

World Trade Center 7 building did not collapse due to fire: Report

Ian Harvey May 20, 2020



A group of engineers and architects is demanding the American National Institute of Standards and Technology (NIST) retract and correct a 2008 report that concluded one of three World Trade Center buildings collapsed because fire weakened the steel supporting it in the 9/11 terrorist attacks.

The Architects & Engineers for 9/11 Truth (AE911T) has formally filed a Request for Correction with the NIST following a new and detailed four-year analysis by a team at the University of Alaska Fairbanks (UAF).

It says the World Trade Center (WTC) building 7 collapse was a “near-simultaneous failure of every column in the building” and dismissed the NIST finding that heat from the fire caused beams to “walk off” their moorings.

Sept. 11, 2001 is the tragedy of when two hijacked planes hit the WTC 1 and WTC 2 towers sending debris tumbling onto WTC 7. The NIST claimed that embers ignited a fire which then caused the 47-storey building to collapse on itself at 5:20 p.m., hours after the initial incident that morning.

“We have filed a request for correction because the NIST report is wrong,” says Ted Walter, spokesperson for AE911T, which is a group of 3,000 engineers, scientists and architects, including more than a dozen Canadians ones, that paid US\$316,000 for the study.

“From an engineering perspective it is imperative to understand how and why this building came down under design load conditions,” said Walter.

The study says NIST made some fundamental errors in how engineers estimated the rigidity of the outside building frame and that the heat generated by the fire did not trigger “thermal movements” at a critical base plate support.

Further, the group, which includes families of those killed, asserts that the investigation is flawed and that the conclusions as to what happened must be based on “science and engineering” and accept that controlled demolition is a plausible cause.

For expediency and because it was not hit by a plane, the study looked only at WTC 7 not the other two but AE911T has long claimed all three were subject to something beyond heat induced failure.

“The report notes that the outside frame was more flexible than the inside framing which is where the elevator shafts were,” says McMaster University professor emeritus of civil engineering, Robert Korol, a fellow of the Canadian Society of Civil Engineering who is also one of two peers who reviewed the UAF study.

“Under the conditions described, the displacement of the outside steel would have been only one inch, not the 6.25 NIST claimed and not enough to cause failure.”

Further, he says, the debris from WTC 1 which fell 943 feet to WTC 7 did not attain sufficient mass to cause structural damage to the steel in that building.

The bottom line, he says, is that the NIST report is flawed and of no value to future engineering or architectural learning.

The Alaska report adds new momentum to long standing claims by the AE911T that all three of the buildings should not have collapsed in the spectacular and deadly manner they did. Further, and Korol underlines this, there was nothing in the offices beyond basic desks, chairs, computers and paper that would be of such a combustible nature so as to feed a fire and raise the temperature to above 1,400 degrees Celsius and melt the steel structure.

“We don’t even know if the steel was fireproofed,” says Korol.

The group makes no assertion as to why it may have been a “controlled demolition” and says its only interest is in ensuring that there’s no need to rethink the structural steel design of highrises because the design was not at fault.

UAF civil engineering professor Leroy Hulsey, principal investigator, his research assistants, Feng Xiao, now an associate professor at Nanjing University of Science and Technology and Zhili Quan, now a bridge engineer for the South Carolina Department of Transportation, found that the design standard of the building was not exceeded by the fire and that simultaneous and controlled demolition caused the structural steel to fail.

“Fires could not have caused weakening of displacement of structural members capable of initiating any of the hypothetical local failures alleged to have triggered the total collapse of the building,” the report states. “Nor could any local failures, even if they had occurred, have triggered a sequence of failures that would have resulted in the observed total collapse.”

The NIST report held that lateral support beams buckled because of thermal expansion from the fire and because they had “nowhere to go” and thus deformed and weakened the structural integrity. Other failures were triggered when joists and means “walked off” their connections, NIST found.

It was also the first NIST finding of a highrise collapse from thermal deformation caused by fire which the 125-page Alaska report disputes.

It presents arguments showing it was a simultaneous global failure not a localized failure causing a domino effect.

Hulsey et al argue that the collapse was straight down in a pancake fashion with about 2.25 to 2.5 seconds for free fall acceleration.

“In a typical building collapse (given a localized structural steel failure) WTC 7 would be expected to experience a combination of axial rotation and bending of members, resulting in a disjointed, asymmetrical collapse at less than free-fall acceleration,” the report states.

The study team undertook extensive computer and physical modelling, paying particular attention to the area around Column 79 which had been identified as the critical juncture of failure.

Their conclusion is that Columns 79, 80, and 81 did not fail at the lower floors of the building and were not subjected to heat above floor 30 because there were no fires there.

Even if they did, they would not trigger a horizontal progression of core column failures and the team was unable to find any other plausible cause for the progressive sequence of failures.
