

Universidade Federal de Minas Gerais - UFMG  
School of Engineering, Department of Structural Engineering  
Av. do Contorno 842, Segundo Andar, Belo Horizonte, MG, 30110-060, BRAZIL  
Phone: +(55-31)3238-1977, FAX: +(55-31)3238-1973, email: diniz\_s@yahoo.com

Tuesday, October 21, 2008

**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 Los Angeles, CA. The minutes were prepared by Mayrai Gindy which is acknowledged with thanks. Also, please find enclosed a copy of the agenda for our upcoming meeting in Saint Louis, MO, on **Tuesday, November 4<sup>th</sup>, 2008**. The meeting will be held in **Flora Room, 8:30 AM-10:00 AM** (note the time change).

Please let me know if you will be able to attend this meeting. Currently we have two documents under development (see agenda). Drafts of these documents have been circulated among the committee members for your comments/suggestions. If you are not able to attend the meeting in Saint Louis, I would appreciate receiving your input on these documents by email (before November 3<sup>rd</sup>).

I look forward to seeing you in Saint Louis!

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

**ACI Committee 348**

***Structural Safety***

**Tuesday, November 4<sup>th</sup>, 2008, 8:30 am-10:00 am.**

**Flora Room, Renaissance Grand Hotel, Saint Louis, MO**

**AGENDA**

Call to order

The agenda items are:

1. Introduction
2. Minutes of the meeting held in Los Angeles, CA, April 1<sup>st</sup>, 2008
3. Discussion on committee documents under development:
  - (i) The Proper Use of Statistical and Probabilistic Techniques as Applied to Concrete Practice (Bazant);
  - (ii) Structural Reliability Basics (Diniz).
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, April 1, 2008  
11:30 A.M. – 1:00 P.M.  
Park Room  
Hyatt Century Plaza  
Los Angeles, California

### ATTENDANCE

#### Voting Members:

Diniz, S. <i>Chair</i>	Nassif, H.
Gindy, M., <i>Secretary</i>	Oglesby, R.
Bartlett, M.	Scanlon, A.
Bazant, Z. P.	Suksawang, N.
Maamouri, M.	

#### Visitors:

Yazdani, Nur University of Texas at Arlington

### 1. INTRODUCTION

Chair called the meeting to order at 11:30 am.

### 2. MINUTES OF THE MEETING HELD IN FAJARDO, PUERTO RICO ON OCTOBER 16, 2007

Scanlon moved to approve the minutes from Fajardo, Puerto Rico. Bazant seconded. The minutes were approved unanimously.

### 3. DISSEMINATION OF STRUCTURAL RELIABILITY CONCEPTS AND APPLICATIONS

Diniz announced that she (together with Hani Nassif) has organized the session "Structural Reliability in Design Practice" at the 2008 Structures Congress to be held in Vancouver, Canada in April 2008. This session has been developed having in mind the same goals of this committee in disseminating Structural Reliability concepts, methods and applications. Diniz will circulate a paper she prepared for Vancouver to committee members for their review (document will be sent by email). According to Diniz, this document could serve as a basis for a TEC note or a Concrete International article prepared by the 348 committee. This would require changes and additions. Please forward comments directly to Diniz within a month after the file is received.

### 4. FUTURE DIRECTIONS

Diniz 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. This committee can be involved with Chapter 4 (Life Safety) and Chapter 5. Bartlett, member of both ACI 348 and 562, informed that the anticipated timeframe for draft completion of full document is 2 years with balloting of chapter drafts by July 16, 2008 for Chapter 4 and August 1, 2008 for Chapter 5. Bartlett is working on Chapter 5. Diniz will coordinate this effort by contacting ACI 562 Committee Secretary to obtain a draft copy of Chapters 4 and 5. She will start an ACI Forum for committee members to share their comments for each chapter. Diniz will assemble all comments/revisions and submit to ACI 562.

Bazant made a presentation regarding the proper use of statistical analysis methods in concrete and concrete structures. He stipulates the method of least squares is the only correct approach to central range statistics. He urged the Committee to prepare a document that discusses the proper use of statistical and probabilistic techniques. Diniz invited Bazant to lead an effort to this end by preparing a document. Bazant will forward a draft document addressing the general problem to Diniz. She will circulate the document to committee members for their review.

## **5. FUTURE SESSIONS**

The committee is currently working on two sessions:

- (1) Theme is examples and consequences of human error and how we can mitigate such errors. Maamouri is leading this effort. He will draft an email describing the purpose of the session and inviting speakers. He will also work with Nassif to submit a Call for Papers. The target date is for the New Orleans (Fall 2009) Convention
- (2) Theme is "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. The target date is for San Antonio (Spring 2009) Convention.

## **6. FUTURE CONFERENCES**

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

ICOSSAR 2009, *The 10<sup>th</sup> International Conference on Structural Safety and Reliability*  
Kansai University, Osaka, Japan, September 13-17, 2009  
[www.sc.kutc.kansai-u.ac.jp/icossar2009/](http://www.sc.kutc.kansai-u.ac.jp/icossar2009/)

Abstracts: April 30, 2008

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

*4th International ASRANet Colloquium: Integrating for Structural Analysis, Risk and Reliability*  
25-27 June 2008, Athens, Greece  
[www.asranet.com](http://www.asranet.com)

*Creating and Renewing Urban Structures – Tall Buildings, Bridges and Infrastructure*  
IABSE Congress Chicago 2008, September 14-19, 2008  
Abstracts: October 31, 2007  
[www.iabse.org/chicago08](http://www.iabse.org/chicago08)

*Structures Congress 2008*, Session "Structural Reliability in Design Practice", organized by Diniz and Nassif  
Vancouver, Canada, April 24-26, 2008

[Content.asce.org/conferences/structures2008](http://Content.asce.org/conferences/structures2008)

*First International Symposium on Life-Cycle Civil Engineering (IALCCE'08)*  
Varenna, Italy, 11-14 June 2008

[www.ialcce08.org](http://www.ialcce08.org)

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

*IABMAS'08, The 4<sup>th</sup> International Conference on Bridge Maintenance, Safety and Management*  
July 13-17, 2008, Seoul, Korea

[www.iabmas08.org](http://www.iabmas08.org)

(Committee member Frangopol is conference chair; committee member Nowak is co-chair of the Scientific committee, Nassif is a member of the Scientific committee)

*8<sup>th</sup> International Symposium on Utilization of High-Strength and High-Performance Concrete*, 27-29 October, Tokyo, Japan

[www.jci-web.jp/8HSC-HPC/](http://www.jci-web.jp/8HSC-HPC/)

*The Inaugural International Conference of the Engineering Mechanics Institute (EM08)*, University of Minnesota, Minneapolis, Minnesota, May 18-21, 2008 (Probabilistic Mechanics and Structural Reliability Symposium, (Committee member Frangopol is co-organizer of the symposium)

[www.ce.umn.edu/em08](http://www.ce.umn.edu/em08)

## **7. MEMBERSHIP UPDATES**

Diniz reported that she has been reappointed as chair of the ACI 348 committee. She took the opportunity to thank committee members for their time and efforts dedicated to ACI 348.

## **8. NEW BUSINESS**

Maamouri suggested that the Committee consider examining the lack of a code-specified phi-factor for anchorages. Currently practitioners use their own phi-factor based on few failure load data provided by manufacturers. Oglesby recommended that Maamouri speak with members of the Anchorage Committee to check the availability of additional data. It was agreed that with little to no statistical analysis can be performed unless more data is obtained.

## **9. NEXT COMMITTEE MEETING**

Next meeting will be held on Tuesday at 8:30-10am.

## **10. ADJOURNMENT**

Gindy made a motion to adjourn the meeting; Rita seconded. The meeting adjourned at 1:30 pm.