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Dear Federal Advisory Committee Member:

As you know, this November 22, 2004 meeting to discuss your recommendations for proposed building code changes has been closed to the public, despite your own unanimous vote at the last meeting and NIST's own attorney's public advice that there were no legal grounds on which to close it.

As a result, no 9/11 family members, none of the Skyscraper Safety Campaign's (SSC) technical advisers, no members of the media and no interested members of the public will witness or inform your discussions. The leadership of the Skyscraper Safety Campaign has protested strongly but we have not prevailed and are continuing to receive legal advice as a result.

These few pages represent the SSC's efforts to impact upon your most critically important discussions today.

Listed below are some of the recommendations the SSC thinks you should consider. Many of these will not be on your agenda today. That is because many of the issues critical to this investigation have, for whatever reason, been ignored by NIST. Witnesses have been ignored, documents you have not seen have been selectively quoted from, and above all, crucial questions have not been asked and therefore have not been answered.

As a result, the conclusions that NIST began to promulgate at your last meeting, are to say the least, debatable, particularly in the absence of the detailed scientific data used to support them. As a further result, we believe that the recommendations likely to be discussed today will be limited and confined—which is in stark contradiction to the mandate of the NIST Investigation.

With the suggestions listed below, we are asking you to raise the horizons of your investigation. 9/11, we are constantly told, changed everything; everything it seems except the "failure of imagination" of our government and its agencies which the 9/11 Commission ultimately blamed for the loss of life that day.

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We are asking you to use your imagination as you read and hopefully consider the suggestions for code changes listed below to be a valid and appropriate part of your recommendations. As you do so, please bear in mind the following:

**1. Buildings are clearly terrorists' weapons of choice.** For decades, it has been clear that terrorists often rely on an initiating event, like an aircraft or a truck bomb, to target the inherent flaws & release the latent destructive energy of buildings—to, in effect, magnify the impact of the initial explosion. On U.S. soil alone, the pattern has been clear for more than a decade. The first attack on the Twin Towers in February 1993 attempted this; the April 1995 attack on the Alfred P Murrah building in Oklahoma City achieved it, as, of course, did the 9/11 attacks at both the Pentagon and the Twin Towers.

**2. In light of this knowledge, even if you do not believe non-compliance with New York City and State codes had a bearing on the collapse of these buildings and the loss of life on 9/11, *does it make sense for any agency, including the government, to be immune from codes?*** Terrorists seek vulnerabilities, which is one reason the Twin Towers were attacked. Non-compliance with codes advertises a possible or even probable vulnerability among what remains a key target for terrorists: government buildings and those constructed by “Authorities” such as the Port Authority of NY&NJ.

**In light of the above, please consider the following as possible NIST code-related recommendations:**

## **BUILDING, FIRE AND LIFE SAFETY CODES**

Should any building in this country be above the law?

Should anyone or anything be immune from local building, fire and life safety codes?

Just as crucially, should any agency be allowed to claim to be in compliance with such codes, as the Port Authority did in the case of the Twin Towers, if they have not been subjected to the jurisdiction of the local code enforcing authorities? It is the height of irony that the Port Authority and the buildings replacing those at the World Trade Center complex in Manhattan will be immune from whatever building code changes are recommended by NIST or enacted by the various local code bodies.

US government terrorist experts tell us that a future attack is not a matter of “if” but a matter of “when.” Bearing this truth in mind, shouldn't all model building, fire and life safety codes have sections on terrorism, or be completely rewritten with terrorism in mind?

## **STRUCTURE**

Please discuss the following:

Banning the use of bar joist floors as primary members in high-rise and super high-rise buildings. (Even if you do not consider their strength or robustness an issue, we believe their small mass and difficulty of insulation against fire to be a serious concern. In

addition, the difficulty of maintaining spray-on insulation on these members was an issue on 9/11/01 and remains one today.)

Banning the use of shaft wall partitions in central cores; the compulsory use of reinforced masonry, brick and other blast and impact resistant materials in the central cores of high-rise buildings.

Special structural provisions for super high-rise buildings.

## **FIRE PROTECTION INSULATION**

Increase the fire rating requirements for high-rise and super high-rise buildings.

Minimum density, cohesion, adhesion and blast-resistant requirements for insulation in high-rise buildings.

Special and on-going inspection regimes of fire insulation by fire departments and code enforcement authorities.

Issuing building industry advisory on the vulnerability of steel structures with inadequately or unevenly applied fire protection insulation.

## **EGRESS**

An increase in exit stairwell capacity for high-rise and super high-rise buildings.

A minimum nominal width of 56 inches (resulting in a clear width of at least 48 inches between handrails) for all exit stairwells. This might also entail provision of wider or additional exit discharge doors.

A significant, meaningful improvement in remoteness requirements for all stairwells.

Hatch latches on elevators to be banned in commercial office buildings; on 9/11 hatches resulted in the deaths of nearly 200 persons trapped in elevators, some of which were only inches from the lobby floors. Residential use should also be restricted.

Minimum levels of elevator capacity to be available at any one time; say 90% of full capacity.

Expected minimum evacuation time for all high-rise buildings to be determined and posted; occupants need to be informed of this so their expectations are reasonable and, if not acceptable, other options should be developed.

Other improvements to exit stairways to improve their usability, efficiency and safety: these include lighting, marking and handrails—in existing as well as new high-rise buildings.

Capabilities of all occupants to be taken into account in design and operation; specialized equipment—such as stair descent devices—should be provided for those unable to use stairs and training should include effective, reasonably safe use of such devices.

Increased redundancy of exit discharge routes so that evacuees can get out of exit stairwells and clear of a building in a variety of emergency scenarios.

Exit stairway use, especially near discharge levels, to be monitored—via video—at control positions and such video to be automatically recorded for post-incident and post-drill analysis.

Utilize building-based and other communication technology, including mobile-phone voice mail, text messages and wireless Internet, to inform occupants of emergency incidents and what evacuation or refuge procedures are appropriate.

## **EMERGENCY RESPONSE**

Incident Command Systems to be mandatory; NYC had no incident command system in place on 9/11/01.

Plans, including structural drawings of all buildings within their jurisdiction, to be available to firefighters.

Emergency service radios must function adequately in all structures and be field tested and licensed by a regulatory body.

## **NIST ROLE IN BUILDING, FIRE AND LIFE SAFETY CODE DEVELOPMENT**

The construction, fire protection and life safety issues arising from the World Trade Center attack, the Station Nightclub fire in Rhode Island and other incidents demonstrate graphically and tragically the need for a supported national mechanism to produce scientific input for building, fire and life-safety code development. NIST should prove, in its code recommendations, its will to tackle the serious issues listed above or admit openly this is a role it does not want to take on. Others in the private sector or public sector or both could then take on this crucial role.

Thank you for your attention.

The Skyscraper Safety Campaign