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Dear Head of Department of Engineering Cambridge University,

One has had the opportunity to evaluate the paper:

Progressive Collapse of the World Trade Centre: a Simple Analysis by Dr K. A. Seffen

I formally request you have the paper corrected without delay because it defies several key laws of physics, i.e. conservation of momentum, conservation of energy and how the heck Dr Seffen can claim all the floors offered the same flimsy resistance when each had different construction characteristics is totally beyond any logic, the lower floor core columns were over double the thickness compared to the upper floors.

(For video of the World Trade Centre Construction please go to:
http://video.google.co.uk/videoplay?docid=4744744660064858887)

The Seffen paper brings the whole Engineering Department at Cambridge into disrepute, because basically it claims a falling body can fall through the path of most resistance; destroy to dust and rubble everything below that falling body and the falling body remains perfectly intact until after all of the stronger lower & much heavier structure has been totally annihilated to dust and rubble.

Basically as an analogy, the paper claims that a small car can ram into the back of a larger bus, destroy the larger bus to dust and rubble whist the smaller car stays perfectly intact until after it has destroyed the much larger bus.

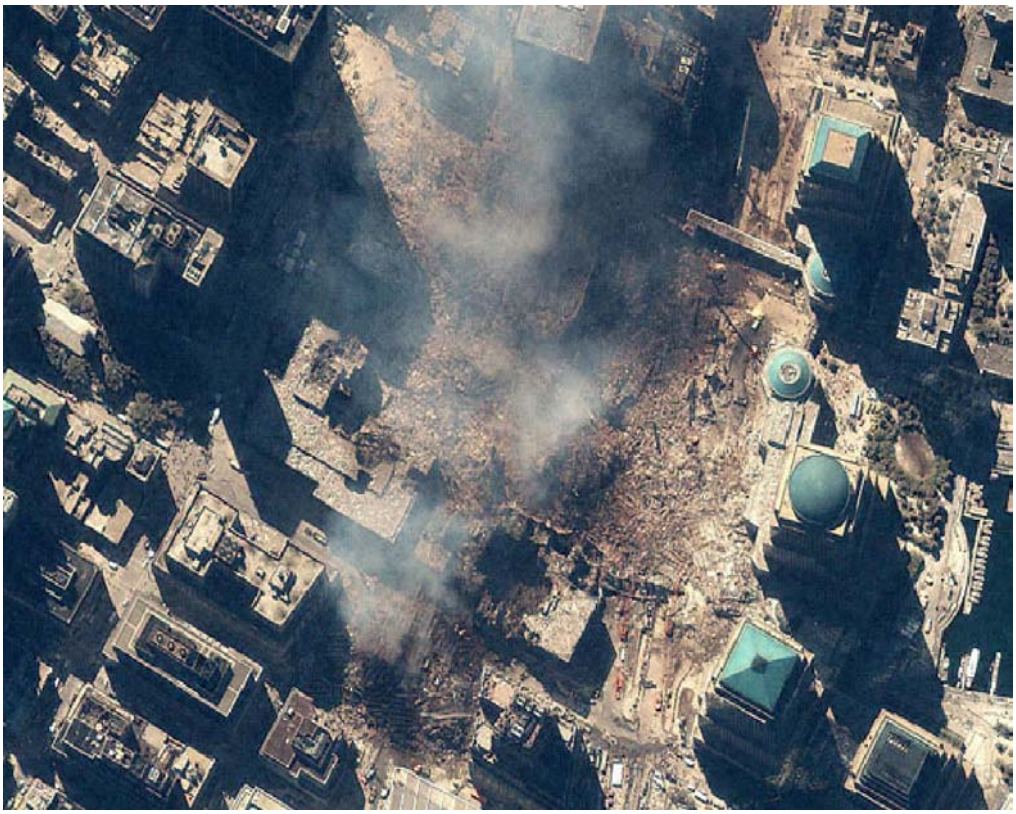
Not only that but if one observed the actual collapse sequence the top portion did not crush the lower portion all the way down as Dr Seffen claims, rather there was no power driver available to crush the lower 80+ floors as the top portion was disintegrated first.

Toppling power driver at start of obliteration sequence

Do you see any power driver left?

If as the images and videos show, debris is being expelled horizontally out of the building footprint, how could that ejected mass be power driving at the same time, such a claim is totally ludicrous and defies all logic or honest scientific integrity.

Also, where are the stacks of floors if indeed the Seffen paper has any bearing on reality in its current format?



(The day after 911 2001 prior to cleanup)

And what about the 300,000 tonnes of concrete, why does the paper not disclose where the energy came from to convert the 300,000 tonnes of reinforced concrete and their steel floor pans into dust and spread it all over New York? How can one possibly ignore the reinforced concrete and floor pan when calculating a value for P*?

What turned the 300,000 tonnes of concrete to dust?

The constant loading at the start of the deformation has been neglected on the basis that it is a small contribution to the deformation, yet it was the longest timescale involved. Is it any wonder the paper is totally ludicrous?

To quote a trivial example of such a deformation, a plastic shopping bag becomes taut for most loads, but when the load gets too large, it does not snap immediately. It creeps for a while under that constant load, before giving way to a large deformation (After the creeping has happened the load required to cause this large deformation is smaller than that required to cause the creeping itself), and eventually snapping. In this case, Seffen's P* corresponds to the AVERAGE load required to cause the large deformation AFTER creeping has happened.

In other words, if you try loading the plastic bag with P* while it is UNdamaged (i.e. before creeping), **then you will NOT get the large deformation!**

This sort of argument applies to objects in tension, compression, and buckling. It is true for EACH floor of the WTC.

Can we really make the false assumption that P* is the same for every floor?

Absolutely NOT! Period! It is much larger for the lower floors than for the upper ones. I also bet that he has fiddled the value of P*, because basically his fall acceleration is proportional to (mg-P*)

The Seffen analysis is based on the columns being a hollow box construction. What about cross bracing?

The Seffen paper claims that burning jet fuel in air can weaken ALL the steel girders evenly (hence symmetrical collapse due to gravity of all columns perfectly), yet both ends of these outer and inner massive columns were outside the fire zone to differing degrees hence heat would have conducted up and down very efficiently at different rates, and many columns were not even subjected to any significant fire. Are we really expected to believe that fire can weaken steel evenly despite the core columns conducting heat efficiently at varying rates away from varied regions of temperature?

The analysis relies very heavily on an assumption of no mass-loss from the WTC during the fall. Yet, the videos and images clearly show that heavy girders were laterally ejected (Not to mention the loss of 300,000 tonnes of concrete and other stuff)?

When an impacted floor begins to fall, it does not go from zero to free-fall speed instantaneously! There is a delay while it accelerates up to that speed. This transition region WILL make a significant difference and that point alone shows the paper is fundamentally flawed.

Last, but not least, Dr Seffen admits toward the end that the analysis is simplified, yet he makes the claim that free-fall speed is possible, without making any attempt whatsoever to say how these neglected assumptions are likely to affect the result. In other words, he has absolutely no right to make his ludicrous claims.

Now Sir, what are you going to do to correct this ludicrous paper and protect the reputation of British Universities in particular Cambridge University – and when?

Kind Regards

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