

NORTH APPROACH IMPACT ANALYSIS

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Introduction - Citizen Investigation Team (CitizenInvestigationTeam.com) has conducted, recorded, and published interviews with dozens of eyewitnesses to the Pentagon attack on 9/11. Of these witnesses, over a dozen were in excellent locations to be able to judge where the plane flew in relation to the former Citgo gas station, which was the last major landmark along on the plane's flight path in the final seconds before it reached the building. All of these witnesses unanimously state that they witnessed the plane flying on, or headed towards, the north side of the Citgo gas station. This includes all known eyewitnesses on the property of the station itself, who had the absolute best possible vantage point to judge which side of the station the plane flew on with zero room for perspective error.

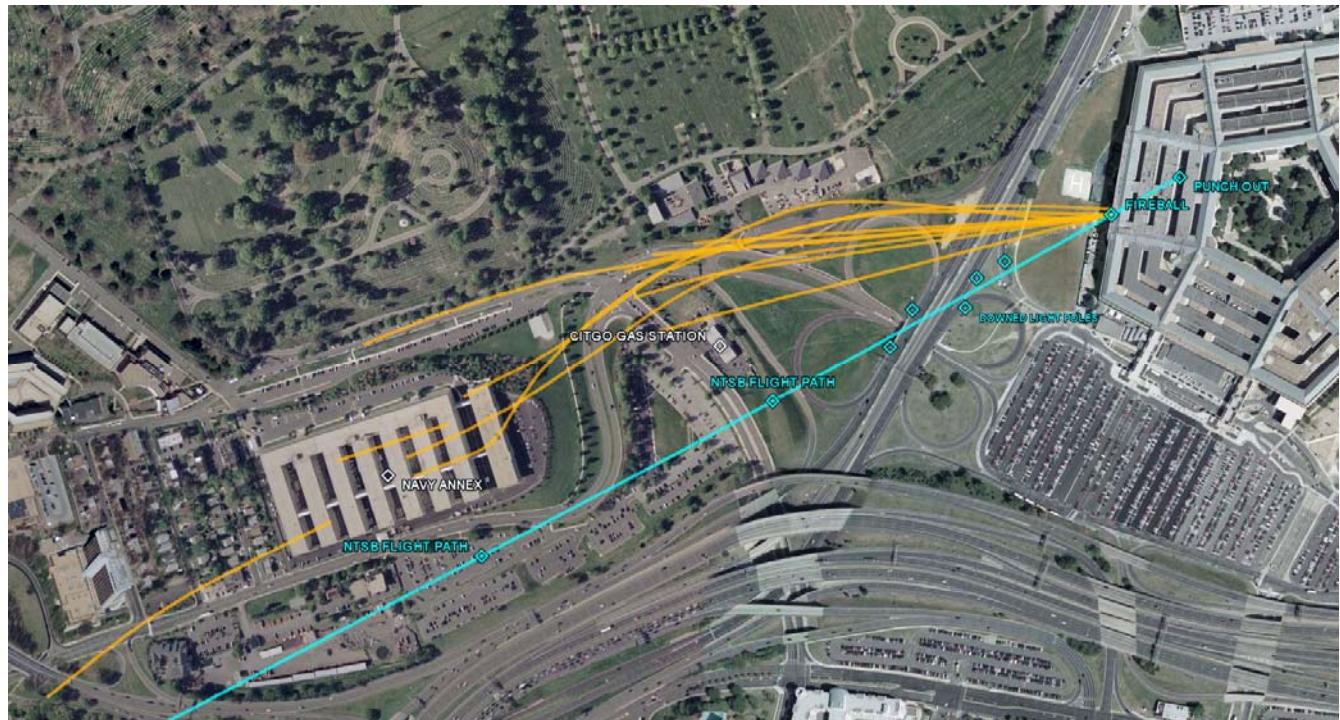
It is physically impossible for a plane approaching the Pentagon on a flight path consistent with eyewitnesses' statements to have caused the physical damage to the light poles, generator trailer, and Pentagon as photographically documented and reported. The following technical analysis will present the calculations that demonstrate this simple scientific fact.

Objective: To determine if an aircraft is able to pass to the north side of the Citgo gas station as reported by eyewitnesses and still cause the physical damage to the light poles, generator trailer, and Pentagon.

Important Note: The simple fact is that most if not all of the eyewitnesses did not stop watching the plane the instant it came even with the north side of the gas station. In order to assert that the plane may have transitioned from the north side of the station to a trajectory that would allow it to cause the observed physical damage -- beginning with the first down light pole -- one would have to ignore everything drawn and reported beyond that point by the eyewitnesses. Ignoring witness statements is intellectually dishonest and not an objective approach to such an analysis. This specifically includes, but is not limited to, their placement of the plane over or very near the parking lot outside of the Arlington National Cemetery maintenance buildings, of which a number of witnesses are explicit. If the hypothetical maneuver in question were possible -- which as this paper shows, it is not -- it would still be a moot point as physical damage analysis and a North Approach Impact hypothesis is not consistent with witness statements, reports or drawings.

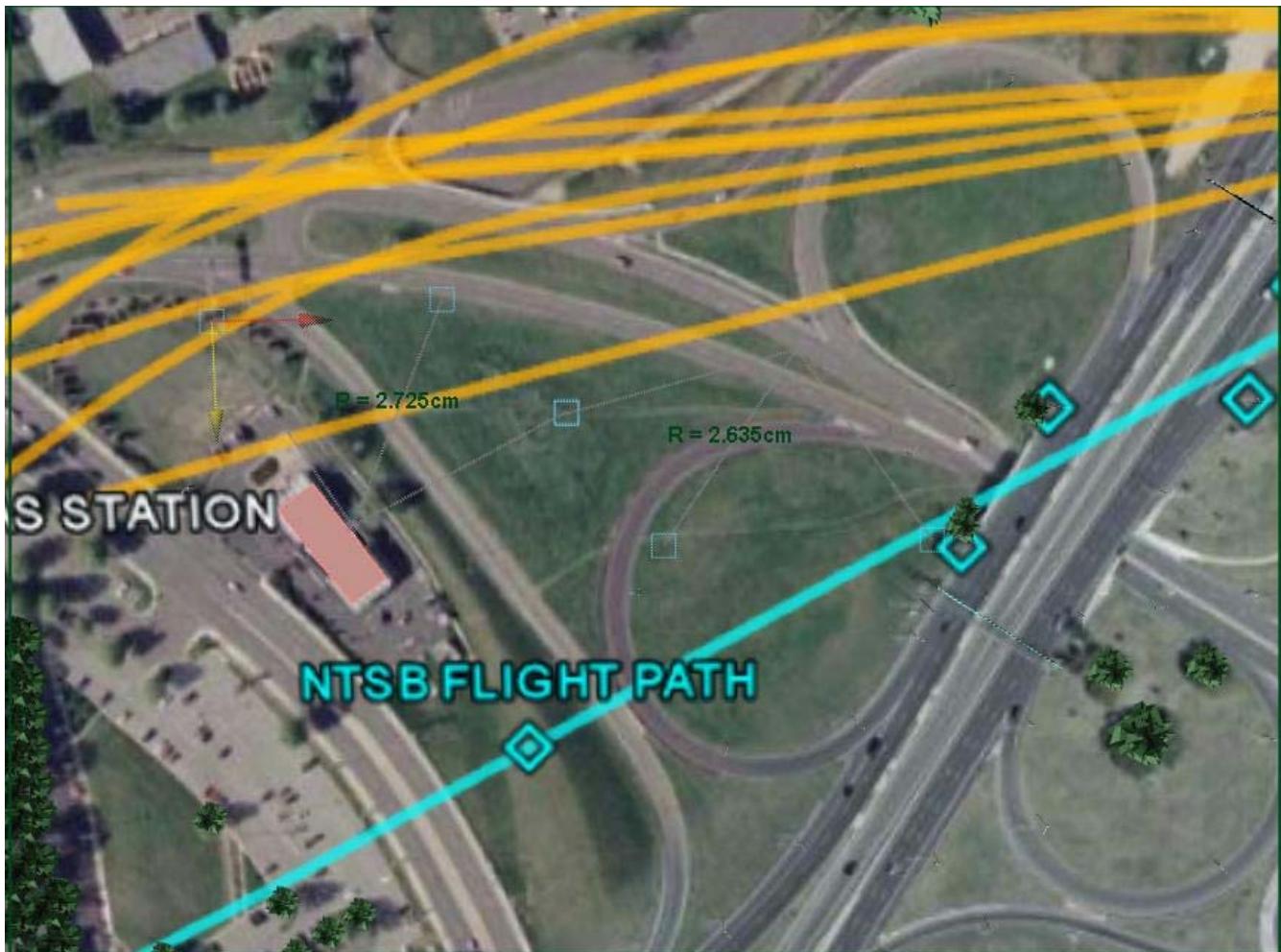
Calculations and Analysis

As seen in the video [National Security Alert](#), many of the eyewitnesses who were in the best possible locations to judge where the plane flew in relation to the Navy Annex and former Citgo gas station personally illustrated the flight path on overhead images during their on-location, on-camera interviews with Citizen Investigation Team. The following is a composite of their drawings.



Based on a hypothetical average of the trajectory as illustrated in these witness drawings, we analyzed the radius required for a transition to the South path, in order to cause the physical damage through the downed light poles, the generator trailer and the "impact" spot on the Pentagon.

Radius drawn with Topography visible



Radius with topography removed
(Scale: 1cm box = 100 feet)



West Turn Radius = 273 feet
East Turn Radius = 264 feet

For simplicity, we will use one calculation for both at an average of 270 feet and the formula used to determine acceleration in circular motion.

Calculations are based on speeds of both 400 Knots and 200 Knots.

To determine G Forces experienced by an object in circular motion along a curve/radius, the formula $G = (v^2/r)/32$ is utilized.

| | |
|----------------------------------|----------------------------------|
| Speed = 400 knots (675 f/sec) | Speed = 200 knots (338 f/sec) |
| $G = (675^2/270)/32$ | $G = (338^2/270)/32$ |
| $G = 52.2$ | $G = 13.2$ |

G Forces required are impossible for a transition from the north path to the south path for a Transport Category fixed-wing aircraft of any type.

Hypothetical Least Challenging Scenario

(Contradicts witness testimony even more blatantly than prior scenario)

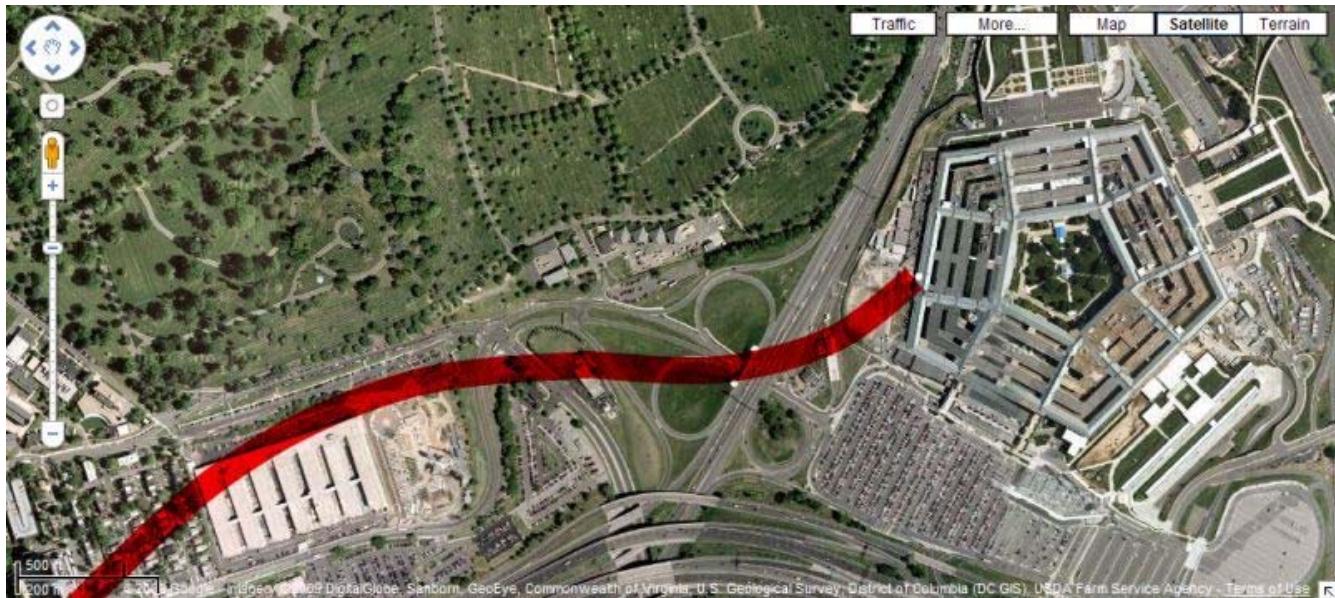
A hypothetical approach path was offered that was falsely implied to have been reconcilable with the witnesses' description of a north side approach as well as the physical damage to the light poles, generator trailer, and Pentagon.

This path completely ignores and contradicts the majority of the key details about the flight path expressed by all of the witnesses seen in [National Security Alert](#), and others who were not even featured in that video due to time constraints ([George Aman](#), for example).

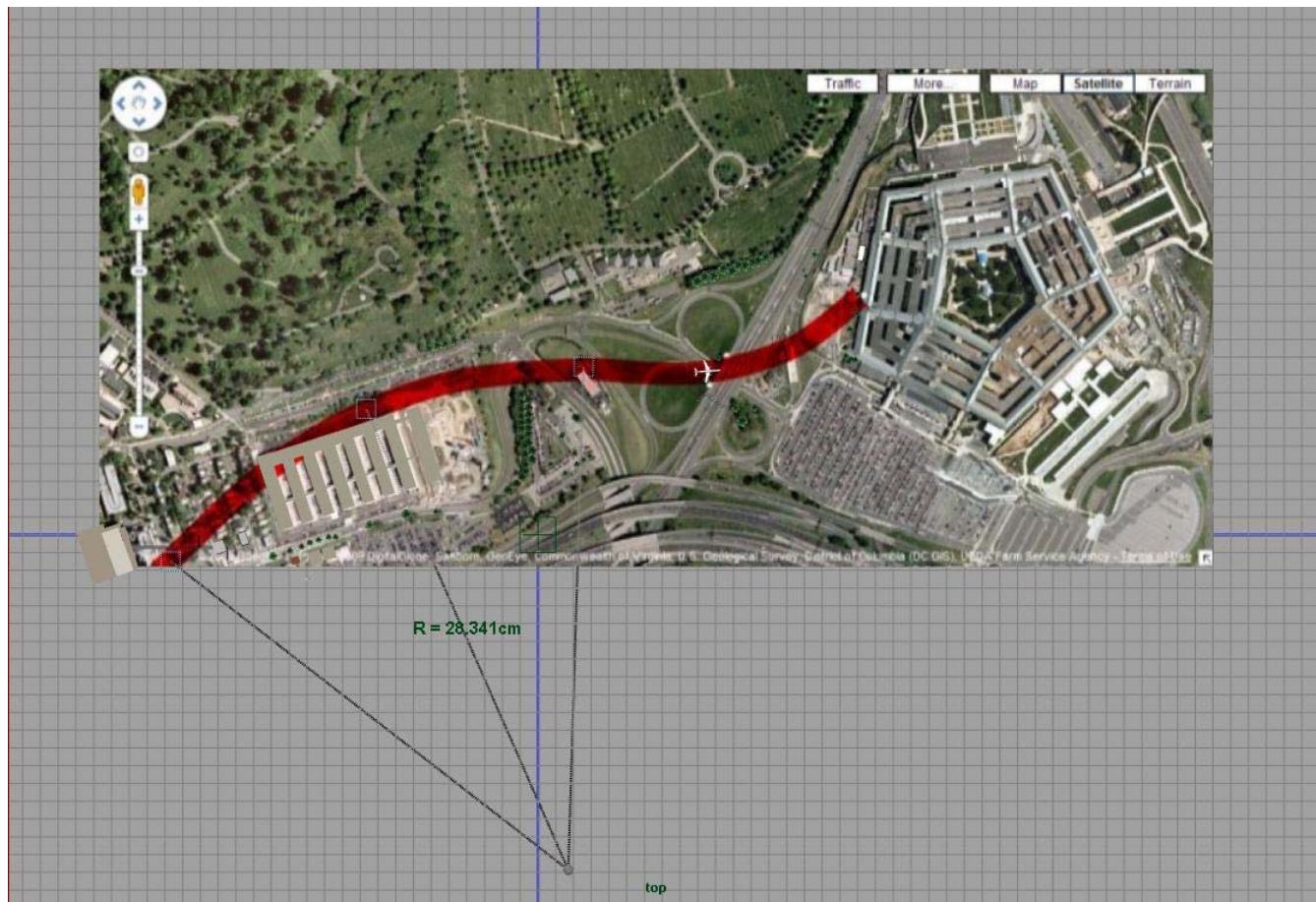
Another major problem with this path is that its width -- which its illustrator claimed is equal to the wingspan of a 757 (124 feet 10 inches) -- fails to take into consideration the fact that bank angle required to make such turns will reduce the effective wingspan significantly, as we will demonstrate below. In order to turn an aircraft, [horizontal component of lift](#) is required. In other words, an aircraft cannot just "yaw" it's way around the path illustrated below and must roll into a bank angle.

Radius was measured for each turn and bank angles are calculated based on speed. Speeds analyzed will once again be 400 and 200 knots. Witness Point Of View images are provided to compare with witness statements.

The following flight path is claimed to be the "First Ever Path Possible" from a north of the gas station approach. This is the path we will analyze closely, and since it is the least challenging hypothetical scenario, any other path will have greater results for bank angle required and therefore G Loading as demonstrated above.



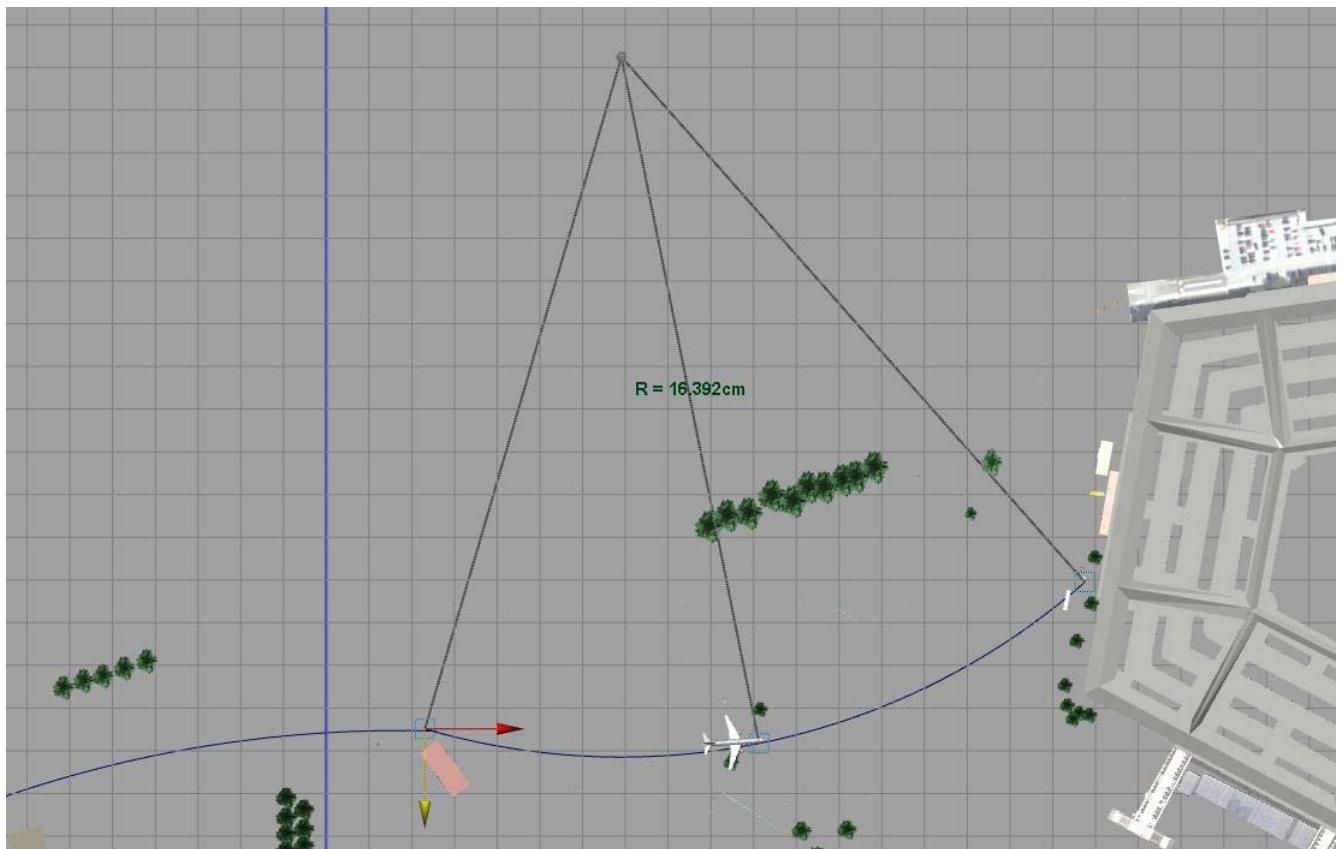
Radius for the west approach is 2,834 feet. Scale: 1cm box = 100 feet
(Scale Aircraft inserted to demonstrate level flight is needed for physical damage)



Radius for east approach turn is 1,692 feet.
(Scale Aircraft inserted to demonstrate level flight is needed for physical damage)



Topography removed for clarity



The above path does not take into consideration roll rate. Therefore the change in direction from the west turn to the east turn must be performed instantaneously which is impossible for any fixed-wing aircraft.

To calculate bank angle required based on radius, we use:

$$\text{Bank Angle} = \arctan(v^2/11.26r)$$

G Force can then be calculated from Bank angle using:

$$G = 1/\cos(\text{Bank Angle})$$

| Speed = 200 knots: | Speed = 400 knots: |
|--|--|
| West Turn Radius = 2834 | West Turn Radius = 2834 |
| Bank Angle = $\arctan(200^2/2834*11.26)$ | Bank Angle = $\arctan(400^2/2834*11.26)$ |
| Bank Angle = 51 Degrees* | Bank Angle = 79 Degrees* |
| G Force = 1.6 G | G Force = 5.2 G** |
| East Turn Radius = 1639 | East Turn Radius = 1639 |
| Bank Angle = $\arctan(200^2/1639*11.26)$ | Bank Angle = $\arctan(400^2/1639*11.26)$ |
| Bank Angle = 65 Degrees* | Bank Angle = 83 Degrees* |
| G Force = 2.3 G | G Force = 8.7 G** |

*The bank angles required for both above speeds conflict with witness statements and exceed bank angles required to cause the physical damage (See demonstrations below). Roll rate required for transition from the west to east turn is not possible for either speed or path.

**G Forces required for a speed of 400 Knots is not possible for any fixed wing transport category aircraft.

The following are the bank angles and roll rate that would be observed at the various witness locations starting with the most western witness, Edward Paik, and ending at gas station employee Robert Turcios. Keep in mind any speed greater than 200 knots will require a greater bank angle and therefore G Force.

Speed = 200 knots:

Speed = 400 knots

Lagasse Cam West - 200 Knots



Lagasse Cam West - 400 Knots



Lagasse Cam East - 200 Knots



Lagasse Cam East - 400 Knots



Speed = 200 knots:

Arlington National Cemetery Workers Cam.
Roll Rate - 200 Knots



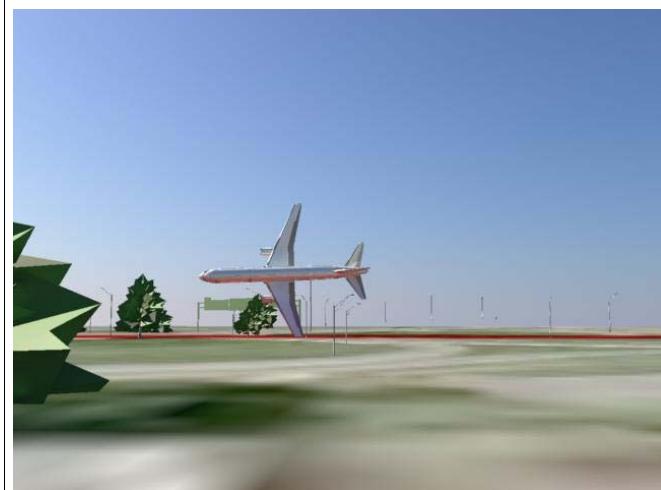
http://pilotsfor911truth.org/pics/NoCImpact/ANC_Cam200K.wmv

Speed = 400 knots

Arlington National Cemetery Workers Cam,
aircraft approaching - 400 Knots



Arlington National Cemetery workers Cam,
aircraft passing - 400 Knots



Turcios Cam, approaching aircraft roll rate
200 Knots



<http://pilotsfor911truth.org/pics/NoCImpact/TurciosCam200K.wmv>

Turcios Cam, passing aircraft roll rate
400 Knots

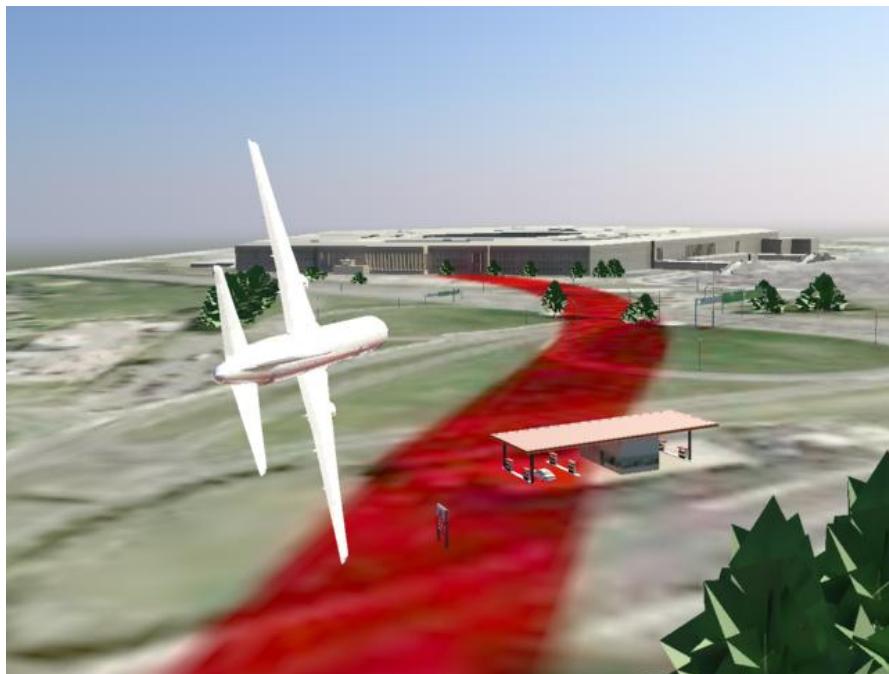


<http://pilotsfor911truth.org/pics/NoCImpact/TurciosCam.wmv>

Follow Cam: 400 Knots

Full Approach

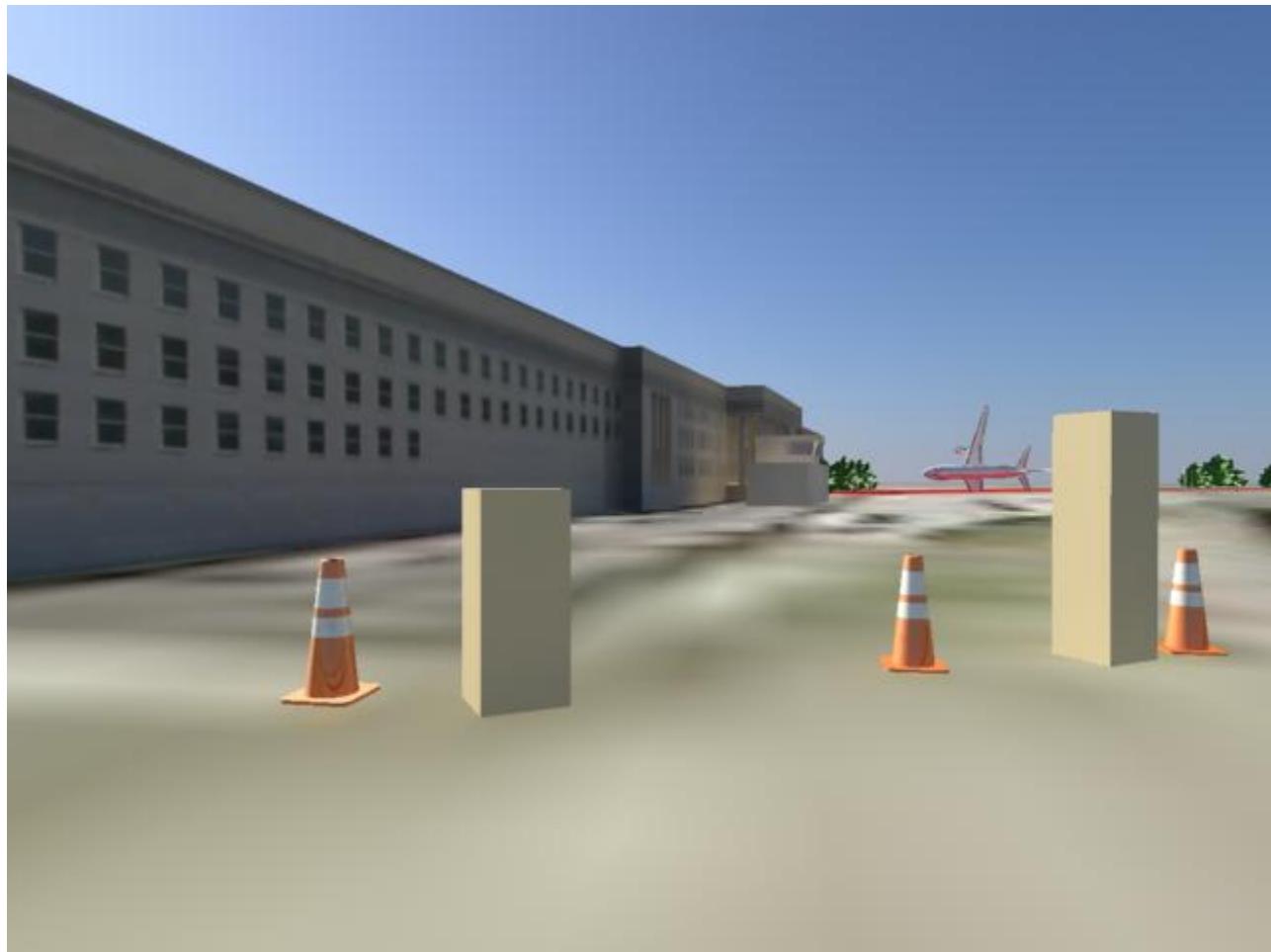
(Please note bank angle as aircraft passes through light poles and wing contact with ground. Impact to light poles is impossible due to bank angle required for turn at either speed. Bank angle would also cause large gouge in ground leading to Pentagon impact.)



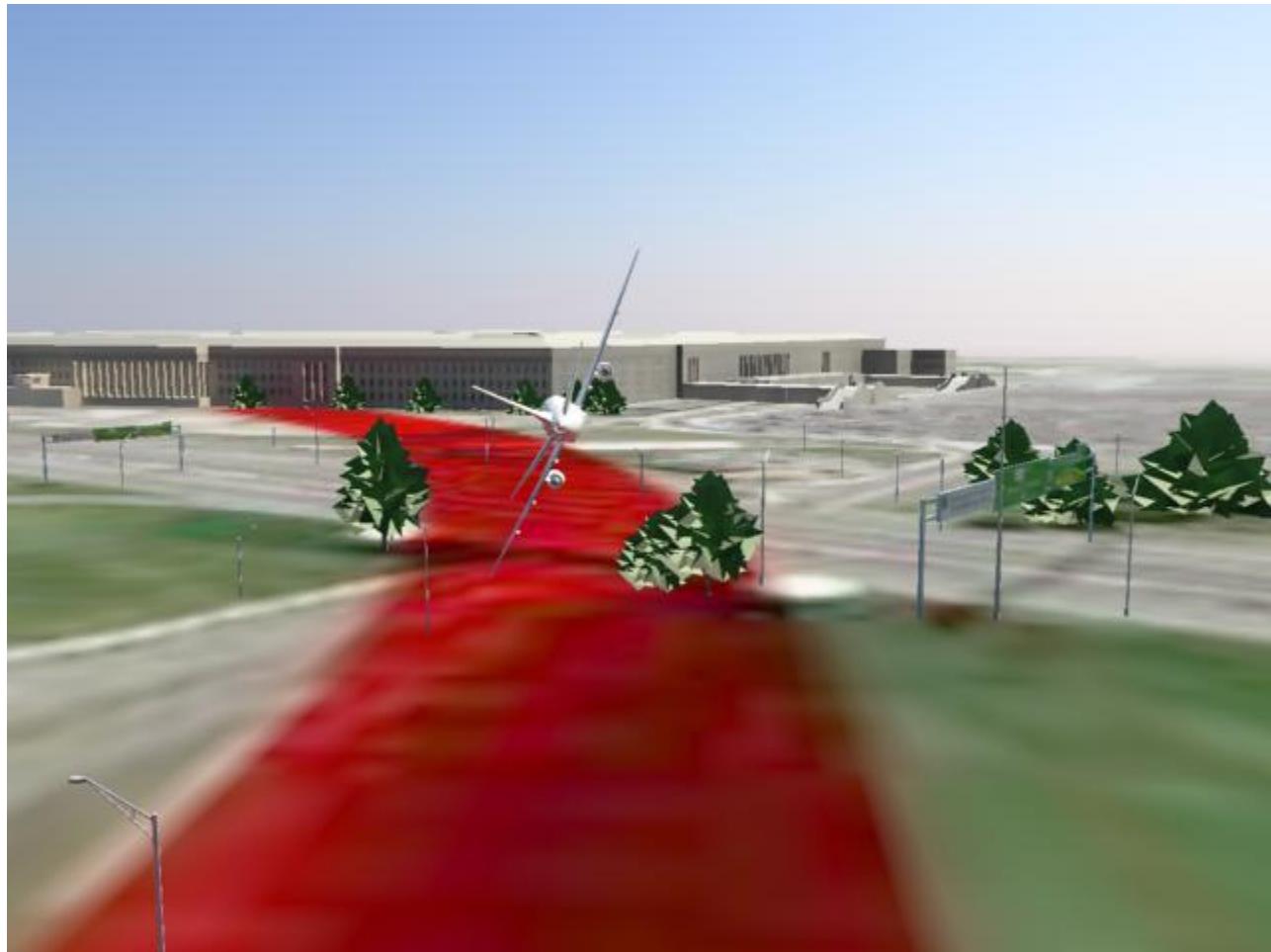
Download Follow Cam

[\(2.7mb\)](http://pilotsfor911truth.org/pics/NoCImpact/FollowCamNoC.wmv)

Parking Gate Cam: 200 Knots



Light Pole Cam: 200 Knots



Download Light Pole Cam High Quality wmv file
<http://pilotsfor911truth.org/pics/NoCImpact/LightPoleCam.wmv>
(157K)

Conclusion - It is impossible for any fixed-wing aircraft to cause the directional physical damage to the light poles, generator trailer, and the Pentagon leading to the C-ring hole approaching from directly over the Navy Annex and north of the former Citgo gas station. The flight paths illustrated by the witnesses would require G forces beyond the physical limitations of any aircraft for it to transition to an approach that lines up with the physical damage. Additionally, a hypothetical least challenging scenario at low speed would require bank angles that are irreconcilable with the physical damage, as well as the witness statements, and require an instantaneously performed roll that is impossible for any fixed-wing aircraft.

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