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 Denver, CO. The minutes were prepared by Mayraei 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 24, 2007. The meeting will be held in Embassy Room, 11:30 AM-1:00 PM.

I look forward to seeing you in Atlanta!

cc: Hani Nassif, TAC Contact
Daniel Falconer, ACI Staff
ACI Committee 348

Structural Safety

Tuesday, April 24, 2007, 11:30 am-1:00 p.m.

Embassy Room, Hilton Atlanta, Atlanta, GA

AGENDA

Call to order

The agenda items are:

1. Introduction

2. Minutes of the meeting held in Denver, CO, November 6, 2006

3. Dissemination of Structural Reliability concepts and applications

4. Future directions

5. Future sessions (Los Angeles)

6. Future conferences

7. Membership updates

8. New business

9. Next Committee meeting

10. Adjournment
Minutes of Meeting held Monday, November 6, 2006
11:30 A.M. – 1:00 P.M.
Plaza Court 6
Adam’s Mark Denver Hotel
Denver, Colorado

ATTENDANCE

Voting Members: Visitors:

Diniz, S. Chair
Krstulovic, N., Secretary
Gindy, M.
Bazant, Z. P.
Scanlon, A.
Oglesby, R.
Bartlett, M.
Sandberg, H.
Nassif, H.
Suksawang, N.
Nowak, A.

Diamantidis, D.
Szelaiga, E.
Podhorecki, P.

1. CALL TO ORDER

The meeting was called to order by Chair Diniz.

2. PREVIOUS MINUTES

Scanlon moved to approve the minutes from the Charlotte, NC meeting on Monday, March 28, 2006. Oglesby seconded. The minutes were approved unanimously.

3. FUTURE DIRECTIONS

The Chair opened the floor for comments and ideas about the future direction of the Committee. Bazant proposed several areas including (1) Code load factors particularly the 1.4 DL factor, (2) Size effects (ex. shear reinforcement for beam depths greater than 1m) and (3) Standardized distributions for parameters. The Committee discussed each of the above at length. With regards to item (1), Bartlett suggested that the 1.4 DL
factor considered the variation in size as well as model variability. Diamantidis suggested that model uncertainty is accounted for in the phi factor. Nowak pointed out that different methods used in the calibration of the Canadian code result in different COV which in turn affect the value of phi factors. He also reported that not enough studies have been conducted of the effects of different analytical methods on the load and resistance factors.

Diamantidis proposed investigating time-dependent resistance and the possibility of using different safety index for different classes of structures (manned vs. unmanned).

Sandberg recommended examining structural failures such as the Hyatt Regency Walkway collapse in Kansas City, Missouri.

Nassif noted that TAC is interested in relating the work of committees to practice. He recommended that the Committee create TechNotes, 1-3 page documents to be disseminated quickly. He also suggested topics for the future direction of the Committee including computer modeling, corrosion, deterioration, and prediction.

4. DISSEMINATION OF STRUCTURAL RELIABILITY CONCEPTS AND APPLICATIONS

See discussion on TechNotes under Future Direction.

5. CURRENT AND FUTURE SESSIONS

Diniz commented that the session “How Reliable is Reliability?” held on Sunday, November 5, 2006 was successful. She pointed out that although it was well attended, the target audience of practicing engineers was lacking. Diniz suggested a monograph of the session to be submitted to Concrete International.

Diniz suggested topics for future sessions:
1. load and resistance models for concrete structures
2. size effects
3. lessons learned from failure due to human factors and natural disasters

Gindy volunteered to collect correspondences among members and assemble a summary document to be discussed at the next meeting in Atlanta, Georgia.

6. RECENT AND FUTURE CONFERENCES

No conference announcements were made.

7. MEMBERSHIP UPDATES

Diniz announced that associate members now need to be members of ACI. Nowak encouraged Diamantidis and Szeliga to become consulting members of the Committee. Diniz also announced that Suksawang, currently an associate member, will soon become a voting member.

8. NEW BUSINESS
No new business was discussed.

9. NEXT COMMITTEE MEETING

The next meeting in Atlanta, Georgia is scheduled for Monday, April 23, 2007 at 11:30 am-1:00 pm.

10. ADJOURNMENT

The meeting was adjourned at 1:00 pm.

Respectfully submitted,
Mayrai Gindy