

ANALYSIS OF AN EXPLOSION AT WTC7

Objective

The following article seeks to pinpoint the exact time and location of the event that took place in the following video: <http://www.youtube.com/watch?v=CcRs1fv8i3I>. The results of which question the standing theory of how WTC7 collapsed.

The Location

I received a tip off that the exact location that this video was filmed was two blocks north of WTC7 on the cnr Park Place and West Broadway approximately 25 feet west of the intersection on the North side of the street. I initially sought to confirm this via Google Earth and what I found was a location that appeared to match.



Co-ordinates: 40° 42' 52" N 70° 00' 37" W

This was followed up by comparing the buildings in the video with those that appeared in other video's shot around WTC7. This video <http://www.youtube.com/watch?v=CwjmgkijwvQ> was filmed just prior to the collapse of WTC7 and includes image of the same building as in the explosion video, in fact it is filmed just around the corner.



Now that we have established where, let's establish when.

Establishing the Time

Firstly I will set out to establish the time of day.

The picture below is a composite of video stills which generally point south/south east (reference the compass on the Google Earth shot above). As the sun is on the left we know it is in the East and that this was filmed in the morning.



Sun Dial Method

As we know the direction of South we are able to use this shadow as an improvised sun dial. While not extremely accurate, given the shadow size, we can determine that the time is somewhere between 10:00 and 10:30 am.



Angle of Shadows

Looking at a shadow side on allows us to better predict the time of day by its angle to the sun. The quality of this image makes it difficult to define the base of the car, but even when using an approximation the results are more accurate than that of the Sun dial. The angle worked out at approximately 40 degrees and when referenced with [Cartes du Ciel](#) the time was 10:20am.

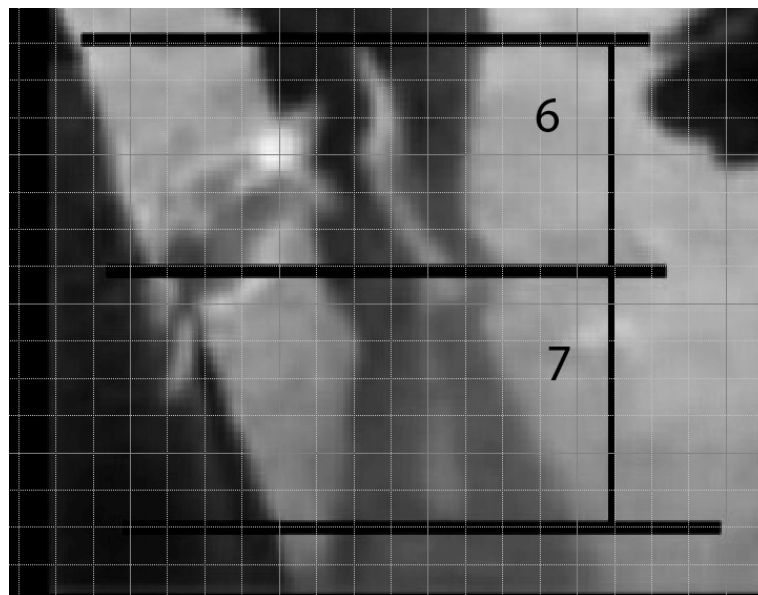


Shadow Ratio's

If we compare the fireman's leg with the shadow it casts, we can use this to help us determine the angle to the sun. If the Sun was at an angle of 45 degrees then these would be equal, but as you can see the shadow is slightly longer which tells us the Sun's angle is less than 45 degrees.

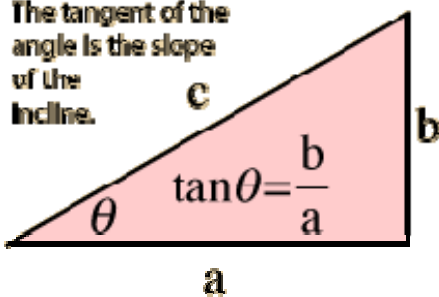


Further, if we draw a grid over the area and assign a value to each section we will be able to calculate the approximate angle of the sun through the application of Pythagorean theorem.



To calculate the angle, all we need is the following formula:

The tangent of the angle is the slope of the incline.



When we use 6 as the height of the leg (b) and 7 as the length of the shadow (a) the calculation is as follows:

$$\tan \theta = 6/7 = 0.85$$

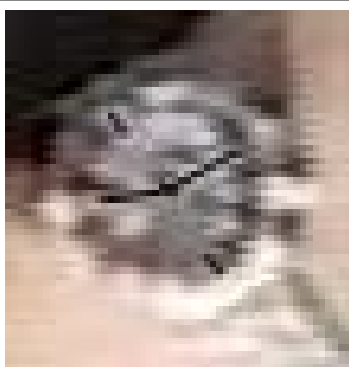
$$\text{Therefore } \theta = 40^\circ$$

Once again giving us a time of around 10:20am.

The Watch

Finally, one other method available would be to refer to the time on the Police officers watch. The time reads 10:16am. The angle to the Sun at this time was 39° which is a 1° (4 minute) variance to the estimations made working with the shadows.

Note: The Police Officer is left handed so the watch appears upside down on his hand.



Here is the watch rotated and with the hands highlighted.
(Tilt your head slightly to the left!)

The call register for the payphone would prove conclusively the time this was filmed.

Now we now know where and when this video was shot.....so what?

The Problem

Firstly, let's look at the timeline of events on 9/11

Event

8:46am AA11 hits north side of North Tower
9:02am UA175 hits south side of South Tower
9:59am South Tower collapses
10:28am North Tower collapses

Damage to WTC7

None
None
None
Damage sustained

This picture shows the trajectory of the debris from Flight UA175, missing WTC7.



This picture shows the trajectory of debris from the collapse of the South Tower once again missing WTC7.



WTC7 was neither damaged by debris from Flight UA175 nor the collapse of the South Tower.

To gain some perspective of the distances involved, look at these images taken before 911.



If you listen again to the [explosion](#) we can reasonably rule a number of sources out. The South Tower stood some 1,500 ft (500 m) from Park Place so the likes of gas cylinders, petrol tanks and generators exploding would have at best sounded like distant thunder. The North face of the North Tower was comprehensively filmed during this period so we can rule out any explosions higher up and the reports of explosions lower down would have been muffled by WTC6, 7 and surrounding buildings. The most likely source for this explosion was from WTC7 which was only 500 ft (150 m) away and almost in a direct line with the camera. Look again at the Fireman on the phone and watch as he ducks, he fears for his safety, indicating that this explosion is close to his position. Notice the angle he looks up to, which incidentally is the same angle the camera points to.

Look again at the angle the camera is positioned relative to the sound of the explosion.



Compare it to this picture taken of WTC7 one block further down.



or this , taken on the western side of the above building, only further back.



Conclusion

The evidence presented above questions the presumption that the damage caused by the collapse of the North Tower, and the resulting fires, were the sole reason that WTC7 collapsed.

Recommendation

The witnesses in this video need to be interviewed and a comprehensive audio analysis conducted to determine the nature and exact location of the blast.