

Wind Effects Committee, Structural Engineering Institute/ASCE

Minutes of the meeting held at the
2005 Structures Congress, New York, New York
Room 507, Hilton New York Hotel
Friday, April 22, 2005

1. Introduction of Committee Members and Visitors

The meeting was called to order by Committee Chair Ted Stathopoulos at 6:22 p.m.

Introduction of members and visitors immediately followed.

Present:

Members: Dick Aynsley, Leighton Cochran, Roy Denoon, Jon Galsworthy, Jooma Ben-Hessine, Anurag Jain (Secretary), Greg Kopp, Chris Letchford, Bob McNamara, Partha Sarkar, Ted Stathopoulos (Chair), Yukio Tamura, Vikas Verma;

Visitors: Rachel Bashar, Tracy Kijewski-Correa, Steven Camposano, Arthur Chiu, Elizabeth English, Ahsan Kareem, Craig Leech, Jon Peterka, Joe Tedesco

2. Approval of Agenda

Accepted with no changes.

3. Approval of Minutes of the May 23, 2004 Meeting (Nashville, Tennessee)

Approved with no changes.

4. Membership

Review of Wind Effects Committee Members and their Appointment Dates:

The list of the Wind Effects Committee (WEC) members and their appointment dates were reviewed and discussed:

Jomaa Ben-Hassine (02/08), Daryl W. Boggs (00/06), Leighton S. Cochran (00/06), James M. Delahay (04/10), Roy Denoon* (03/09), Jon K. Galsworthy (04/10), Kurtis R. Gurley (02/08), Santiago Hernandez (02/08), Nicholas Isyumov (00/06), Anurag Jain, (00/06), *Secretary*, Gregory A. Kopp (02/08), Christopher W. Letchford (02/08), Marc L. Levitan (00/06), Robert J. Mc Namara^S (95/05), Dorothy Reed (04/10), Fahim Sadek (02/08), Partha P. Sarkar (00/06), R Paneer Selvam (02/08), Theodore Stathopoulos (01/07), *Chair*, Yukio Tamura (04/10), Morteza A. Torkamani (02/08), Vikas K. Verma (03/09) and Timothy M. Whalen (03/09).

*Society Nonmember.

^S Members with terms expiring October 2005. The WEC acknowledged and appreciated these members' contributions to the committee

- TS sadly reported that Jim Delahay passed away on April 16, 2005.
- TS' term as Chair of the WEC terminates on October 1, 2005. Leighton Cochran (LC) will be the next Chair of the WEC and his term will be from October 1, 2005 – September 30, 2008.
- The issue of continued membership on the WEC without attendance at annual meeting was discussed. It was noted that WEC members are still able to contribute to the activities of the committee even without attendance by reviewing papers submitted to the Journal of Structural Engineering and by organizing sessions at Structures Congresses. Some members suggested a “mid-term” review of WEC members to determine continuing membership on the committee. The procedure for application to WEC membership was also clarified by TS; he stated that it can only be accomplished through the SEI website.

Recruitment of New Members:

Membership of Fred Haan of Iowa State University was recently approved. TS stated that more practitioners were needed to replace Jim Delahay and Bob McNamara. Referral of new members was encouraged by TS. All visitors interested in joining the WEC were encouraged to apply for membership to the committee.

5. Report on EXCOM Activities

The EXCOM meeting was held on April 21, 2005 and continued on April, 22 with discussion with Technical Administrative Committee (TAC) Chairs from 8 – 9 a.m. Joe Tedesco (JT), Chair of of the TAC of Dynamic Effect Committee reported on EXCOM activities. The following issues were mentioned by JT:

- Charles Roeder made some comments at the TAC Chair's committee meeting and tabled the proposed sub-committee on Wind-Induced Motion of Tall Buildings by Roy Denoon (RD) since the anticipated work product of the Wind Effects Booklet task committee was not complete. JT circulated a draft of the booklet at the meeting and stated that it was 90% complete. TAC committee members were unhappy about receiving no update on the status of the Wind Effects Booklet task committee's work. LC (Chair of Wind Effects Booklet task committee) stated that an update on the task committee's activities was requested and provided in November 2004. LC also stated that a draft of the booklet will soon be circulated for a “user review”. JT report that the TAC committee membership was satisfied after the 90% draft was circulated and progress was demonstrated. JT also provided a copy of the 90% draft report to Debbie Smith of ASCE. Based on the outcome of the TAC meeting, JT gave the go-ahead for the formation of the sub-committee by RD. Later on in the meeting Elizabeth English reported that the EXCOM will hopefully approve RD's sub-committee in approximately 2 months during their next meeting.

- JT also forwarded LC's name as the next Chair of the WEC.

6a. Report of Task Committees

Booklet on Wind Effects (Task Committee for Booklet on Wind Effects Term 2003-2005)

Members: R. M. Aynsley, B. Bienkiewicz, J.E. Cermak, A. N. L. Chiu, L. S. Cochran (Chair), Roy Denoon*, E. C. English, M. P. Gaus, A. Jain, N. P. Jones, G.A. Kopp, C.W. Letchford, M. L. Levitan, R. J. McNamara, J. E. Minor, J. A. Peterka, D. A. Smith, T. Stathopoulos, Jiming Xie and M. S. Zarghamee.

LC reported on the activities of the Task Committee. Activities and progress are briefly listed below:

- A 90% draft of the document is ready with the exception of contributions from a committed author. A draft of the document has been circulated within the committee members for comment and a paper was presented on the Booklet during the 2005 Structures Congress.
- Once the draft is complete a user review will be performed and for that 30 potential reviewers have been identified. A questionnaire composed by Mark Levitan will be circulated along with the draft to obtain focused feedback from the reviewers. LC also stated that the user reviews can be completed in a month.
- All the figures (24) in the document are to be organized in a uniform format and for that some funding has been previously provided by ASCE but no work has been performed yet. Elizabeth English stated that students had been hired to draft the figures but work has not yet commenced. The figures were expected to be completed by the middle or end of June 2005. Alternatives for having the figures drafted up were discussed and included hiring of architectural students at Colorado State University. Jomaa Ben-Hassine offered his assistance in case other options failed to pan out.
- The user review is to proceed in parallel with the drafting of the figures.
- TS inquired about the fall back position in case the contribution from the committed author wasn't received in a timely manner. LC replied that the author had completed a half of the work and we should allow 2 more weeks (May 6, 2005) otherwise LC will complete the missing portions of the Booklet.

6b. Report of Sub-Committees

I. Designing for Wind-Induced Motion of Tall Buildings

A newly re-constituted sub-committee, co-sponsored by the Tall Buildings Committee, chaired by Roy Denoon (RD) will proceed with the work. RD reported and members discussed the following:

- All material developed by the previous sub-committee will be collected from N. Isyumov (NI) and Jon Galsworthy (JG).

- A lot of data has been recently gathered from experiments and simulations.
- The previously developed material and new data will be used to develop new criteria for wind-induced motion comfort in tall buildings.
- Anyone interested in contributing to the activities of the sub-committee should contact RD.

II. Computer-Aided Wind Engineering

Members: Muhammad R. Hajj, Horia Hangan, Gregory A. Kopp (Chair), Marc L. Levitan, T. Stathopoulos and Timothy M. Whalen.

GK reported on the activities of the Sub-Committee.

- The meeting time for the Computer-Aided Wind Engineering (CWE) Sub-committee was parallel to one of the Congress wind sessions. Only TS and GK were present for the meeting of the sub-committee.
- A special issue of the Journal of Structural Engineering is being planned based on CWE related papers that will be presented at the 10th America's Conference on Wind Engineering (10ACWE) to be held in Baton Rouge, LA in June 2005. GK is going to solicit the authors for writing papers for the Journal and approximately 5 to 8 paper submissions were expected. EE reported that approximately 10 – 20 papers related to computer-aided wind engineering had been submitted for the 10ACWE. EE also stated that the plenary session papers and selected papers from the 10ACWE were to be published in the Journal of Wind Engineering and Industrial Aerodynamics.
- The sub-committee is also contemplating putting together guidelines for using Computational Fluid Dynamics.
- People interested in joining the sub-committee should contact GK.

At this point some members of the Tall Buildings Committee joined the WEC meeting. TS extended a formal welcome to all members of the Tall Buildings Committee.

7. Update by Associate Editor, ASCE Journal of Structural Engineering

K. Gurley (KG) was not present but sent a report to TS. During the last year, wind engineering-related papers submitted for publication in the ASCE Journal of Structural Engineering (JSE) were as follows:

Total number of submitted papers	15
Number of accepted papers	8
Number of rejected papers	4
Total number of papers under review	3

- TS reported that there were some delays in transmission of papers from ASCE to KG and he (TS) raised this issue with TAC.

- KG needs a list of WEC members' areas of expertise for ease in selection of potential reviewers. WEC members and visitors are encouraged to send a short email listing their areas of interest to KG at kgurl@ce.ufl.edu.

8. Wind Effects Sessions During ASCE Meetings

WEC Sponsored/Co-sponsored Sessions Proposed for 2005 Structures Congress

The following sessions had been proposed for the 2005 Structures Congress:

1. "Wind Engineering Education", Mark Levitan and L. Cochran
2. "Vortex-Induced Response of Long-Span Bridges", P. King and P. Irwin*
3. "Wind Load Provisions for Low-Rise Buildings", G. Kopp and T. Stathopoulos

* Co-sponsored by Aerospace Division, Aerodynamics Committee

Only session number 1 was approved. The proposers of session number 2 received no acknowledgement from ASCE about the decision on their session but it has been re-submitted for the 2006 Structures Congress. Proposers of session number 3 above received an acknowledgement of their submission and were offered to put 1 paper from their proposed session into another session. This offer was not accepted and this session will also be resubmitted for the 2006 Structures Congress. The deadline for submission of session proposals and abstracts is May 23, 2005. Another wind engineering related session titled "Wind Effects on Tall Buildings" was approved for the Congress but was not sponsored by the WEC.

WEC Sponsored/Co-sponsored Sessions Proposed for 2006 Structures Congress in St. Louis

1. "Vortex-Induced Response of Long-Span Bridges", P. King and P. Irwin*
2. "Wind Load Provisions for Low-Rise Buildings", G. Kopp and T. Stathopoulos
3. "Wind Effects on Pneumatic/Inflated Structures", Mehdi Zarghamee
4. "Tornado and Microburst Induced Effects on Structures", Partha Sarkar and Chris Letchford
5. "Icing Problems on Buildings" *, Peter Irwin
6. "Use of Damping Systems to Reduce Wind Response", Jon Galsworthy and Peter Irwin
7. "Design of Storm Shelters and Shutters*", Mark Levitan and Russell Carter
8. "Reliability of Wind Loading Studies", Andrew Allsop and Mehdi Zarghamee
9. "Computational Wind Engineering"* , Ted Stathopoulos and Nigel Wright

* Co-sponsored by Aerospace Division, Aerodynamics Committee

Session proposals are due on May 23, 2005. For more details visit the conference website at www.asce.org/conferences/structures2006. The conference website has provisions to link committee affiliation with the session proposals. TS requested that, for tracking purposes, he be CC'd on all session proposals for the 2006 Structures Congress in St. Louis. EE stated that if the session proposer writes a full abstract for the session and a couple of sentences per expected speaker then abstracts by individual authors do not require to be submitted separately.

9. Support for Wind Engineering - Report on Congressional Action, ASCE-7 and AAWE

TS stated that the link with the ASCE-7 wind loads task committee will need to be reestablished due to the passing of Jim Delahay.

EE provided an update on AAWE activities related to the 10th ACWE. In brief:

- ML along with other organizing committee members were hard at work organizing the conference.
- The conference will commence on Wednesday, June 1, 2005 afternoon and conclude on Saturday, June 4, 2005 noon. A number of workshops were being organized for Tuesday, May 31, 2005.
- Approximately 200 papers have been submitted out of which 150 are to be presented and others will be posters. There are several professional tracks that are also being organized.
- AAWE members will receive a discounted registration rate to the conference.
- Chris Letchford is chairing the awards committee and the results of the awards will be revealed during the awards ceremony at the conference.

With regards to AAWE congressional activities it was reported that the Wind Hazards Reduction Program has passed through congress and the senate and has been signed by the President. It is now in the appropriations process.

A meeting of AAWE membership assembly will be held at the 10ACWE and will discuss, among other things, the issue of membership representation of South and Central America countries in IAWE as well.

10. Interaction of Wind Effects Committee with other ASCE Committees

In addition to our strong relationship with the Aerodynamics committee of ASD, an effort is being made to work more closely with the Tall Buildings Committee since there is common membership between the two committees. As noted earlier, members of the Tall Buildings Committee joined the WEC meeting after their own meeting adjourned.

During the Aerodynamics Committee meeting a possible merger of the WEC and Aerodynamics Committee was discussed. The Chair of the Aerodynamics Committee, Richard Aynsley (RA) stated that the Aerodynamics Committee does not link completely

with the activities of the Aerospace Division but is more related to wind-related structural and environmental effects. However, RA noted that the Aerodynamics Committee looks at several issues beyond wind loads on buildings, such as pedestrian comfort, so combination of both committees would not be very productive. RA also stated that there might be a need to bring the Aerodynamics Committee under the SEI umbrella, in which case collaboration with WEC activities should be revisited. Jon Peterka stated that if the Aerodynamics Committee is dissolved then SEI will have to accept the non-structural aspects of the modified WEC. A joint meeting of the WEC and the Aerodynamics Committee was also proposed.

11. Domestic and Foreign Wind Engineering Activities of Interest to WEC

Report on Other Wind Engineering Conferences

The following wind engineering related conferences are to be held in the next couple of years:

1. European & African Conference on Wind Engineering, Prague, July 11-15, 2005
2. Asia Pacific Conference on Wind Engineering, Seoul, September 2005
3. Australasian Society, January 2006, New Zealand
4. Indian Society of Wind Engineering, January 5-7, 2006
5. Asia Pacific Wind Workshop, Hong Kong, December 2005
6. UJNR Workshop, Japan, May 2005
7. Conference on Ventilation, Japan, December 2005
8. International Conference on Wind Engineering, Cairnes, Australia, July 2007
9. ICBEST, Bath, 2007
10. CWE, Yokohama, Japan, July 16-19, 2006. Abstracts are due on September 30, 2005. Four-page papers are due on March 31, 2006. Full papers are to be published in the Journal on Wind Engineering and Industrial Aerodynamics and will be selected after the conference.

Yukio Tamura stated that the ISO 4350 is under committee draft and comments are due by July 7, 2005. Anyone interested in obtaining a draft should contact Bill Melbourne for details.

12. Current and Possible Future Activities for Wind Effects Committee

- i. Jomaa Ben-Hassine (JB) established and developed the WEC website www.seiwec.net and provided statistics on the website. Jomaa has done an outstanding job and the WEC has been congratulated for this site. TS invited all members to visit the site, where information of interest to the WEC will be posted. TS and all WEC members expressed their deep thanks to JB for his contributions.
- ii. Danielle Rickard (drickard@asce.org) is ASCE's program coordinator for continuing education and is soliciting ideas for new topics for short courses.

- iii. Vikas Verma reported that material developed by the WEC should be presented to local chapters of the SEI. SEI should also help out with the activities of the local chapters.

13. Other Business

None

14. Next Meeting Date

The SEI/ASCE 2006 Structures Congress will be held, in St. Louis, from 18-21 May (Thursday-Sunday). It was tentatively suggested that the next meeting of the committee be held on Friday, May 19, 2006 from 6 – 9 pm.

15. Adjournment

The meeting was adjourned at 9:05 p.m.

Minutes respectfully submitted by
Anurag Jain, Secretary WEC.