

Jake Pauls' Public Comments to National Construction Safety Team Advisory Committee Meeting at NIST, November 22, 2004

There are three items to address:

1. Objection to Closed Meeting. Along with others protesting the closed meeting, I add my strong objections. For an agency that will need all the public support it can get for its future survival, let alone its growth, NIST officials should not be cutting off public participation by insisting on a closed committee meeting, especially for the reasons given.

Noting the reasons given in the Federal Register (Vol. 69, No. 214 / Friday, November 5, 2004), what is the relevance of “criminal cases or lawsuits” as NCSTAC findings are already exempted from use in such cases? What “data collection” might be frustrated, especially as NIST has previously reported that it has all the information it needs to do its work on the WTC investigation? Regarding issuing of subpoenas, NIST has not issued any and, apparently, is disinclined to use its subpoena power in any event.

Also, according to Jim Dwyer’s article in the New York Times, 11/12/04, Mat Heyman, NIST's chief of staff, claimed there are “concerns that discussions about changes in construction codes could prematurely influence the building industry and the people who write the codes. . . . ‘We are still literally formulating our possible recommendations regarding improvements in standards, codes and practices,’ Mr. Heyman said.” This is a ludicrous reason to close the meeting. The development of improvements to standards, codes and practices is a very public process in the USA. If NIST staff were more involved with it, they would realize that there are advantages to giving those involved with the process as much lead time as possible on all ideas for changes. This is especially true in the case of the new NFPA High-Rise Building Safety Advisory Committee on which I serve and which was formed, in part, to help expedite the processing of proposals related to current NCSTAC investigations. The NFPA committee meets in mid December.

2. Opposition by NIST Representative, on NFPA Means of Egress Technical Committee, to Proposed Increase in Minimum Stairway Width for Large-Population, High-Rise Buildings. At a meeting of the NFPA Technical Committee in late October, NIST’s new representative voted against acceptance of a public proposal increasing the minimum width of stairways from 44 inches to 56 inches (giving 48 inches clear between handrails) if serving more than 2,000 persons occupant load. The NIST representative joined representatives for the General Services Administration and the National Association of Home Builders—in a minority opposing approval of the change which is now being balloted formally and which will require a negative ballot justification from NIST if its representative continues to oppose the change.

On the assumption that the NIST representative has an instructed vote, what reason is NIST going to give for a negative ballot on the improved minimum stair width—which only begins to affect stair width for buildings over about 14 stories in height and having very large floor areas? Is this related to NIST’s failure to do a reasonable, detailed investigation of counterflow and other aspects of exit stairway use in the World Trade Center?

Are there even less respectable reasons; for example, a desire not to annoy one of its research funders, the General Services Administration, or one of the powerful industry organizations, the Building Owners and Managers Association, which may have some influence with the US Department of Commerce under which NIST is an agency? (The change to a wider minimum corrects old deficiencies in code requirements going back to a 1935 report of the Department of Commerce; research-based recommendations for a more-appropriate minimum width go back at least two decades to a time that NIST was de-emphasizing research on human factors in building safety including crowd use of stairways.)

3. Additional Criticism of NIST's Investigation of Human Behavior and Evacuation Issues in World Trade Center Disaster. At its October meeting, the NCSTAC received criticisms from me (along with many questions) regarding these issues. Since then, I have also received comments from peers who have asked me to present their views to the NCSTAC. Like me, peers are concerned that NIST staff has not done—and likely will be unable to complete—a thorough study of survey data NIST has amassed on human behavior and evacuation issues. Those data should be made available for further scientific study by other qualified, experienced researchers. The data should not be destroyed! (There has already been too much destruction of key evidence such as structural steel.)

Moreover, in its treatment of WTC evacuation modeling, NIST staff should be reporting—in detail—input and output information as well as identifying the models used. This is especially important in estimates of evacuation time with larger populations than was the case on 9/11; the times presented thus far by NIST are highly questionable.

Like me, other researchers object to NIST's failure to present baseline information on the WTC egress system; compare what staff did for example with other aspects of the WTC.

Researchers also want a better treatment of behavior of, and conditions faced by, nonsurvivors. What about the persons who fell from the building? What about the group of people reported (at the October NCSTAC meeting) descending one of Tower Two's stairways just before collapse? Where is the analysis of the possible availability—later—of the stairway that was usable in the impact area early in the incident? This relates, again, to the matter of exit remoteness on which NIST has done a dreadful job in the investigation reported thus far.

There is a strong sense that the objectives of Project 7 have not been realized either as an independent aspect of the incident or as an aspect closely related to other issues such as impact damage. Where is the damage analysis for the exit stairways, especially for the one that was usable for a portion of the post-impact period in Tower Two?

NIST is supposed to be doing an investigation, as distinguished from a series of research studies or even an integrated research study. NIST has been empowered to do such an investigation. Has it chosen not to do one? If so, why?

On human behavior and evacuation issues, NIST and its current consultants and advisors do not have a monopoly of research and investigative expertise. NIST should be prepared to share amassed evidence with others who can extend the work. The Advisory Committee should be prepared to recommend this and insist on it being done.