Discovery Channel Evidence: JFK Assassination Film Faked

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Research commissioned by the Discovery Channel for a special on the assassination of President John F. Kennedy has inadvertently solved a mystery that has perplexed researchers and fueled vitriolic debate in recent years.

The discovery presents problem for the U.S. government by confirming that key photographic evidence of the assassination was altered and fabricated to implicate the alleged assassin, Lee Harvey Oswald, who was himself gunned down two days later by Dallas nightclub owner Jack Ruby.

The authenticity of the home movie known as "the Zapruder film" (with its "back and to the left", describing Kennedy' head movement after a fatal shot made famous by Oliver Stone's "JFK") has been a heated topic in the research community.

At least four books have included studies offering proofs that it has been faked. None of them, however, were as obvious and elegant as this.

The special, "Death in Dealey Plaza," aired on the U.S. Discovery Channel on February 26 and March 1, and on the Australian Discovery Channel on November 4, 5, and 15.

A Polaroid photograph taken by Dallas resident Mary Ann Moorman on Elm Street in Dealey Plaza, Dallas on November 22, 1963 shows the President slumping in reaction to a gunshot, as well as the infamous "grassy knoll" in the background.

Moorman had driven to Dealey Plaza with her friend, Jean Lollis Hill, to see the presidential motorcade. They chose a location on the south side of Elm Street, down the hill from the Texas School Book Depository, where there were few spectators to block their view.

The Discovery Channel commissioned a reconstruction of the Moorman Polaroid, using a camera identical to Moorman's. Gary Mack, JFK historian and the Archivist for The Sixth Floor Museum located in
Dealey Plaza, worked with Discovery Channel researchers to ensure that Moorman's location was precisely that shown in the Zapruder film, that three men seen standing on the steps in the background of the Moorman Polaroid were re-created accurately, and that the settings of the Polaroid camera matched those of Mary Moorman's on the day of the assassination.

The research presented was intended to determine why possible shooters on the grassy knoll are so difficult to see in the Moorman Polaroid. But the reconstruction has inadvertently answered a more important question: where was Mary Moorman standing when she took her Polaroid?

The Dallas Times-Herald, published on the day of the assassination, reported that Mary Moorman and Jean Hill were standing in the street when Mary took her photograph. Moorman herself repeated the claim when interviewed by Charley Jones on News Radio 1080 KRLD, broadcast live from The Sixth Floor Museum in 1997.

The Zapruder film, however, shows her standing still on the grass at the time she snapped the Polaroid. (See Figure 1 above.)

Jean Hill told authorities after the assassination that she had called to
the President to get his attention, a claim repeated by Mary Moorman herself in the Discovery Channel special. In a 1965 letter to historian Richard B. Trask, Hill stated that she had "jumped into the street and yelled, 'Mr. President, we want to take your picture!!" This is rather striking, because the Zapruder film shows Hill standing completely still on the grass, with hands clasped, and only snapping her head toward the President at the last moment. It constitutes a proof that the film has been faked on its own.

Mary Moorman stated that she stepped into the street to take her photograph. Jean Hill stated that she stepped into the street with her to get the President's attention. The reconstruction photograph confirms that Mary was standing in the street when she took her photograph. As the Zapruder film shows the women standing only on the grass, this proves that, at the very least, frames have been removed from the film. And that, in turn, is more than enough evidence to prove the lack of authenticity of the Zapruder film.

The elegant proof arises from a procedure used in creating a special on JFK for television. The Discovery Channel took a photograph with the same model Polaroid camera as Mary Moorman's, from her exact position as shown on the Zapruder film. (See Figure 2.)

Because Polaroid film of the 1960s is no longer available, the Discovery Channel researchers used modern negative film and made a print. This produced a 3-1/8" by 2-1/4" image - the size of the "aperture cutout" at the film plane in the Moorman camera. The
Polaroid film used by Mary Moorman, however, was only reactive within a slightly smaller 2-7/8" by 2-1/8" area.

According to Melbourne, Australia physicist John P. Costella, Ph.D., who made the discovery, and California physicist and radiation oncologist David W. Mantik, M.D., Ph.D., the two images can be compared directly if the Discovery Channel print has 1/8" trimmed off each of the left and right edges, and 1/16" trimmed off each of the top and bottom edges. (See Figures 3 and 4 below.)
When this trimmed image is compared with the Moorman Polaroid, there is clearly too much of the grassy knoll and too much of the roadway of Elm Street visible in the Discovery Channel reconstruction in comparison with the Moorman original.

This means that the Discovery Channel camera was further away from the grassy knoll than was Mary Moorman when she took her famous photograph. It is the same effect as when you are trying to photograph a landmark or a group of people which doesn't fit inside the picture - you walk backwards to try to get a wider view.

For the sizes of the structures and the positions of the bystanders on the grassy knoll to be matched up in the two photographs, the Discovery Channel reconstruction would need to be magnified by some 7%. (Note that the infamous "picket fence" was recently rebuilt in a different location.)

Figure 5. Survey map with locations
According to the physicists Costella and Mantik, this means that the Discovery Channel photograph was taken from a position that was about 7 feet too far away from the grassy knoll. "That puts Mary onto the roadway of Elm Street," says Dr. Costella, "and that completely disagrees with the Mary Moorman we see on the Zapruder film." (See survey map of Dealey Plaza, above, prepared in 1978 for the House Select Committee on Assassinations.)

As can be seen on the map, the camera position used for the Discovery Channel reconstruction is between 100 and 120 feet from the fixed structures used to match up the two photographs. Because the camera has a fixed focal length and was manufactured with its focus at infinity, a 7% increase in image size corresponds to an approximate 7% increase in distance from the objects matched up in the two photographs.

This puts Moorman's actual historical position at least 7 feet closer to the grassy knoll than the Discovery Channel's reconstruction.

The map also shows how the view changes when the camera is moved forward by 7 feet. The angular width of the image, just over 40 degrees from edge to edge, does not change when the camera is moved. (There is no "zoom lens" on the Moorman camera.)

The discovery provides an unexpected proof that Mary Moorman was standing in the street when she took her famous Polaroid (Figure 6). It thereby settles one contentious issue.
Since the Zapruder film shows Mary standing on the grass at the very instant that she took her photograph, it also proves that this 27-second home movie - which many take to be the closest thing to "absolute truth" in the assassination - has been subject to alteration.

Experts continue to debate the reasons for altering the film, the most important of which may have been that the driver brought the limo to a halt after bullets began to be fired. The purpose appears to have been to make sure that the shooters would have an easier target.

Vincent Palamara, the leading expert on the Secret Service, has collated the reports of some fifty-nine spectators who said that the limousine had either slowed dramatically or come to a halt in Dealey Plaza, including all four motorcycle patrolmen accompanying the President. They were published in the book *Murder in Dealey Plaza*.

These reports suggest that the limousine slowed dramatically as it came to a halt. The Zapruder film, however, does not show the limousine stopping or slowing dramatically. There is a slight loss of speed - imperceptible to the naked eye - that is gradual enough that the occupants of the limousine are not jostled.

Dr. Costella, an expert on light and the properties of moving objects, is also a contributor to a new book published in September, *The Great Zapruder Film Hoax*, which provides extensive evidence that the
Zapruder sequence was fabricated using other genuine films and photographs of the assassination.

Dr. Mantik, also a physicist as well as being a board-certified radiation oncologist, is another contributor to the new volume. He is the leading expert on the medical evidence in the assassination and has previously used a physics technique called "optical densitometry" to establish that the X-rays of JFK's autopsy had been altered. His previous studies of the medical evidence and of the Zapruder film were published in *Assassination Science* and in *Murder in Dealey Plaza*.

Before this latest discovery, the simplest yet most powerful proof that the Zapruder film was fabricated has been the lack of any "blurring" in Frame 232 of the film, which was published in *Life* magazine just weeks after the assassination.

Because the limousine was moving, and the shutter speed of the Zapruder camera was only 1/40 of a second, either the limousine or the entire background should be blurred by the same amount (or some combination of the two). They are not.

Another powerful proof has been the inconsistent behavior of a road traffic sign seen in the film. When the optical properties of the Zapruder camera are carefully accounted for, and two different frames of the film are precisely overlaid, the sign appears to "twitch."

"This is one of the few technical mistakes made in the fabrication of the film," explains Costella. "The optical properties of the Zapruder camera were mimicked extremely well. However, some poor-quality images published on the weekend of the assassination showed the sign as it would look through a perfect camera. Unfortunately for those who faked the film, the Zapruder camera was not perfect. Once published, the mistake could not be retracted. The toothpaste was out of the tube."

Governor of Texas in 1963, John B. Connally, was himself hit by bullets as he rode in the jump seat in front of President Kennedy in the presidential limousine. Connally survived the wounds and throughout the rest of his life stuck steadfastly to his description of events on that fateful day.

Connally refuted outright the Warren Commission's "single bullet theory", concocted by then junior counsel and now Senator Arlen
Specter. He adamantly insisted that he was not hit by the first bullet to strike the President.

Connally also described making a turn to his left, which is not seen on the Zapruder film. Until recently, it was believed that Connally was simply mistaken as was any witness statement that disagreed with what could be plainly seen on the Zapruder film.

Recognition that the film is itself fabricated evidence has caused researchers and historians to reassess all of the eyewitness reports that have previously been disregarded as "mistaken".

The Discovery Channel production was under the control of Gary Mack, Archivist for The Sixth Floor Museum. Several chapters in The Great Zapruder Film Hoax discuss this documentary and question the role of The Sixth Floor Museum in slanting its coverage of these events.

David Lifton, the author of Best Evidence, describes how Mary Moorman was repeatedly admonished by Gary Mack - during filming for the Discovery Channel special - for stating that she stepped forward before taking her picture and then stepping back afterwards.

Lifton has since discovered that Moorman's words were edited in production to remove the latter statement. For the final "take", Mack stood in front of Moorman to ensure that she did not step any further forward. (See Figure 7 below.)

Figure 7. Mack inhibits Moorman
Lifton also found that the "silent edit" removed Mary's explanation that she snapped her Polaroid at the moment of the first gunshot, after which she heard two further shots. The Zapruder film, however, shows Moorman taking her photograph at the moment of a final shot that appears to blow out the back of the President's head, some six seconds after he reacts to a shot to his throat.

Moorman made the same claims in her live 1997 radio interview with Jones. This prompted Costella to examine the affidavits of Moorman and Jean Hill, sworn on the day of the assassination, as well as the FBI reports of interviews with the two women.

Costella found that both women consistently described the first shot occurring as Moorman snapped her photo.

The heated controversy over Moorman's position arose three years ago when veteran JFK researcher, Jack White, of Ft. Worth, Texas, discovered that Mary's location could be constrained to a "line of sight" that aligned structures on the grassy knoll.

White's one-page summary of the method, published in *Murder in Dealey Plaza*, has ignited more controversy than anything else published on the assassination in the past ten years.

This has led some observers to speculate that the Moorman location is a sensitive issue for those trying to maintain the U.S. government's position that Lee Oswald alone assassinated Kennedy.

White and Costella both believe that even the famous Moorman Polaroid may have been tampered with before being published the day after the assassination. But this new Discovery Channel discovery was completely unexpected. "There are plans for checking the field of view of the Moorman Polaroid using an identical camera during the 40th anniversary visits to Dallas this week," says Costella. "I hadn't realized that the Discovery Channel had already performed the same experiment earlier this year - the special was only broadcast in Australia in recent weeks."

Belgian researcher Marcel Dehaeseleer proposed the experiment three months ago, and shipped his Moorman replica camera to Rick Janowitz, an Ohio researcher. Janowitz will travel to Dallas to perform the experiment in Dealey Plaza on Thursday and Friday of this week.
But is there any other explanation for the Discovery Channel photograph? "I guess it's possible that they could have faked the details of their reconstruction," concedes Costella, "but given how devastatingly damaging that would be to the Discovery Channel and to The Sixth Floor Museum, I can't imagine they would be that incredibly foolish."

The discovery is certain to fuel further controversy over the role that agencies of the U.S. government played in the cover-up of the assassination. More than 80% of Americans believe that there was a conspiracy to assassinate JFK (USA Today), but until now the government has been able to cast doubt on the involvement of agencies such as the Secret Service, the CIA, or the FBI.

The proven falsification of the photographic evidence, however, leaves them little room to maneuver: only these agencies had custody of the evidence and the means to alter or change it. It has been speculated that, in turn, the complicity of key members of these agencies in the planning of the assassination supplies a powerful motive for a cover-up.

Despite these discoveries, any official Watergate-style admission of wrongdoing by agencies of the U.S. government looks as unlikely today as it did nearly 40 years ago. With the ABC network planning to broadcast a special on November 20 claiming to prove Oswald acted alone on the basis of computer animations that take for granted the authenticity of the Zapruder film, observers can only wonder how historians of the future will regard this Orwellian "doublethink."

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