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 Fajardo, Puerto Rico. 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 Atlanta, GA, on Tuesday, April 1st, 2008. The meeting will be held in Park Room, 11:30 AM-1:00 PM.

I look forward to seeing you in Los Angeles!

cc: Hani Nassif, TAC Contact
    Daniel Falconer, ACI Staff
Call to order

The agenda items are:

1. Introduction
2. Minutes of the meeting held in Fajardo, Puerto Rico, October 16, 2007
3. Dissemination of Structural Reliability concepts and applications
4. Future directions
5. Future sessions
6. Future conferences
7. Membership updates
8. New business
9. Next Committee meeting
10. Adjournment
1. INTRODUCTION
Chair called the meeting to order at 11:00 am.

2. MINUTES OF THE MEETING HELD IN ATLANTA, GA ON APRIL 24, 2007
Nassif moved to approve the minutes from Atlanta, GA. Suksawang seconded. The minutes were approved unanimously.

3. DISSEMINATION OF STRUCTURAL RELIABILITY CONCEPTS AND APPLICATIONS
Diniz will take the lead on preparing an article for Concrete International. The article will include basic concepts and illustrations regarding structural reliability presented in simple form. The background and intent of the different approaches (i.e. ASD, LFD, and LRFD) will be discussed. It is suggested that one example using ASD and LFD be presented. Discussion of questions such as “what is the difference” and “what are the benefits of LFD”, “what is the true meaning of probability of failure” should be included. The effect of changes in material properties (fc’) as well as loads (office buildings, parking lots, residential) on the factor of safety should also be discussed. An equation for calculating beta values (or Pf) should be included along with a short numerical example.

Nassif suggested publishing this article as an ACI Technical Note, a 2-3 page practice-oriented publication. Any programs developed as part of this effort such as an Excel spreadsheet for computing beta values or statistical distributions can also be published as ACI Web Tools.
4. FUTURE DIRECTIONS
Sandberg highlighted the importance of considering human error (e.g. bridge collapse in Canada this past year) as part of the structural safety/reliability problem. He recommended a joint session with ACI 345 (Bridge Construction) about examples and consequences of human error and how we can mitigate such errors. Maamouri will take the lead on organizing this joint session.

5. FUTURE SESSIONS
Diniz suggested a joint session, possibly titled “Service Life and Safety”, with ACI 365 (Service Life Prediction) for the San Antonio (Spring 2009) or New Orleans (Fall 2009) conventions. The session can include topics relating to the safety evaluation of existing structures.

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/
Abstracts: March 31, 2008

4th International ASRANet Colloquium: Integrating for Structural Analysis, Risk and Reliability
25-27 June 2008, Athens, Greece
www.asranet.com
Abstracts: October 31, 2007

Creating and Renewing Urban Structures – Tall Buildings, Bridges and Infrastructure
Abstracts: October 31, 2007
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

First International Symposium on Life-Cycle Civil Engineering (IALCCE’08)
Varenna, Italy, 11-14 June 2008
www.ialcce08.org

IABMAS’08, The 4th International Conference on Bridge Maintenance, Safety and Management
July 13-17, 2008, Seoul, Korea
www.iabmas08.org

8th International Symposium on Utilization of High-Strength and High-Performance Concrete, 27-29 October, Tokyo, Japan
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
www.ce.umn.edu/em08
7. MEMBERSHIP UPDATES
Diniz reported of recent changes in the Committee roster. Gindy currently serves as Secretary and Maamouri and Suksawang are now Voting Members. Diniz urged members of the Committee to recruit participation by others to strengthen and widen the expertise of the Committee. Diniz also reported that Bartlett requested to become an Associate Member of this Committee at the previous ACI meeting in Atlanta.

8. NEW BUSINESS
None

9. NEXT COMMITTEE MEETING
Next meeting will be held on Tuesday at 10am or 2pm to accommodate members’ schedules.

10. ADJOURNMENT
Nassif made a motion to adjourn the meeting; Diniz seconded. The meeting adjourned at 12:20 pm.