

**ASHRAE TC1.5 Computer Applications**  
**Draft Meeting Minutes**  
**Nashville Annual Meeting**  
**June 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: June 2004****TC NO. TC 1.5****TC TITLE: Computer Applications****CHAIR: M. Hydeman****VICE CHAIR/SECRETARY: R. Hitchcock (A. Kwok acting)****TC 1.5 MEETING ATTENDANCE**

Name	Affiliation	Email	TC	Research	Program	Applications	Handbook	Internet
Vikrant Aute	CEEE, University of Maryland	vikrant@wam.umd.edu	X			X		X
Bruce Billedeaux	Armstrong Service. Inc.	bbilledeaux@armstrongservice.com	X	X	X	X		X
David Bornside	Siemens Building Technologies	David.bornside@siemens.com		X	X			
David Branson	Compliance Services Group, Inc.	djbranson@csg.net	X	X	X	X	X	X
David Claridge	Texas A&M University	claridge@esl.tamu.edu	X					
Dru Crawley		Mark H. listed him at the Main						
Charlie Culp	Texas A&M	cculp@tamu.edu	X	X	X			
Tim Dwyer	London South Bank University	timdwyer@lsbu.ac.uk	X	X	X	X		X
Mike Galler	NIST	mikeg@nist.gov	X	X	X	X	X	X
Ken Gillespie	Pacific Gas & Electric	klg2@pge.com	X	X	X			
Krishnan Gowri	PNNL	krishnan.gowri@pnl.gov	X	X	X		X	
Walter Grondzik	Florida A&M University	gzik@polaris.net	X	X	X		X	
Jeff Haberl	Texas A&M University			X	X			
Marty Harrington	Kele Companies	MartyH@kele.com		X	X	X		X
Mark Hydeman	Taylor Engineering	mhydeman@taylor-engineering.com	X	X	X	X		X
Alison Kwok	University of Oregon	akwok@aaa.uoregon.edu	X	X	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
Troy Peters	Independent	630-529-8493		X	X			
Michael Pouchak	Honeywell, Inc.	mike.pouchak@honeywell.com	X	X	X	X		X
Mick Schwedler	Trane	mschwedler@trane.com	X			X		X
Pornsak Songkakul	Siemens Building Technologies	pornsak.songkakul@siemens.com	X	X	X			
Ryan Stroupe	Pacific Energy Center	R2S2@pge.com	X	X	X	X		X
Ben Sun	Flack & Kurtz					X		X
Miao Yang						X		X

**TC MEETING SCHEDULE**

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

**TC SUBCOMMITTEES**

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

**RESEARCH PROJECTS**

Project Title	Contractor	Monitoring Committee Chair	Report Made at Meeting?
TRP 1049		TC4.7	See attached Research Subcommittee Minutes

**LONG RANGE RESEARCH PLAN**

Rank	Title	W/S Written	Approval	To R&T
1	"Meta Schema for HVAC industry" – Barnaby/Gillespie/Gowri	No (RTAR written)	No	No
2	"Retooling of HVAC Education Process" - Haberl	No (RTAR written)	No	No
3	"Development of Courseware for cost effective and Efficient Conversion of ASHRAE Handbook to a Multimedia eBook" - Haberl	No (RTAR to be revised)		
4	"Multimedia Database for Comparison of Design Alternatives" – Gronzik	No (RTAR to be revised)	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
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**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)**

<b>Title</b>	<b>When Presented</b>
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)**

<b>Title</b>	<b>When Presented</b>
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
HVAC unplugged – the Wireless Approach - Branson	Future - Orlando
Only Losers Submit on Paper - Hydeman	Future - Orlando
Can the Spam guaranteed - Billedaux	Future - Orlando
Web Services for the HVAC Industry - Songkakul	Future - Orlando
A Vision of eASHRAE: or How to Give a Seminar in Your Pajamas – Chair Songkakul	Nashville (6/04)
XML Guidelines for the HVAC Industry – Chair Gowri	Nashville (6/04)
Sustainable Design for All: The Tools on Your Desktop - Dwyer	Anaheim (1/04)
Emerging Web Applications for HVAC and Energy Industries - Hitchcock	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)**

<b>Title</b>	<b>When Presented</b>
Collaborative Web Based Benchmarking - Norford	Future
XML Guidelines for the HVAC Industry - Gowri	Future - Orlando
How can Proposed Guideline 20 Help the ASHRAE Membership – Barnaby	Nashville (6/04)
How Secure is your Wireless Office Place	Kansas City (6/03)
Should ASHRAE Establish Guidelines for Electronic Media that Contains Manufacturer's	Chicago (1/03)

Product Information? - Grondzik	
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)**

<b>Title</b>	<b>When published</b>
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 - Washington B (PM)
- Internet/Emerging Applications S/C: 5:00 - 6:30 PM Sunday - Cheekwood F (MM)
- Program/Research S/C: 6:30 - 8:30 PM Sunday - Cheekwood F
- Handbook S/C: 6:00 - 6:30 PM Monday - Hermitage B (MM)

**Main Committee Agenda**

Call to order 6:40 p.m.

Introductions

Agenda Review:

Roll Call: **Quorum: 10** voting members present.

MEMBER	PRESENT?
Bruce Billedeaux	X
Dave Branson	X for the fun of it
Wayne Dunn	
Tim Dwyer (International)	X doesn't want to be Wayne Dunn
Mike Galler	X
Krishnan Gowri	X needs no introduction
Rob Hitchcock	
Mark Hydeman	X
Alison Kwok	X
Ron Nelson	X for the candy
Vernon Peppers	
Mick Schwedler	X because he loves the committee
Pornsak Songkakul	X
Wayne Webster	

(Bob Old

(Walter Grondzik

for the chocolate)

here for the candy)

Anaheim Meeting Minutes Approval:

Motion: **Accept the minutes:** Moved **Gowri**, Seconded **Schwedler**.

Discussion: **Name: no discussion**

Motion **Passed, 8-0-1** CNV (Chair Not Voting).

**Chair's Report - Hydeman**

- Dinner Plans: Santa Fe Cattle Co. reservation for 15-20 people at 9 p.m., meet at Cascade lobby, 1919 Gallatan Ave. 885-7852.
- Announcements
  - Update on new Education and Publication Council and Electronic Communications Subcommittee: ad-hoc committee on the new council finished work, delivered report, and accepted prior to this meeting. Created new BARS and MOPS (we just mopped up at the bar). The new alignment is a rational structure. Steve Comstock responsible for publishing, electronic communication, and collect issues for website, e-publishing, presentations in one place and prioritize issues.
  - DB: it will be an active committee.
  - MH: turf and growing pains. All of the marketing range of products rolls up to Steve Comstock, good.

- Big push to make the Handbook more relevant:
  - Running example of the ASHRAE HQ in Atlanta to be used throughout handbooks
  - new author's guide
  - computer enhancements
- Formation and purpose of our new T&P committee: **Dave Branson, chair. This committee is responsible for dealing with uncompleted action items.**
- Duane Barrett may be lurking.
- TC 9.5 Residential and Small Building Applications is looking for input and liaisons.
- CSI Master Format review has been completed. Thanks to those that contributed. Many changes to the format.
- New BOD motion: all draft (minutes and handbook chapters) have to have the following.
  - That the following statement be placed on the cover of the minutes of the Board, councils, standing committees, technical committees and standard project committees that are distributed prior to being approved:
  - "These draft minutes have not been approved and are not the official, approved record until approved by this (council/committee)."

Motion: That chair write a letter to the meeting and arrangements committee to recommend that locations be considered only if they have **high speed internet access to be available in the guest and meeting rooms.** Voted 11-0-0: Moved **Billedeaux**, Seconded. **Branson**

Discussion: **Encourage other TCs to do so.**

Motion **Passed, 11-0-0** (Chair Voting).

- Nashville Meeting Step Up to the Plate Awards:
  - For the recovery of our website... winner is Ron Nelson
  - To fill in for the missing vice-chair and secretary... winner is Alison Kwok
- Action Item Review
- **ACTION ITEM: Bruce to produce scannable forms**
  - 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.
    - Action item Chair to write letter.

Status: **Chair met with Jim Wolf and discussed this. Chair to write a follow up letter.**

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

Status: **Completed**

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

Status: **Completed by Chair**

- Action item: Billedeaux send electronic copy of SPC 134P Symbols, "Graphics symbols for HVAC" to Hitchcock for distribution to committee members.

Status: **To do**

- Action item: Rob Hitchcock to distribute to everyone else.

Status: **To do**

- Action item: Chair to take motion for co-sponsored program on distance learning to ALI

Status: **Completed.**

- o Committee Membership Update

### Section Liaisons

- TC 1.6
- Section Jim Norman
- Handbook T David Underwood
- Research Jianshun S Zhang
- Program Jim Wolf
- Special Pubs Marilyn Listvan
- TEGA Michael Circosta
- Standards Charles W Coward Jr
- ALI Doug Hittle

### Subcommittee Reports

#### Programs - Gowri

Nashville June 2004 Program:

Orlando January 2005 Program:

**ACTION ITEM:** Collect evaluation forms at the end of a session, tally, fill out summary report. Hand a copy to speaker's lounge and summary copy to TC Program Committee chair. Send a copy of the feedback to speakers. Members failed to do this at the Anaheim meeting. In the future these members will be referred to the T&P committee.

At one of our Anaheim presentations there was concern that one of the speakers was too commercial. People in audience took issue with it. Issue of recorded sessions discussed at TAC. Policy was that TC would have tacit approval of any presentation, prior to it being distributed on CD or DVD. More important now if it goes onto the website, that speakers need to know this. Program Committee should police it not TC. However, TC is supposed to approve prior. Chair might receive a letter

Chair of sessions needs to notify speakers that they will be recorded. Option for speakers to not be recorded. ASHRAE is trying to make money through process, so TC shouldn't put it on the website.

TC challenged to submit one symposium for each meeting. Probably should do one on use of XML

Motion: **accept prioritized programs for Orlando Meeting.** Voted 9-0-0: Moved: **Gowri**, Seconded. **Brannon**

Discussion: **None.**

Motion **Passed, 9-0-0** CNV (Chair Not Voting).

### Research – Mike Pouchak

Present Research

Prioritize Work Statements/Pre-Work Statements

Status of WS-1220

Dru Crawley willing to review one or two RTARs. Dru wants to be corresponding member again.

Ron Nelson: see minutes. Read final report and pass on any comments.

TC must approve RTAR unanimously; even conflict of interest would count against.

GET ATTACHMENT with flow chart from Pouchak.

Once RTAR approved it should be done and no more groveling to get WS through. TC would like to have comments returned and know reasons for rejections.



Motion: accept long-range research plan as prioritized in the Research Committee minutes. Voted 9-0-0: Moved: Nelson, Seconded. Branson

Discussion: None.

Motion Passed, 9-0-0 CNV (Chair Not Voting).

Meta Schema for HVAC&R Industry RTAR: send RTAR to Dru. Dru to review and comment prior to reviewing by RAC. TC to take time during this meeting (ahead of schedule) to work on language. Language to be worked on and vote by electronically. Run RTAR by Jianshun Zhang (RAC liaison) early. --“meta schema” language? August 1, deadline Note: must go out to the NEW voting members. Finish by July 15 and vote by July 22.

**ACTION ITEM:** Meta Schema for HVAC&R Industry RTAR to be revised by July 15, Mike Pouchak to submit ballot to voting members on July 15. Nine members expressed that they are available to vote on the ballot by July 22.

MS: reports that RAC says no workstatements are in the queue.

Forum 18: ASHRAE’s Strategic Research Plan. TC member to attend. Charlie Culp incoming chair.

If RTAR was approved and later rejected, is it with prejudice? Will the WS be smooth sailing?

Scrutiny at RAC comes at the RTAR gate, not WS. RTARs must be done in simple non-technical language.

Have section liaison up to date.

## Emerging Applications/ Internet – Pornsak Songkakul/ Bruce Billedeaux

Electronic web-casting seminar. TC 1.5 to develop the groundwork to do so.

Tim Dwyer took to Region-at-Large Planning committee meeting. Run concurrent seminar in all three zones at one time. UK/Ireland Subregion C; Europe Subregion B; outside of U.S., except region 13 Subregion A. Equipment: Seat; projector, site, telephone link. Tim Dwyer, David Branson, Ryan Stroupe (PG&E to buy Microsoft license). Seminar to help with international members to be held in January, prior to actual meeting. Give parti

**ACTION ITEM:** Mark Hydeman, Tim Dwyer, David Branson, Ryan Stroupe, Bob Old to research technical/licensing offline.

Motion: TC group to pursue online seminar to be conducted prior to the winter meeting. Voted 10-0-0: Moved: Brannon, Seconded. Dwyer

Discussion: Record and give to ASHRAE, show during the meeting, place on website.

Motion Passed, 10-0-0 CV (Chair Voting).

## Handbook – Mike Galler

Can include up to 2MB for chapter (so no sound, visuals). Could put in a button to “expose” the sections of the text that were edited out by the Handbook committee. Submission deadline of August 2. Provide links to expanded information.

CC: Why nothing from 10.17? TC 1.5 needs to take handbook to the next level.

Size limit issue: can request more space, with good reason. Develop content by July 14th.

## Standards - ? (who?) new chair: Alison Kwok

**ACTION ITEM:** Alison to study up on GPC 20

## Web Page – Ron Nelson

Photos from Anaheim great!

### Liaisons

**TC 1.6: Bruce Billedeaux create terminology book (SPAM, “computer”, “with prejudice”).**

**TAC Chairman** – Mark Hegberg

**Section 01 Head** – Jim Norman

**Program Liaison** – Mike Byars

**TEGA Liaison** – Mike Circosta

**Standards Liaison** – Charles Coward

**ALI Liaison** – Doug Hittle

**Special Pubs Liaison** – Marilyn Listvan

**Handbook Liaison** – T David Underhill

**RAC Research Liaison** – Jianshun Zhang

**Staff Liaison (Standards)** – Claire Ramspeck

**Staff Liaison** - Mike Vaughn

**GPC20** – Wayne Dunn

**SPC 134P Symbols** – Bruce Billedeaux

**International Alliance for Interoperability** – Rob Hitchcock/Jim Forester

## Old Business

None

## New Business

Meeting times for Orlando: Tim can't make winter meeting Monday nights. Conflict with region-at-large dinner.

Several advanced organizations use own web server to launch certain applications (PHP, SQL, ASP). Useful for surveys, interactive feedback, online forms and driven off of database. Any expertise in TC 1.5 to do this? Tim Dwyer, David Branson, Bob Old. Involves some expense but inexpensive as some are free. Great showcase for TC 1.5. Simply takes time to do it and dedicating time to do it.

Bruce Billedeaux: no more paper at meeting. Everything available from laptop.

Motion: All future TC 1.5 meetings to be **paperless**. Voted 10-0-0: Moved: **Gowri**, Seconded. **Billedeaux**

Discussion: **Circulate specifications of what to bring on the laptop. Offline discussion of who can bring wi-fi hub.**

Motion **Passed, 10-0-0 CV** (Chair Voting).

**ACTION ITEM: Bruce Billedeaux to bring LCD projector to meeting. Mike Galler will set up a wireless server for file exchange via FTP.**

## Adjournment

8:50P

**TC 1.5: Program Subcommittee Meeting Minutes – (2004 Summer Meeting)**

## Nashville, TN (06/27/04)

Meeting Called to Order: 7:30 p.m. (06/27/04), Cheekwood F, Opryland Convention Center

**Subcommittee Chair:** Krishnan Gowri

1. **Feedback from Programs at 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

Both sessions were well attended, the feedback was generally positive. No detailed feedback summary was prepared. Chairs are reminded to fill and report the feedback summary to the PSC.

2. **Programs in Anaheim:**

- i. A Vision of eASHRAE: or How to Give a Seminar in Your Pajamas  
Chair: Pornsak Songkakul, Sun. Jun. 27, 2004 (8 a.m. – 10 a.m.)
- ii. XML Guidelines for the HVAC Industry (GPC-20/TC-1.5 Co-sponsored – Seminar-25)  
Chair: Krishnan Gowri, Mon. Jun. 28, 2004 (8 a.m. – 10 a.m.), Presidential Ballroom C
- iii. How can Proposed Guideline 20 Help the ASHRAE Membership  
(GPC-20/TC-1.5 Co-sponsored – Forum-15)  
Chair: Chip Barnaby, Mon. Jun. 28, 2004 (11:15 a.m. – 12:05 p.m.), Tennessee Ballroom A

3. **Subcommittee reports** – Emerging Applications and Internet subcommittees proposed three new seminars and one new forum. All of the programs were reviewed and identified potential programs proposal for Orlando (program details are listed in the attached spreadsheet). It was also proposed to take the highest ranking program not scheduled by ASHRAE PC and present it as a webinar.

4. **Orlando Program Proposals** – A total of nine program proposals were considered for the Orlando 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 – the Wireless Approach | Branson   |
| 2. Seminar | Only Losers Submit on Paper            | Hydeman   |
| 3. Forum   | XML Guidelines for the HVAC Industry   | Gowri     |
| 4. Seminar | Can the Spam guaranteed                | Billedaux |
| 5. Seminar | Web Services for the HVAC Industry     | Pornask   |

Program chairs are reminded to submit all information on-line before **August 6, 2004**.

5. **Co-Sponsorship** – PSC moved to co-sponsor the ALI seminar “Web-based Distance Learning – Revisited” to be proposed for the Orlando Meeting.

6. **New ASHRAE Policies** – 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 and their talks will be recorded for future distribution. These will be posted in the ASHRAE web site and also sold as DVD containing waf files. TC’s do not have to post these in the future.

7. **Future Symposium Proposals** – TC’s are challenged to submit at least one symposium per meeting. Members are encouraged to provide ideas for new symposiums.

Meeting adjourned at 8:30 p.m.

## TC 1.5: Research Subcommittee Meeting Minutes

Nashville, TN Sunday, June 28, 2004

Meeting Called to Order 6:30 p.m. (6/28/04) Opryland Convention Center Cheekwood F

**In Attendance:** Bruce Billedeaux, Walter Gronzik, David Bornside, Mike Galler, Ron Nelson, Bob Old, Mike Pouchak (Subcommittee Chair), Pornsak Songakul, Jeff Haberl, Charlie Culp, David Branson, Martin Harrington, Ken Gillespe and Krishnan Gowri.

### Research report:

**1049 – TRP Report – “Building System Design Synthesis and Optimization”** - Final draft available dated 5/27/4. TC 4.7 is main sponsor. Ron Nelson is chair of PM committee. Ron distributed a 6-page overview of report. An Electronic copy of the final draft (173 pages) was distributed to interested members and is also available from [J.A.Wright@lboro.ac.uk](mailto:J.A.Wright@lboro.ac.uk) -- Next step is to get PM subcommittee approval and TC 4.7 will vote for final approval. No action is required from TC 1.5 except to review reports. 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.

**1228-TRP Report – “Case Studies of ASHRAE Software Projects Using “The Software Guide”**. This was presented and requested to be removed from the discussion list.

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

### Proposed Research:

Internet Subcommittee --Bruce Billedeaux withdrew proposed RTAR “ASHRAE Technical Committee News Service” from consideration. The ECC (Electronic Communication Committee) will be involved in further reviews and evaluation of matters related to news services. No new research proposed

Emerging application – Porsack Songakul reported no new research ideas.

New proposed research included Meta Schema for HVAC industry” from Chip Barnaby/ Ken Gillespe/Krishnan Gowri.

### Long Range Research Plan:

The following research plan was voted and prioritized:

1. “Meta Schema for HVAC industry” from Chip Barnaby/ Ken ASHRAE Technical Committee News Service” – Chip Baranby/ Ken Gillespe/ Krishnan Gowri – 12 votes – RTAR is in development for TC 1.5 approval vote and August 1 submission. This is co sponsored with GPC 20 – XML
2. “Retooling of HVAC Education Process” – Haberl – 5 votes – RTAR attached
3. “Development of Courseware for cost effective and Efficient Conversion of ASHRAE Handbook to a Multimedia eBook” Haberl. – 4 votes – resurrected as an RTAR – to be revised
4. “Multimedia Database for Comparison of Design Alternatives” – Gronzik – 3 votes – to be revised per RAC comments on RTAR and resubmitted.

Further actions: TC to approve Long Range Research Plan and approve 2 prioritized RTARs after they become available. RAC deadline for 2 RTARs is August 1, 2004.

Meeting Adjourned at 7:30 p.m

## 2004 Summer TC 1.5 Internet - Emerging Application Subcommittee Minutes

### 1. Introduction

### 2. Old Business / 3. New Proposals

Focus on programs for Orlando

#### 1. Wireless Sensor Applications, Dave Branson, Orlando

Martin H. offered a speaker for this seminar.

Mark Hydeman mentioned the nano-sensor technology, UC Berkley center for built environment. Ed Arrons chair.

Add an additional speaker "It's not your usual MOT."

Can we create a symposium from external speakers for nano technology. Mark and Dave believe this is possible.

Web service for building controls. Pornsak Songkakul

Four speakers are secured

#### 2. Improve HVAC&R Workflow using your Network PC. Tim Dwyer, Orlando

Four speakers desired

Ken Gallespie

Mark Hydeman

Dave Branson

Vikrant Aute

Frank Mills

#### 3. Post/Pre-meeting seminar. On-line seminar. Mark Hydeman, Orlando

Cross-link to vendor sponsored teleconferences for chapter meetings.

Member at large.

Translation real-time.

Playback at seminar during meeting.

#### 4. Forum "Has ASHRAE taken electronic communications too far" - Mic

#### 5. "Only losers submit in paper" – Presentation – Mark Hydeman

Dave Branson

Bruce Billedeaux - Submittal

Steve Taylor -

Martin Harrington - Manufacture

Ken Gallespie

#### 6. Email seminar "Dam the spam, Guaranteed!" – Bruce

### 4. Research

1. No new research

2. ASHRAE Technical Committee News Service withdrawn by Billedeaux

### 5. New business

1. None

Meeting adjourned 1830