

Re: Why the planes did not crumple

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- *From:* Mark Smith <emarksmi@xxxxxxxxxxx>
 - *Date:* Sat, 10 Jun 2006 02:40:26 GMT
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This is probably a waste of breath, but I'm going to do it anyway.

You obviously don't investigate very many airplane crashes. I've done a bunch. The issue here is one of mass and velocity. It is very easy for a lot of mass concentrated over a small area to punch through a much harder material. If this weren't the case, you'd never be able to destroy a main battle tank. It is a fairly simple matter to concentrate a liquified metal over a very small area to punch through armor as if it wasn't there.

So, in the case of our poor world trade center, a fully loaded 767 about 30 minutes after takeoff is about 350,000 pounds. The total surface area of the front wing spar plus the surface area of the first major structural pressure bulkhead in the fuselage is about 39,000 inches. Assuming an impact speed of about 500 MPH (and I've heard estimates of up to 600 MPH), you are talking about an impact force on the steel of about 80 KSI. The structural steel used in the WTC was columular plate with yeild strengths that varied between 30 and 100 KSI. The thickness of the plate in the impact zones varied from 1/4 inch to 5/8 inch thick which gives you a yeild strength perpendicular to the wall of 7.5 KSI to 62.5 KSI.

So, even at the strongest point of the impact zone, the impact forces were nearly 133% of the yeild strength of the structure. It didn't matter what the material that hit the structure was. If you hit the structure with ANYTHING that produced that much energy, it would have gone right through the outer wall.

OK. We are going to massively simplify things here, but you have the pieces of the aircraft penetrating the first wall with an excess force of anywhere from 72.5 KSI to 17.5 KSI. Unfortunately, once you rupture the tanks, your mass is going to drop very rapidly as the fuel combusts and the overall force per unit area will drop as it spreads out. An empty 767 is only about 175,000 pounds and our pieces are going to stop flying as a cohesive structure after passing through the wall and the fireball. With our total mass dropping by a bit over half and our surface area probably at least tripling, that means that we are looking at possible forces of perhaps 1/6 the initial impact forces as the aircraft strikes the core and the other side of the

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building. Note that I'm ignoring the walls and flooring that we are passing through as well which will further bleed off energy. The bottom line is that the MAXIMUM possible forces available to try to punch through the exit wall are only about 3–12 KSI. Only the very highest energy debris will puncture the thinnest portion of the exit wall (which is exactly what was seen).

So, the bottom line is that your attempt at forensics isn't worth the electrons it was sent with. A fully loaded 767 easily penetrates the side of the WTC and most of the aircraft remains fully inside the building.

Please, leave the engineering to engineers.

On 8 Jun 2006 07:00:49 -0700, u2r2h@xxxxxxx wrote:

<http://www.911closeup.com/index.shtml?ID=79>

WTC Forensics

November 11 2005

Gerard Holmgren

Observe that we have a hole in the tower which is approximately the size and shape of a 767, indicating that the alleged large passenger jet punched decisively through the building. Also observe that we have no wreckage significant enough to be identifiable.

The combination of these two factors is a forensic proof that it can not have been a plane of that size, as I shall explain shortly.

Before that comes another forensic proof. Note that the shape of the hole indicates that the wings punched through the building, making more or less a shape of themselves.

When you sit in a passenger jet and look out the window to the wings, what do you see ? A light aluminium structure which is segmented into panels and movable flaps. Hardly a cutting blade or battering ram, except against light materials.

The WTC was constructed of heavy construction steel, built to withstand hurricanes. We are asked to believe that such flimsy aluminium wings

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sliced through this structure decisively enough to make a cartoon type shape of themselves. Steel cutting blades are generally made from cobalt or tungsten and are either sharpened to precision or toothed.

If unsharpened, untoothed aluminium wings, with moveable panels could slice through construction steel like this, then blades for cutting steel would be a whole lot cheaper and less demanding of precision manufacture than what they are. This alone is enough to show that the 767 type shape in the wall, including an almost exact fit for the wings is an absurdity.

But lets just suppose that this was possible. That a plane could decisively punch through a building in this way. If so, then the wreckage can't just disappear into effectively nothing. Its simple conservation of energy. When a stronger object strikes a weaker object or vice versa, there are three possible outcomes.

The struck object is completely destroyed or moved out of the way, leaving the striking object with no damage and only loss of velocity to show for the collision. The striking object is completely destroyed or bounces off, leaving the struck object unmoved and undamaged. The destructive energy of the collision is shared in some balance between the struck object and the striking object. Most collisions will give this result although the destruction may well be much more heavily weighted towards one or the other, leaving one object with the majority of the damage.

What you can't have is a striking object destroying itself against the same object that its decisively punching through.

Here's some every day examples.

1a. Striking object negligibly damaged, struck object destroyed.

An arrow shot through a piece of carboard. The impacted part of the carboard is decisively destroyed making a hole roughly the shape of the arrow, and the arrow passes through, losing velocity and comes to rest undamaged.

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1 b Striking object negligibly damaged struck object moved.

A bowling ball hitting a bowling pin. The pin is knocked clear and the bowling ball slows a little as a result.

2a Striking object destroyed, struck object unmoved and undamaged.

A glass thrown against a wall. The glass smashes, the wall is unmoved and undamaged.

2b Striking object bounces off, struck object undamaged

A tennis ball thrown against a wall and bouncing off.

Now note what happens if the tennis ball breaks as it hits the wall. Instead of bouncing, it will now flop pretty much where it is. It can't break *and* bounce off as it did before. If you add energy to one part of the process, you have to subtract it from somewhere else. Conservation of energy.

Which brings us to

3 Destruction shared between both objects.

A car colliding with a brick garden fence. Both objects suffer some damage and the car pretty much stops. The possible graduations of how the damage is shared are infinite, but what you cannot have is the car decisively punching through the fence leaving a cartoon type shape of itself, completely going through and *then* suddenly disintegrating beyond recognition.

If the car disintegrates itself to almost nothing, it will be because it hits a stronger surface which pushes most of the energy of the

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collision back into the car. So you might get a car reduced to confetti, but the surface it struck will be negligibly damaged/moved.

Or you might get a car bursting through a barrier of stretched cardboard, easily punching a shape of itself, but in this case you won't get a confetti car. It will emerge the other side negligibly damaged. Or you might get a wall of roughly equal strength to the car, in which case, you get a damaged but still basically intact car, coming to rest, probably part way through a wall which has been significantly damaged but doesn't have a cartoon type shape of the car punched neatly through it.

Think of the cartoon scene, where the cat chases the mouse through a mincer. The cat emerges from the other side still running, not realizing that it's now made of a jigsaw type shape. It keeps running for a while, and then with a look of resignation realizes that it's been cut up, stops and collapses into a pile of little jigsaw type pieces.

Why do small children find this funny? Because even at that age, they know that what they've seen is impossible.

In real life, the cat either

Gets immediately cut into pieces and ceases all co-ordinated movement as a single object, and doesn't damage the blades or bursts through the mincer blades, breaking them or mangles itself, stopping almost immediately and also causing significant damage to the blades.

So what we asked to believe at the WTC is a Tom and Jerry cartoon.

What would happen in real life is

the plane would smash itself to pieces against the building, doing little damage to the building and the wreckage falling mostly to the street. or The plane would pass through the wall making a cartoon type shape of itself (heh! Those sturdy aluminium cutting blades slicing through the flimsy construction steel of the building!) and come to

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rest, relatively intact. or You'd have a smashed up and scattered plane, still in large identifiable pieces some of it inside the building, some falling to the street below, and damage to the wall of some unpredictable configuration.

The latter option is what happened when the plane hit the Empire State building in 1945. Large pieces of the plane broke off and fell to the streets below, and the bulk of it stuck pretty much in the side of the building.

In the Sandia video, you see option 1 – the plane being reduced to almost nothing and the struck surface negligibly affected.

What is impossible is for the plane to punch neatly through the building leaving a cartoon type shape of itself and *then* disintegrate into nothing. If this were possible we'd find the following examples in everyday life.

You saw through a piece of wood. When you've finished you've got a neat cut, and the saw blade has completely disintegrated.

You swing a sledge hammer through a plasterboard wall. The wall is decisively punched through, and when the hammer emerges the other side, the head has disintegrated.

A tennis ball hits a racquet. The ball smashes through the strings, leaving a neat round hole, passes through and then disintegrates into tiny pieces after its passed through.

One last thing to look at. Suppose that we forget about the aluminum cutting blades problem, and suppose that the plane passed through decisively, relatively undamaged, thus obeying conservation of energy laws and then , being packed with explosives, blew up into pretty much nothing after passing through.

In this case, how does an explosion massive enough to disappear a 70 ton plane, have a negligible effect on the building inside which the

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explosion is taking place, leaving no damage other than that apparently caused by the entry of the plane ?

This problem is heightened by the following observation. If the plane passed decisively through the wall, then the plane is by definition the more robust of the two objects, having easily smashed aside the wall. But when the explosion goes off it totally disintegrates the stronger plane and yet somehow doesn't damage the comparatively flimsy building. Not possible.

Since the WTC was about 210 ft each side and the alleged plane about 160 ft, then with the plane completely inside the building, the extremities of the plane are less than a stones throw from the edges of the building. So any secondary explosion, powerful enough to disappear the plane should have also exacerbated the damage to the wall, where the plane passed through. If there had been, for a brief moment, a plane shaped hole, that should have been blasted bigger and differently shaped by the explosion which blew up the plane.

In fact it was this observation which finally laid to rest any lingering doubts I had about the Sth tower plane being a fake, after I looked at WF's site, way back.

As if that's not enough, there isn't room for a 767 to completely disappear inside the WTC. The total size of the building only allows about 50 ft to spare, and there's the problem of the core of the building. Nearly half of the plane would have still been hanging out when the nose hit the core and the plane started smashing itself up. Or if you want to make the absurd suggestion that it also easily smashed through the core, without even enough damage to the plane to disturb it's direction enough to mess the cartoon type shape of itself, then why doesn't it also pass through the other side of the building in a similar manner?

Lets see now... the plane effortlessly punches through the wall, the wings making a shape of themselves, effortlessly punches through the core, and then, with a few feet to spare, once its completely inside the building, puts the brakes on and then blows up into nothing, with the explosion miraculously causing no extra damage to the building.

This would also mean that those razor sharp aluminium wings which sliced so easily through the flimsy construction steel would have been merrily slicing away for about 100 ft into the building, slicing the building like a loaf of bread before the plane blew up. The slice then healed itself. Perhaps the explosion put it all back into place...

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This kind of thing might happen in cartoons and in the "minds" of people like Eastman, but it's notably absent from real life.

The alternative is to come to the shocking conclusion that CNN and the govt lied to us, by showing us an animation and passing it off as real. The idea that CNN and the govt might have lied (gasp !) is so shocking to the "minds" of people like Eastman, so offensive to their deep sense of patriotism that they prefer to believe that cartoons are real.