



American Concrete Institute®

COMMITTEE CORRESPONDENCE

Andrew J. Boyd
McGill University
Dept of Civil Engineering
817 Sherbrooke Street West
Montreal, QC, H3A 0C3
Canada
Tel.: 514-398-6967
Fax: 514-398-7361
andrew.boyd@mcgill.ca

October 8, 2012

TO Members of ACI 228

FROM Bernard Hertlein, Secretary
 Andrew Boyd, Chairman, ACI Committee 228

SUBJECT Minutes of ACI 228 Meeting, Spring 2012, Dallas, TX, USA,

Please find attached the minutes of the ACI 228 meeting held at the Hyatt Regency in Dallas, TX on March 18, 2012.

Copy: Jan Olek, TAC Contact
 Jessie L Bournay, Supervisor, Technical Documents, ACI

MINUTES

ACI Committee 228 - Nondestructive Testing of Concrete

Hyatt Regency, Dallas TX – Room: Pegasus A
Sunday 18th March 2012, 10.00 AM – 12.30 PM

1. Call to order / meeting objectives / approval of agenda.

The meeting was called to order by Chairman M. Forde at 10.04 AM

2. Self-Introduction of participants.

The following individuals introduced themselves and signed the attendance sheets. Please note that the indicated membership status is taken from the current ACI committee roster.

Members

| | | |
|-----------------|---------------------|---------------|
| Jacob Bice | Aldo DeLaHaza | Keith Kesner |
| Andrew Boyd | Christopher Ferraro | H.S. Lew |
| Nick Carino | Mike Forde | Malcolm Lim |
| Nestor Chonillo | Dirk Heidbrink | Ken Lozen |
| Bill Ciggelakis | Bernie Hertlein | Larry Olson |
| David Corbett | Kal Hindo | John Popovics |
| Neil Cumming | Bob Jenkins | Paul Siwek |

Consulting/Associate Members

| | | |
|-------------------|-------------------|----------------|
| Cesar Constantino | Ming Liu | David Scott |
| Mike Faubel | Roberto Nunez | Woody Vogt |
| Eric Gianini | Randy Poston | Ali Abu Yousef |
| Kerry Hall | Patrice Rivard | Jingying Zhu |
| Steven Jaycox | Thomas Schumacher | |

Visitors

| | | |
|---------------|-------------------------|--------------------------------------|
| Todd Allen | Bora Gencturk | Claus Petersen |
| Jinbiao Cai | Dan Hoang | Francisco Presuel-Moreno |
| Daniel Clem | Alex Kaneko | Pichet Sahachaigunta |
| Xiaowei Dai | Passarin Jongvisuttisun | Marc Petersen David Scott |
| Andrew Foden | Aaron Larosche | Wilasa Vicuit-Vadallan |
| Richard Gagne | Lassaad Mhamdi | |

3. Apologies for absence.

Apologies were received from M. Basheer, J. Bice, M. D. Brown, B. Dragunsky, R. Jenkins, M. Taylor, P. Sullivan, and P. Ziehl.

4. Review and approval of Minutes of 16th October 2011 meeting Cincinnati OH.

N. Carino noted that C. Pederson was incorrectly shown as a visitor, when he was in fact a consulting member, and that the names on the committee liaisons list needed to be updated. With those comments noted, the minutes of the Cincinnati meeting were approved.

5. Status of 228.2R document revision (Forde).

Chairman Forde updated the committee on the status of ACI-228.2R, which was awaiting review and approval by an ACI staff engineer. Chairman Forde advised the committee that the document, marked up with any comments by the staff engineer, will be posted to the website for members' review. Following staff engineer approval, the document will be forwarded to the printer/publisher within the next four weeks.

6. ACI 437 soliciting abstracts for 2 sessions at ACI Fall 2012, Toronto: Applications of Acoustic Emission for Reinforced Concrete (P Ziehl).

A. Larosche advised the committee that the session organizers were still seeking a few more submissions for the special session.

7. Liaison reports (2 minutes each):

ACI 201 Durability of Concrete (A. Boyd) A. Boyd reported that the members of 201 had approved transferring the 201 visual inspection document to 228. Transfer is pending approval by ACI administration..

ACI 207 Mass Concrete (C. Ferraro) C. Ferraro reported that members of 207 were revising the 207.3 document on mass concrete inspection.

ACI 214 Evaluation of Results of Tests Used to Determine the Strength of Concrete (K. Hindo) K. Hindo reported that 214 members were revising the committee document.

ACI 222 Corrosion of Metals in Concrete (R. Poston) No report

ACI 224 Cracking (R. Poston) C. Ferraro informed the committee that there was nothing relevant to report from 224.

ACI 231 Properties of Concrete at Early Ages (No Liaison) J. Zhu volunteered to become new liaison to 231.

ACI 236 Material Science of Concrete (M. Basheer) No report.

ACI 301 Specifications for Concrete (N. Carino) N. Carino had nothing new to report on 301.

ACI 311 Inspection of Concrete (R. Jenkins) No report.

ACI 336 Footings, Mats and Drilled Piers (B. Hertlein) B. Hertlein had nothing new to report from 336.

ACI 342 Evaluation of Concrete Bridges and Bridge Elements (J. Bice) L. Olson reported that the members of 342 had proposed a session on advanced techniques for bridge inspection for the Phoenix meeting – preferably as a joint session with 228, with a focus on innovation. L. Olson subsequently confirmed as champion for 228.

ACI 362 Parking Structures (B. Dragunsky) No report.

ACI 364 Rehabilitation (B. Dragunsky/K. Kesner) No report.

ACI 365 Service Life (PAM Basheer) No report.

ACI 437 Strength Evaluation of Existing Concrete Structures (K. Kesner) N. Carino reported that 437 members were working on a new standard for cyclic load-tests.

ACI 440 FRP (G. Brown) No report.

ACI 444 Experimental Methods (J. Popovics) J. Popovics reported that committee 444 was reviewing its direction and focus to include structural health monitoring, and anticipated more collaboration with 228 on future sessions. A revision of the committee name was also being considered.

ACI 543 Concrete Piles (W. Ciggelakis) W. Ciggelakis had nothing new to report from 543.

ACI 546 Repair (K. Lozen) No report.

ACI 562 Evaluation, Repair, and Rehabilitation of Existing Concrete Buildings (K. Kesner) No report.

ACI E706 Repair Application Procedures (K. Lozen) No report.

ICRI (K. Lozen) L. Olson reported that ICRI was publishing a simple guideline to aid owners in structural assessment.

TRB AFF40-1 Nondestructive Testing subcommittee (L. Olson/A. Boyd/ MC Forde) L. Olson reminded the committee that AFF40-1 is a subcommittee of the main TRB bridge assessment committee, AFF40, Dynamics and Field Testing of Bridges. Chairman Forde added that many of the members and attendees at AFF40 meetings were DOT and Transportation personnel. The meetings are therefore excellent networking opportunities for those interested in evaluation of transportation infrastructure.

RILEM (J. Popovics) J. Popovics had nothing new to report from RILEM. Chairman Forde informed the committee that the RILEM committee on concrete was in the process of publishing a collection of papers that included recent NDE advances, but they leaned heavily toward statistical analyses rather than specific case histories. Chairman Forde noted that the latest NDE analysis trend to come out of Europe was the Probability of Detection (PoD) method, and several recent European papers focused on this method.

8. Current 228 Goals – just 3 needed:

- 1) Publish: "Nondestructive Test Methods for Evaluation of Concrete in Structures," ACI 228.2R;
- 2) Produce a Special Issue in an Elsevier journal from the Puerto Rico session (Boyd/Forde)
- 3) Administer ACI James Instruments Award (Heidbrink)

Chairman Forde informed the committee that 228.2R and the special issue journal of papers from the Puerto Rico meeting should both be completed before the Toronto convention.

9. Incoming Chair of 228 + New Goals

Chairman designate A. Boyd informed the committee that the new goals for the committee would include revision of 228.1R, and revision of the visual inspection document that will be moved from ACI 201 to 228. A preliminary step in the 228.1R review was the current ballot to reapprove the document as-is, to prevent it being dropped from the manual in the interim.

10. Reports (5 minutes each except 228.1R revision):

- Journal Special Issue from Puerto Rico – JCBM (Boyd/Forde). A. Boyd announced that the document was very close to publication, with one paper still due, and one in the final stages of review.
- Status of 228.1R document revision – M. Forde reminded the committee that the current ballot for reapproval was merely a temporary placeholder, and urged all committee members to vote affirmative.

11. Recent and Upcoming Meetings (2 minutes)

- Report on any NDT conferences held since last committee meeting - no comments.
- Upcoming conferences – Structural Faults & Repair-2012.
- J. Popovics reminded the committee about the annual Structural Materials & Technology (SMT) Conference, which always includes a significant NDE component. The SMT Conference is scheduled for New York, NY, August 20-24, 2012.
- J. Zhu informed members that the ASNT Conference was being held almost concurrently with the ACI convention, but in Dallas, TX. March 22-25, 2012

12. NDE Technician Certification (M. Lim)

A. Boyd reported that the ACI certification committee had proposed two new committees to manage the NDT Technician Certification program – A 600-number committee for the certification itself, and an E905 subcommittee for education and training. The ACI also wanted 228 to maintain a certification subcommittee to liaise with the new committees – they will need the 228 sub-committee to provide technical input. A. Boyd will have more information by the Toronto meeting.

13. 2012 James Instruments Award (D. Heidbrink)

D. Heidbrink reported that there was only one paper submitted for this year's James Instruments Awards, but the judging panel considered the paper worthy of the award. B. Hertlein said that the paper had been judged on the relevance of the subject matter, the quality of the research and reporting, and the likely contribution to the industry. The winner, Xiaowei Dai, from the University of Texas, made a brief presentation of his paper "Signal Amplification by using a Parabolic Reflector in Air-coupled Impact-Echo Test" to the committee. In addition to the 228 presentation, Dai would be presenting his paper at the Research in Progress session at the current convention.

The committee briefly discussed ways and means of getting the James Award more widely known, and encouraging a larger number of paper submissions.

14. Short Presentations:

Alex Kaneko, of A-Lex International Marketing, LLC, made a brief presentation of the CTS-02, Non-destructive concrete tester, which estimates concrete strength from the mechanical impedance measured during an impact by a specially instrumented steel-faced hammer.

15. New business, Informal presentations and open discussion:

- Other NDT committee activities.

- New products, novel projects, research projects, etc.

16. Preferred day / time for next meeting. (October 21-25, Toronto, ON)

Chairman designate A. Boyd asked the committee if there were any objections to meeting at the same time, 10.00 AM to 12.30 PM on the Sunday of the Toronto convention. There were no objections, and the meeting will be scheduled as stated.

17. Adjourn.