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Monday, March 2, 2009

Memorandum

To: Members of ACI Committee 348

From: Sofia M.C. Diniz, Committee Chair

Re: ACI Committee 348 Structural Safety

Dear Members and Friends,

Please find enclosed the minutes of our meeting in Saint Louis, MO. The minutes were prepared from the notes taken by Nakin Suksawang which is acknowledged with thanks. Also, please find enclosed a copy of the agenda for our upcoming meeting in San Antonio, TX, on **Tuesday, March 17, 2009**. The meeting will be held at Suite 529, **8:30 AM-10:00 AM**.

Please let me know if you will be able to attend this meeting.

I look forward to seeing you in San Antonio!

cc: Hani Nassif, TAC Contact
Daniel Falconer, ACI Staff

ACI Committee 348

Structural Safety

Tuesday, March 17, 2009, 8:30 am-10:00 am

Suite 529, Marriott Rivercenter, San Antonio, TX

AGENDA

Call to order

The agenda items are:

1. Introduction
2. Minutes of the meeting held in Saint Louis, MO, November 4, 2008
3. Discussion on committee documents under development
4. Future directions
5. Future sessions
6. Future conferences
7. Membership updates
8. New business
9. Next Committee meeting
10. Adjournment



ACI Committee 348 Structural Safety

**Minutes of Meeting held Tuesday, November 4, 2008
8:30 A.M. – 10:00 A.M.
Flora Room, Renaissance Grand Hotel
Saint Louis, Missouri**

ATTENDANCE

Voting Members:

Diniz, S. *Chair*

Maamouri, M.

Nassif, H.

Oglesby, R.

Sandberg, H.

Suksawang, N.

Visitors:

Toon, D. United Forming

Yasdani, N. University of Texas at Arlington

Mackie, K. University of Central Florida

1. INTRODUCTION

Chair called the meeting to order at 8:30 am.

2. MINUTES OF THE MEETING HELD IN LOS ANGELES, CA ON APRIL 1, 2008

Chair mentioned that the LA minutes were posted on the ACI website committee's page and emailed to committee members. Diniz added that a correction was required since Michael Bartlett, who is currently Associate Member of this committee, has been listed as Voting Member. With this correction, minutes were approved unanimously.

3. DISCUSSION ON COMMITTEE DOCUMENTS UNDER DEVELOPMENT

Diniz mentioned that, following decisions made in previous meetings, two documents have been circulated among committee members for their input. These documents are: (i) The Proper Use of Statistical and Probabilistic Techniques as Applied to Concrete Practice (Bazant); and (ii) Structural Reliability Basics (Diniz).

3.1 DISCUSSION ON "THE PROPER USE OF STATISTICAL AND PROBABILISTIC TECHNIQUES AS APPLIED TO CONCRETE PRACTICE"

Diniz mentioned that for this document, being developed by Bazant, she received comments from Bartlett only (positive comments). No other comments were received by email. A discussion followed on the adequacy of this document within committee goals.

Maamouri suggested that the document and the methods proposed in the documents should be first reviewed by a statistician to determine its validity. Nassif mentioned that he has asked one of

his statistician colleagues to review the paper and his colleague seems to agree with the contents of the proposed document. Nassif added that, however, the paper is too complex to be adopted as a committee document. Furthermore, because the committee is not currently involved with Statistics, Nassif suggested that maybe Bazant's work would be more appropriate to another committee, for example committee 214 whose work is directly linked to Statistics. Diniz reminded that Probability and Statistics are the basis for Structural Reliability and Structural Safety methods, and as such, the contents of the proposed document are within the scope of the 348 committee. However, she mentioned that, as a committee document, this should reach a broader audience with examples not limited to those presented in the proposed document. At this point, Oglesby made a motion, seconded by Maamouri, that "Bazant's proposed document should not be adopted by Committee 348 as a committee document." Nassif made an amendment to the motion, accepted by both Oglesby and Maamouri and unanimously accepted by all members: "Bazant's proposed document, in its present form, should not be adopted by Committee 348 as a committee document and asked the committee to request Dr. Bazant to modify the paper to make it appropriate to a broader audience."

Nassif made a motion that the committee should initiate a document that addresses elementary statistics. To this end, the committee should write a CI paper that covers reliability and statistics. Maamouri made an amendment to this motion, seconded by Nassif and unanimously accepted by the committee members: The committee should write two papers, one on statistics and one on reliability. Sandberg suggested that for this effort to generate interest, examples must be included.

3.2 DISCUSSION ON "STRUCTURAL RELIABILITY BASICS"

Pursuing the idea of the development a CI paper on Structural Reliability, Diniz mentioned that following the Los Angeles discussion on this subject, she prepared a first draft of the document "Structural Reliability Basics". This document was emailed to committee members for their suggestions. She acknowledged receiving comments from Santos, Bartlett (Associate Members) and Frangopol (positive comments in all cases). A discussion followed on the adequacy of this document within committee goals.

Maamouri suggested more examples for all methods and a need to keep it on a basic level. Nassif suggested that the article should be similar to a news article. Nassif accepted the responsibility to work with Diniz on a revised version of the paper and is committed to e-mail the chair a draft by December 15th, 2008. Nassif also suggested that the committee should also proceed with a tech note focusing on existing structures.

4. FUTURE DIRECTIONS

Diniz reminded committee members that in the previous convention (Los Angeles) she attended the Repair Code Coordination meeting organized by ACI 562 (Evaluation Repair and Rehabilitation of Concrete Buildings). ACI 562 is currently preparing a Repair Code to parallel ACI 318. The goal is to involve several committees including ACI 348 in preparing and reviewing the document. However, no further contact has been made by ACI 562.

Future directions have been discussed and proposed as reported in the previous item.

5. FUTURE SESSIONS

The committee is currently working on two sessions:

- (1) "Errors in the Design and Construction of Concrete Structures—Examples, Consequences, and Mitigation". Maamouri is leading this effort. He has contacted the chair of ACI 345 (Bridge Construction) for co-sponsoring this session. Diniz attended ACI 345 committee meeting in Saint Louis to discuss possible involvement of ACI 345 in the development of this session. Maamouri will work with ACI 345 chair in the preparation of the session abstract and inviting potential speakers. He will also work with Nassif to submit a Call for Papers in Concrete International.
- (2) "Service Life and Safety". This session will be co-sponsored by ACI 365 (Service Life Prediction). Diniz is leading this effort. She will contact Dr. Lounis from ACI 365 and report back to this Committee.

6. FUTURE CONFERENCES

Diniz reported of some upcoming sessions that may be of interest to members of the Committee. These include:

ICOSSAR 2009, *The 10th International Conference on Structural Safety and Reliability*
Kansai University, Osaka, Japan, September 13-17, 2009

www.sc.kutc.kansai-u.ac.jp/icossar2009/

(Committee member Frangopol is chair of the International Scientific committee; committee members Bazant, Diniz, Nassif, and Nowak are members of the International Scientific committee)

Second International Symposium on Life-Cycle Civil Engineering (IALCCE 2010)

Taipei, Taiwan, October 27-30 2010

www.ialcce2010.org

(Committee member Frangopol is symposium chair; committee members Diniz and Nowak are members of the International Scientific committee)

IABMAS2010, *The 5th International Conference on Bridge Maintenance, Safety and Management*

July 11-15, 2010, Philadelphia

www.iabmas2010.org

(Committee member Frangopol is conference chair; committee member Nowak is co-chair of the Scientific committee, Diniz and Nassif are members of the Scientific committee)

7. MEMBERSHIP UPDATES

Diniz reported that ACI 348 has a new Associate Member, Prof. Abbie Liel, University of Colorado at Boulder.

8. NEW BUSINESS

None.

9. NEXT COMMITTEE MEETING

Next meeting will be held on Tuesday at 8:30-10am during the San Antonio spring convention.

10. ADJOURNMENT

Oglesby made a motion to adjourn the meeting; Maamouri seconded. The meeting adjourned at 10:00 am.

Minutes prepared by Sofia Diniz from notes taken by Nakin Suksawang.