Analysis of Pentagon Plane Approach and Impact

Prepared for the October 25, 2017 9/11 and Other Deep State Crimes Teleconference

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 - Wire spools
 - Projection of plane onto facade
 - Damage to south-end impact
 - Damage to north-end impact damage
 - Wing impact with shattered tree stump





Question After April Presentation About Tree at Column 16

Question after the April presentation:

On our call, you said that you thought the tree was severed by the right wing spar.

Could you explain how the bottom of the right engine could hit the top of the generator trailer and then the wing dip low enough to sever the tree just a few feet from the ground?

And if the wing spar hit the tree, as you suggest, would the engine not gouge the lawn and/or hit some of the spools?





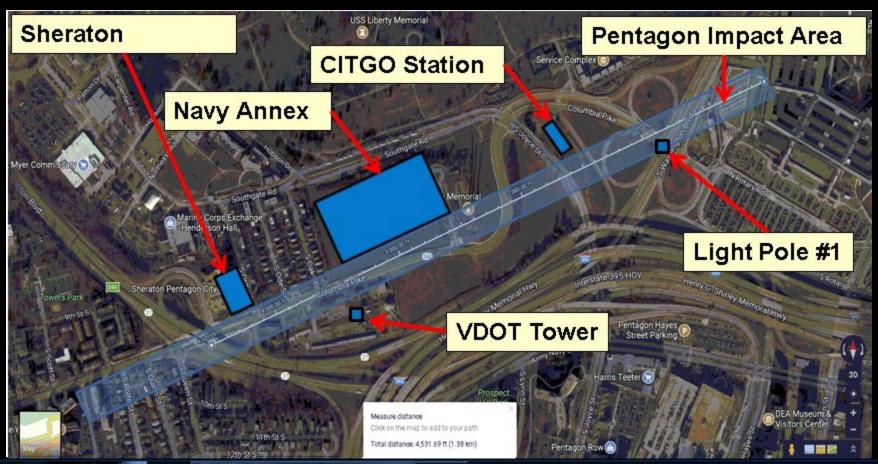
Analysis of Pentagon Plane Approach and Impact

ORIENTATION





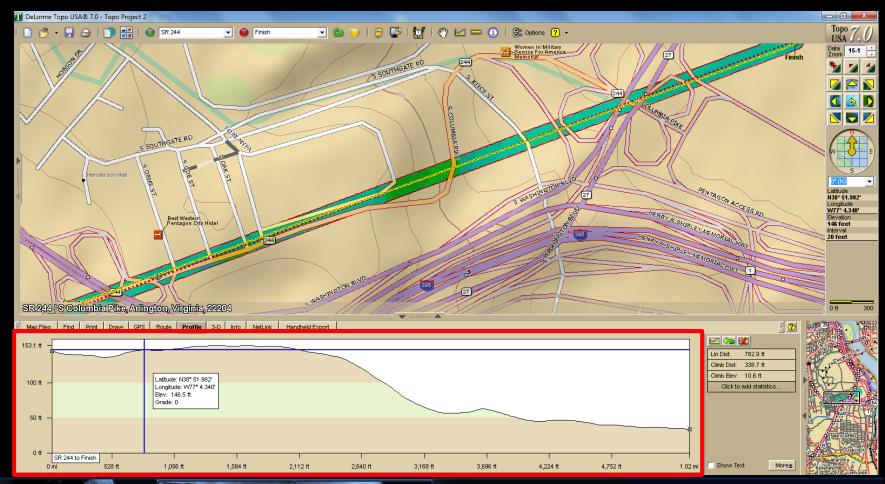
Overview of Plane Path With Area Swept by Wings Shown







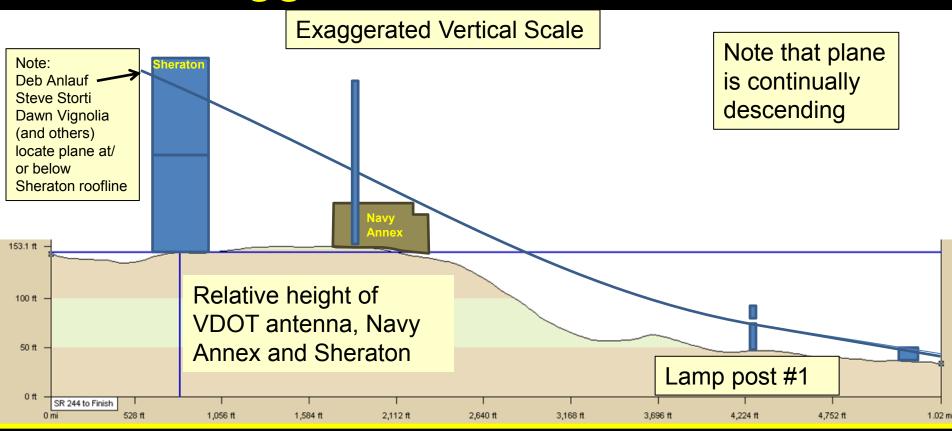
Topography Under the Plane Path







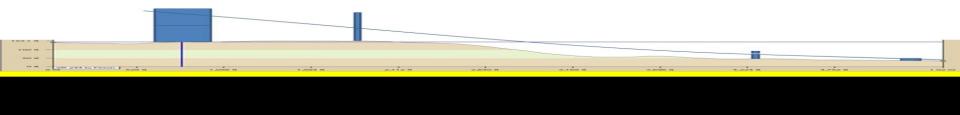
Topography with Obstacles Exaggerated Vertical Scale







Topography with Obstacles Drawn to Scale







Analysis of Pentagon Plane Approach and Impact

APPROACHING PLANE G-FORCE CALCULATION





Pilots for 9/11 Truth Rule-Out Plane Impact Because "High" G-Forces

- Pilots for 9/11 Truth calculate required G-Force
 - Assumes plane travels in arc with a 2,085' radius
 - For plane pulling up out of a dive
 - Results in forces of 10.14 G
- Pilots for 9/11 Truth conclusion:

[at 9:50] ... for the least challenging "pull." If we hypothetically lower the aircraft altitude from the NTSB plotted altitude, to the lower height of the VDOT antenna. As we can see, the G-loads to "pull" out of a dive from the top of the VDOT antenna are impossible for a 757.





Pilots for 9/11 Truth Calculate Upward G-Forces of 10.14G

To get their upward 10.14 G-Force, 2,085 ft radius they assume the 2,085 radius arc for the approaching plane travel. The plane must travel along this arc for their calculation to be valid. But the plane cannot transition into this 2,085 radius arc from the path from Sheraton or VDOT.





16,300 foot Radius Arc Creates Upward G-Forces of 1.16G

With a 16,300 foot radius arc, the G-Force is approximately 1.16 G.

Within structural limits of aircraft a 757.

16,300 ft radius





Analysis of Pentagon Plane Approach and Impact

APPROACHING PLANE NEAR IMPACT OVERVIEW





West Wall of the Pentagon Before 9/11







Because there is important news the "free press" isn't telling you

Retaining Wall Gouge

Photo Taken Approximately Perpendicular to Column 14





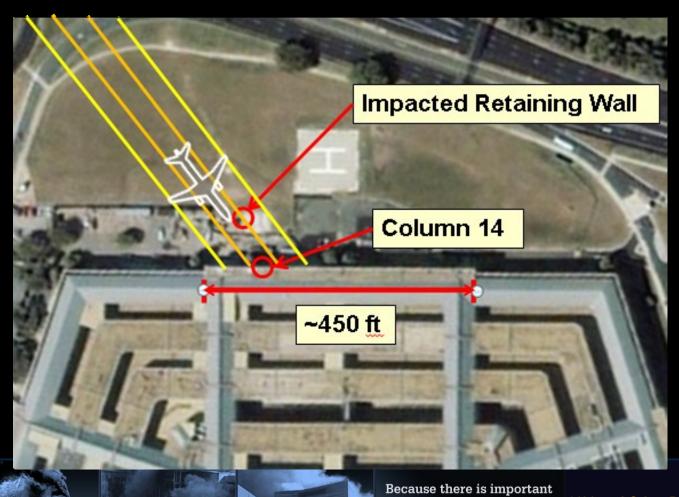


Dimensions Relevant to Approaching Aircraft



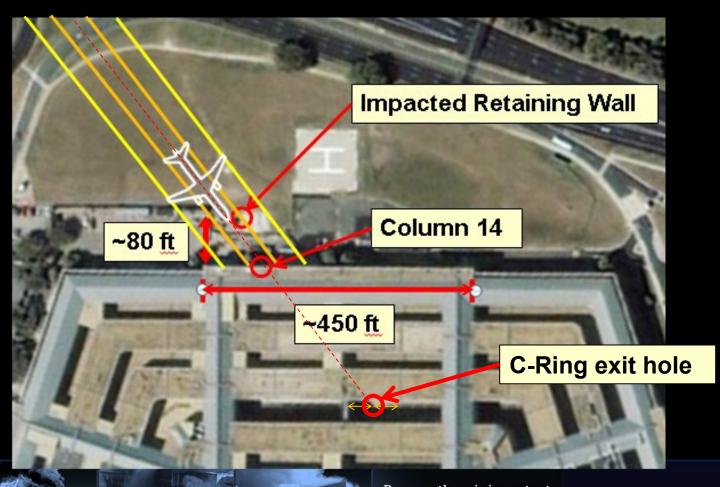
news the "free press" isn't

Dimensions Relevant to Approaching Aircraft



news the "free press" isn't

Dimensions Relevant to Approaching Aircraft



Plane Superimposed Above Lawn







news the "free press" isn't telling you

9/11 Truth and Other Deep State Crimes Teleconference 19 October 25, 2017

Analysis of Pentagon Plane Approach and Impact

WIRE SPOOLS





Wire Spools

- Presence of wire spools have been cited as evidence against a large plane impact
 - Post-impact photos show them in path of plane
 - However, initial location not previously known
- Now, sufficient pre-impact photos are available to document initial location of seven spools
 - Five are seen in post-impact photos
 - Spools #5 and #6 are probably labeled correctly
 - Spools labeled #3, #4 and #7 are "best guess"





West Wall of the Pentagon Before 9/11 – Wire Spools







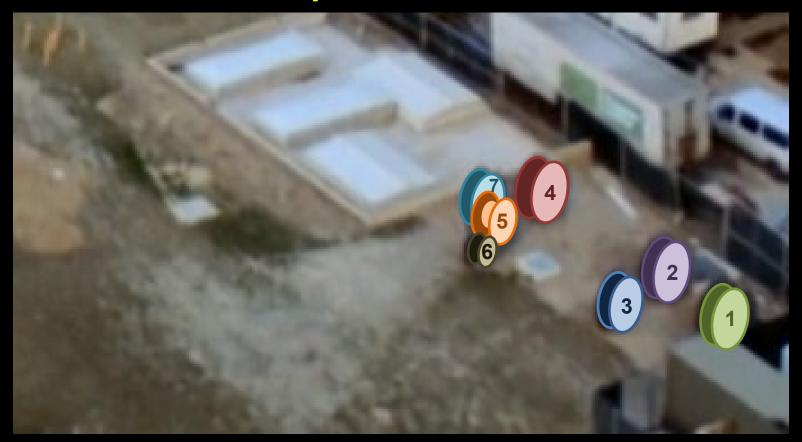
Zoom-in of Wire Spools







Zoom-in of Wire Spools With Spools Labeled







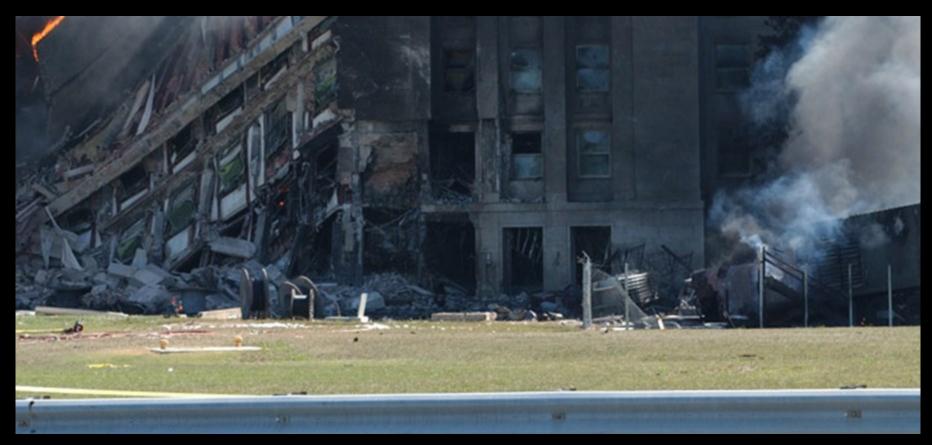
Sept 7th Satellite Photograph Supports Spool Location







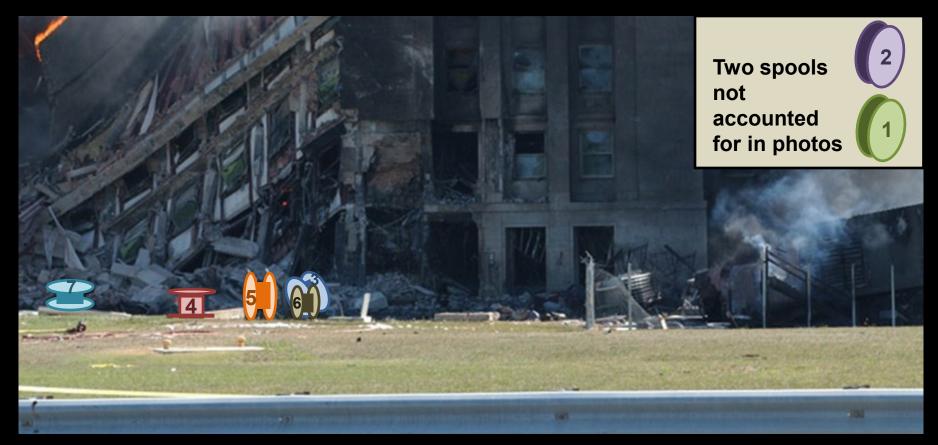
Five of Seven Spools Are Seen Post-Impact







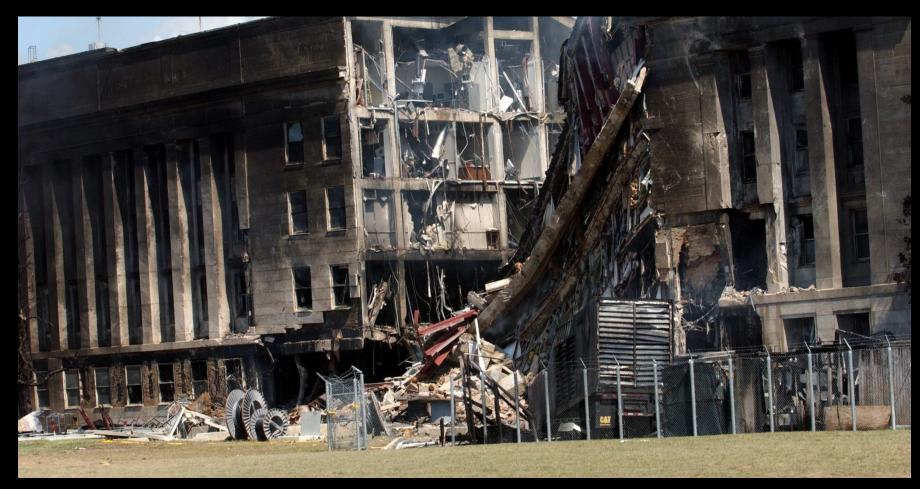
Five of Seven Spools Are Seen Post-Impact With Spools Labeled







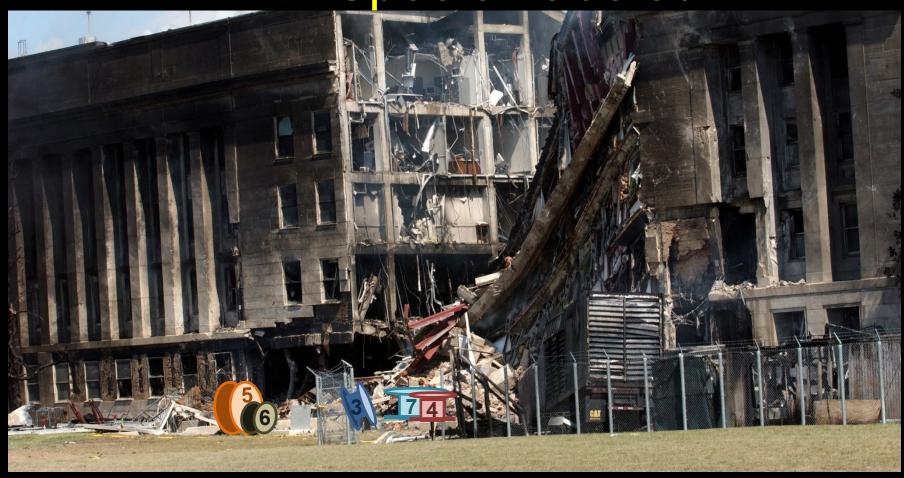
Three Spools Knocked Toward Wall







Three Spools Knocked Toward Wall With Spools Labeled







Three Spools Knocked Toward Wall Fifth Spool Obscured by Smoke







Three Spools Knocked Toward Wall With Spools Labeled







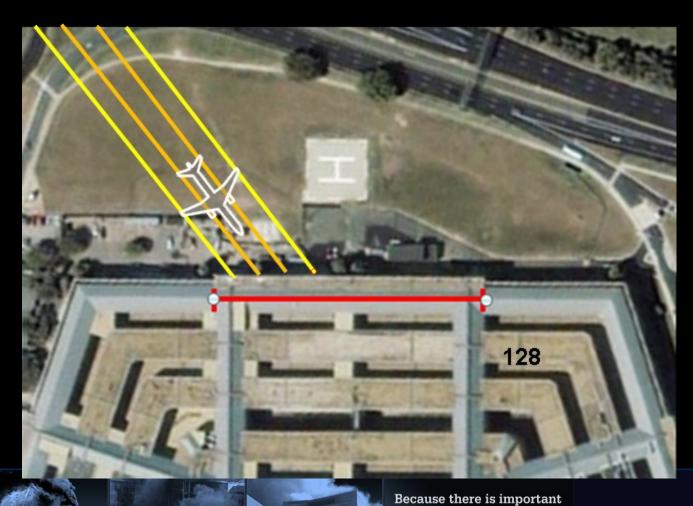
Analysis of Pentagon Plane Approach and Impact

IMPACT SEQUENCE ILLUSTRATING YAW MOTION





Before Hitting Generator Trailer



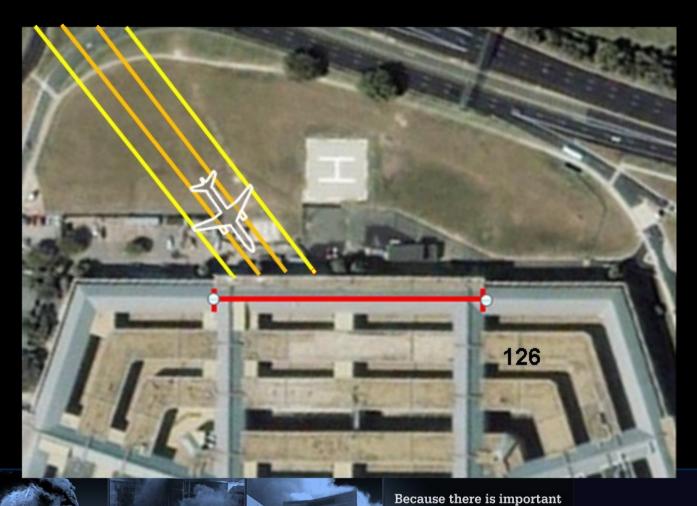
news the "free press" isn't

Hits Generator Trailer Yaw Rotation Begins



news the "free press" isn't

Before Hitting Retaining Wall Yaw Rotation Continues



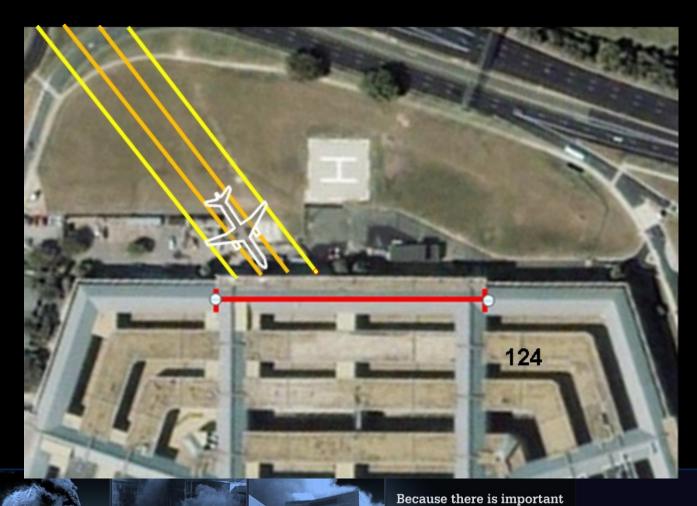
news the "free press" isn't

Left Engine Impacts Retaining Wall Right Engine Clears Gen Trailer



news the "free press" isn't

Continues Toward Façade Probably Accelerating Spools #4 and #7



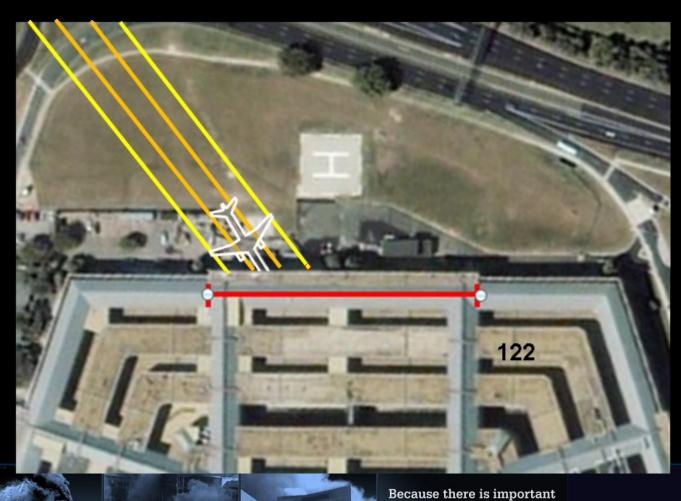
news the "free press" isn't

Continues Toward Façade



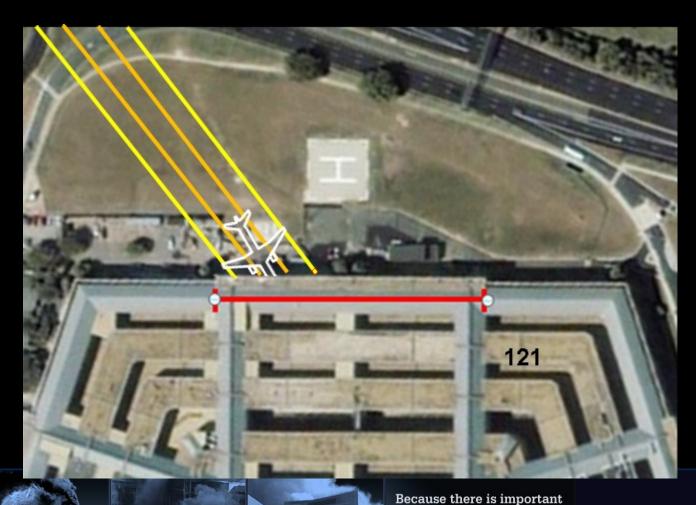
news the "free press" isn't

Nose Hits at Column 14



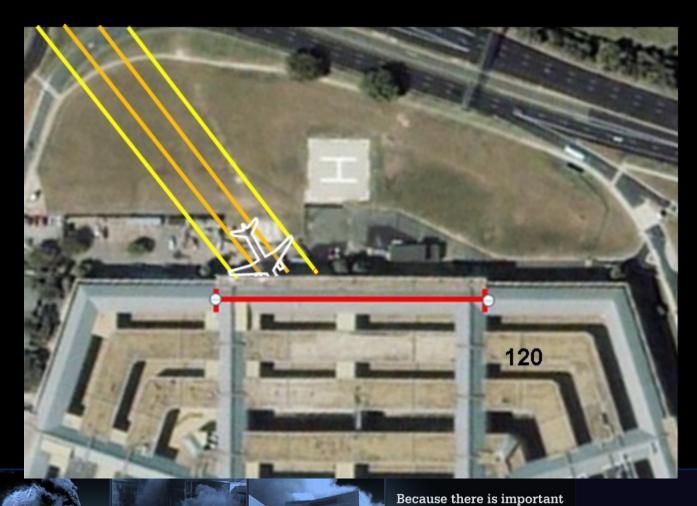
news the "free press" isn't

Continues Impacting Façade



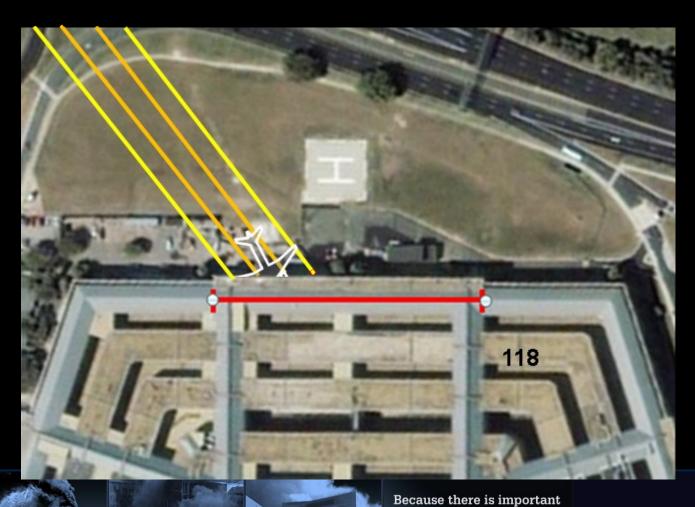
news the "free press" isn't

Right Engine Impacts Window to Left of Column 17



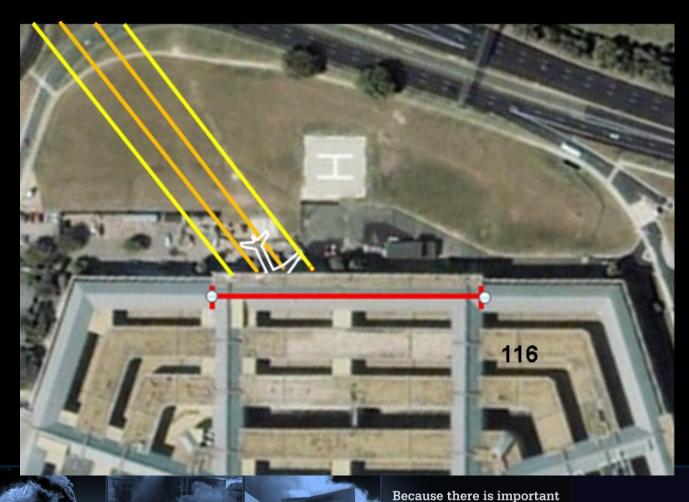
news the "free press" isn't

Right Wing Spar Bashes in Second Floor Columns 18 and 19



news the "free press" isn't

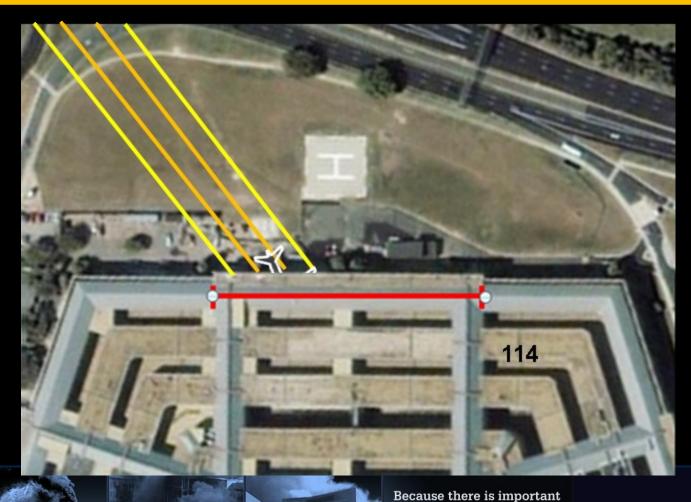
Left Engine Impacts Column 12



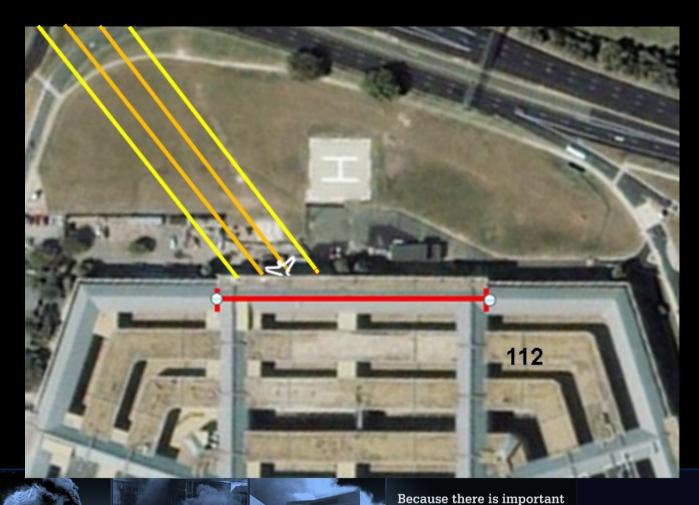
news the "free press" isn't

Left Wing Impacts Column 9AA

Column 9AA bowed, not severed, because energy in the wing spar dissipated by impact with Columns 10, 11 and 12

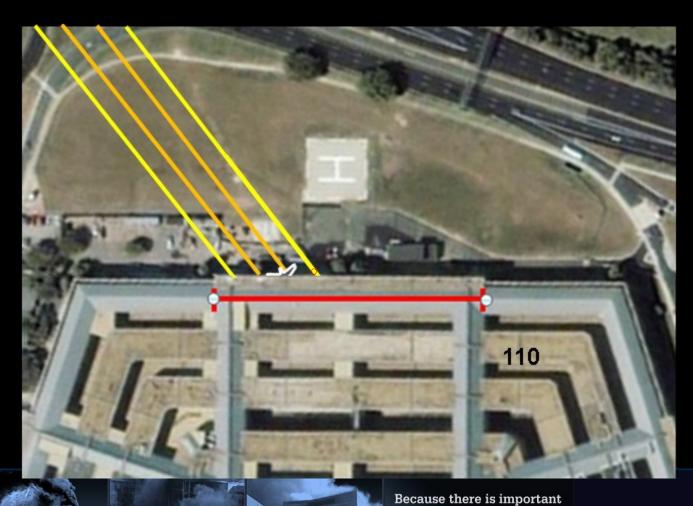


Bulk of Plane Inside Pentagon



news the "free press" isn't

Tail Impacts Near Column 12



news the "free press" isn't

Analysis of Pentagon Plane Approach and Impact

DAMAGE TO KEY LOCATIONS AT THE FAÇADE





Damage to Columns 18 and 19 on Second Floor

- Evidence of large momentum based impact event
- Consistent with large plane impact
- Cannot be explained by other hypotheses
 - e.g. Exterior explosives
 - e.g. Interior explosives
 - e.g. Cruise missile type event





Columns 18 and 19 Shown "Bashed" Inward



Column 19 "Bashed" Inward







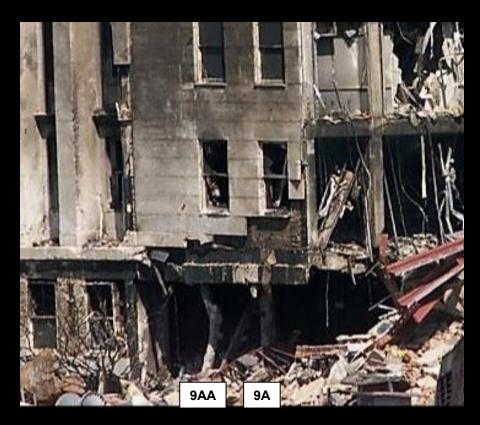
Column 19 "Bashed" Inward







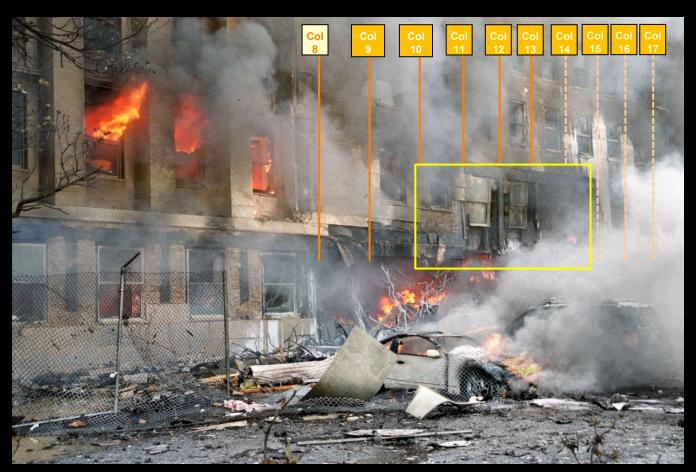
Column 9AA is Bowed Inward at North End from Wing Impact







Damage at Column 12 Suggests Impacting Mass into Second Floor







Second Floor Beam Missing Under Column 12

Wing and engine impact was significantly below the second floor beam, suggesting another mass damaged this area.







Analysis of Pentagon Plane Approach and Impact

PLANE PROJECTION ON DAMAGE TO FAÇADE





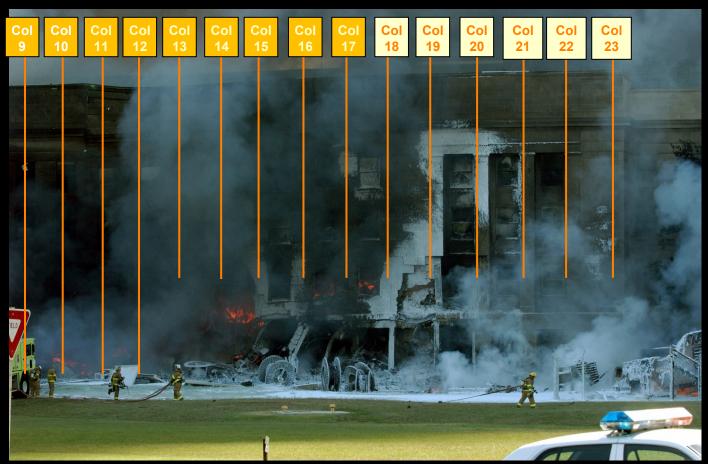
Key Assumptions for Plane Projection

- Impact scaled to 140'
 - Assumes "yaw" (z-axis) rotation
 - Due to right engine firmly impacting generator
 - Right wing impacting the wall
 - Without rotation projection would be 157'
 - Rotation (z-axis orientation) has no significant change direction of momentum
- Both wings flexed 4 ft upward at wingtips
- Impact angle 4 degrees to horizontal





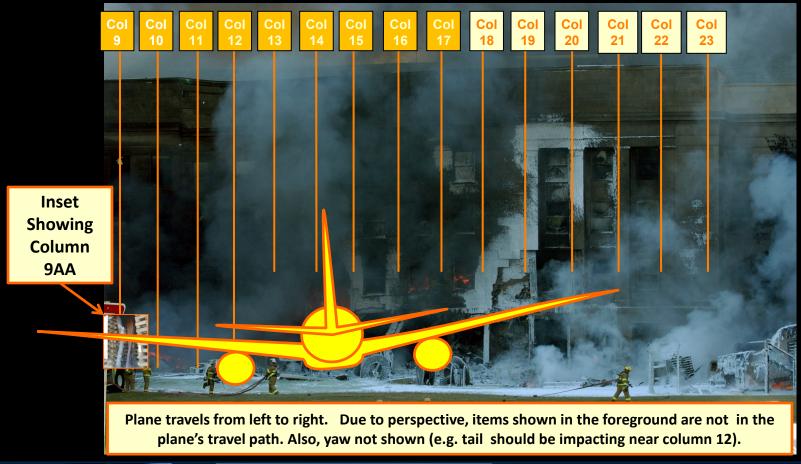
West Façade Showing Impact Area







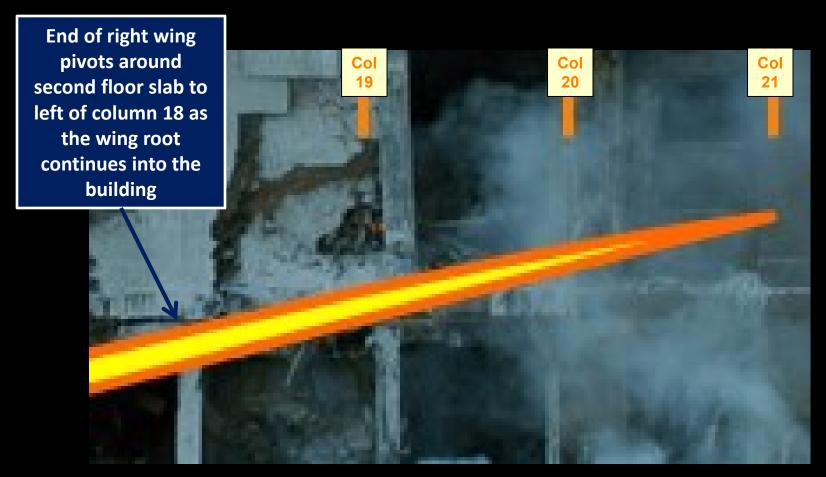
Plane Projection Aligns with Columns 9AA and 19; Tree Stump







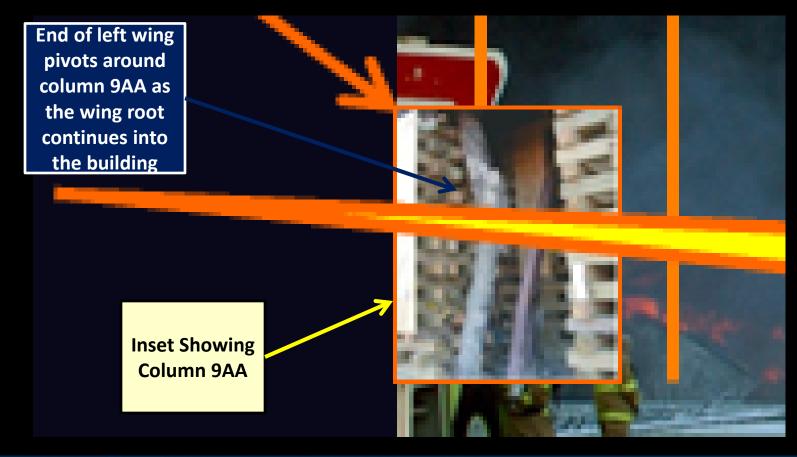
Right Wing Impacts and Damages Columns 18 and 19







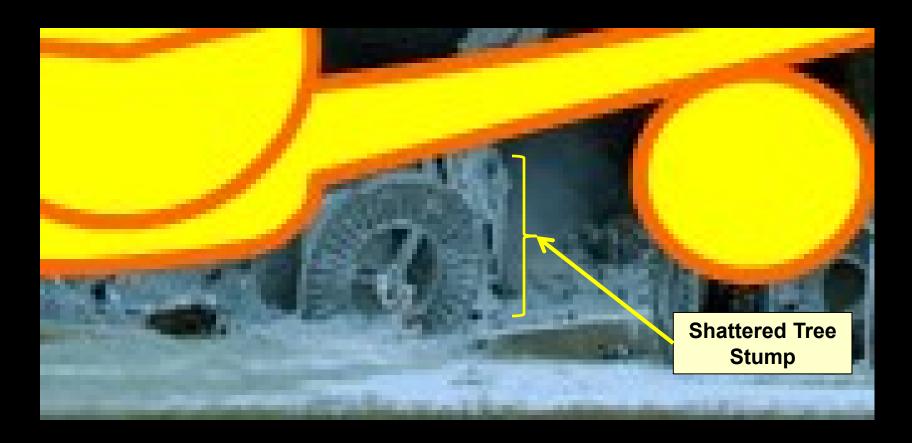
Left Wing Impacts Column 9AA Leaving Column Bowed Inward







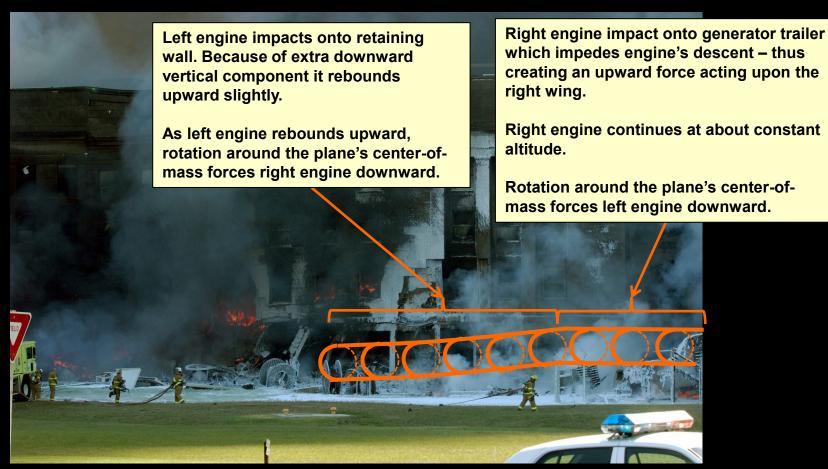
Projection Shows Tree Stump at Height of Wing Root / Wing Spar







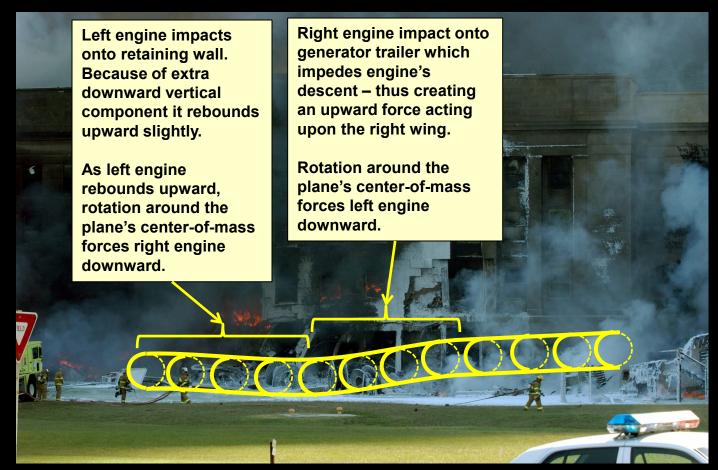
Trace of Right Engine to the Impact Point on the Façade





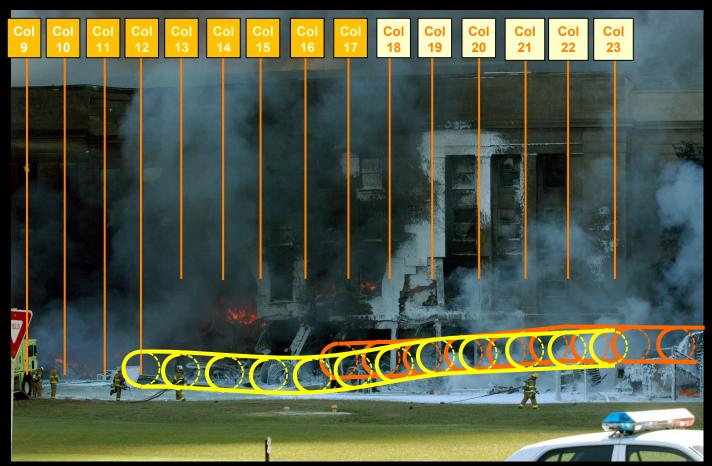


Trace of Left Engine to the Impact Point on the Façade





Trace of Both Engines to Their Impact onto the Façade







Analysis of Pentagon Plane Approach and Impact

ANSWER TO THE QUESTIONS





Question After April Presentation About Tree at Column 16

Question after the April presentation:

On our call, you said that you thought the tree was severed by the right wing spar.

Could you explain how the bottom of the right engine could hit the top of the generator trailer and then the wing dip low enough to sever the tree just a few feet from the ground?

And if the wing spar hit the tree, as you suggest, would the engine not gouge the lawn and/or hit some of the spools?





Answer

- Mass of the plane is descending slightly across the lawn
 - Right engine impacts the generator trailer
 - Right engine cannot descend at same rate as plane
 - Because of rotation around the center-of-mass of the plane, the left engine descends faster
 - Left side engine
 - Impacts the ground at the retaining wall
 - Downward movement arrested and reversed
 - Left wing tip apparently does not hit the ground





Answer (continued)

- Right side engine
 - The right engine impacts the façade
 - To the left of column 17
 - Near the lower half of the window
 - Traveling horizontally (e.g. no impact into floor slab)
- Left side engine
 - Impacts into Column 12 well below second floor
- Damage to second floor at column 12 suggests tail impact

Answer (continued)

- The wire spools rolled
 - From their storage area between the generator trailer and the retaining wall
 - Rolled in the wake of the plane, or
 - Moved because of impact with the plane
 - They came to their final post-impact location after the plane had passed
- There is no photographic record showing two of the seven wire spools
 - Suggests their destruction upon impact, or
 - Rolling into the Pentagon opening in first floor





Answer (continued)

- Aligning the key damage points positions the plane
 - Second floor wing impact at column 19 at about one foot above floor slab, places the right wing
 - First floor column 9AA bowed inward places the left wing location
 - Severed tree stump in front of column 16 establishes height of wing root near fuselage





Questions





Analysis of Pentagon Plane Approach and Impact

OTHER PHOTOS SHOWING SPOOL LOCATION





Photo with Spools Visible

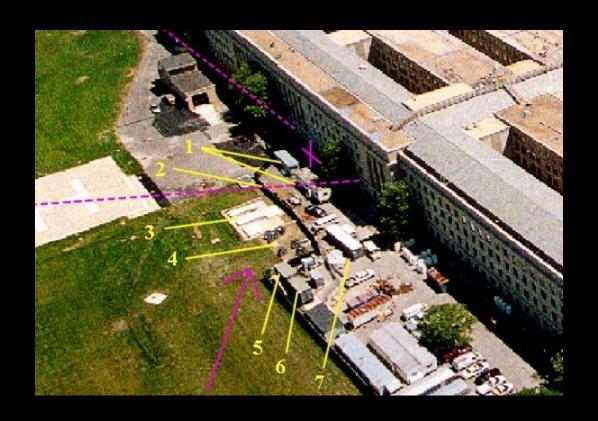
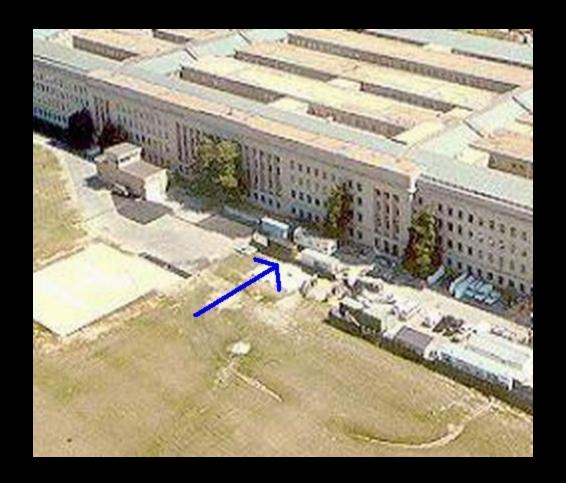






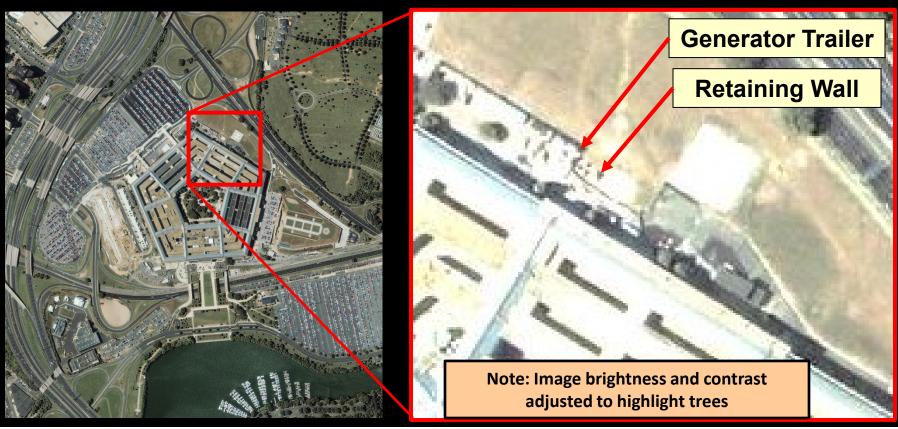
Photo with Spools Visible







Satellite Photograph on Sept 7



Source: https://web.archive.org/web/20050212002810/http://www.spaceimaging.com/gallery/9-11/Pentagon/Pentagon_9_7_01.jpg





Analysis of Pentagon Plane Approach and Impact

APPENDIX "PILOTS FOR 9/11 TRUTH" G-FORCE CALCULATION





Overview

- Pilots for 9/11 Truth use a simple equation for centripetal force to estimate G-Forces
 - Applied to aircraft descending from
 - Above the VDOT tower to
 - Become level as passing street lamp pole #1
 - Remain level to the West Façade of the Pentagon
 - Pilots for 9/11 Truth calculate 10.14 G-Force
 - G-Forces too high for a Boeing 757 aircraft
 - Purports to rule-out a large plane impact





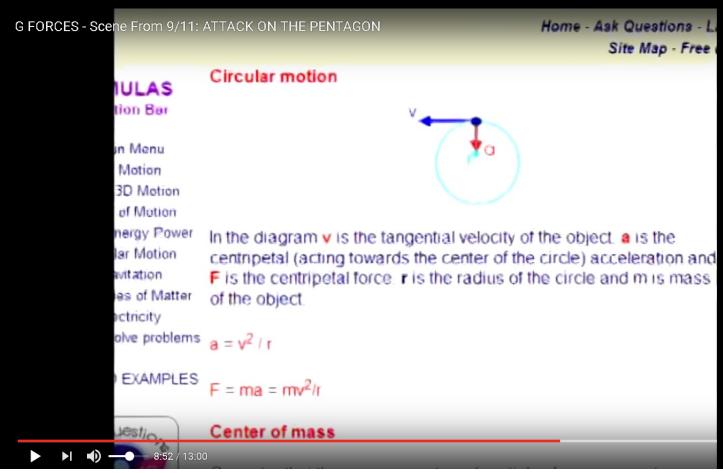
G-Force Calculation

- Based on their calculated G-Force
 - Plane pulling up out of a dive
 - Assume plane travels in arc with a 2,085' radius
- Pilots for 9/11 Truth make the following conclusion:

[at 9:50] ... for the least challenging "pull." If we hypothetically lower the aircraft altitude from the NTSB plotted altitude, to the lower height of the VDOT antenna. As we can see, the G-loads to "pull" out of a dive from the top of the VDOT antenna are impossible for a 757.



Formula for Centripetal Force

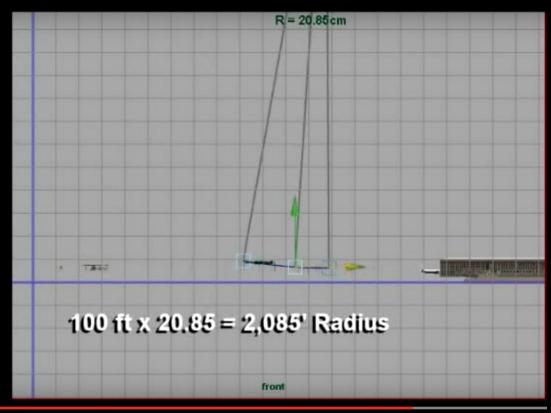






Pilot's For 9/11 Truth Problem Set-Up with 2,085 Foot Radius

G FORCES - Scene From 9/11: ATTACK ON THE PENTAGON

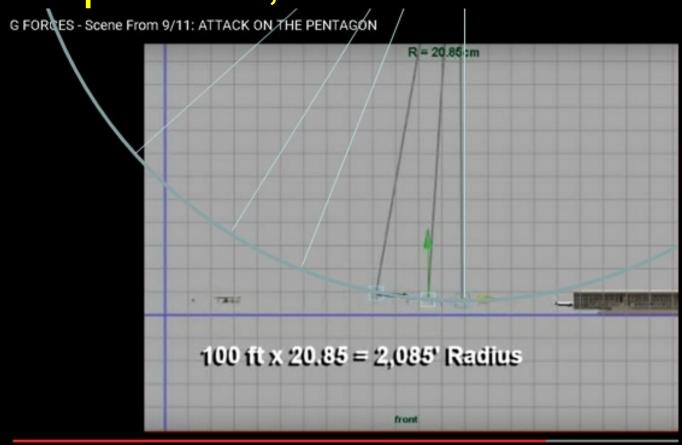


> 3 8:41 / 13:00





Pilot's For 9/11 Truth Problem Set-Up with 2,085 Foot Radius

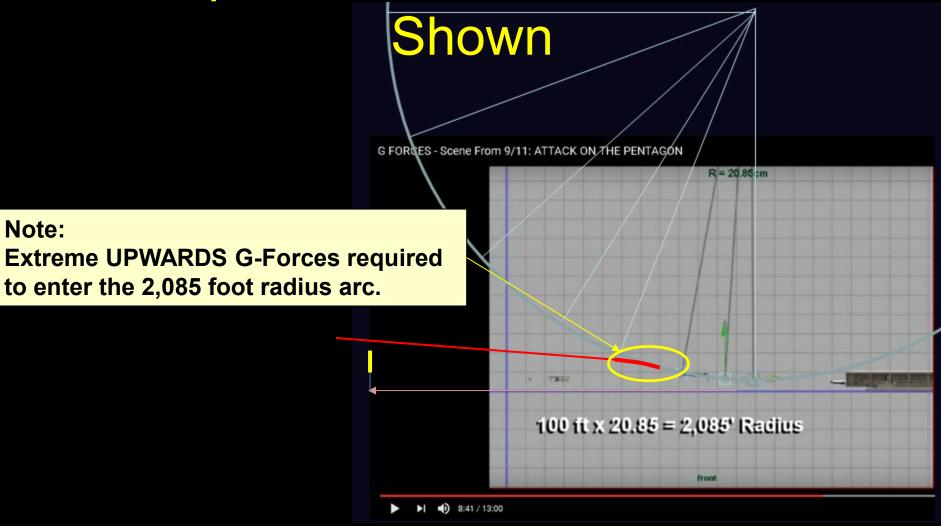








Complete 2,085 foot Radius Arc





Calculations Supporting 10.14 G-Force

G FORCES - Scene From 9/11: ATTACK ON THE PENTAGON

$$V = 781 \text{ f/s}^2 = 609961$$

Total G Force Required = 10.14 G







Corrections Required

- Pilot's key assumption is unsupportable
 - No justification given for the 2,085 foot radius assumption
 - Radius, drawn to scale on the topography, shows impossibility of the assumption
- 16,300 foot radius fits the observation
 - Estimates force of approximately 1.16 G-Force
 - Easily within design limits of a Boeing 757





G-Force Conclusion

- Radius of:
 - 16,300' consistent with approach path from VDOT tower
 - G-Force of ~1.16 is consistent with
 - Within design limits of a Boeing 757
 - 2,085' not consistent with approach path from VDOT tower
- Pilots for 9/11 Truth G-Force analysis is unsupportable and should be corrected





Analysis of Pentagon Plane Approach and Impact

APPENDIX: POST PRESENTATION QUESTIONS





Post Presentation Question Internal Damage Pattern

 A comment was made regarding the approach path and damage at the C-Ring:

It doesn't match the official path and it doesn't match the path that you have shown us in past presentations. It also doesn't line up with the damage including the C-ring hole.

 Reply: Slide 18 now shows the projection to the C-Ring exit hole and internal damage path is depicted correctly





Post Presentation Question Regarding the G-Force Calculation

 Another comment was made regarding the topography and implications for the

It's very clear that Wayne's blatantly false path allows him to claim the plane flew below the top of the antenna. Based on this, he argues that the G forces would be well within the capabilities of a 757. It is anything but "quibbling" to point this out. Wayne is attempting yet again to undermine a key piece of evidence the Truth Movement has to show the official story to be false.





Pilots for 9/11 Truth Calculate Upward G-Forces of 10.14G

To get their upward 10.14 G-Force, they assume the 2,085 radius arc for the approaching plane travel.

The plane must travel along this arc for their calculation to be valid.

But the plane cannot transition into this 2,085 radius arc from the path from Sheraton or VDOT.

620 ft radius gives: 30 G-Force





Pilots for 9/11 Truth Calculate Upward G-Forces of 10.14G

To get their upward 10.14 G-Force, they assume the 2,085 radius arc for the approaching plane travel.

The plane must travel along this arc for their calculation to be valid.

But the plane cannot transition into this 2,085 radius arc from the path from Sheraton or VDOT.

452 ft radius gives: 42 G-Force





Pilots for 9/11 Truth Calculate Upward G-Forces of 10.14G

To get their upward 10.14 G-Force, they assume the 2,085 radius arc for the approaching plane travel.

The plane must travel along this arc for their calculation to be valid.

But the plane cannot transition into this 2,085 radius arc from the path from Sheraton or VDOT.

2,085 ft radius gives: 9 G-Force





Analysis of Pentagon Plane Approach and Impact

APPENDIX: TRAILER IMPACT – BASIS FOR YAW ROTATION





Plane Begins to Rotate

- The approaching plane has a weight of about 200 tons
 - Symmetric around line of travel
 - Engines are approximately 21 feet to either side of the centerline
- The generator trailer has a weight that is probably in the range of 20 - 40 tons
 - Probably 10 percent of the plane's mass



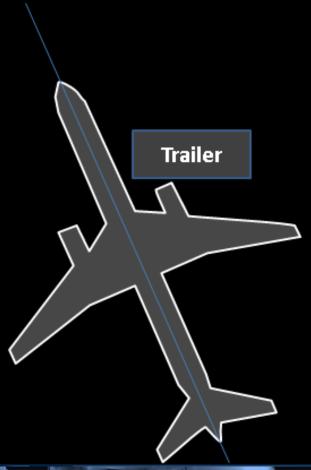


Conservation of Momentum

- Upon impact with the generator trailer
 - Significant force exerted on the trailer
 - Causes the trailer to accelerate toward the Pentagon wall
 - Rotates / moves about 15 feet



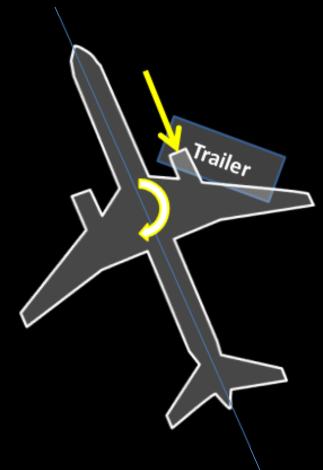
Plane Approaching







Plane Transmits Energy to Trailer Creating Rotational Force to Plane







Rotation of Plane Around Center of Mass Continues

