaux will talk to Mike to get new research plan to committee for an email vote.

WS on XML was Rejected by RAC unanimously with prejudice.

Billedeaux has RTAR for new research topic. Passed out copies for review by committee. Explanation by Billedeaux – members cannot make it to every technical session and committee meeting at ASHRAE meetings, Google now has a push news update service, similar function on ASHRAE intranet could search for user specified items of interest and send email notification to user.

Emerging Applications/ Internet – Songkakul/ Billedeaux

10-12 attendees including new faces, good discussion, still in state of rediscovering ourselves, will continue discussing. Songkakul would like formalizing of this timeslot for EA/I subcommittee meeting. Both chairs are happy with combined meeting.

Handbook - Galler

Paper version of Handbook is still the “Official” version of the handbook. CD is included with paper version. President indicated that this was a response to comments from members. There is no option to decline the paper version. Hydeman asked for show of hands on who still wants to get paper copy – several hands shown indicating lasting preference for paper.

Listserv being set up for Handbook chapter. Members who wish to be added to list – contact Bruce Billedeaux.

Request for input from all on applet enhancements for Handbook, sent to Galler. August 1, 2004 final submittal deadline, including TC approval.

Action item: Chair request LCD projector for next meeting to aid committee review of Handbook enhancement.

One suggestion is to include a simple XML transaction example.

Standards

Rob Briggs not present. Gowri suggests dropping the Standards Subcommittee, since it is not appropriate for this TC.

Chair asks for volunteer for assuming Standards Committee chair. Branson volunteers.

Branson reports subcommittee met concurrent with TC Main.

Web Page – Nelson

Nelson requests that session chairs submit entire package as a whole. Hydeman says posting is not a requirement. Nelson will accept requests from session chairs to post presentations. TC must approve posting on a session-by-session basis.

Liaisons

GPC20 – Dunn – We exist and therefore we are. Committee met on Sunday morning. During XML Symposium (Tuesday) presenters will discuss GPC-20. Committee has made good progress, looking at two years from now for public review of Guideline document. Document describing XML schema development process will be ASHRAE sold document. XML schemata will be separately available to the public at large. A new focus “industry collaborative” will seek to assure consistency between schemata. Looking for more participation on schema development. Branson pleased that GPC-20 is using previous ASHRAE research results as input in developing schemata. Bob Old states that slip of review date by one year is regrettable. TC chair asks if 1.5 can help in any way. Dunn says yes – content development.

SPC 134P Symbols – Billedeaux – Graphics symbols for HVAC. Third public review happening 45 days period after this meeting. Visio library for these symbols has become the draft standard.

Action item: Billedeaux send electronic copy to Hitchcock for distribution to committee members.

IAI – Hitchcock/Selkowitz – Display of new marketing materials developed now that IAI is a council under NIBS. IAI International meetings taking place in Paris this week. IfcXML 2x2 to be announced and released as part of these meetings. Focus has shifted to software implementation. Much more activity abroad with over 600 members worldwide, including available software. For example, Singapore is moving to require code checking submittals in IFC format. Also, just before end of 2003 GSA memo announced that IFC-compliant submissions will be required beginning in 2006. Federal Facilities Council (FFC) meeting late 2003 discussed interoperability benefits for federal agencies. More information available at iai-na.org

Graphisoft supports IFC. A third-party developer has created IFC interface for Architectural Desktop. Others are waiting for visible market demand, but have announced intent to support IFC when that happens.

How can ASHRAE help promote interoperability?

Ad-Hoc Committee on ASHRAE website – no report

Old Business

New Business

Meeting times for Nashville

Hydeman - any subcommittee chair requesting changes? NO – all same times as Anaheim

Gowri reminds committee that program submissions for Nashville are due by January 13.

Peppers invites people to attend ASHRAE Bookstore to see duct design demonstration.

Adjournment

Motion to Adjourn Branson, 2nd Galler. Unanimous. Meeting ended 8:17pm.

TC 1.5 Internet/Emerging Applications Subcommittee Meeting Minutes

Sunday, January 25th, 5:00 to 6:30 p.m.
ASHRAE 2004 Winter Meeting, Anaheim, California

Agenda**The meeting was called to order at 5:05 p.m.**

Sub-committee chairs welcome all the attendees. Everybody introduced themselves and their affiliation.

1. Introduction of the new Internet Sub-Committee Chair: Bruce Billedeaux**2. Old businesses**

Since the sub-committee meeting attracted several new faces, the meeting begun with the discussion on the sub-committee objectives. Everybody agreed that the Internet is no longer an emerging technology. The Internet technology becomes ubiquitous to everything we do that the sub-committee should focus instead on emerging applications on the Internet and real usages of such Internet applications in the HVAC industries. The discussion led to a brainstorming session to identify areas that this sub-committee should concentrate on bringing researches, programs, and information to the ASHRAE member. Technology and application areas being discussed are summarized below:

- Real time monitoring of HVAC equipments: The technologies involved are Internet, wireless, wireless sensors, and data collection equipment. Sample applications required by USDA deal with large amount of environmental data and CO2 monitored data. From this discussion, a seminar program "Big Brother is Watching" is created.
- Pushes from the Information Technology world: As more and more Building Automation Systems reside on the Information System network, HVAC industry is forced to deal with emerging technologies from computer hardware and software industries. How could TC 1.5 help educating ASHRAE member on these technologies in a timely manner? How could TC 1.5 help ASHRAE keep track of these bleeding-edge and leading edge technologies?
- Wireless Technologies: What are the strengths, weaknesses, pitfalls, and limitations? How can we fit different wireless technologies together (i.e., IEEE 802.11b, 802.11g, Wi-Fi, Bluetooth, etc.)?
- How could ASHRAE help coordinating the converging the technology Building Automation and HVAC industry with other industries and all the potential goodies that are coming out from the university researches?
- What are the remote access issues over the Internet? Now that the Internet is also a super information highway for the HVAC industry, what are the issues that ASHRAE member need to be concerned with when traveling on this superhighway to remotely access the HVAC equipment and controls.
- The seminar "Electronic Information Exchange" proposed by Tim Dwyer should be converted to an ASHRAE short course. People in the room felt that a lot of ASHRAE member would be interested in how several AEC applications that they are using exchange data and information electronically.

3. Program proposals for upcoming ASHRAE meetings

The following programs were identified and submitted to the program sub-committee.

Seminar: Big Brother is Watching

Seminar: Web Services for HVAC Industry

Seminar: Electronic Information Exchange

4. Research ideas/proposals/opportunities related to subcommittee's interests

A new research idea to develop Bot or Spyder to serve ASHRAE member and all committee members was introduced by Bruce. The concept is similar to the Google News alert services of which ASHRAE member can subscribe and search for news and discussions from different TC from their meeting minutes and web sites.

5. New business/issues/initiatives

6. The meeting was adjourned at 6:30 p.m.

TC 1.5: Research Subcommittee Meeting Minutes –

Anaheim, CA Sunday, January 25, 2004

Meeting Called to Order 6:30 p.m. (1/25/04) Hilton Redondo

In Attendance: Bruce Billedeaux, David Bornside, Mike Galler, Rob Hitchcock, Ron Nelson, Bob Old, Mike Pouchak (Subcommittee Chair), Pornsak Songakul, Matt Biesterveld, Stephen Kemp, Vikrant Aute, Noel Susskind, and Krishnan Gowri.

Research report:

1049 – TRP Report – “Building System Design Synthesis and Optimization” - Doing good work. Was formerly rated as high risk. Expected date of completions 12/4/04. In progress. Ron Nelson is chair of PM committee.

1032-TRP Report – “Identification and Computer-Based Preservation of Building Design and Commissioning Information”. Deliverable of Symposium report was delivered at Chicago on Wednesday session but low attendance due to date selection. This was completed two sessions ago. This report is closed

1228-TRP Report – “Case Studies of ASHRAE Software Projects Using “The Software Guide”. Follow-up with Charlie Culp on status. Henry Amistadi was PI. May need signoff to complete.

1295-WS – “Prototype Demo of IFC/ AEC XML Interoperability in Support of HVAC&R Activities”. Rejected by RAC. No further action will be pursued.

Unsolicited Proposal – “Development of Courseware for cost effective and Efficient Conversion of ASHRAE Handbook to a Multimedia eBook” Akleman, Parke & Haberl. This was brought for a support vote in the TC 1.5 main committee Meeting on June 31, 2003 in Kansas City and failed 2-4-1. See Kansas City Minutes under “Action Item Review”.

Proposed Research:

Bruce Billedeaux provided information on Research Proposal later named “ASHRAE Technical Committee News Service”. A new opportunity may involve a proposal from GPC20’s Mark Palmer

Long Range Research Plan:

The following research plan was voted and prioritized:

1. “ASHRAE Technical Committee News Service” – Bruce Billedeaux
2. “Retooling of HVAC Education Process” – Haberl
3. “Multimedia Database for Comparison of Design Alternatives” – Brambly
4. “SW tools to aid projects with Software deliverables” – Amistadi

Further actions: Contact Authors: Haberl, Brambly, and Amistadi to get status of proposals.

Meeting Adjourned at 7:29 p.m. (1/25/04) Hilton Redondo

TC 1.5: Program Subcommittee Meeting Minutes – (2004 Winter Meeting)

Anaheim, CA (01/25/04)

(also see spreadsheet below)

Meeting Called to Order: 7:30 p.m. (01/25/04), Hilton Redondo

In Attendance: Bruce Billdoux, David Bornside, Mike Galler, Rob Hitchcock, Ron Nelson, Bob Old, Mike Pouchak, Pornsak Songakul, Matt Biesterveld, Stephen Kemp, Vikrant C. Aute, Noel Susskind and Krishnan Gowri (Subcommittee Chair)

1. **Feedback from Programs at Kansas City.**

- i. Forum 14: How Secure is Your Wireless Office Place (Chair: Charlie Culp)
- ii. Seminar 14: Establishing Cost Effective Energy Balance (Chair: Pornsak Songakul)

Both sessions were well attended, but overall attendance was less than estimated.

Sessions held on Wednesday towards the end of the meeting often result in low turnout. Despite our requests, TC 1.5 sessions are repeatedly being scheduled on Wednesday slots. The TC 1.5 Chair is requested to write a letter to the ASHRAE Program Committee liaison to schedule the programs for Monday or Tuesday sessions.

2. **Programs in Anaheim:**

- i. Seminar 56: Sustainable Design for All: The Tools on Your Desktop
Chair: Tim Dwyer, Wed. Jan 28, 2004 (8:00 a.m. – 10:00 a.m.) in Room 209A
- ii. Seminar 60: Emerging Web Applications for HVAC and Energy Industries
Chair: Rob Hitchcock, Wed. Jan 28, 2004 (10:15 a.m. – 12:15 p.m.) in Room 208B

3. **Subcommittee reports** – Emerging Applications and Internet subcommittees proposed two new seminars and two new forums. All of the programs were reviewed and identified potential programs proposal for Nashville (program details are listed in the attached spreadsheet).

4. **Nashville Program Proposals** – A total of six program proposals were considered for the Nashville meeting. The Program Subcommittee ranked these proposals and recommends the following top five programs for submission. All program proposals and ranking information are provided in the attached spreadsheet.

- | | | |
|------------|--|-----------|
| 1. Seminar | HVAC unplugged - wireless Approach | Branson |
| 2. Seminar | Cool Stuff that ASHRAE Could be Doing Using the Internet
(Now Available from ASHRAE, not!)" | Hydeman |
| 3. Seminar | XML Guidelines for the HVAC Industry | Gowri |
| 4. Forum | Global Virtual Participation in ASHRAE Meetings | Dwyer |
| 5. Seminar | It's a Small World Afterall - Interesting Software from Faraway | Forrester |

Program chairs are reminded to submit all information on-line before **February 13, 2004**.

5. **Future Symposium Proposals** – Members are encouraged to provide ideas for new symposiums. TC 1.5 has been traditionally sponsoring at least one symposium at every ASHRAE meeting. But there are not too many future symposium proposals and we should come up with new proposals and announcements to attract authors and speakers.

6. **Other Items** – Program chairs are asked to inform the presenters that their speakers presentation materials will be copied in the Speaker's Lounge during review for commercialism. These will be posted in the ASHRAE web site and the TC's don't have to post it in their web site.

Meeting adjourned at 8:30 p.m.

Note: Nashville program proposals were revised at the main committee meeting, making the Seminar #3 as priority #1 program for GPC-20, co-sponsored by TC 1.5. TC 1.5 programs 4, 5 and 6 were moved up by one spot because of removing the above seminar #3 as shown in the attached programs list updated after the main committee mee

TC 1.5: Program Subcommittee - Proposed Programs List (Updated 01/25/04 - Anaheim)						
Rank	Venue	Type	Title	Chair	Speakers Committed	Notes
Nashville						
1	Nashville	Seminar	HVAC unplugged - wireless Approach	Branson	yes	9 Votes
2	Nashville	Seminar	A Vision of eASHRAE: or How to Give a Seminar in your Pajamas	Hydeman	Yes	6 Votes
3	Nashville	Forum	Global Virtual Participation in ASHRAE Meetings	Dwyer	Yes	2 Votes
4	Nashville	Seminar	It's a Small World Afterall - Interesting Software from Faraway	Forrester	Yes	1 Vote
5	Nashville	Seminar	Webservices for HVAC Industry	Pornsak	yes	0
co-sponsor	Nashville	Seminar	XML Guidelines for the HVAC Industry	Gowri	yes	3 Votes
Future						
	Orlando	Seminar	Big Brother is Watching	Billedaux	yes	remote monitoring
	Orlando		Security and Remote Access Issues over the Internet			
	Orlando	Short Course	Electronic Information Exchange - (how to)			Course dev. Subcommittee
	Future	Symposium	1017 RP (Ankleman and Haberl 1, Kreider c/o Nelson 1) and Advanced computer applications in HVAC with Agami	Watts	No	
	Future	Seminar	Methods for exchanging / integrating data among different HVAC & Control systems and business information systems	Pornsak		
	Future	Forum	Collaborative Web Based Benchmarking	Norford		
	Future	Seminar	A Day in the life of ASHRAE members in 10 years from now	Culp		
	Future	Seminar	Emerging Internet Technologies Bring New Business Opportunities	Dunn		
		Forum	AHSREAE 20/20 - Is the HVAC Engineer Endangered from the Research done in 2000-2005 ?	Schwedler	Yes	
		Forum	What does the ASHRAE Membership want from Electronic Manufacturer's Product Information	Grondzik	Yes	
Deleted						
X	Future	Seminar	Is that a cell phone in your bowels or are you just experiencing borborigimi	Hydeman		
X		Forum	Are We Ready to Use Web Services for Controls ?	Gowri	Yes	
X	Future	Forum	ASHRAE Research Developed Software: Should it be free?	Hydeman	Yes	
X		Seminar	Security Issues with your Wireless Infrastructure (warchalking c/o Bob Old)	Schwedler	Yes	
X	Future	Seminar	Internet based training	Grondzik		

X	Future	Seminar	Network Applications of Internet, Intranet and Building Automation	Pouchak	Yes	
Past						
(1/04)	Anaheim	Seminar	Computer Tools for Sustainable Design	Dwyer	Yes	
(1/04)	Anaheim	Seminar	Emerging Web Applications for HVAC and Energy Industries	Hitchcock	Yes	
(6/03)	Kansas City	Seminar	Establishing Cost Effective Energy Baseline for Measurement and Verification	Pornsak		
(6/03)	Kansas City	Forum	How Secure is Your Wireless Office Place	Culp		
(1/03)	Chicago	Poster Paper	1017 RP	Haberl		
(1/03)	Chicago	Symposium	Interoperable Computer Applications	Branson		
(1/03)	Chicago	Seminar	Computer Security	Pouchak		
(1/03)	Chicago	Seminar	Experiences in Distance Learning: Leveraging Curriculum through Media	Pouchak		co-sponsored
(6/02)	Honolulu	Seminar	Internet Technology for HVAC/R Business: Use It or Lose It	Dwyer		
(6/02)	Honolulu	Seminar	Terms that Your Engineer Knows, but You Don't	Schwedler		
(6/02)	Honolulu	Seminar	Self-Configuring Controls: Needs, Technology and Potential Benefits	Brambley		co-sponsored
(1/02)	Atlantic City	Seminar	Uses and Benefits of Electronic Collaboration, Newsrooms and Groupware	Pouchak		
(1/02)	Atlantic City	Symposium	Tools and Techniques for Calibration of Component Models	Reddy		
(6/01)	Cincinnati	Seminar	Internet for Global Working	Dwyer		
(6/01)	Cincinnati	Seminar	Future NET Gains for the AE Office	Kammers		
(6/01)	Cincinnati	Seminar	Pattern-Recognition-Based Fault Detection and Diagnostics for Building Operation	Brambley		
(6/01)	Cincinnati	Seminar	Future NET Gains for the AE Office	Kammers		
(1/01)	Atlanta	Seminar	Interoperable Computer Applications for the Computer Industry	Hydeman		
(1/01)	Atlanta	Forum	What Does the ASHRAE Membership Need from the Computer Applications Handbook	Pouchak		
(6/00)	Minneapolis	Forum	How Should We Apply Electronic Media to the Development and Implementation of Standards?	Hydeman		
(6/00)	Minneapolis	Forum	Sensors for HVAC: Problems, Needs and Technology	Brambley		
(6/00)	Minneapolis	Seminar	What is the Future Relationship Between DDC and the Web	Branson		
(6/00)	Minneapolis	Seminar	Applications of Electronic Media for the Development and Implementation of Codes and Standards	Hydeman		