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Compelling Evidence

A New Look At

The

Assassination

of

**President
Kennedy**

Michael Griffith

1997 2nd Printing



COMPELLING EVIDENCE

A New Look at the Assassination

of President Kennedy

SECOND EDITION

Michael T. Griffith
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ABBREVIATIONS AND TERMS

CE.....	Commission Exhibit
CIA.....	Central Intelligence Agency
DPD.....	Dallas Police Department
FBI.....	Federal Bureau of Investigation
H.....	Warren Commission Hearings
HSCA.....	House Select Committee on Assassinations
JBC.....	John B. Connally
JFK.....	John F. Kennedy
NAA.....	Neutron Activation Analysis
Sniper's nest.....	The southeast corner window of the sixth floor of the Texas School Book Depository Building, i.e., the place from which the alleged lone gunman fired
TSBD.....	Texas School Book Depository
WC.....	Warren Commission
WCR.....	WARREN COMMISSION REPORT (I cite the Barnes & Noble printing of the report) Also cited by some authors as WR.
Z or Z-frame (+number).....	A certain frame from the Zapruder film

CHAPTER ONE

**AN INTRODUCTION TO THE
ASSASSINATION OF PRESIDENT KENNEDY**

The Lone-Gunman Theory

In 1964 the Warren Commission (WC) concluded President John F. Kennedy was assassinated by a lone gunman, Lee Harvey Oswald, and that there was no conspiracy involved in the killing. The Commission claimed Oswald shot JFK from the sixth floor of the Texas School Book Depository (TSBD) Building in Dallas, Texas, with an Italian-made 6.5 Mannlicher-Carcano rifle on November 22, 1963.

The Other View of the JFK Assassination

The other view of the Kennedy assassination is that it was the result of a conspiracy. Proponents of this position generally agree on the following points:

- There were at least two gunmen, one of whom shot at and hit the President from the front.
- The assassination was followed by a massive cover-up.
- Oswald was framed. He was set up ahead of time to be the patsy for Kennedy's murder.

I will argue herein that the conspiracy view of the assassination is more tenable than the lone-gunman theory.

Oswald's Alleged Marksmanship

According to the WC, the alleged lone assassin, Lee Harvey Oswald, fired at Kennedy three times, hitting him twice. But could anyone have shot JFK from the sixth floor of the TSBD in the manner described by the WC? Could Oswald have done so? I think the answer to both questions is no.

Oswald was at best only an average marksman. President Kennedy was a moving target. From the southeast corner window of the Book Depository's sixth floor, Oswald would have been firing at the President from sixty feet up and from over two hundred feet away on average. Oswald would also have been shooting from a position that was to the rear of the President's limousine, so the car would have been moving away from him. The WC made it clear that it believed the lone assassin's alleged three shots were fired in less than six seconds. There are serious doubts about the capabilities of the alleged murder weapon itself. In reenactments of the assassination, the expert marksmen hired by the WC were unable to duplicate Oswald's alleged shooting performance. In 1986 a former member of the firearms panel of the House Select Committee on Assassinations (HSCA) conceded that no rifleman had ever duplicated Oswald's alleged marksmanship feat.

However, lone-gunman theorists insist Oswald's alleged marksmanship was entirely possible. Professor Jacob Cohen of Brandeis University has defended this view, as have other WC apologists. Interestingly, however, these lone-gunman theorists find it necessary to attempt to stretch the assassin's firing time from six seconds to slightly over eight seconds. These researchers claim the sixth-floor gunman fired at around frame 160 of the Zapruder film, that any of the three shots could have been the miss, and that therefore he would have had "more than eight seconds to shoot, and more than five seconds--ample time--between the two hits." Even if the miss came between the hits, they say, that still would have been "enough time for an amateur used to handling guns, like Oswald."

There are numerous problems with this scenario. To begin with, it is based on an acceptance of the WC's dubious single- or magic-bullet theory. In a nutshell, this hypothesis says a bullet struck the President in the back or neck, exited his throat, struck Governor John Connally, who was seated in front of Kennedy, in the back, wrist, and thigh, causing all of his wounds, yet somehow emerged in nearly pristine condition, and was found at Parkland Hospital in Dallas. This theory is so implausible that even two members of the WC rejected it (and a third was highly skeptical of it). However, for the sake of argument, I will assume the correctness of the magic-bullet hypothesis.

It is true that the WC did not provide a definite opinion on which shot missed. However, Jim Moore, a staunch defender of the lone-gunman theory, acknowledges that the Commission's report "clearly indicated a leaning by its authors toward a second-shot miss."

Most of the assassination witnesses agreed that all the shots were fired within a time span of not more than five to six seconds, although it is possible the interviewing FBI agents misrepresented what some, or many, of these witnesses said on this point. The WC clearly seemed to believe that in the Zapruder film the period of time between the first and final shots was between "4.8 to 5.6 seconds." FBI experts analyzed the film and reached the same conclusion.

Another problem with trying to stretch the lone gunman's firing time to over eight seconds is that in order to do this it must be assumed he fired--and missed--at some point between Zapruder frames 145 and 166, which is what most WC defenders now believe. The sixth-floor gunman's view of President Kennedy would have been obscured by the oak tree on Elm Street at least from frames 167-206 (and probably till frame 209). Although a pre-Z167 shot would have required the gunman to fire at a sharply downward angle, the limousine would have been less than 140 feet from the window. How could a person firing from the sixth-floor window have missed the entire limousine? The WC acknowledged it was hard to imagine how a sixth-floor gunman could have completely missed, not only Kennedy, but the huge limousine as well, with his first shot.

The WC believed it was improbable that its sixth-floor gunman fired before Z-frame 207, which is when the presidential car emerged from beneath the intervening oak tree (the President would have come back into view at right around frame 210). Other than the period from frames 145-166, the only other time the alleged lone gunman could have fired at the limousine prior to frame 207 would have been during the split-second break in the oak tree's foliage at frame 186. However, the gunman would have had only 1/18th of a second to aim and fire, but the human eye requires 1/6th of a second to register and react to data. The Commission concluded it was unlikely that the alleged lone gunman would have fired during the foliage break, much less that he could have hit the target with such a shot.

Although most of the witnesses were reported to believe that all the shots were fired within six seconds, other witnesses gave slightly longer times for the shooting. There is, in fact, very good evidence that a shot was fired prior to frame 167, probably at around frames 145-150). The point is that it is unlikely the gunman in the sixth-floor window fired it.

So we have the lone gunman scoring hits on his first and third shots, having less than six seconds to get off three rounds, and with positively no more than 2.8 seconds to fire and refill. Even in the hands of the experienced, Master-rated riflemen who participated in the WC's tests, the alleged murder weapon couldn't be operated faster than 2.3 seconds between shots. WC defenders point out that other rifle tests have been done in which the Carcano's firing time was reduced to less than two seconds. However, those tests didn't use the alleged murder weapon--they used different Carcanos.

- The gunman would have faced many other problems as well. Here are a few of them:
- He would have had less than one second to aim and fire his first shot if he fired between frames 207 and 224, which is what the WC believed he did.
- The WC's own hired marksmen reported that the Carcano's bolt was so difficult to operate that it tended

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to skew their aim. They also said it had an odd trigger pull.

- The Carcano's scope was so badly misaligned that the FBI had to adjust the mounting apparatus before it could determine the rifle's accuracy. Lone-gunner theorists reply that the scope might have been damaged when the rifle was allegedly "thrown" to its hiding place. However, the evidence indicates the rifle could not have been thrown into the place and position in which it was found. The police officers who saw the weapon before it was removed from its hiding place found it under a bridge of different boxes and between several other boxes that "were just wide enough to accommodate the weapon and hold it in an upright position."
- Numerous witnesses, located in different parts of Dealey Plaza, reported that two of the shots came nearly simultaneously, less than one second apart. No rifleman, no matter how skilled, could have fired the alleged murder weapon with that kind of speed.
- **Oswald's Whereabouts at the Time of the Shooting**
 - The WC said Oswald was on the sixth floor of the TSBD Building at the time of the shooting. This is highly doubtful since he was seen by the building manager and a police officer well under 90 seconds later on the *second* floor, standing in the lunchroom with a soft drink in his hand (some 18 feet past the foyer door through which he would have had to come), and giving every appearance of being perfectly calm and relaxed. Reenactments have proven Oswald could not have reached the second floor (1) without being seen on the way down the stairs by the building manager, and (2) in time to get even a few feet past the foyer door when spotted. In addition, there is photographic evidence, confirmed in 1979 by photogrammetric experts hired by the House Select Committee on Assassinations, that someone was rearranging boxes on the sixth floor less than two minutes after the assassination. Obviously, Oswald could not have been in the second-floor lunchroom and on the sixth floor moving boxes at the same time.
 - Some people reported seeing *two* men, one with a rifle, on the sixth floor of the Book Depository Building minutes before the assassination. Their descriptions of the two men do *not* resemble Oswald. In fact, *all* five of the witnesses who reported seeing a man with a rifle in the sixth-floor window said he was wearing a light-colored shirt, whereas Oswald wore a brownish shirt to work that day and was seen in that shirt in the second-floor lunchroom less than 90 seconds after the shots were fired.
 - Some WC defenders assert that two people identified Oswald in a police lineup as the person they had seen firing from the sixth-floor. There was only one such witness, Howard Brennan, who at best gave problematic testimony. In fact, Brennan failed to make a positive identification of Oswald in a police lineup on November 22, even though he had seen Oswald's picture on TV beforehand. Only after weeks of "questioning" by federal agents did Brennan identify Oswald. The House Select Committee found Brennan's testimony to be so flawed that it ignored his story entirely.
 - If Oswald fired a rifle from the sixth floor of the TSBD on November 22, why did the paraffin test done on his cheek turn up *negative*? Why did the neutron activation analysis done on the paraffin cast of Oswald's cheek likewise fail to yield evidence that he had fired a rifle? Why have voice stress analyses of his claim that he didn't shoot anybody indicated he was telling the truth?

Oswald and the Mannlicher-Carcano Rifle

Lone-assassin theorists note that the money order, envelope, and order form used to purchase the Mannlicher-Carcano were filled out in handwriting identified as Oswald's. Also, Oswald supposedly used the alias "Alek Hidell." The rifle was sent to Oswald's post office box, but it was ordered in the name of, and addressed to, "A. Hidell." The Dallas police said Oswald was carrying an "Alek J. Hidell" ID card when he was arrested. Shortly after the assassination, the WC leaked photos that showed Oswald standing in his backyard holding the Carcano in

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one hand and some radical newspapers in the other hand. These are the famous "backyard rifle photos."

All of this might seem impressive at first glance, but consider the following facts:

- Oswald was at work when he is said to have purchased the money order.
- Nobody at Oswald's post office reported giving him a hefty package such as the kind in which a rifle would be shipped.
- No "A. Hidell" was authorized to get mail from Oswald's post office box.
- No mention was made of the Hidell ID card in the radio transmissions between the arresting officers and the police station. Nor was the card mentioned in the reports that those officers prepared two weeks later.
- There is a four-inch difference in length between the alleged murder weapon and the rifle that was offered in the advertisement Oswald is supposed to have used.
- The famous backyard rifle photos contain tell-tale signs of fakery. The HSCA photographic panel claimed the photos were authentic, but researchers, including professional photographers and photo lab technicians, have identified numerous flaws in the panel's authentication. At times the panel found it necessary to engage in far-fetched speculation and to omit crucial data in order to sustain the alleged authenticity of the backyard pictures.

Many conspiracists see the mail-order murder weapon and the "Hidell" ID card as evidence of a frame-up. In the Texas of 1963, Oswald could have bought a rifle across the counter with few if any questions asked. He could have done so and risked only a questionable identification by some gun-shop worker. Instead, we are told, Oswald ordered the murder weapon by using the alias "A. Hidell," gave his own post office box number, committed his handwriting to paper, and then went out to assassinate the President of the United States with this same "Hidell"-purchased rifle and while carrying a "Hidell" ID card in his wallet!

If Oswald did in fact order a Carcano rifle, he could have done so in compliance with orders from someone else. If, as is widely believed, and as some evidence suggests, Oswald was some kind of U.S. intelligence agent or operative, he could have been instructed to order a Carcano by his intelligence handler. Even if one accepts that Oswald ordered the rifle, or a rifle, there is little more than disputed, questionable evidence that he ever picked it up, or that he really "owned" it in the normal sense of the word. In fact, one can make a good case that the weapon reportedly delivered to Oswald's post office box was four inches shorter than the weapon later placed into evidence as the alleged murder weapon. Additionally, Professor George Michael Evica has developed evidence that Oswald might have ordered a Carcano as part of the Dodd Committee's investigation into mail-order weapons.

WC supporters assert that Oswald's palm print was found on the barrel of the alleged murder weapon. The palm print had no chain of evidence and the Dallas police announced its discovery only *after* Oswald was dead. Incredibly, the crime lab officer who supposedly found the print "failed" to photograph it, even though it was standard procedure to photograph a print before lifting it. When the FBI examined the Carcano on November 23, not only did it not find Oswald's prints on the weapon, but it found no evidence that the barrel had even been processed for prints. Researchers further note the suspicious fact that the palm print was not made available for examination until several days after Oswald's death. There is evidence that suggests the palm print was obtained from Oswald's dead body.

There are serious questions about all of the other items that supposedly identify Oswald as JFK's killer.

The Witnesses in Dealey Plaza

A majority of the people in Dealey Plaza who commented on the subject said at least some of the shots were

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fired from a point in front of the President's limousine. Specifically, they said shots came from somewhere in the area of the grassy knoll on the right side of Elm Street, or from the triple underpass next to the knoll. The President was shot on Elm Street.

WC defenders offer various explanations for this testimony. The most popular one is that those who testified to shots from the front heard echoes, that they were innocently misled by Dealey Plaza's alleged "echo-chamber" effect. Yet, when WC apologists assess the accuracy of those who testified to shots from the TSBD, nothing is said about the "echo-chamber" effect. A number of those who heard shots coming from the grassy knoll were standing on or very near the knoll itself.

Sixteen Dallas sheriff's deputies placed the origin of the shots near the triple underpass. One highly credible witness reported seeing a man with a rifle case walking up the knoll about an hour and a half before the assassination.

Several people reported seeing puffs of smoke near the wooden fence atop the knoll right after Kennedy was shot. In relation to this, a number of people in Dealey Plaza, including a U.S. senator and two police officers, said they smelled gunpowder on or near the grassy knoll following the shooting. Contrary to the claims of some WC defenders, the smoke cannot be attributed to hot steam pipes or automobile exhaust. And no one has yet been able to account for the presence of the scent of gunpowder on the knoll right after the President was shot. (Interestingly, not one of the Dallas police officers who inspected the alleged sniper's nest in the TSBD reported smelling gunpowder there.)

Was There A Wound Several Inches Down in Kennedy's Back?

Lone-gunner theorists claim there was an entrance wound in the back of President Kennedy's neck, on the lower right-hand side. They do so in order to account for his throat wound. They say the bullet which allegedly hit the back of Kennedy's neck exited his throat.

However, the back wound was actually located about five and a half inches down in the back, near the third thoracic vertebra. WC apologists strenuously deny this fact, but it is confirmed by President Kennedy's death certificate, by an original autopsy face sheet (marked "verified" by JFK's personal physician), by the transcript of the 1/27/64 WC executive session, by an FBI report on the autopsy, by the holes in the President's shirt and coat, by former Parkland nurse Diana Bowron, and by four medical professionals who attended the autopsy. Moreover, recently released HSCA documents have provided further corroboration for the back wound's low location. Three federal agents who saw the back wound drew diagrams of it for HSCA investigators. Those diagrams have now been released, and they show that each agent placed the back wound well below the neck (and visibly below the throat wound).

The Alleged Autopsy X-Rays and Photographs

WC supporters see the alleged JFK autopsy x-rays and photographs as crucial evidence for their position. They note that experts hired by the House Select Committee authenticated the autopsy x-rays and photos. However, the HSCA overlooked or ignored evidence of fraud in these materials, and one of the former members of the Committee's medical panel now says he believes the autopsy materials were tampered with and do not accurately reflect President Kennedy's wounds.

The skull x-rays were authenticated partly on the basis of a right frontal sinus. However, if, as many researchers believe, the x-rays are composites, or if they are the originals but have been altered, the identification of the right frontal sinus (or both sinuses) as belonging to President Kennedy would not automatically establish authenticity anyway.

A number of the medical personnel who saw Kennedy's body at Parkland Hospital or at Bethesda Naval Hospital believe the autopsy photos and x-rays are false. Even two of the autopsy doctors told the HSCA's medical panel that some of the photos contradicted their own recollections of the location of the entrance wound on

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Kennedy's head. Indeed, the Bethesda x-ray technician who allegedly took the x-rays has publicly stated that the x-rays in evidence are *not* the ones he took.

On the other hand, some experts assert that the x-rays are authentic but that they have been misinterpreted by the government-hired consultants who have examined them. For instance, Dr. Randy Robertson, a radiologist who has examined the x-rays at the National Archives, says they show that two bullets struck President Kennedy in the head, and that one of the missiles entered from the front. Dr. Joseph Riley has likewise concluded the skull x-rays show that two bullets struck Kennedy's head. Additionally, Dr. Gary Aguilar, though he questions the radiographs' authenticity, maintains that the anterior-posterior x-ray at the National Archives indicates a noticeable defect in the right rear part of the head, and Dr. Aguilar is not the only expert who has noticed the back-of-the-head defect in this radiograph.

Two alleged autopsy photos of the back of Kennedy's head show it to be intact. But there is compelling testimony from dozens of witnesses who saw the President's body that there was a large, gaping wound in the right rear part of the head (see below). The autopsy report itself states that the large wound extended partly into the occipital area, yet the autopsy photos show no damage in that area.

A Frontal Shot and the Large Defect in the Back of Kennedy's Head

The WC denied there was a large defect in the rear of Kennedy's head, and many lone-gunman theorists continue to do so. Why the controversy? Because a large wound (typical of a bullet's point of exit) in the back of the President's head would suggest a shot from the front. There is massive testimony from both Parkland and Bethesda medical personnel, as well as from some federal agents, that there was such a wound.

Some lone-assassin theorists claim that the Parkland doctors who said they saw the large defect in the rear did not get a good look at the President's head wounds, and that some of those doctors later reversed themselves about the defect when they reviewed the alleged autopsy x-rays and photos for Walter Cronkite's *Nova* documentary, *Who Shot President Kennedy?* In light of the evidence that the autopsy x-rays and photos are not genuine, any change of opinion based on them would be unfounded.

Only four of the Parkland doctors were consulted for the *Nova* program, and there is evidence suggesting they were not all shown the same pictures. According to Dr. Robert McClelland, the large defect in the rear of the head IS visible in some of the photographs in the *full* set of autopsy pictures he was permitted to see at the National Archives for *Nova*, photos the public has yet to view. None of the three other doctors mentioned seeing any such photographs. In fact, when Dr. McClelland emerged from viewing the autopsy materials at the National Archives, he said the wound was where he had previously said it was, in the right rear part of the head.

Some of the Dallas doctors got a very good look at the head wound, and six of them even stated they could see cerebellar tissue protruding from the defect. Cerebellar tissue is easily distinguishable from other brain tissue, and one of the doctors who reported seeing cerebellar tissue was a neurosurgeon. This is significant because the cerebellum is located in the back of the head.

All but one of the Dallas doctors who testified on the subject told the Warren Commission that the large defect was in the right rear part of the head, and in later years that one doctor likewise put the wound in the right rear portion of the head in a filmed interview.

Former Parkland nurse Diana Bowron cleaned Kennedy's head wound and packed it with gauze squares. Nurse Bowron vividly recalls that the large wound was in the right rear part of the head. Also, Nurse Bowron strongly disputes the authenticity of the alleged autopsy photos.

The Zapruder Film and a Shot from the Front

Further evidence that Kennedy was shot from the front can be seen in the Zapruder film. In this gruesome home movie of the assassination, we see the President's head and upper body being jerking violently to the rear and

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to the left in reaction to the fatal head shot.

The Zapruder film explains why the two motorcycle policemen who were riding to the left rear of the President were splattered with blood and brain tissue coming toward them. One of those policemen indicated a piece of skull struck him with such force that for a moment he thought he himself had been hit. Some lone-gunman theorists have suggested the patrolmen drove into the spray that came from the front of Kennedy's head, but the Zapruder film and several photographs of the limousine prove that they remained behind the car before, during, and well after the fatal head shot, and that no significant amount of spray was blown leftward. The Zapruder film also shows that the forward spray from Kennedy's head blew mostly up and toward the camera and quickly dissipated.

Before the Zapruder film was made public, WC member Allen Dulles vehemently denied the film showed Kennedy being thrust backward. After the film was seen on national television, WC defenders were forced to explain why the President was thrown violently to the rear if the fatal shot came from behind.

Many WC apologists now assert that the fierce backward motion of Kennedy's head and upper body was "a seizure-like neuromuscular reaction to major damage inflicted to nerve centers in the brain" combined with a so-called "jet effect." Some goats were even shot in an attempt to demonstrate the plausibility of the neuromuscular-spasm theory. However, this explanation is highly speculative at best, and the goat tests do not explain the reaction of Kennedy's head and body as seen in the Zapruder film. In addition, the speed of Kennedy's reaction appears to rule out this theory.

As for the jet-effect theory, this hypothesis is supposedly demonstrated in a home movie wherein plaster-filled skulls fly to the rear after being shot from behind. However, this experiment, which was shown in Cronkite's *Nova* documentary, is not relevant to the assassination because the skulls were not attached to anything, and in other experiments the skulls were blown forward (i.e., they flew in the same direction the bullet was traveling). Moreover, the jet-effect theory, as explained by one of its leading advocates, violates Newton's third law of physics, according to physics instructor Ken DeGazio. Ballistics and physics expert Dr. Larry Sturdivan implicitly rejected the jet-effect theory when he testified before the HSCA.

Police instructor and firearms journalist Massad Ayoob, who is an expert on the effects of bullets on human bodies, has stated that the reaction of JFK's head to the fatal shot in the Zapruder film indicates the shot came from in front of the limousine. Dr. Roger McCarthy, a ballistics expert with Failure Analysis Inc., and Craig Roberts, a former Marine sniper with numerous kills in Vietnam, have reached the same conclusion.

Recent research has produced evidence that frames were removed from the head-snap sequence in the Zapruder film, and that the original backward motion was not quite as violent as it now appears in the film. This would answer the objection raised by some physicists that no bullet striking Kennedy's head could have caused his head and upper body to move so rapidly. In addition to the apparently missing frames from the head-snap episode, other indications of tampering have also been found in the film and are discussed in detail in Harrison Livingstone's recent book *Killing Kennedy and the Hoax of the Century*. This is a ground-breaking book, and I would urge the reader to obtain it and to study it carefully.

What About the Magic Bullet?

As mentioned previously, according to the WC, one bullet hit Kennedy in the back of the neck, exited his throat, entered Governor Connally's back, caused all of his wounds, and yet emerged from the governor in nearly pristine condition to be found later at Parkland Hospital. This bullet, known to many as the "magic bullet," is listed as Commission Exhibit (CE) 399.

The magic-bullet theory is untenable. Even one of the Kennedy autopsy doctors called it "most unlikely." And Dr. Charles Gregory, one of the physicians who treated Governor Connally, said the bullet that hit the Governor "behaved as though it had never struck anything except him."

More bullet fragments were removed from Connally's wrist than are missing from CE 399, and at least one

fragment remains in his body to this day. Nurse Audrey Bell, the Parkland nurse who assisted with the surgery to the Governor's wrist, insists that far more bullet fragment material was removed from the wrist than is missing from CE 399, and her account is supported by the 11/22/63 Parkland operative record on the wrist surgery. Therefore, the magic bullet could not be the same missile that hit Connally.

WC apologists hail the neutron activation analysis (NAA) conducted by Dr. Vincent Guinn for the HSCA. Guinn analyzed CE 399 and some alleged fragments from Connally's wrist and from the limousine. He concluded it was "very likely" and "highly probable" they were from the same ammunition. However, given the fragments Guinn tested, as well as those he did *not* test, it is impossible for his NAA to support the magic-bullet theory or the lone-gunman scenario.

When Guinn began his analysis, he found that a can which had contained fragments that had apparently struck the limousine's windshield was empty, so he could not test them. The fragments from Connally's wrist that were tested in 1964 were (and still are) missing and thus were not analyzed either. Of the fragment specimens that were available to Guinn, one of them, CE 569, could not be tested because it was only the copper bullet jacket with no lead inside. In addition, Guinn later conceded that *none of the wrist fragments available for his test weighed the same as those listed as evidence by the WC, and that he did not test the same samples that were tested by the FBI in 1964.*

Another major problem with the magic-bullet theory is that Kennedy and Connally were not in the proper alignment for the magic bullet to have caused all of the governor's wounds. According to WC apologists, however, some experts have proven that a line drawn "through Connally and Kennedy's wounds leads right back, straight as an arrow" to the sixth-floor window." This alleged straight line is based on downright fanciful speculation, and it is contrary to eyewitness testimony and to the photographic evidence. The author of the HSCA's trajectory study admitted he could not get the "straight line" to match up when JFK's back wound was considered. He also admitted that the margin of error in his analysis was so great it could allow for a shot from the Dal-Tex Building and even from the County Records Building.

Dr. David Mantik's recent research at the National Archives definitely appears to refute the single-bullet theory once and for all. Dr. Mantik, a physicist and radiologist, was permitted to examine the original x-rays at the NA, along with the autopsy photographs. I quote from Livingstone's book *Killing Kennedy and the Hoax of the Century*:

Mantik measured the width of the spine directly on the X-ray. He estimated the front-to-back distance of the body as 14 cm (typical for males of this size) and the distance of the back wound from the midline (4.5 cm to 5.0 cm) was given by the HSCA. He measured distances on the photographs as well. The wound seen in the front of the throat at Parkland was placed at the midline. [Quoting Dr. Mantik] "When I placed these measurements onto a cross section of the body at the seventh cervical vertebra and then connected the bullet entry and exit sites by a straight line, I *immediately saw that the 'magic' bullet had to go right through the spine.* This path would have caused major damage to the spine and would have been very obvious on the chest X-ray. In fact, there is no major trauma like this anywhere in the spine.

[Still quoting Dr. Mantik] "Because of the impenetrable vertical barrier produced by the transverse process up and down the entire cervical spine and because of the total width of the cervical spine, *there is no place for the bullet to pass through anywhere in the neck and still exit through the midline of the throat.* If, instead, the upper chest (thoracic spine) is considered as a possible bullet trajectory site, then another problem arises. The bullet would have had to go right through the lung. But no lung damage of this type was seen by the pathologists and none is seen on the X-rays either. This 'magic' bullet simply cannot enter through the back wound and then exit through the throat wound without hitting the spine--or else causing major lung trauma!

"It is odd that this rather simple construction with exact measurements has never

Compelling Evidence

been done before. *Its very simplicity, however, provides direct evidence that the object which entered the back could not have exited at the front of the throat.* This throat wound, which looked like an entrance wound to the Parkland physicians when they *first* described it [original emphasis], may indeed have been an entrance wound." (emphasis added)

Dr. Mantik's discovery confirms the conclusions of the late Dr. John Nichols, who was a professor of pathology at the University of Kansas Medical Center. Although Dr. Nichols was not permitted to study the autopsy x-rays and photos, he deduced from the trajectories involved and from his knowledge of human anatomy that no bullet could have gone from the back wound to the throat wound without smashing into one of the transverse processes of the spine. Said Dr. Nichols,

Figure 6 is the view through Oswald's telescopic sight at Frame 222, showing the depressed angle of 20.23 degrees prevailing at the first shot as measured in the FBI reenactment. I have both measured and calculated the lateral angle at this frame to be 9.21 degrees. Elementary anatomy indicated that the minimum lateral angle for the bullet to miss the transverse processes and emerge in the midline [of the throat] is 28 degrees; this is obviously impossible from Oswald's alleged firing position.

More Evidence of Conspiracy

Time does not permit me to discuss herein all of the evidence that President Kennedy was killed by a conspiracy. However, here are some additional facts which show a conspiracy was involved:

- An unknown person or persons was impersonating Oswald and leaving a trail of incriminating evidence against him *before* the President was shot. Lone-gunman theorists deny that these impersonations took place, but the fact that they occurred has been established beyond any reasonable doubt. A recently released transcript of an 11/23/63 phone conversation between J. Edgar Hoover and Lyndon Johnson reveals that Hoover acknowledged that someone was impersonating Oswald at the Soviet embassy in Mexico City. And, there can be no credible doubt whatsoever that the "Oswald" who called the Soviet embassy from the Cuban embassy on 9/28/63 was *not* the real Oswald. Historian and former Army intelligence officer John Newman discusses this new evidence in his recent book *Oswald and the CIA* (New York: Carroll and Graf Publishers, 1995).
- Dozens of JFK assassination witnesses have either been murdered or died under suspicious circumstances. The number and circumstances of these cases are such that they cannot be a coincidence.
- There was at least one unidentified man posing as a Secret Service agent on the grassy knoll. This phony agent reportedly prevented witnesses and even a police officer from going into the railroad yard behind the knoll immediately after the assassination.
- Two days before the assassination, several unidentified men were seen engaging in what appeared to be mock target practice from behind the fence on the grassy knoll. The men appeared to be aiming rifles in the direction of Dealey Plaza. These men were seen by two Dallas police officers. The officers headed for the fence, but by the time they reached it the men had departed. This incident was unknown until 1978 when the FBI report on it was released under the Freedom of Information Act.

Final Thoughts

Where can we go from here? What can be done about the assassination at this late date? For one thing, we can become informed about President Kennedy's death and help others to realize that what happened on November 22, 1963 was nothing less than a coup d'etat. Once informed, we can press our elected officials to release *all* of the assassination documents that are still sealed. We can also demand that a special prosecutor be appointed to reinvestigate the case to the fullest extent possible. Many witnesses are still alive, and there is a great deal of

important evidence that has yet to be properly analyzed. There is much that we could learn from a new investigation--much that we *need* to learn. I conclude this article by quoting Dr. Cyril Wecht and then Gaeton Fonzi. Dr. Wecht is a nationally recognized forensics expert and a former member of the HSCA's medical panel. Gaeton Fonzi is a former Senate investigator and a former staffer of the HSCA. I start with Dr. Wecht from a filmed interview in 1988:

I think it's extremely important for the American people to know that there can be the overthrow of a government, that there can be a coup d'etat in America, and that that in fact did happen with the assassination of President Kennedy. In order to prevent that kind of thing from happening again, and in order to expose the forces that were responsible for that murder and for the cover-up that has ensued in the following twenty-five years, it's necessary to expose them, otherwise we can have the same thing happen again.

Therefore, in the same fashion that we have exposed problems and scandals involved with Watergate, problems in Vietnam, problems in Central America, problems in the overthrow of governments elsewhere (like Allende in Chile), and on and on and on, so must we expose that same kind of political assassination in our country. As painful as it may be, as disruptive as it might be in a transitory nature, as embarrassing as it might be to certain individuals and organizations in the United States Government, this must be done. If they were able to do it to John F. Kennedy in 1963, they could do it to some other president in the future.

Gaeton Fonzi:

Despite the clamor of the last few years, all the books, the films and the articles, the assassination of President John F. Kennedy is being allowed to go quietly into history. We must not let that happen--not yet, not ever. I fear that if it does become mere history, our vision of what our democratic system is all about, already waning, will dim dangerously. And the system's most elemental imperative will be forgotten: Our Government governs by the consent of *all* the people, not by a small group with the power and resources to impose its own will. The wolves of oligarchy are waiting for that darkness. . . .

The assassination of President Kennedy was a blatant affront to each and every one of us who believes that we, as individuals, should have some control over who governs us and how we are governed. That's the bedrock of our democracy. We would have been very angry if someone with a gun had stopped us from going into the voting booth, impeding our freedom of choice. We would have seen that quite clearly as a direct attack against the democratic system--not only a flagrant violation of our rights but an outrageous *personal* affront.

The analogy is obvious: The conspiracy to kill the President of the United States was a conspiracy against the democratic system--and thus a conspiracy against each and every one of us. Our choice was denied. That's why it very much still matters.

Understand this, also: The action that brought about the death of President Kennedy is directly related to where we have gone as a nation since then. It is particularly important to what is happening today. That single event prefaced the disintegration of our solid faith in government, fathering the now pervasive and enervating assumption that we no longer have control over our economic or political destiny. Its residue lies in the ashes of the Sixties--in burned out countries and burned out cities and burned out people--and in the debilitating social disparities and continuing civil conflicts of the last thirty years. The assassination and its aftermath bred rampant distrust and disrespect for all established institutions, and that outlook festers yet.

Compelling Evidence

And now, we hardly . . . [care] when our own Government violates or ignores its own laws, as it has done with distressing regularity over the last two decades. . . .

And still, it seems incredible that we're not angry. The fact is, we know an effective democracy demands a populace ready, willing and able to get riled enough to pressure its elected officials into doing their duty in spite of themselves.

RECOMMENDED READING:

John H. Davis, *Mafia Kingfish: Carlos Marcello and the Assassination of John F. Kennedy*, New York: Signet, 1989.

Robert Groden, *The Killing of a President: The Complete Photographic Record of the JFK Assassination, the Conspiracy, and the Cover-Up*, New York: Viking Studio Books, 1993.

Gaeton Fonzi, *The Last Investigation*, New York: Thunder's Mouth Press, 1993.

Henry Hurt, *Reasonable Doubt: An Investigation Into the Assassination of John F. Kennedy*, New York: Holt, Rinehart, and Winston, 1985.

Harrison Edward Livingstone, *Killing the Truth: Deceit and Deception in the JFK Case*, New York: Carroll & Graf Publishers, 1993.

----, *Killing Kennedy and the Hoax of the Century*, New York: Carroll & Graf Publishers, 1995. A very important book. Must reading.

Jim Marrs, *Crossfire: The Plot That Killed Kennedy*, New York: Carroll & Graf Publishers, 1988.

Newman, John, *Oswald and the CIA*, New York: Carroll and Graf Publishers, 1995.

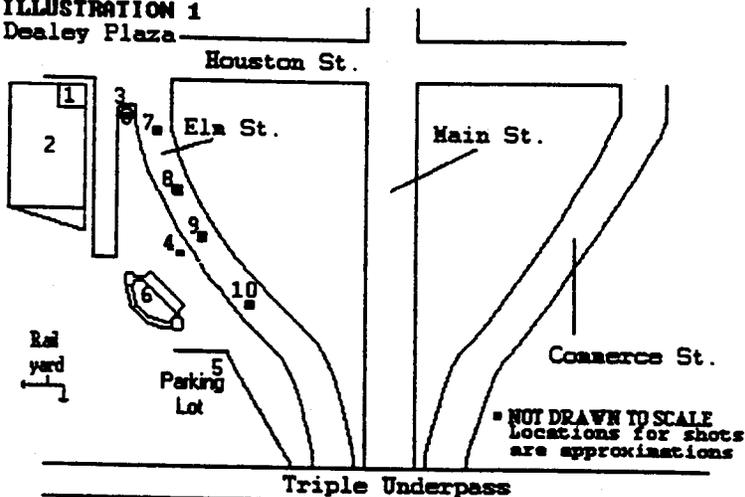
David Scheim, *The Mafia Killed President Kennedy*, London: Virgin Publishing Ltd., 1988.

Harold Weisberg, *Case Open: The Omissions, Distortions, and Falsifications of "Case Closed,"* New York: Carroll & Graf Publishers, 1994.

----, *Selections From "Whitewash,"* New York: Carroll & Graf Publishers, 1994.

----, *Never Again: The Government Conspiracy in the JFK Assassination*, New York: Carroll & Graf Publishers, 1995.

ILLUSTRATION 1
Dealey Plaza

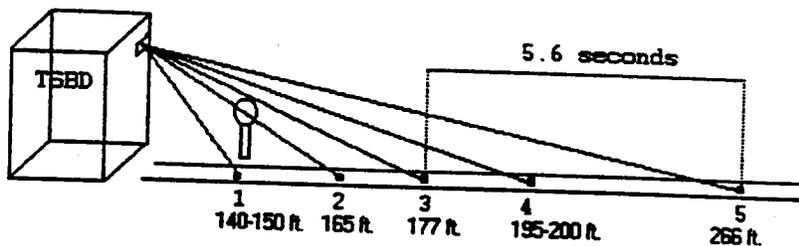


1. Alleged sniper's nest
2. Book Depository Building
3. Oak tree in front of TSHD
4. Stearns Freeway sign
5. Corner of wooden/stockade fence on the grassy knoll
6. Concrete pergola on the grassy knoll
7. Point of first shot, according to HSCA acoustical experts (Z-frame 160)
8. Earliest point sixth-floor shooter could have fired at limousine after oak tree
9. Point of Connally hit in current Z film (Z236-238)
10. Fatal head shot (Z 313)

ILLUSTRATION 2
Firing Time of Sixth-Floor Gunman

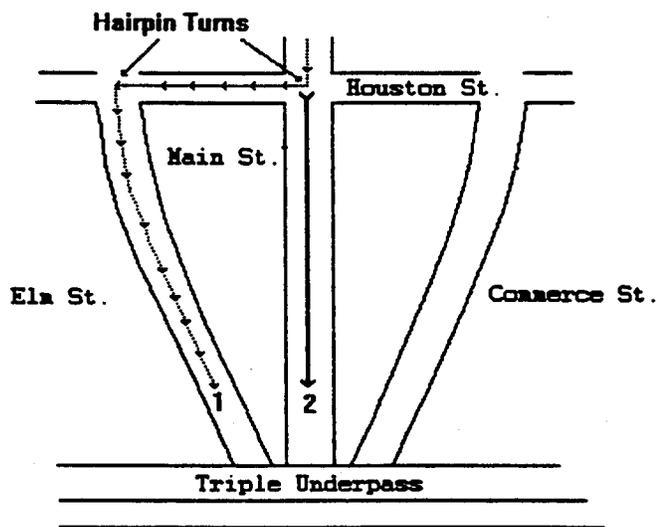
1. Early shot (Z150-160)
2. Shot through break in foliage (Z186)
3. Earliest shot at JFK after tree (Z207-210)
4. Latest point for hit on Connally (Z238)
5. Fatal head shot (313)

(Shots are based on current version of Zapruder film)



Note that in order to believe that the sixth-floor shooter fired at around Z160, one would have to assume that he completely missed, not only Kennedy, but entire limousine from a distance of less than 150 ft. and while firing nearly straight down at the car. Moreover, to shoot during the break in the foliage, the gunman would have had only 1/8th of a second to aim and fire, but the human eye requires 1/6th of a second to register and react to data.

ILLUSTRATION 3
Motorcade Routes

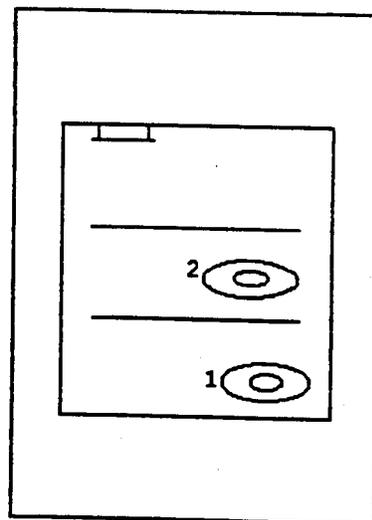


1. Fatal motorcade route
2. Route the motorcade could and should have taken

ILLUSTRATION #4
Kennedy and Connally in the Limo

1. JFK
2. Connally

[Not drawn to scale, but illustration reflects their positions as they appear in various photos of the motorcade.]



(Not drawn to scale)



CHAPTER TWO

THE GRASSY KNOLL AND SHOTS FROM THE FRONT

The House Select Committee on Assassinations (HSCA) formally concluded that at least one shot was fired at President Kennedy from the grassy knoll. The grassy knoll was to the right front of the limousine during the shooting. It was on the north side of Elm Street, which was the street on which the limousine was traveling when the assassination occurred. The Committee judged as credible the accounts of numerous witnesses in Dealey Plaza who said they heard shots fired from in front of the limousine. Most of these witnesses said shots came from behind the picket fence on the knoll, while others said shots came from the far west end of the knoll, next to the triple underpass. If the Kennedy assassination had been any ordinary murder case, the eyewitness testimony of shots from the front would have been immediately recognized as credible and important. But, the Warren Commission (WC) rejected this testimony because it was committed to its lone-gunman theory. The Commission said the witnesses were "mistaken," and it ignored or arbitrarily dismissed the other indications of gunfire from the front. Let us now take a brief look at *some* of the evidence that has convinced so many people that shots were indeed fired at the President from the front.

Suspicious Events on the Knoll Prior to the Shooting

On November 22, 1963, Lee Bowers had an excellent view of the area behind the grassy knoll. He was positioned in a 14-foot railroad tower that was located behind the parking lot to the rear of the grassy knoll.

Bowers told the WC that three cars entered the parking lot behind the knoll about half an hour before the assassination. The first vehicle, he said,

... proceeded in front of the School Depository down across 2 or 3 tracks [railroad tracks] and circled the area in front of the tower [Bowers' tower], and, as if he was searching for a way out, or was checking the area, and then proceeded back through the only way he could, the same outlet he came into.

This car, said Bowers, was a 1959 Oldsmobile station wagon with an out-of-state license tag. It bore a Goldwater-for-President bumper sticker, so presumably it was not a federal car of any kind.

The second vehicle to enter the parking lot behind the knoll, reported Bowers, was a 1957 Ford that was driven by a man who appeared to be holding a microphone up to his mouth. The Ford probed "a little further into the area than the first car." After three or four minutes of cruising around, the vehicle departed the same way "the first car had left."

The third vehicle, said Bowers, entered the parking lot no more than nine minutes before the shooting. It, too, bore a Goldwater campaign sticker, and it had the same type of out-of-state license tag as the first car. Bowers testified that the third car spent a little more time in the area before leaving.

The area between the tower and Elm Street was "cut off" as of ten o'clock that morning. How, then, did these cars manage to cruise around in the parking lot behind the grassy knoll? What were they doing there? Who were the drivers? It is certainly not illogical to suggest that the drivers were scouts for the sniper team on the knoll, and that they were making sure the escape routes were clear.

Bowers also said he saw two men standing near the fence on the knoll minutes before the shots were fired. He said one of the men was younger and was wearing a plaid shirt or coat. He described the other man as heavy-set and middle-aged.

Compelling Evidence

Julia Ann Mercer saw two men resembling this description near the knoll about an hour and a half before the shooting. As Miss Mercer was driving west on Elm Street, she got stuck in traffic that was congested because of a green Ford pick-up truck which had illegally parked in the lane on the far right. This vehicle was half on the street and half on the sidewalk. Miss Mercer pulled up behind the truck and stopped as she waited to pull out and pass. While she was waiting to pass, she saw a man at the back of the truck take what appeared to be a brown *rifle case*, which she described in considerable detail, from the tool compartment of the truck and walk up the grassy knoll. This man, she said, was white and was wearing a gray jacket, brown pants, and a plaid shirt. He was also wearing a stocking-type hat. As she drove around the truck, she took a look at the driver. He was, she reported, a heavy-set white man with brown hair and wearing a green jacket.

Realizing the implications of Miss Mercer's account, WC supporters have sought to discredit it. In so doing, they face a very difficult task. Miss Mercer reported her story to the Sheriff's Department within hours of the shooting. She had no conceivable motive to lie, was a person of good character, and gave a clear, detailed account of what she saw. Additionally, her description of the two men in the truck resembled the description of the two men later seen by Lee Bowers standing near the fence on the knoll. Both Mercer and Bowers described two males, one heavy-set and middle-aged and the other younger, and both said the younger man was wearing a plaid shirt or coat.

In an obvious but flimsy attempt to discredit Miss Mercer's account, the FBI produced a questionable statement taken from Patrolman Joe Murphy, who was allegedly one of the three officers whom Miss Mercer saw on the triple underpass while she was stopped behind the truck. Murphy's statement wasn't filed until 17 days later. Why the delay? Murphy contradicted himself and vouched for things he could not have seen. Conveniently, Murphy claimed he was "unable to recall" the name of the company for whom the men in the truck supposedly worked (he said they were construction workers). He did say, however, that they were working on the First National Bank at the time. But, neither the Dallas police nor the FBI bothered to call the bank to find out the name of the alleged company. Such information could have been easily obtained and would have enabled the authorities to corroborate Murphy's story. Once they had learned the name of the company, the FBI then could have obtained the names, addresses, and phone numbers of the men Murphy said were in the truck, and Miss Mercer's story could have been destroyed once and for all had the men proved genuine. But no such inquiries were made. As British scholar Matthew Smith points out, "That this never happened would seem to dispose of the FBI report, which raises more questions than it answers, and strengthens Miss Mercer's claims" (Smith 81). Furthermore, why didn't the police or the FBI produce statements from the other two patrolmen who were with Murphy on the underpass? Surely one of those two policemen would have noticed Murphy doing at least some of the things that he claimed he did in his belatedly filed FBI statement. If one or both of those officers had corroborated even just a few parts of Murphy's statement, that would have made his claims seem more credible. But this never happened either.

Some of the Witnesses

Abraham Zapruder: Zapruder was standing on the knoll itself and made the famous home movie of the assassination called the Zapruder film. He told the Secret Service on the day of the shooting that the assassin had fired from behind him. During his WC testimony, Zapruder was prepared to reveal evidence that there was more than one gunman, but, incredibly, the Commission lawyer who was questioning him, Wesley Liebeler, refused to pursue the matter. Said Zapruder,

They claim it was proven it could be done by one man. You know there was an indication there were two? (7 H 576)

And what was Liebeler's response to this tantalizing statement from a man who had been standing on the knoll itself? "Your films," he replied, "were extremely helpful to the work of the Commission, Mr. Zapruder" (7 H 576).

Zapruder said one of the shots caused reverberations all around him and was louder than the others. The HSCA noted that this description was more consistent with a shot that had been fired from nearby, i.e., from the knoll, than with a shot from the TSBD:

Michael T. Griffith

One shot, he noted, caused reverberations all around him and was much more pronounced than the others. Such a difference, the committee noted, would be consistent with the differing effects Zapruder might notice from a shot from the knoll, as opposed to the Texas School Book Depository. (HSCA Report 89)

James Tague: Tague was standing near the triple underpass and was in an excellent position to hear the shots. Tague stated that he heard shots fired from the grassy knoll. When counsel suggested he might have heard echoes, he replied,

There was no echo from where I stood. I was asked this question before, and there was no echo. (Lifton 21 n)

Jean Hill: Hill was standing on the south side of Elm Street and had an excellent view of the limousine and the grassy knoll in the background. Hill was within 50 feet of the limousine when the fatal head shot struck. She gave three interviews to reporters within hours of the shooting. "The shots," she said less than an hour after the assassination, "came from the hill--it was just east of the underpass." And she made it clear that she had heard more than three shots. However, in what was to become a familiar pattern, Mrs. Hill's FBI statement, taken later that day, mentioned none of this. As Richard Trask has correctly observed, the FBI statement "reflected little of what Hill had told national television" (Trask 242). The statement said nothing about four or more shots, nor did it say anything about gunfire from the knoll.

Paul Landis: Landis was a Secret Service agent and was riding in the follow-up car. He stated that when the President was shot in the head, his impression "was that the shot came from somewhere toward the front . . . along the right-hand side of the road."

Charles Brehm: Brehm was standing on the south side of Elm Street and was behind and to the left of the limousine when the fatal head shot occurred. Brehm told newsmen on November 22 that "the shots came from in front or beside the President."

Forrest Sorrels: Another Secret Service agent. He was traveling in the lead car. In his first account of the shooting, he said the shots seemed to come from the terrace on the grassy knoll.

William Newman: Newman was standing at the base of the grassy knoll and was therefore between the knoll and the limousine during the shooting. Newman said the shots came from behind him.

Gayle Newman: Wife of Bill Newman. She said the shots came from behind her.

Mary Woodward: She was to the left front of the grassy knoll. She said the shots came "from behind us and a little to the right," which would have been the knoll.

Maggie Brown: She, too, was standing to the left front of the knoll. The shots, she said, came from behind and to her right, i.e., from the knoll.

Jean Newman: Newman was standing between the Stemmons Freeway sign on Elm Street and the TSBD. She said, "The first impression I had was that the shots came from my right." The grassy knoll was on her right.

Aurelia Lorenzo: Like Brown and Woodward, she was standing to the left front of the knoll. She said shots came from a point to her right rear.

John Chism: Chism was standing beneath a freeway sign on Elm Street, with the grassy knoll behind him. He said that when the shots rang out, "I looked behind me."

Mary Chism: Wife of John Chism. The gunfire, she said, "came from what I thought was behind us."

Compelling Evidence

Bill Lovelady: Lovelady was standing on the front steps of the Texas School Book Depository Building (TSBD). He said sounds of shots came from "right there around that concrete little deal on that knoll." He told the FBI that he did not "at any time believe the shots had come from the Texas School Book Depository."

A. J. Millican: Millican had been standing in front of the colonnade on the other side of Elm Street from the TSBD. He said he heard five shots come from the area between the triple underpass and the TSBD.

Sam Holland: Holland was standing on the parapet of the railway bridge that overlooked Elm Street. He said he was positive shots came from behind the wooden fence on the grassy knoll.

James L. Simmons: Simmons was on the triple underpass and thus was well positioned to hear the shots. Simmons said the sounds of the shots came "from the left and in front of us, toward the wooden fence" on the knoll.

Richard C. Dodd: Dodd was also standing on the triple underpass. Dodd said he heard shots come from the grassy knoll.

Lee Bowers: During the shooting, said Bowers, his attention was drawn to the area near the fence where he had seen the two men standing. Bowers reported that there was a "flash of light or smoke or something" that caused him to look at that spot.

James N. Crawford: Standing near the TSBD, on the day of the shooting Crawford believed the shots came "from down the hill toward the underpass."

Mrs. Avery Davis: Mrs. Davis, a TSBD employee, said the shots were fired "from the viaduct," i.e., from the triple underpass, which, again, was next to the knoll.

O. V. Campbell: A TSBD employee. He said, "I heard shots being fired from a point which I thought was near the railroad tracks located over the viaduct on Elm Street."

Danny Arce: A TSBD employee. He told the WC, "I thought they [the shots] came from the railroad tracks to the west of the Texas School Book Depository." Arce was referring either to the tracks behind the grassy knoll or to the tracks on the triple underpass.

Ron Boone: Boone, a deputy sheriff, searched the area behind the fence on the knoll a minute or two after the shooting because "several witnesses" had told him that shots had been fired from that location.

J. C. Price: Price watched the motorcade from the roof of the Terminal Annex Building. He said the shots came "from behind the picket fence where it joins the underpass."

Seymour Weitzman: Weitzman was a deputy sheriff and was in Dealey Plaza at the time of the shooting. As he was running up the knoll moments after the shots rang out, a bystander told him that "a firecracker or shot had come from the other side of the fence." Weitzman then jumped over the fence into the parking lot, where a railroad worker told him that the source of the gunfire was "the wall section where there was a bunch of shrubbery."

Kenny O'Donnell: A close friend and aide of Kennedy, O'Donnell was seated in the follow-up car. He told former Speaker of the House Tip O'Neill during a private dinner that he was sure he had heard "two shots that came from behind the fence" on the knoll.

When O'Neill noted that O'Donnell had not said this in his FBI statement, O'Donnell replied that he had in fact told this to the interviewing agents but that they reacted by saying he must have been imagining things. "So," O'Donnell continued, "I testified the way they wanted me to" (O'Neill 211). How many other witnesses were persuaded or pressured into "testifying the way they wanted me to"? Some of the witnesses cited above told the WC they now believed the shots had all come from the TSBD. However, these witnesses either expressed a different view right after the shooting or admitted during their WC testimony that their first impression had been that the shots had come

from in front of the limousine.

Dave Powers: Powers, like Kenny O'Donnell, was an aide to Kennedy and was seated in the follow-up car. During the abovementioned dinner with Speaker of the House O'Neill, Powers confirmed O'Donnell's account of shots from the knoll (O'Neill 211).

Jesse Curry: Curry was the chief of the Dallas Police Department. Curry stated in his famous book on the assassination that he believed one of the shots came from in front of the limousine.

Gun Smoke on the Knoll?

A second or two after the shots rang out, seven men who were standing on the triple underpass saw "a puff of smoke" above the spot on the grassy knoll from which so many other witnesses said they heard shots fired. This area was just behind the wooden fence, about 10-20 feet to the right of the corner of the fence, and was slightly below and about 180 feet to the left of where the seven men were standing on the underpass. Mark Lane observes the following:

Many rifles emit a small amount of smoke when discharged. . . . Most of the railroad workers standing on the overpass turned to their left-- toward the knoll--when the shots were fired. Thus of all those in Dealey Plaza when the assassination occurred, they appear to have been in a unique position to observe smoke on the knoll. Seven of them said that they did see smoke above the bushes and under the trees. (Lane 40-41)

WC supporter Gerald Posner disputes the witness accounts of smoke on the knoll. Posner claims that James Simmons said he saw "exhaust fumes" from the embankment on the knoll, not a puff of smoke (Posner 256). This is what the FBI claimed Simmons recounted. However, in a filmed 1966 interview, Simmons insisted he saw a "puff of smoke" that came from beneath the trees next to the wooden fence. Continuing, he said, "we ran around to the picket fence. . . . There was no one there but there were footprints in the mud around the fence and footprints on the two-by-four railing on the fence. . . ." (Marrs 58). Posner relies solely on Simmons' FBI statement and does not even mention his 1966 interview.

Railroad workers Nolan Potter and Richard Dodd also saw smoke off to their left, i.e., near the fence on the knoll (Marrs 58). Posner does not mention their testimony.

Finally, Posner notes that some of the people who were on the triple underpass with Holland did not see smoke (Posner 256). One of those individuals was a Dallas police officer. Another one of those witnesses was Royce Skelton, whose attention was immediately drawn to the limousine when he saw "something" strike the pavement to the left rear of the car, so it's understandable that he didn't notice the smoke. Given the fact that a number of witnesses who were standing next to each other noticed different things, it is not surprising that not everyone on the triple underpass saw the smoke on the grassy knoll. Furthermore, one cannot help but wonder if their statements were accurately recorded by the FBI agents who took them. Railroad worker Dodd's FBI statement says nothing about smoke on the knoll, but in a subsequent filmed interview, he insisted he saw smoke above the bushes on the knoll, in the same spot where others saw smoke (Marrs 58).

Lone-gunman theorist Jim Moore thinks the smoke witnessed on the grassy knoll was automobile exhaust (Moore 31). Posner believes the smoke came from hot steam pipes located "at the top of the knoll where the smoke was seen" (Posner 256). Neither explanation is plausible. The steam pipes were not located in the right location to have caused the smoke seen that day (Scheim 27; Lifton 189-190). And there is no evidence that a smoking car was idling near the wooden fence at the time of the shooting. If there had been such a car, its exhaust smoke should have been visible before, during, and after the assassination, but no one reported seeing smoke near the fence until after the shots were fired. Additionally, in one clear frame of the Weigman film, as the presidential limousine enters the triple underpass a puff of smoke is clearly visible hanging in front of the trees on the knoll, which is in the same area where Sam Holland and other railroad workers placed the smoke (Marrs 58).

Compelling Evidence

The HSCA studied the witness accounts and cautiously concluded that the smoke they saw above the identified firing point on the knoll could indeed have been gun smoke:

Based on the statements of these witnesses, if the smoke they reported was in fact the result of gunfire, it would have originated in the area of the top of the grassy knoll. There is no way of determining what type of ammunition was used in that "gunfire" so that it can be stated conclusively whether the smoke seen by the witnesses is consistent with smoke produced by the type of ammunition used in any gunfire from the knoll. Nevertheless, a firearms expert engaged by the committee explained that irrespective of the exact type of ammunition used, it would be possible for witnesses to have seen smoke if a gun had been fired from that area. According to the expert, both "smokeless" and smoke-producing ammunition may leave a trace of smoke that would be visible to the eye in sunlight. That is because even with smokeless ammunition, when the weapon was fired, nitrocellulose bases in the powder which are impregnated with nitroglycerin may give off smoke, albeit less smoke than black or smoke-producing ammunition. In addition, residue remaining in the weapon from previous firings, as well as cleaning solution which might have been used on the weapon, could cause even more smoke to be discharged in subsequent firings of the weapon. (12 HSCA 24-25; cf. 1 HSCA 485)

The Scent of Gunpowder on the Knoll

Right after the shots were fired, several witnesses reported smelling gunpowder on or near the grassy knoll. These witnesses, moreover, notes Anthony Summers, were "all either distinguished public figures or qualified to know what they were talking about" (Summers 29). He continues,

Three witnesses in the motorcade--the Mayor's wife, Mrs. Cabell, Senator Ralph Yarborough, and Congressman Ray Roberts--all later mentioned the acrid smell in the air. It is highly improbable that any of these people--sweeping past in the motorcade--could have picked up the smell of gunpowder from a sixth-floor window high above them. It is remarkable too that they could have smelled it from the grassy knoll, but it seems it was in that general area that they did notice it. Police Officer Earle Brown, on duty at the railway bridge, and Mrs. Donald Baker, at the other end of the knoll, reported the same distinctive smell. Another policeman, Patrolman Joe Smith, was holding up traffic across the road from the Texas School Book Depository when the motorcade passed by. He heard gunfire, and when a woman cried out, "They're shooting the President from the bushes!" Smith ran to the grassy knoll, the only bushy place in the area. In 1978 he still remembered what he reported shortly after the assassination, that in the parking lot, "around the hedges, there was the smell, the lingering smell of gunpowder." (Summers 29)

The Man Seen Fleeing Behind the Knoll

J. C. Price was watching the motorcade from the top of the Terminal Annex Building in Dealey Plaza. From that location, he had an excellent view of the plaza and of the area behind the grassy knoll. Immediately after the shots were fired, Price's attention was drawn to the area behind the grassy knoll. He saw a man running across the railroad yard, toward "the passenger cars on the railroad siding." Price said the man "was running very fast, which gave me the suspicion that he was doing the shooting." This man, Price added, "was carrying something in his hand," which "could have been a gun" or "a head piece" (a hat).

Jack Lawrence and His Borrowed Car

About a month before the assassination, a man named Jack Lawrence was hired at Downtown Lincoln-Mercury, a Dallas car dealership that was only two blocks from Dealey Plaza. Lawrence got the job by providing job references from New Orleans. These references were later found to be phony. Lawrence was known

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as an ardent right-wing speaker, and reportedly had been an expert marksman in the military. The night before the assassination, Lawrence borrowed a car from the dealership, saying he needed it for a date.

Lawrence did not show up for work in the morning. However, thirty minutes after the shooting, he came hurrying through the company's show room. He was pale and sweating and had mud on his clothes. He rushed into the men's room and threw up. He claimed he had been ill, and that he had tried to return the car but was forced to park it because of traffic. His co-workers became suspicious and called the police. Later, the car Lawrence had borrowed was found--it was discovered in the parking lot behind the wooden fence on the grassy knoll (Marrs 339-340; Groden and Livingstone 133-134; Shaw 90).

Lawrence was arrested by the Dallas police that evening. However, like other potentially important suspects who were arrested that day, he was released in short order and with little or no investigation into who he was or what he had been doing at the time of the shooting. Lawrence left Dallas soon after he was released.

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CHAPTER THREE

REACTIONS TO FIVE SHOTS IN THE ZAPRUDER FILM

The following discussion on reactions to shots in the Zapruder film is not intended as an analysis of *all* the shots that were fired during the assassination. The purpose of this article is to briefly examine reactions to five different shots in the Z film. The sequences presented below include the approximate frame of the shot and the reactions to that shot. The starting points given for each shot sequence are estimates, and in some cases the shot could have occurred a few frames earlier or later. It should be kept in mind that Zapruder's camera operated at right around 18.3 frames per second, and that therefore each frame represents only 1/18th of a second.

This chapter is based on an analysis of the Zapruder film as we now have it. Evidence has surfaced that the film has, in fact, undergone significant alteration, namely, that a number of frames have been removed from it and that some frames are composites. For a cogent presentation of the evidence on this point, I would refer the reader to Harrison Livingstone's recent and very important book *Killing Kennedy and the Hoax of the Century*.

Zapruder Frames 145-167

The HSCA photographic panel saw evidence of a reaction to gunfire by the vehicle's occupants between frames 162 and 167. The panel noted that at frame 162 Governor John Connally starts to snap his head 60 degrees to the right in 1/9th of a second. Connally's reaction is particularly significant because it conforms to his WC testimony that he turned in response to having heard the first shot. Connally's rapid head movement at Z162-167 indicates that the shot to which he was reacting was fired no later than frame 160.

Failure Analysis Associates, following a study of the Z film using state-of-the-art enhancement technology, determined that a shot was fired at right around frame 160. Failure Analysis, like the HSCA photographic panel, noted Connally's rapid turn to the right at frame 162.

Failure Analysis also concluded that at around frame 160 Rosemary Willis, running along the grass to the left of the limousine, begins to stop and turn to the right and starts to look up the street toward a point somewhere behind the limousine. According to Failure Analysis, by frames 187-190, i.e., only about 1.5 seconds later, she has completed these actions—she is turned away from the motorcade and is looking back toward a point to the rear of the President's car. Other experts, however, have concluded that Rosemary Willis does not begin to stop and turn until around frames 186-189.

Although Failure Analysis opined that Rosemary Willis begins to stop and turn at around frame 160, some researchers believe the House Select Committee's photographic panel concluded this does not occur until around frames 186-190, based on the following statement by the panel:

During the period of Connally's initial rapid movement (from frames 162-167), however, no one else shows a comparable reaction. The President does not appear to react to anything unusual prior to Zapruder frame 190. The Panel observed, however, that at approximately this time, a young girl who had been running across the grass, beyond the far curb of the street where the limousine was traveling, suddenly began to stop and turn sharply to her right, looking up the street in a direction behind the limousine. (6 HSCA 17)

Close reading of this passage, however, appears to show the panel's conclusions on the matter are essentially in agreement with Failure Analysis's findings. The former chief counsel of the HSCA, G. Robert Blakey, takes the view that the Willis girl begins to slow down at around the time Connally turns his head rapidly to the right. Exactly when the Willis girl starts to slow down is a matter of interpretation. It seems to me she begins to slow down in the Z165-175 range, and then comes to a full stop and then turns around at Z188-190.

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- Kennedy turns his head very rapidly from left to right at Z154, and there is a significant blur at Z155.

Several witnesses in Dealey Plaza reported that the first shot was fired just after the limousine had turned the corner onto Elm Street. Among these witnesses were Secret Service agents Paul Landis and George Hickey, Buell Frazier, Royce Skelton, and Barbara Rowland. SSA Landis, for example, who was riding in the follow-up car, said he heard the first shot right after the limousine "had completed its turn." Similarly, SSA Hickey, also riding in the follow-up car, said the limousine had turned and had only "proceeded a short distance" when he heard the first shot. Taken by itself, this testimony would indicate a shot between frames 150 and 162, give or take a few frames, and no later than frame 166. However, when combined with Connally's rapid head turn to the right at frame 162, it indicates that the first shot was fired no later than frame 160.

Virtually all researchers believe this shot missed. There is no evidence that anyone in the presidential car was hit by this bullet.

In addition, many researchers doubt that this shot came from the alleged sniper's nest, i.e., from the southeast corner window on the sixth floor of the Book Depository Building. The WC claimed that only one gunman did the shooting and that he fired all his shots from this window. However, if the alleged lone assassin fired this shot, how could he have completely missed, not only the President, but the huge limousine, from a distance of less than 140 feet and while firing from 60 feet above the car?

Zapruder Frames 186-207

The HSCA photographic panel concluded Kennedy was hit between frames 188 and 190. The panel noted that a fraction of a second later, at around frame 200, Kennedy's movements suddenly freeze and his right hand abruptly stops in the middle of a waving motion. It was further noted that JFK's head rapidly moves from the right toward his wife on his left. The HSCA said the following in its report:

... the second shot hit ... at about Zapruder frame 188-191. The [photographic] panel noted that at approximately Zapruder frame 200 the President's movements suddenly freeze, as his right hand seemed to stop abruptly in the midst of a waving motion. Then, during frames 200-202, his head moves rapidly from right to left. The sudden interruption of the President's hand-waving motion, coupled with his rapid head movements, was considered by the photographic panel as evidence of President Kennedy's reaction to some "severe external stimulus." (HSCA Report 82)

Based on its jiggle or blur analysis of the Z film, the Committee's photographic panel determined that the strong blur episode between frames 189 and 197 indicated a shot was fired "between frames 181 and 192." After correlating this blur episode with other evidence, the panel concluded the shot was fired just before frame 190.

By frames 202-204, Mrs. Kennedy has made a sudden sharp turn to the right, toward her husband. This would have been in reaction to the Z186-190 shot.

At frame 207, Howard Brennan suddenly looks to his right. This could have been in reaction to the Z186-190 shot. Or, it could have been in reaction to another shot that was fired between frames 190 and 200.

At the direction of the Secret Service, Special Agent John Howlett analyzed films of the shooting (mainly the Z film) with the aid of a surveyor a few days after the assassination and concluded that Kennedy was first hit at around Z199. Don Olson and Ralph Turner discussed Howlett's analysis in their 1971 article in the *Journal of Forensic Sciences*:

In the National Archives, there is an FBI document concerning the SS analysis of the Z film. The document is dated Nov 29, 1963. SA John Joe Howlett, US SS, Dallas advised that with the aid of a surveyor and through the use of 8mm movie films depicting

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JFK being struck by assassins bullets on Nov 22, 1963, Howlett was able to ascertain that the distance from the window ledge of the farthest window to the east in the 6th floor of the TSBD, to where JFK was struck the first time in the neck was approximately 170 feet. He stated this distance would be accurate within 2 or 3 feet.

SA Howlett advised that it had been ascertained that JFK was struck with the first and third shots fired by the assassin, while Gov. Connally was struck with the second.

A map was included, which showed a point "A" at 170 feet from the window, with the notation "President struck with first bullet." Howlett's figure of 170 feet corresponds to about frame 199 or 200 of the Zapruder film, which is when JFK's reaction to being shot becomes particularly noticeable. This was the original SS analysis, JFK shot around Z199. (Olson and Turner 416-417)

At around frame 200, JFK's hand not only stops suddenly in the middle of a wave, but it also drops to the chin or throat level in a fraction of a second and stays at that level until he disappears behind the freeway sign at frame 207.

SSA Hickey, seated in the left rear of the follow-up car, begins to turn his head to the right in frame 195; he continues this motion for as long as he can be seen in the Z film, i.e., up to frame 207, "at which point he is looking off to the right of the motorcade" (Olson and Turner 409).

William Hartmann, a member of the Committee's photographic panel, reported that the panel found that Willis slide 5 indicated a shot was fired at or shortly before frame 190. Explained Hartmann,

Furthermore, there is some photo evidence that tends to support the thought of a shot in the time frame shortly before 190. For example, there is the Phillip Willis photograph which shows Mr. Zapruder in the background and the motorcade passing in between. Because the motorcade is in between, it is quite possible, quite easy, to determine exactly which Zapruder frame that corresponds to, because you can tell which part of the motorcade is passing between Zapruder and Willis. And Willis said that he took that photograph as a reaction. He pressed the shutter as a reaction to what he perceived as the first shot, at least a shot.

Well, it turns out that that frame is 202. So that means that Mr. Willis is telling us that he pressed the shutter as part of his reaction to a shot, and he was reacting at frame 202, while here we see that Mr. Zapruder is in the middle of his reaction at frame 202. So that is very nice, consistent evidence that something happened, say, at 190 or shortly before 190. (2 HSCA 15)

As mentioned, the Select Committee's photographic panel concluded that Kennedy was *hit* by frame 190 and began to react to it a split second later. Many researchers agree with this assessment.

However, this poses a problem for the lone-gunman theory, since the gunman in the sixth-floor window would have had an obscured, if not obstructed, view of the limousine because of the oak tree during these frames, i.e., from frames 186-191.

The suggestion has been made that a shooter in the sixth-floor window could have fired during the split-second break in the foliage of the intervening oak tree, at frame 186. And, indeed, a shot that struck Kennedy at Z188 would have been fired at Z186, give or take a few milliseconds. But, the foliage break would have only lasted 1/18th of a second, and the human eye requires 1/6th of a second to register and react to data. Even the WC thought it was highly improbable that its sixth-floor gunman would have fired during the foliage break, much less hit the target with such a shot. (The oak tree would have obscured the sixth-floor gunman's view of JFK from frames 166-207, except for frame 186.)

Many researchers, myself included, believe this shot was fired from in front of the limousine and that it wounded the President in the throat. On the day of the shooting, the Dallas doctors who treated Kennedy, along with those who either saw the wound or heard detailed descriptions of it from their colleagues, stated in no uncertain terms that the throat wound was an entrance wound. Dr. James Carrico told the HSCA that the damage he saw beyond the surface of the wound proved that the bullet must have been traveling from front to back (7 HSCA 270). The throat wound gave every appearance of being an entry wound—it was small (3-6 mm in diameter, and several of the doctors said it was 3-5 mm in diameter), fairly clean-cut, circular, and not punched out. In fact, it was *smaller* than the caliber of the type of missile that was allegedly used by the supposed lone assassin. It was also *smaller* than the bullet hole in the President's back, indicating that it was a different caliber than that of the missile that struck the back. Dr. Charles Baxter, one of the Parkland doctors who saw the throat wound, said in a taped interview in 1979 that the wound was "no more than a pinpoint. It was made by a small caliber weapon. And it was an entry wound" (Grodan and Livingstone 45). Nurse Margaret Henchcliffe, who had seen numerous gunshot wounds over the years, got a good look at the throat wound and concluded it was an entrance wound:

She saw a small hole in the middle of the President's neck, about as big as the end of her little finger. It looked like an entrance bullet hole to her. She had never seen an exit wound that looked like that. (6 H 143; Meagher 151)

Zapruder Frames 224-232

Dr. Luis Alvarez, a Nobel-prize-winning physicist, in his 1967 blur analysis of the Z film for CBS, concluded that Kennedy was hit between frames 226 and 229.

HSCA photographic panel members Hartmann and Frank Scott did their own jiggle analysis of the Z film and noted a blur episode from Z225-228. The panel obliquely conceded that this could represent another shot—not that it *did*, but that it *could*: "It is difficult to determine," they said, whether this blur "represents an additional shot."

Raymond Marcus, in a highly acclaimed analysis of the Z film, says the following on this shot:

In frame 225, JFK is clearly in distress, reacting to the frame 189 hit two seconds earlier. His face is contorted and his hands are in front of his chest, right hand above his left. Then there is a four-frame blur at frames 226-229, Kennedy's body is jolted sharply forward, and the position of his hands and elbows—particularly his elbows—changes dramatically, as they are flung upward and forward. The force and speed of these movements of his arms and elbows are quite startling when one compares frame 226, where they are first discernible, to frame 232 just 1/3-second later. (Marcus 6)

Although the WC, and to a great extent the HSCA, ignored these movements, they are among the most dramatic and visible reactions on JFK's part in the entire Z film. They can be readily discerned by viewing any decent copy of the film. Those readers who are fortunate enough to own the Medio CD entitled *The JFK Assassination: A Visual Investigation* can play the Z film one frame at a time, or in slow motion, and clearly see these movements for themselves.

Robert Groden, a photo-optics technician who served as a photographic consultant to the HSCA, in an analysis of the Z film in his best-selling book *The Killing of A President* (1993), identifies frame 228 as the moment a shot strikes Kennedy in the back. This shot, says Groden, "pushes him downward and forward violently" (Grodan 28). The fact that this shot pushes Kennedy noticeably forward is demonstrated frame by frame in Groden and Livingstone's book *High Treason*, fourth photo set, fourth and fifth pages. The demonstration begins with frame 228 and ends with frame 231. An overlay with reference lines is provided to enable the reader to see just how far Kennedy is thrust forward in less than half a second. (Grodan believes this shot came from the second floor of the Dal-Tex Building, which was across the street from the Book Depository Building.)

Marcus, Groden and others believe this was the second shot to hit President Kennedy, and I agree with that conclusion.

Zapruder Frames 233-240

John Connally himself, after carefully studying the Z film, chose frame 234 as the actual moment of impact. When *Life* magazine showed Connally the Z film and asked him about frame 230, he replied, "There is no question about it. I haven't been hit yet."

Dr. Robert Shaw, Connally's chest surgeon, studied the Z film and concluded the bullet struck the Governor at frame 236, "give or take 1 or 2 frames."

Dr. Charles Gregory, Connally's wrist surgeon, opined that the hit occurred between frames 234 and 238.

Professor Josiah Thompson, in an analysis of the Z film in his watershed book *Six Seconds In Dallas*, determined that Connally was struck at right around frame 236. Ballistics expert Howard Donahue and lone-gunner theorist Jim Moore, along with many other researchers, have reached the same conclusion. I quote from Thompson's superb analysis:

... in frame 238 we see a very definite change indicating the impact of a bullet: his right shoulder collapses, his cheeks and face puff, and his hair is disarranged. . . .

Dr. Gregory told me in Dallas that a necessary consequence of the shot through Connally's chest would be a compression of the chest wall and an involuntary opening of the epiglottis, followed by escaping air forcing open his mouth. Dr. Gregory estimated the interval between impact and mouth opening to be on the order of 1/4 to 1/2 second. Thus the surge of air to the cheeks in Z238 and the subsequent mouth opening indicate the impact of a bullet only the barest fraction of a second earlier. . . .

Yet the clearest indication of the impact of a bullet is the sudden collapse of the Governor's shoulder. (Thompson 71, 74)

As Connally's right shoulder is driven downward and forward, his entire body is pushed somewhat forward as well. This is another reaction that is very easy to observe in any good copy of the Z film.

A few researchers, however, have claimed that the shoulder drop is an optical illusion caused by the rapid movement of Mrs. Kennedy's hand, but Thompson's precise measurements indicate that the shoulder does in fact drop. He provides a graph charting the slope of Connally's shoulder in relation to the top of the limousine's door, from frames 230 to 240. Concerning these measurements, he says the following:

This shoulder collapse can be seen quite readily by comparing the slope of the Governor's shoulder against some relatively constant line-- such as the top of the car door. When we do this we find that the slope steepens dramatically at Z238 by some 20 degrees, and remains steep through successive frames. (Thompson 74)

The dramatic shoulder drop, which occurs in 1/18th of a second, has been noted by everyone from Jim Moore to Howard Donahue to Richard Trask to Robert Groden, among many others. Moore has this to say about the shoulder drop:

The problem Dr. Lattimer, the Warren Commission and the HSCA investigators share is the sudden drop of Connally's right shoulder at frames 237-238. Portions of the human frame don't suddenly drop 20 degrees without some significant outside force acting upon them. And, when you consider that this shoulder drop took place within an eighteenth of a second, that outside force must have been very significant indeed. Impact on the Governor's back, then, most likely took place at Zapruder frame 237. Interestingly enough, Connally's doctors also reviewed the Zapruder film and placed the moment of impact at about frame

236. (Moore 168-169)

Governor Connally and his wife both described the bullet's impact in terms that seem to corroborate the shoulder drop. For example, Mrs. Connally said that her husband "lunged forward" as a result of the bullet's impact (1 HSCA 52). The Governor said the bullet's impact felt like someone had hit him with a sharp blow and that it made him "pitch forward" (1 HSCA 46, 53; see also 1 HSCA 42). He told the WC that the missile's impact felt as though someone had doubled up his fist and struck him hard just below his right shoulder (4 H 144; Thompson 74). In addition, when interviewed for the 1993 CBS documentary *Who Shot JFK? The Final Chapter*, Connally said the shot knocked him forward.

Marcus points out another way to track the shoulder drop, and that is by making the simple observation that in Z238 Jackie's red roses are suddenly more visible than in Z236-237. This has nothing to do with the location or movement of Jackie's hand. In Z236 you can see where her hand is, and you can faintly see a small part of the roses beneath it. It is important to note that there is a space between her hand and the roses. In Z237 her hand has risen ever so slightly, but the roses are still only barely visible, which is to be expected since there was already a space between her hand and the roses anyway in Z236 and earlier. But, in Z238 the roses are suddenly more visible. Why? Because Connally's right shoulder has been driven downward in the fraction of a second between frames 237 and 238.

Zapruder Frames 312-320

Little needs to be said about these frames.

At frame 312, Kennedy's head is jolted forward for a split second, but as the head is in the process of moving forward, it and his upper body are rocketed violently to the rear and to the left beginning at frame 313.

This, of course, is the fatal head shot. Some researchers see these movements as evidence of two hits striking nearly simultaneously, one from the rear followed by one from the front. Other researchers question the authenticity of the momentary forward movement, while agreeing that the more violent backward motion indicates the shot was fired from the front. Lone-gunman theorists see the forward head movement as evidence that the shot came from behind and opine that the rearward motion was caused by a jet effect and/or by a neuromuscular reaction.

When the bullet strikes, some particulate matter sprays out from the right frontal area of Kennedy's head; it is blown more or less toward Zapruder's camera and then quickly dissipates. Other blood and tissue are blown to the front and rear so rapidly that the human eye cannot detect their movement. Riding on the left rear side of the limousine, Patrolmen Bobby Hargis and B. J. Martin are splattered with blood and brain from Kennedy's skull. Hargis told reporters that he was hit so hard by a piece of bone or something from the President's head that he initially thought he himself might have been wounded. Standing to the limousine's left rear, Charles Brehm saw a piece of the President's skull blown backward and to the left, i.e., toward Brehm and toward the two patrolmen, Hargis and Martin.

After the President's head and upper body snap violently backward, his entire body goes limp. He is obviously mortally wounded. As mentioned earlier, recent research has produced evidence that frames are missing from the head-snap sequence in the Zapruder film, and that therefore the original motion was not quite as rapid as it now appears in the film. This is an important development because, among other things, it answers the objection raised by some physicists that no bullet could have caused JFK's head and upper body to move so violently. In fact, Harrison Livingstone and his team of expert advisors have developed evidence that quite a few frames were removed from the Zapruder film in an attempt to shorten the time span of the shooting and to remove scenes of reactions that could not possibly be explained with any version of the lone-gunman theory.

Herein we have examined indications of five shots in the Z film. Again, I emphasize that this is not to say there were only five shots. There are credible reports of other bullets landing in Dealey Plaza, and there is the undisputed wounding of James Tague, which almost certainly was not the result of any of the misses or fragments suggested by lone-gunman theorists. Indeed, the closest *fragment* that WC supporters can come up with would have

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just finished plowing through a human skull that was over 200 feet away from the point where Tague was standing. The closest *bullet* that WC defenders can offer struck the curb and/or a limb of the oak tree from a distance of over 400 feet away.

No lone-gunman theory can account for five shots. The WC said there were only three shots. Howard Donahue believes there might have been only two shots; he can allow for three shots, but his assassination theory cannot account for five shots. The alleged lone assassin could have fired no more than three shots. Yet, as we have seen, there is very strong evidence from the Z film that at least five shots were fired.

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CHAPTER FOUR

**FATAL FLAWS OF THE LONE-GUNMAN THEORY:
EVIDENCE THAT PRESIDENT KENNEDY
WAS KILLED BY A CONSPIRACY**

Many people, researchers and lay persons alike, have compared the Warren Commission's lone-gunman scenario to the flat-earth theory and to the tale of the emperor's clothes. Why? Because there are facts which show this scenario to be based on wildly implausible, if not impossible, theories and assumptions. Herein we will consider six fatal flaws of the lone-gunman scenario:

1. The wounding of James Tague.
2. The lack of copper traces around the holes in the front of President Kennedy's shirt and tie.
3. The nick in the knot of President Kennedy's tie.
4. Governor John Connally's thigh wound and Commission Exhibit 399, i.e., the alleged magic bullet.
5. Lee Harvey Oswald's whereabouts less than 90 seconds after the last shot was fired.
6. The absence of human tissue and fiber strands and patterned striations on CE 399, and CE 399's nearly pristine condition.

Just exactly what is the lone-gunman theory? Allow me to summarize it:

- President Kennedy was killed by a lone gunman. The President was shot twice while his limousine was traveling on Elm Street in Dealey Plaza in Dallas, Texas, on November 22, 1963. One bullet hit him in the back of the neck and then exited his throat. The other bullet hit him in the head and killed him. Both shots were fired from behind.
- The lone assassin was Lee Harvey Oswald, an ex-Marine and alleged Marxist who had supposedly defected to the Soviet Union.
- Oswald shot JFK from the southeast corner window of the sixth floor of the Texas School Book Depository (TSBD) Building in Dealey Plaza with an Italian-made 6.5mm Mannlicher-Carcano rifle at 12:30 P.M.
- No conspiracy of any kind was involved in the shooting.
- The same bullet that allegedly exited Kennedy's throat went on to severely injure Governor John Connally, who was seated in front of the President. This came to be known as the single- or magic-bullet theory, and the bullet, officially labeled Commission Exhibit 399, is often referred to as "the magic bullet." The single-bullet theory is crucial to the single-assassin position, for if CE 399 did not wound both Kennedy and Connally, then there must have been more than one gunman.

Let us now consider six fatal flaws of the lone-gunman scenario.

1. The Wounding of James Tague

When the shots were fired, James Tague was standing near the triple underpass in Dealey Plaza. He was about 450 feet from the TSBD. Suddenly, a bullet struck the curb on Main Street about 20 feet from where he was standing. Moments after the shooting, a police officer noticed that Tague was bleeding from his left cheek. Tague had been struck by a piece of concrete that had been sent flying by the bullet, or by a fragment from the bullet that hit the curb, or by a fragment that struck him before it hit anything else. The curb scar was deep enough that Tague assumed he could have been cut by a chip of concrete from it. He recalled that when the shooting started he had felt a sting on his cheek. Later, he described the mark on the curb as it appeared when he saw it:

There was a mark. Quite obviously, it was a bullet, and it was very fresh.
(Weisberg, *Case Open*, 141; *Warren Commission Report* 116, hereafter cited as WCR
[Note: I am using the Barnes & Noble edition of the report.]

Deputy Sheriff Buddy Walthers, who saw the mark soon after the shooting, agreed that it had been caused by a bullet (Hurt 135). Patrolman Clyde Haygood, who radioed in the incident at around 12:40, seems to have been under the same impression (WCR 116). In a 1966 filmed interview, Tague unequivocally said the curb mark was the result of a bullet striking the curb.

Why does the wounding of Tague destroy the lone-gunman scenario? For a number of reasons. One reason is that it virtually proves there were at least four bullets fired at the President, but the lone-assassin theory allows for only three shots. There is good evidence, which is now accepted even by several leading Warren Commission (WC) defenders, that the first shot was fired much earlier than the Commission thought it was, and that it missed.

The lone-gunman theory allows for only one miss. Yet, if the supposed miss from the sixth-floor window hit the curb near Tague, without striking anything else first, then it was a wild miss. Realizing this fact, and accepting the evidence of an early first-shot miss, most modern lone-gunman theorists claim that only a fragment caused the mark on the curb. Here's where the lone-assassin case gets particularly desperate and far-fetched.

J. Edgar Hoover said the mark on the curb must have been caused by the lead fragment of a bullet. The WC suggested the fragment might have come from the fatal head shot. That is, that a lead fragment from the fatal head shot struck the curb and sent a piece of concrete or lead streaking toward Tague. However, the fatal missile was around 260 feet away from the curb when it struck Kennedy in the head. Furthermore, according to this hypothesis, the lead fragment separated from its metal jacket while plowing through JFK's skull, exited the skull, then somehow cleared the limousine's bubble-top support bar and traveled over 200 feet to the south Main Street curb, yet struck the curb with enough force (1) to send a concrete chip flying twenty feet, and (2) to cause that chip to cut Tague's face at the end of the 20-foot journey. But after plowing through a human skull, it is extremely doubtful the fragment could have traveled over 200 feet and still have been moving fast enough to visibly mark the curb and to send a concrete chip, or a lead fragment, streaking toward Tague. Moreover, how could the supposed fragment have traveled the required distance and speed, when two other fragments dropped into the car and did not even penetrate the windshield or the soft surfaces on which they were found? Other researchers have noted the marked implausibility of this theory. Jim Marrs:

... the only ... [bullet] that could have lost such an amount of lead is the final head shot and that was at a location more than 200 feet away, a considerable distance for a small fragment to travel and still impact the curb as described.

If the bullet mark on the curb was a miss, it was an incredible miss. If the shot that struck the Main Street curb came from the Texas School Book Depository's sixth floor, it must have missed Kennedy by thirty-three feet in the air and twenty-one feet to the right. Such a miss is hardly compatible with that claim that Oswald was able to hit home with two out of three shots from his inefficient rifle aiming at a target moving laterally and away from him. ... (Marrs 63)

Sylvia Meagher:

It [the WC] suggests that a fragment from the bullet that hit the President's head might have produced the mark on the curb, ignoring the fact that two large fragments (equivalent respectively to one-fourth and one-eighth of the mass of the bullet) had dropped into the car without even penetrating the windshield or the relatively soft surfaces on which they were found. (WCR 76-77, 557; 5 H 66-74) If those fragments suffered such a dramatic loss of velocity upon impact and fragmentation, how could a different piece of the bullet retain sufficient momentum to travel "about 260 feet farther, and to cut Tague's face and/or mark the curb? (Meagher 7)

Moreover, in order for a fragment from the head shot to have struck the curb near Tague, it would have had to somehow fly over the limousine's bubble-top support bar and its windshield, and then dive down to the curb. However, it is hard to imagine how the fragment could have flown over the support bar and/or the windshield, much less dived down to hit the curb and still retained enough force to create a readily visible mark on the curb and to send a concrete chip, or a piece of the bullet fragment, streaking toward Tague. In addition, if the missile had been fired from the sixth-floor window, the bullet would have approached from the right rear and would have struck the head at a downward angle or around 20 degrees. How would a fragment from such a bullet have traveled upward so as to clear both the support bar and the windshield? And even if this amazing fragment had been deflected upward, how could it have possibly retained enough force to travel over 200 feet, mark a concrete curb, and then send a concrete chip flying so fast that it could cut a man's face? Even if it's assumed that Tague was cut by something other than a chip of concrete from the curb, there is still the fact that the curb was visibly marked and that some concrete had been blasted out of the curb mark by the object which struck caused it (which is why Tague and others assumed he could have been cut by a piece of concrete from the curb scar).

Could a fragment from the head shot have struck Tague's face directly, that is, without hitting anything else first? This suggestion is as problematic as the theory that a fragment caused the mark on the curb. For example, in order to have struck Tague's face, the fragment still would have had to somehow fly over the limousine's support bar and windshield. The HSCA's trajectory expert, Dr. Tom Canning, told the Committee that the windshield damage appeared to be too high to have been caused by a fragment from the head-shot missile. Yet, to accept the theory that a fragment from this bullet somehow reached Tague, we would have to believe that the fragment flew well above the damaged portions of the windshield. In fact, it would have had to clear the support bar. But if it had managed to do this, how could it have gone on to strike the curb and/or Tague with any appreciable force?

Jim Moore's theory to explain the mark on the curb is even more problematic than the WC's. According to Moore, the first shot struck the road near the right rear of the President's limousine while it, the car, was hidden from the gunman's view by the oak tree in front of the TSBD. Then, says Moore, this missile bounded low beneath the car and then traveled diagonally until it hit the curb, which was nearly 300 feet away (Moore 198). But the metal smears taken from the mark on the curb had no traces of copper in them, which means the bullet that caused the mark could not have been the copper-jacketed ammunition that Oswald supposedly used, assuming the FBI crime lab accurately reported the results of its analysis of the smears.

To make matters worse, Moore says the first shot was fired at frame 186 of the Zapruder film, when the limousine appeared for a split second between a break in the foliage of the oak tree in front of the Depository (Moore 123, 198). Even the WC was highly skeptical of the idea that a gunman would have fired at this time (WCR 98, 105). The gunman would have had only 1/18th of a second to aim and fire during the foliage break, but the human eye requires 1/6th of a second to register and react to data.

Why would the alleged lone assassin have fired at Z186 when this shot would have had very little chance, if any, of hitting the target and could have alerted the President's driver that the limousine was under attack? (Of course, a gunman firing from the Dal-Tex Building or from the County Records Building would have had a good shot at the limousine just after the limousine turned onto Elm Street, but lone-assassin theorists claim that all the shots were fired from the sixth floor of the Book Depository.)

The most fanciful theory of all has been proposed by Gerald Posner, the author of the book *Case Closed*.

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Posner suggests that the mark on the curb was caused by a lead fragment from a bullet that allegedly struck a limb of the oak tree, in spite of the fact that the tree whose limb the bullet supposedly hit was at least 400 feet from the curb.

Additionally, according to Posner, this was the first shot, but Tague said it was the second shot which caused the mark on the curb and/or that wounded his face (Weisberg, *Case Open*, 146-147; WCR 116). Moreover, Posner theorizes that the lead core separated from its copper jacketing after the alleged tree-branch collision and then traveled over 400 feet in a straight line from the Depository to the curb (Posner 326). However, after separating from the jacket and then flying over 400 feet, it is highly doubtful the lead core would have been able to hit the curb with enough force to cause a concrete chip to reach Tague with enough speed to visibly cut his face, nor is it at all likely that such a fragment would have had enough force to fly straight to Tague's face and then cut it.

Another problem with Posner's theory is that it would require us to believe that the alleged lone assassin fired--and missed--sometime between Zapruder frames 145 and 166 (see Posner 324; see also Weisberg, *Case Open*, 98). But to make this assumption, we would have to believe that the supposed lone gunman *completely missed, not only Kennedy, but the entire limousine*, from an elevation of 60 feet and from a distance of less than 140 feet. Even the WC admitted it was hard to believe the gunman would have been so wildly off the mark with his first and closest shot (WCR 111).

Moreover, in order for Posner's errant shot to have fragmented off a tree limb, one would think the missile would have had to strike far enough up the limb so that the limb would not move, bend, or snap when the bullet hit it. This would have been a staggering miss from the sixth-floor window.

There are several factors behind Moore's and Posner's convoluted theories. One, there is persuasive eyewitness testimony that a shot was fired between Z158 and Z190. (In fact, there is good evidence that one shot was fired at around Z145-160 and that another one was fired at around Z190.) Two, Moore and Posner cannot allow for the possibility that a gunman was firing from one of the buildings adjacent to the TSBD, such as the Dal-Tex Building or the County Records Building, even though those buildings would have afforded an assassin a good view of the limousine from frames 150-210 (and beyond). Three, they cannot accept the plausible suggestion that the mark on the curb was caused by a non-copper-jacketed bullet, or possibly by a lead bullet, because the alleged lone gunman supposedly used copper-jacketed ammunition. Nor can they accept the equally plausible suggestion that the mark was caused by a large fragment from a missed shot that struck much farther down on Elm Street (and, of course, much closer to the south Main Street curb near Tague).

The mark on the curb near Tague and Tague's resulting facial injury present lone-gunman theorists with severe difficulties. Oswald supposedly used copper-jacketed bullets, but the metal smears taken from the mark on the curb had no traces of copper in them. If it is claimed that the mark was caused by a direct strike from the lone gunman's errant shot, then the single-assassin theory is refuted by the absence of copper in the metal smears and by the significant nature of the miss. On the other hand, if it is assumed that the mark was caused by a lead fragment, the closest fragment that the lone-gunman theory can offer was over 200 feet away, had just finished plowing through a human skull, and would have had to fly over the limousine's bubble-top support bar.

The plain fact of the matter is that the Tague incident reveals the patently implausible nature of the single-assassin scenario. All of the reasonable explanations for the absence of copper in the curbing section and for Tague's facial injury are incompatible with the lone-gunman theory.

It is worth noting that the WC's staffers tried to ignore the wounding of Tague. Before they finally acknowledged the incident, they (along with the FBI and the Secret Service) made the common-sense assumption that Kennedy and Connally were hit by separate bullets (Weisberg, *Selections*, 322-329).

2. No Copper Traces on Shirt and Tie Holes

A crucial component of the lone-gunman theory is the claim that the missile which struck Kennedy in the back exited his throat. As evidence for this claim, WC defenders cite the holes in the President's tie and in the front of his shirt. Yet, they consistently ignore the fact that no traces of copper, or of any other metallic substance, were found around those holes. Although copper traces were found around the holes in the back of Kennedy's coat and shirt, no metallic traces of any kind were found around the holes in the front of the shirt (5 H 62).

Furthermore, the absence of copper traces tends to corroborate Dr. Charles Carrico's testimony that the hole in the President's throat, which he and other Dallas doctors characterized as an *entrance* wound, was *above* the tie. Moreover, the lack of copper traces is additional evidence for the fact that the clothing holes in question were made by Parkland nurses as they cut away the President's clothing in order to treat him.

Critics of the WC have spoken cogently on these points. I quote Weisberg:

There was no secret from the very first that neither the cuts in the front of the shirt nor the cut in the tie bore any traces of the passage of a bullet. Again, [FBI ballistics expert Robert] Frazier acknowledged this, without Finck-like evasion, in New Orleans [during the 1969 trial of Clay Shaw]. . . . Frazier said only "No, sir," when asked, "Did you find . . . copper traces on the front slits of the shirt and tie?" . . .

Dr. Charles James Carrico, then but twenty- eight years old, is the physician who first attended the President in the emergency room [at Parkland Hospital]. His March 30 [1964] testimony immediately preceded that of [Dr. Malcolm] Perry. [WC member Allen] Dulles interrupted the Carrico questioning to try to learn exactly what was being testified to about his [JFK's] anterior [frontal] neck wound (3H361-362).

"Will you show us about where it was?" he asked.

Carrico showed by placing his hand on his own throat while speaking, his rejoinder ending, "This was a small wound here."

To this demonstration of "here," Dulles responded, "I see. And you put your hand *right above where your tie is?*"

Although those who drafted the Report of the Commission deliberately ignored this and the members, of whom only five were present to hear this, seem to have forgotten it, the doctor who first saw the President, the only one who saw him before the clothes were attacked so the President could be treated, placed the front-neck wound above the knot of the tie. (Weisberg, *Selections*, 517-518, original emphasis)

Henry Hurt:

That front neck wound, of course, was largely believed to have been one of entry by those experienced observers at Parkland Hospital. That was the thrust of their initial impressions and was stated several times at a press briefing at the hospital by a White House official. But the official version ruled that it was a wound of exit and suggested that the exiting bullet caused the nick on the side of the knot of the President's tie. The government version also suggested that the slits through the front of the neckband of the President's shirt were caused by an exiting bullet.

The initial difficulty with the government's case was that the FBI laboratory--after spectrographic analysis--could find no metal traces on the tie or the neckband of the collar, traces that should have been there if a bullet had caused the damage.

The second major problem was one that often plagued the commission: a highly credible witness who saw and said things that contradicted the larger picture. Dr. Charles Carrico, the doctor who examined Kennedy in the emergency room *before* his shirt and tie were removed, testified to the Warren Commission (and later confirmed in an interview) that the anterior neck wound was *above the knot of his tie*. A wound location this high in the front would render fatuous the whole teetering premise of the Warren Commission. (The commission ignored Dr. Carrico's testimony on this point, even though

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he was the doctor in the best position to have any direct knowledge.) (Hurt 59-60, original emphasis)

In an interview with Harold Weisberg, Dr. Carrico confirmed that the throat wound was above the tie (Weisberg, *Never Again*, 241-242; Weisberg, *Post Mortem*, 357-358, 375-376).

3. The Nick in President Kennedy's Tie

The nick on the knot of President Kennedy's tie is powerful evidence against the single-bullet theory, and hence against the lone-gunner scenario as well. According to WC defenders, the nick on the tie's knot was caused by CE 399 as it allegedly exited Kennedy's throat. Is this even possible? No. A digitized and enlarged print of the official picture of the tie shows the nick to be visibly inward from the knot's left edge, and there are no holes in the tie beneath the nick, nor are there any holes at any other point in the tie beneath or around the nick. There is no way an exiting bullet could have caused the nick as it appears in the official photograph of the tie (see, for example, Weisberg, *Never Again*, 246-247). In response to this fact, the suggestion has been made that the tie was untied and then retied before the photos of it were taken, and that originally the nick was on the knot's left edge. But, if we assume the nick was originally on the knot's left edge, this would still refute the single-bullet theory. Why? Because in order to have caused a nick on the knot's left edge, the bullet would have had to be traveling at a very sharp right-to-left angle and could not possibly have gone on to strike Governor Connally near the right armpit as required by the single-bullet theory.

The slits in the front of President Kennedy's shirt reinforce this fact. According to the magic-bullet hypothesis, CE 399 created those slits when it supposedly exited the neck. In photos of the shirt, the slits can be seen to be directly beneath the button and button hole (Weisberg, *Never Again*, 244-245). It is much more likely, if not virtually certain, that the slits were made by one of the Parkland nurses when the President's clothing was being removed in the trauma room. However, if the slits were made by CE 399 when it allegedly exited the throat, then it would have had to travel at a sharply leftward angle in order to nick the knot's left edge, and therefore it could not have gone on to strike Governor Connally near his right armpit. (Given the depth of the knot, I'm not at all sure that even a bullet which exited the throat at an extremely sharp leftward angle could have nicked the knot in the required manner.)

In response to the problem posed by the tie nick, some WC supporters have suggested that President Kennedy's tie was as much as a quarter of an inch off center. But several photos of the President taken at various stages of the motorcade show that his tie was neatly centered between the collar bands (see, for example, Groden 2, 3, 7, 11, 17). Other WC defenders have attempted to explain the tie nick by noting that Kennedy's head might have been turned to the right when he was shot in the back. The turning of Kennedy's head, however, would not have altered the position of the tie in relation to the collar band and to the neck. Photos of the motorcade show that the tie remained centered on the neck and between the collar bands when Kennedy turned his head to the right or left (see, for example, Groden, first photo after Contents page, 3, 7). So if Kennedy's head was turned when the back shot occurred, the missile still would have had to travel at a sharply leftward angle in order to nick the left edge of the tie's knot.

In connection with this point, it is interesting to note that the 12/9/63 FBI Summary Report neither claimed nor implied that President Kennedy's clothing in any way indicated a bullet hole at the front of the throat. David Lifton explains:

The FBI was given President Kennedy's clothes within 24 hours, and its own documents prove the FBI Lab had examined them by the morning of November 23, 1963. Yet despite that, the FBI omitted from its December 9, 1963 report any pictures of the clothing, or any mention that the President's clothing showed a bullet hole at the front of the throat. (Lifton 545)

Dr. David Mantik, a highly qualified radiologist and physicist, examined the President's clothing, including the shirt, at the National Archives. With regard to the slits, he has reported the following:

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What also struck me about the slits is how unlikely a bullet could have passed through there (see Weisberg's photo, if necessary) and also nicked the *left* outside of the knot of the tie.

Furthermore, there was no obvious fabric missing from the slits, whereas the hole in the back (even before FBI sampling) clearly had lost some fabric during the bullet passage. According to the experts on bullet transit . . . , such missing fabric is typical. If this bullet really transited the neck (or upper chest), and according to the Warren Commission, lost very little speed, then why didn't it also remove fabric from the area of the slits?

The shape of the slits is much more compatible with a scalpel than with a bullet.
(E-Mail, 21 August 1996)

4. Governor Connally's Thigh Wound and the Magic Bullet

The foundation of the entire lone-gunman scenario rests on the WC's infamous single-bullet theory. As mentioned, according to this theory, the magic bullet struck Kennedy in the back, exited his neck, entered Connally's back below the right armpit, plowed through his chest and broke bone in the process, exited beneath the right nipple, entered and fractured the right wrist, and then penetrated deep into the Governor's thigh, yet emerged in nearly pristine condition. The Commission claimed this bullet somehow managed to pop out from the thigh and onto the Governor's stretcher before he had been undressed and taken into surgery. But how did the magic bullet find its way through the only hole in Connally's pants, the thigh wound's point of entry, onto the stretcher? And, more importantly, how could it have managed to escape from Connally's thigh in the first place? The fact of the matter is that the alleged magic missile could not have fallen out from the thigh. Dr. Cyril Wecht, a recognized forensic expert and a former president of the American Academy of Forensic Sciences, explains:

While the governor lay on the stretcher, officials said, the bullet must have plopped out. . . .

What absolute nonsense. The only time bullets pop out is when you have a big gaping hole. Governor Connally's leg wound was anything but large. It was also not a simple surface wound. The bullet went deep into the leg. When a bullet penetrates the skin and goes deeply into soft tissue, as happened with Governor Connally, it becomes immediately entrapped in the tissue because of the hemorrhaging and swelling. That fact, combined with the elasticity of the skin, would have made it impossible for the bullet to work its way back out, as the Warren Commission stated it had. (Wecht 30)

Some lone-gunman theorists have suggested that the missile only penetrated a half inch into Connally's thigh and that it therefore could have dropped out after Connally was removed from the limousine. But, given Connally's movements after he was shot, wouldn't the bullet have fallen out well before he was taken into the hospital? If half an inch of the missile was stuck in the thigh, then over half an inch would have been protruding from it. Wouldn't Mrs. Connally have noticed this? Wouldn't one of the nurses who removed Connally from the limousine have noticed it?

It should be pointed out that the initial police report on the thigh wound, quoting Parkland doctors, said it had been caused by a fragment, not by a whole bullet (Weisberg, *Never Again*, 204). Connally's own press secretary, Bill Stinson, said the same thing on the afternoon of the assassination, as did Dr. Malcolm Perry in an interview with Harold Weisberg (Livingstone 81; Weisberg, *Never Again*, 203-204). Dr. Robert Shaw, the surgeon who operated on Connally's chest, has also stated the thigh wound was caused by a fragment, not by a whole missile (Livingstone 81). Not only was the thigh wound initially said to have been caused by a fragment, but there is considerable evidence indicating that the wound itself was rather superficial.

If we assume for the sake of argument that CE 399 wounded Connally's thigh, that it only penetrated about half an inch, and that it then plopped out onto Connally's stretcher (although the weight of the evidence indicates that the bullet was *not* found on Connally's stretcher), there is still the matter of the bullet's alleged, and highly unlikely,

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location on the stretcher when it was finally discovered by Parkland Hospital engineer Darrell Tomlinson. Just exactly where on Connally's stretcher did the magic missile reportedly manage to end up after supposedly falling out of his thigh? By all appearances, it was *beneath the mattress!* How in the world could it have gotten there, unless it was planted? Weisberg observes:

When Tomlinson pushed this stretcher [supposedly Connally's stretcher, although this was never established] against the wall, "he bumped the wall, and a spent cartridge or bullet rolled out that had apparently been lodged under the edge of the mat" (6H130). There is no question about the unusual location of the bullet, under the mattress.

It is the Commission's belief that this bullet fell out of Governor Connally's body through his trousers, which had only the one hole, the point of entry of the thigh wound; was undetected in the emergency room during examination, unnoticed during transportation to the operating room, undetected when the Governor was lifted off the stretcher, after he was lifted off the stretcher, and as the stretcher was rolled out of the operating room and while it was on the elevator; unnoticed after it was in the hall for some time, including by a doctor who moved it; and at some point in some mysterious way it got underneath the mattress. (Weisberg, *Selections*, 189)

A few years after the assassination, Tomlinson told researcher Josiah Thompson that he did not actually see the bullet beneath the edge of the mattress, but that that was where he assumed it had been at the time it was dislodged when the stretcher bumped against the wall. If the bullet was not beneath the edge of the mat, then it is hard to understand how it could have gone unnoticed from the time Connally was taken to the emergency room until the time Tomlinson found it. At one point, *before* the magic bullet was discovered, the stretcher on which it would have been lying was wheeled part of the way back toward an elevator by a nurse, who then stopped to remove various paraphernalia that were on the stretcher, i.e., a sponge, gauze, hypodermic syringe wrappers, and a roll of tape. If the bullet had been lying on the mattress, how could the nurse have missed it? For that matter, how could all the other people who saw the stretcher not have noticed the missile before it was discovered? In fact, to judge from Tomlinson's statements about finding the bullet, one of the reasons he assumed the missile had been beneath the edge of the mattress was that he did not see it on top of the mattress. On the other hand, it is equally hard to comprehend how CE 399 could have wedged itself beneath the edge of the mattress. It is no wonder that so many researchers believe the bullet was planted on the stretcher shortly before Tomlinson found it.

5. Oswald's Whereabouts Less Than 90 Seconds After the Final Shot

It goes without saying that the lone-gunner theory assumes that Oswald fired the shots from the alleged sniper's nest on the sixth floor of the Book Depository. But, if Oswald was at the sniper's nest at the time of the shooting, then how is it he was seen by building manager Roy Truly and patrolman Marrion Baker less than 90 seconds later on the *second* floor, standing in the lunchroom, giving every appearance of being perfectly calm and relaxed? Moreover, there are indications that Oswald had a Coke in his hand when Baker and Truly saw him, further confirming the fact that Oswald could not have reached the second-floor lunchroom in time to be seen by them.

Moore and other lone-gunner theorists assume that Oswald bought the Coke after the encounter with the manager and the policeman (e.g., Moore 53). However, the weight of the evidence indicates Oswald purchased the Coke before the second-floor encounter (Marrs 50-52). When Oswald mentioned the Coke-buying during his questioning, he did so in passing, and he could not have known the important role the timing of this detail would subsequently play in the investigation. I agree with what Lifton has said on this subject:

The original news accounts said that when Baker first saw Oswald, the latter was drinking a Coke. This seemingly minor fact was crucial, because if Oswald had time to operate the machine, open the bottle, and drink some soda, that would mean he was on the second floor even earlier than the Commission's reconstructions allowed. In a signed statement Officer Baker was asked to make in September 1964, at the tail-end of the investigation, he wrote: "I saw a man standing in the lunchroom drinking a coke." A line was drawn through "drinking a coke," and Baker initialed the corrected version. Police

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Captain Will Fritz, in his report on his interrogation of Oswald, wrote: "I asked Oswald where he was when the police officer stopped him. He said he was on the second floor drinking a Coca Cola when the officer came in." If I were a juror, I would have believed Oswald already had the Coke in hand, and indeed, had drunk some of it, by the time the officer entered the lunchroom. (Lifton 351)

On the day after the assassination, Dallas police chief Jesse Curry reported in a news conference that Oswald was holding the Coke when Baker and Truly saw him in the lunchroom (Meagher 74 n). This detail was also carried extensively in the press, even a full ten days after the shooting (David 22).

In addition to the evidence that Oswald bought the Coke prior to the second-floor encounter, there is also the fact that only if he had come up from the first floor could he have been visible to Baker, since Truly did not see the slow automatic door closer in motion, and Baker probably didn't either; they certainly should have done so if Oswald had just come through that door from the sixth floor. Weisberg explains:

Roy Truly was running up the stair ahead of Baker and saw nothing. He retreated from a position between the second and third floors when he realized Baker was not following him. Neither he nor Baker saw the automatic door closing. The door itself had only a tiny window, made smaller by a 45-degree angle at which it was mounted from the lunchroom. Baker saw twenty feet through this, according to his testimony.

Dulles was troubled by this testimony. He asked Baker: "Could I ask you one question . . . think carefully." He wanted to know if Oswald's alleged course down from the sixth floor into the lunchroom apparently could have led to nowhere but the lunchroom. Baker's affirmative reply was based on his opinion that a hallway from which Oswald could also have entered the lunchroom was a place where Oswald "had no business" (3H256). This hallway, in fact, leads to the first floor, as CE 497 (17H212) shows. *It is the only way Oswald could have gotten into the lunchroom without Baker and Truly seeing the mechanically closed door in motion. It also put Oswald in the only position in which he could have been visible to Baker through the small glass in the door.* And Oswald told the police that he had, in fact, come up from the first floor. (*Selections*, 56-57, emphasis added)

In his testimony to the WC, Baker weakly and tentatively said the automatic door might have been moving, adding that if the door was in fact in motion it was shut or almost shut. But he did not say he was basing this suggestion on anything he had seen, and in his previous and subsequent statements to the FBI Baker neither stated nor implied that the door might have been in motion. If the foyer door was still moving at the time Baker first allegedly caught a glimpse of Oswald, it must have been nearly shut, as Baker himself stated, or else it would have been virtually impossible for Baker to have seen Oswald through the door's tiny window. Also, if the door had not been nearly closed (assuming it was moving at all), i.e., if it had been more than just barely open, one would think Baker would have noticed this and mentioned it to the Commission, since this would have indicated that Oswald had just used the door to get to the lunchroom.

Moreover, if Oswald had come down the stairs and then walked through the automatic door just a second or two before Baker saw him, as required by the WC's lone-gunman theory, then Truly certainly would have seen Oswald coming down the stairs, or walking on the landing floor toward the door, or at least walking through the door. This is another indication that the door could not have been shut or nearly shut when Baker observed it if Oswald had just used it.

Oswald simply could not have made it to the second floor from the sixth floor without being seen by Truly and in time to be spotted by Baker just past the foyer door with the door shut or nearly shut behind him. According to the descriptions of how the alleged murder weapon was hidden, the rifle had been very carefully concealed under and between a stack of book boxes at the *opposite* end of the sixth floor from where the shots were supposedly fired. It is reasonable to assume Oswald would have attempted to wipe his fingerprints off the rifle (at least from those parts he would have just handled while firing it). Someone wiped off the Carcano before it was "discovered" because the FBI found no identifiable prints on the rifle when it examined the weapon on November 23.

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Furthermore, Oswald would have had to literally "squeeze" his way out of the sniper's nest, for when Officer Luke Mooney attempted to enter the nest he reported that he had to "squeeze" through the boxes on the right side in order to get to the window. And, even witnesses quoted by the WC reported that the gunman in the sniper's nest withdrew the rifle slowly.

In short, in order to accept the lone-gunman scenario, we would have to believe that in well under 90 seconds Oswald slowly withdrew the rifle from the window, squeezed out of the sniper's nest, ran all the way to the opposite end of the sixth floor, wiped off the rifle, carefully hid it under and between some boxes, ran down four flights of stairs to the second floor (actually eight small flights), made his way to the lunchroom, and then was seen by Baker and Truly not looking the least bit winded or nervous. And, if we assume that Oswald bought the Coke before Baker saw him, which is probably what happened, then there is no way that Oswald could have been on the sixth floor when the shots were fired.

When the WC attempted to duplicate Oswald's alleged dash to the second floor, the stand-in was able to make the trip in 74 seconds without appearing winded upon arrival, by moving at a "fast walk." However, he could only do this when, among other things, he *skipped* (1) wiping off the rifle, (2) hiding the rifle (for all intents and purposes, he did skip this action), and (3) buying the Coke. In addition, the stand-in did not slowly withdraw his weapon from the window, and there is no indication that he had to squeeze through boxes to exit the sniper's nest. Furthermore, the Commission did not take into account the time it would have taken the automatic door closer to slowly shut the vestibule door behind Oswald. (The vestibule door was about six feet from the entrance to the lunchroom.) Even assuming that Oswald had run down the stairs, he could not have performed all of the other actions and still have reached the second-floor lunchroom without being seen Truly. And if Oswald had raced down the stairs, he would have appeared at least somewhat winded, but Officer Baker said Oswald seemed to be perfectly relaxed.

And these are not the only flaws in the WC's "reenactment." According to the lone-gunman theory, Officer Baker made it from his motorcycle outside the Depository to his second-floor encounter with Oswald in right around 90 seconds. But the figure of 90 seconds for Baker's trip, which is the time that is normally given, is too long. When Commission staffers had Baker "reenact" his frantic run from his motorcycle to the Depository, they did not, incredibly enough, have him run. Instead, Baker walked during the first test, and "kind of ran" for the second test, yet in the actual event he practically sprinted to the TSBD. What's worse, in the alleged reconstruction of Baker's actions after he entered the building, the Commission had him move "at kind of a trot," but on the day of the shooting he was running very fast inside the Depository. In spite of all this manipulation, Baker's *slowest* reenactment time was 90 seconds, and his *fastest* time (done at only "kind of a run" outside the building and only at "kind of a trot" inside the building) was 75 seconds. This indicates that on the day of the shooting as few as 60-65 seconds might have elapsed between the time Baker revved up his bike to speed toward the Depository and the moment he allegedly caught a glimpse of Oswald through the tiny window on the foyer door (Brown 105, 374). The Baker-Oswald encounter is powerful evidence of Oswald's innocence. By way of summary and review, let us consider Weisberg's analysis of the WC's reenactment of Baker's movements:

On the other side of the coin, the first reconstruction of Baker's movements was done at a walk. In Baker's words: "From the time I got off the motorcycle, we walked the first time, and we kind of ran the second time from the motorcycle, on into the building." Once they got into the building, "we did it at kind of a trot, I would say, it wasn't a real fast run, an open run. It was more of a trot, kind of" (3H253).

Walking through Oswald's reconstruction was pure fakery, and the "kind of run" or "kind of trot" for Baker was not much better. Both Baker and Truly described what would have been expected under the circumstances--a mad dash. They were running so fast that when they came to a swinging office door on the first floor it jammed momentarily. Baker had sent people careening as he rushed into the building. He had been certain this building was connected with what he had immediately identified as rifle fire (3H247). The invalid walking reconstruction took a minute and thirty seconds. The "kind of trot" took a minute and fifteen seconds.

The reconstruction of Baker's steps began at the wrong place, to help the Commission just a little more. To compare with the rifleman's timing, this reconstruction had to begin after the last shot was fired. Witnesses the [Warren] Report quotes at length describe the leisureliness with which the assassin withdrew his rifle from the window and looked for a moment as though to assure himself of his success. Not allowing for his leisureliness, the assassin still had to fire all three shots before he could leave the window. Commissioner Dulles mistakenly assumed the Commission's reconstruction was faithful to this necessity. He asked Baker: "Will you say what time to what time, from the last shot?"

The nonplused Baker simply repeated: "From the last shot." Belin corrected them both, interjecting: "The first shot" (3H252). Dulles asked, "The first shot?" and was then reassured by Baker, "The first shot." The minimum time span of the shots was established by the Commission as 4.8 seconds. Hence, that much as a minimum must be added to the Baker timing. During this time, according to Baker, he had "revved up" his motorcycle and was certainly driving at something faster than a walk or "kind of trot." (Weisberg, *Selections*, 56)

There is also the fact that none of the persons who were on or near the stairs during the approximate time in question heard or saw anyone racing down them, and no one could have used the elevators because they were unavailable at the time (Marrs 50-53; Meagher 70-74; Summers 75-78).

6. No Human Tissue, Fiber Threads, or Patterned Striations on the Magic Bullet, and the Magic Bullet's Nearly Pristine Condition

According to the lone-gunman theory, CE 399 passed through JFK's coat and shirt, transited his neck, penetrated Connally's shirt and coat, traversed his chest, smacked into his wrist, and then dug into his thigh. However, this bullet was clean when examined by FBI ballistics expert Robert Frazier. In addition, it could be significant that there were no fabric threads or weave-like impressions (striations) on it. Meagher summarizes this point as follows:

Another mortal blow to the Commission's single-missile-single-assassin conclusions is the surface condition of the stretcher bullet [CE 399] when it was delivered to FBI Expert Robert Frazier for examination within hours of its discovery. Frazier testified that the bullet had been clean and had no blood or tissue on it. (3H 428-429) Yet, asked later about the bullet *fragments* which had been recovered from Presidential car (CEs 567, 569), Frazier indicated that "there was a very slight residue of blood or some other material adhering" which was wiped off to clean up the fragments for examination. (3H 437)

Even more extraordinary than the absence of blood and tissue on the stretcher bullet is the absence of fabric threads or impressions. This bullet, according to the Commission, penetrated and damaged the back of the President's coat and shirt and the front of the shirt, after which it penetrated the Governor's shirt and coat, in back and in front and at the end of the right sleeve in each garment. (WR 94) There was also a hole in the trousers, near the left knee. Not only did the bullet have searing contact with garments of four different fabrics, but it carried bits of thread and cloth into the wound in Connally's wrist from which Dr. Gregory was able to deduce the color and fabric of the Governor's suit. (4H 119) . . .

Ballistics expert Joseph D. Nicol testified that he had examined the stretcher bullet to ascertain whether there was any evidence of contact with fabric but had found "nothing of such a nature that it would suggest a pattern, like a weave pattern or anything of that nature." (3H 505) This information, casting still more doubt on the stretcher bullet, was blandly disregarded by the Commission. (Meagher 173-174, original emphasis)

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Another problem with the single-bullet theory is the fact that CE 399 emerged in virtually perfect condition after allegedly plowing through a human neck, smashing through Connally's chest and breaking a rib in the process, shattering the radius bone in Connally's right wrist, and then penetrating the Governor's thigh. Not only is this missile virtually devoid of deformity, but even its lands and grooves are intact, and it is lacking no more than 3-4 grains of its substance. In fact, Robert Frazier, a renowned FBI ballistics expert, told the WC that the magic missile might not have experienced *any* weight loss:

Mr. EISENBERG. Mr. Frazier, did you determine the weight of the exhibit—that is, 399?

Mr. FRAZIER. Yes, sir. Exhibit 399 weighs 158.6 grains.

Mr. EISENBERG. How much weight loss does that show from the original bullet weight?

Mr. FRAZIER. We measured several standard bullets, and their weights varied, which is a normal situation, a portion of a grain, or two grains, from 161 grains—that is, they were all in the vicinity of 161 grains. One weighed— 160.85, 161.5, 161.1 grains.

Mr. EISENBERG. In your opinion, was there any weight loss?

Mr. FRAZIER. There did not necessarily have to be any weight loss to the bullet. There may be a slight amount of lead missing from the base of the bullet, since it is exposed at the base, and the bullet is slightly flattened; there could be a slight weight loss from the end of the bullet, but it would not amount to more than 4 grains, because 158.6 is only a grain and a half less than the normal weight, and at least a 2 grain variation would be allowed. So it would be approximately 3 or 4 grains. (3 H 430)

The meager 3 to 4 grains said to be possibly missing from this bullet could be explained by the fact that two small samples were removed from the missile for testing purposes, one from its nose and the other from its lead core (3 H 428; Weisberg, *Selections*, 426).

A telling blow to the single-bullet theory, and hence to the lone-gunman scenario, is the evidence that more bullet fragments were removed from Connally's wrist than are missing from CE 399. Although one of the Parkland doctors later claimed that only "flakes" of metal were recovered from the Governor's wrist, former Parkland nurse Audrey Bell has stated that four or five sizeable metal fragments, which could be picked up and handled, were removed from the wrist, and her account is supported by the 11/22/63 Parkland Hospital operative record on the wrist surgery (WCR 533). Nurse Bell received the fragments as they were recovered and then placed them into a vial (Lifton 558).

How deformed is CE 399? It is hardly deformed at all. In fact, Frazier told the Commission that one could hardly tell that the missile was distorted unless he looked at its base:

Mr. EISENBERG. Were the markings on the bullet at all defaced?

Mr. FRAZIER. Yes; they were, in that the bullet is distorted by having been slightly flattened or twisted.

Mr. EISENBERG. How material would you call that defacement?

Mr. FRAZIER. It is hardly visible unless you look at the base of the bullet and notice it is not round. (3 H 430)

Could CE 399 have emerged from its alleged journey with virtually no deformity, especially to its nose and with its lands and grooves intact? In the WC's own ballistics tests, one bullet that was merely fired into cotton

wadding emerged with *more* deformity than CE 399 (Oglesby 31). In those same tests, bullets that were fired into goat chests emerged with much more deformity than CE 399. So did bullets that were fired into the wrists of human cadavers. And, as mentioned, Nurse Bell has reported that significant metal fragments were recovered from Connally's wrist. These fragments could not have come from CE 399.

With regard to the deformity at CE 399's base, the late Dr. John Nichols, a professor of pathology at the University of Kansas, argued and confirmed through testing that it was unlikely that the missile's base could have been deformed as a result of its alleged journey through Kennedy and Connally. Ballistics tests performed by Failure Analysis, Inc., strongly tend to support Dr. Nichols' conclusion. The WC's own ballistics tests likewise provided evidence that CE 399's base would not have been deformed after transiting Kennedy and Connally. Although the deformity appears to be minor, tests have shown that the bullet's alleged trip would not have produced enough force to deform its base even to such an apparently limited degree. These tests and analyses indicate that someone manually deformed CE 399's base after firing the missile into water or cotton wadding. Dr. Nichols discussed his tests and conclusions in his famous 1977 article "The Wounding of Governor John Connally of Texas, November 22, 1963," which was published in the *Maryland State Medical Journal*, October 1977, pp. 58-78.

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CHAPTER FIVE

THE MAGIC BULLET'S ALLEGED TRAJECTORIES AND TWO DOCUMENTARIES ON THE ASSASSINATION

Two Documentaries and Kennedy's and Connally's Positions

I recently reviewed two documentaries that provide valuable information bearing on the single-bullet theory's supposed trajectories, particularly with regard to the position of Kennedy and Connally in relation to each other. The two documentaries were *The Day the Nation Cried* (TDTNC) and *Nova's Who Shot President Kennedy?* (WSPK).

In TDTNC, there is some good footage of the limousine leaving Love Field. You get a view of the limo as it is driving away from the camera. Connally is not seated 10-12 inches to JFK's left. It looks as though he is only "somewhat" to Kennedy's left (to use the WC's phrasing). In fact, in this footage Connally appears to be sitting perhaps 4-7 inches to JFK's left.

In WSPK we see where *Nova's* technicians believed JFK and JBC were seated. In their computer graphics reconstruction, which is done to scale, Connally is not seated very far to JFK's left, no more than 6-8 inches. The documentary describes the governor as being "somewhat" to JFK's left.

Additionally, the *Nova* computer simulation can only make the magic bullet's horizontal trajectory line up by moving Connally to his left by an *extra* several inches. In other words, the computer simulation already has Connally seated "somewhat" to JFK's left, but in order to make the magic bullet's horizontal path work, Connally is moved several more inches to the left. Not only this, but his torso is rotated markedly to the right. Then and only then does the magic bullet's horizontal trajectory become feasible. The problem, of course, is that Willis slide 5 alone refutes any suggestion that Connally shifted that far to the left. In the Zapruder film, we see Connally seated "somewhat" to JFK's left before he and Kennedy disappear behind the freeway sign, and we see Connally in the same position when he and JFK become visible again about 1 second later.

What is even more revealing about *Nova's* computer reconstruction is the degree to which the JFK model must be leaned forward in order to get the bullet to exit the throat at a downward angle of around 20 degrees. In this segment of WSPK, we also see Dr. Michael Baden, a strong supporter of the lone-gunner theory and the former chairman of the HSCA's medical panel, doing the same thing, i.e., leaning far forward to make the SBT's vertical trajectory work—his forward lean is easily beyond the 18-degree limit established by the Select Committee's own trajectory consultant. Baden starts off by acknowledging that with the body in the anatomical position the bullet transited the neck in a slightly *upward* trajectory. He is holding a pointer to illustrate the bullet's path. In order to get the bullet's "path" to move downward, Baden leans far forward. The problem is that there is no photographic evidence that Kennedy was leaning that far forward during the time frame for the first hit (Zapruder frames 186-238). The Select Committee's trajectory expert put Kennedy's forward lean at no more than 18 degrees.

But even having JFK leaning markedly forward is not enough. In order to make the magic bullet's vertical trajectory work, the *Nova* computer simulation also assumes that Connally was leaning somewhat backward at the exact same time that Kennedy was supposedly leaning far forward. There is no photographic evidence for either assumption. JFK was leaning only slightly forward, and Connally was sitting virtually straight up, during the first-hit time frame. Confirmation of this fact was provided by the Warren Commission itself:

The President wore a back brace which tended to make him sit up straight, and the Governor also sat erect since the jump seat gave him little leg room. (WCR, p. 105)

And, again, the HSCA's trajectory consultant determined that JFK was leaning forward by no more than 18

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degrees at the time of the first hit.

Author's Note

[After submitting this book for publication, I became aware of a previously unpublished photo of the limousine taken by presidential aide Dave Powers. The photo was printed on page 40 of the August 1995 issue of *Life* magazine. Powers took the picture while riding in the follow-up car, i.e., from the vehicle that was directly behind the presidential limousine. Thus, his photo was taken from the perfect vantage point in terms of enabling us to determine Kennedy's and Connally's positions in relation to each other. The picture shows Connally was sitting no more than 4-6 inches to Kennedy's left.]

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CHAPTER SIX

PHONY SECRET SERVICE AGENTS IN DEALEY PLAZA

The Phony Agent on the Knoll

Some witnesses said they encountered Secret Service agents in Dealey Plaza moments after the assassination. These reports continue to be the subject of much controversy. Why? Because it has long been established that there were no genuine Secret Service agents on the ground in Dealey Plaza until later that afternoon. This fact suggests there were phony Secret Service agents in Dealey Plaza, and that they were there to help the assassins escape. Says David Scheim,

After the shooting, Dallas Police officer Joe M. Smith encountered another suspicious man in the lot behind the picket fence [on the grassy knoll]. Smith told the Warren Commission that when he drew his pistol and approached the man, the man "showed [Smith] that he was a Secret Service agent." Another witness also reported encountering a man who displayed a badge and identified himself as a Secret Service agent. But according to Secret Service Chief James Rowley and agents at the scene, all Secret Service personnel stayed with the motorcade, as required by regulations, and none was stationed in the railroad parking lot [behind the grassy knoll]. It thus appeared that someone was carrying fraudulent Secret Service credentials--of no perceptible use to anyone but an escaping assassin. (Schein 30-31)

Not only were there no Secret Service (SS) agents stationed on or behind the grassy knoll, but there were no FBI or other federal agents stationed there either. Officer Smith was not the only witness who encountered an apparently phony federal agent. Malcolm Summers ran to the knoll moments after the shooting. He related the following in the 1988 documentary *Who Murdered JFK?*:

I ran across the--Elm Street to right there toward the knoll. It was there [pointing to a spot on the knoll]--and we were stopped by a man in a suit and he had an overcoat--over his arm and he, he, I saw a gun under that overcoat. And he--his comment was, "Don't you all come up here any further, you could get shot, or killed," one of those words. A few months later, they told me they didn't have an FBI man in that area. If they didn't have anybody, it's a good question who it was. (Anderson 14)

Lone-gunman theorist Gerald Posner dismisses all reports of phony SS agents. Says Posner,

Outside the Depository, some witnesses later claimed they ran into Secret Service agents. Since there were no Secret Service agents at Dealey until 1:00 P.M., when Forrest Sorrels returned from Parkland Hospital, could that mean that somebody was impersonating Secret Service agents, indicating a conspiracy? Most of the witnesses later admitted they were mistaken. And immediately after the assassination, different groups of law enforcement officials (most of them having been there to watch the motorcade from nearby government buildings) spread out in Dealey Plaza--they included Alcohol, Tobacco and Firearms (ATF) agents, postal inspectors, officers from the Special Service Bureau of the Dallas Police, county sheriffs, IRS agents, and even an Army intelligence agent. . . . The author has reviewed the 1963 badges for the above organizations, and found that several look alike. Any of those law enforcement officials could have been confused with Secret Service agents. (Posner 269)

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I find this explanation inadequate for a number of reasons. For one thing, the various "spectator" government agents mentioned by Posner could not have reached the parking lot behind the grassy knoll so quickly after the shooting; none of them could have been there in time to be encountered by Officer Smith. Furthermore, although Officer Smith did not specifically say so, it seems reasonable to infer from his testimony that the man he met identified himself *verbally* as an SS agent—I doubt that the man merely held up his badge and said nothing. In addition, Posner does not address the fact that Officer Smith himself later became suspicious of the man he had seen, nor does Posner mention Smith's reasons for doubting the man's identity. Explained Officer Smith,

He looked like an auto mechanic. He had on a sports shirt and sports pants. But he had dirty fingernails, it looked like, and hands that looked like an auto mechanic's hands. And afterwards it didn't ring true for the Secret Service. At the time we were so pressed for time, and we were searching. And he had produced correct identification, and we just overlooked the thing. I should have checked that man closer, but at the time I didn't snap on it. (Summers 50)

None other than former Dallas Police Chief Jesse Curry stated in 1977 that the man encountered by Officer Smith "must have been bogus." Said Curry,

I think he must have been bogus—certainly the suspicion would point to the man as being involved, some way or other, in the shooting, since he was in an area immediately adjacent to where the shots were—and the fact that he had a badge that purported him to be Secret Service would make it seem all the more suspicious. (Summers 51)

As for Mr. Summers' account, Posner notes that Summers said nothing about encountering an armed federal agent in his 11/22/63 affidavit (Posner 259). But this is understandable since Summers had no reason at the time to think it was unusual or noteworthy that an armed federal agent would be stationed on the grassy knoll. He apparently assumed that the man was an FBI agent. It wasn't until later that Summers learned there were no FBI agents stationed in that area before or after the shooting.

Posner further notes that "no one else saw" the man Summers said he encountered. However, even if no one else saw the man, this does not prove that Summers' account is false. Nor can we be absolutely certain that no one else saw the man. The most that can be said is that there is no known report that another witness saw him.

Phony Agents Behind the Book Depository Building

Often overlooked in discussions on phony SS agents in Dealey Plaza is the disturbing account of Sergeant D. V. Harkness. (Posner, for example, does not even mention it.) Sergeant Harkness went to the rear of the Texas School Book Depository Building within a few minutes of the assassination. When he arrived there, he encountered several "well-armed" men dressed in suits. These "well-armed" men *told* Harkness they were SS agents (Hurt 110-111). It's not hard to understand why the presence of the armed, well-dressed men at the rear of the Book Depository did not make Harkness suspicious. Police officers were beginning to seal off the area, and just six minutes after the shooting Harkness himself identified the Depository over the radio as a possible source of gunfire. The problem, of course, is that the men encountered by Harkness could not have been SS agents, nor is it credible to suggest that Harkness somehow "misunderstood" what they said to him.

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CHAPTER SEVEN

THE FIRING TIME OF THE ALLEGED MURDER WEAPON

A Faster Firing Time?

According to the lone-gunman theory, President Kennedy was killed with a 6.5 mm Mannlicher-Carcano, which was found on the sixth floor of the Book Depository Building about an hour after the shooting. Over the years, Warren Commission (WC) supporters have had to fend off questions about the firing time of the sixth-floor Carcano. The alleged assassin, Lee Harvey Oswald, was at best an average shot, and there is considerable evidence that he was, in fact, a rather poor shot.

Could the supposed murder weapon have been fired quickly enough by an average marksman for the lone-gunman scenario to be plausible? Could it have been fired quickly enough even in the hands of a skilled shooter? WC defenders answer these questions by claiming that the Carcano's firing time has been reduced from the WC's figure of 2.3 seconds per shot to 1.66 seconds per shot. This issue is especially relevant to the assassination scenario advanced by most contemporary lone-gunman theorists.

The CBS and HSCA Rifle Tests

As mentioned, WC supporters now claim that the Carcano's firing time has been reduced to 1.66 seconds per shot. Says Gerald Posner,

According to the Warren Commission, the fastest he [the alleged lone assassin] could have fired all three shots was 4.5 seconds. However, that minimum is now out of date. CBS reconstructed the shooting for a 1975 documentary. Eleven volunteer marksmen took turns firing clips of three bullets at a moving target. None of them had dry runs with the Carcano's bolt action, as Oswald had had almost daily while in New Orleans. Yet the times ranged from 4.1 seconds, almost half a second faster than what the Warren Commission thought was possible, to slightly more than 6 seconds, with the average being 5.6 seconds, and two out of three hits on the target. Based on its 1977 reconstruction tests, the House Select Committee lowered the time between shots on the Carcano to 1.66 seconds, with the shooter hitting all the targets. (Posner 318)

Before addressing the issue of the Carcano's firing time, I first need to correct a few of Posner's errors and omissions concerning the CBS and HSCA rifle tests:

- All of the eleven marksmen in the CBS test were experienced, expert riflemen.
- The shooters in the CBS test *did* in fact practice working the Carcano's bolt prior to the simulation (Menninger 7-8).
- The CBS shooters did not fire from a window that was at least halfway closed, as Oswald would have had to do; rather, they fired from a window that was wide open.
- The best of the CBS shooters, Howard Donahue, did not score at least two hits out of three shots in less than six seconds until his *third* attempt (Menninger 8-10). In fact, *none* of the CBS shooters scored at least two hits on his first attempt, and seven of them failed to do so on *any* of their attempts.
- The HSCA's shooters fired at stationary targets and merely point aimed for their fastest time.

- The HSCA's shooters did *not* actually score two hits out of three shots while firing at a rate of 1.66 seconds per shot (8 HSCA 185; Hurt 101). Even though the Committee's chief counsel tried to put the best possible face on this fact, he stated that this feat was "difficult" and admitted that none of the Committee's shooters actually accomplished it:

It is apparently *difficult*, but not impossible—at least with only minimal practice with the firearm used—to fire 3 shots, at least two of which score "kills," with an elapsed time of 1.7 seconds or less between any two shots, even though in the limited testing conducted, *no shooter achieved this degree of proficiency*. (8 HSCA 185, emphasis added)

I would add that in the HSCA's tests, any shot that landed anywhere in the silhouette targets, which portrayed a man from waist to head, was counted as a "hit" (or "kill") (8 HSCA 184).

- Neither the CBS nor the HSCA riflemen used the sixth-floor Carcano. They used other Carcanos.

New Times Weren't Done with Alleged Murder Weapon

This last point brings us to the biggest problem with the claim that the Carcano's firing time has been reduced below 2.3 seconds per shot, namely, that the sixth-floor Carcano itself was *not* used in any the tests in which the firing time was lowered.

The sixth-floor Carcano had a difficult bolt. Ronald Simmons, who supervised the Army tests that were performed for the WC, reported that one of the three expert shooters who participated in the Army tests noted that "the pressure to open the bolt was so great that we tended to move the rifle off target." Simmons said that the two other Master-rated shooters who took part in the Army tests likewise commented on "the amount of effort required to open the bolt." Continuing, he stated,

As a matter of fact, Mr. Staley had difficulty in opening the bolt in his first firing exercise. He thought it was completely up and it was not, and he had to retrace his steps as he attempted to open the bolt for the first round. (David 141)

Not one of the shooters in the CBS or HSCA reenactments reported having this much trouble with the bolts of the Carcanos they used. (Simmons added that "considerable" experience with the weapon—this particular weapon—would have been needed to operate it quickly and accurately.)

The shooters in the Army tests also reported that the sixth-floor Carcano had a rather odd trigger pull. Simmons:

There was also a comment made about the trigger pull, *which is different as far as these firers are concerned*. It is in effect a two-stage operation where the first—in the first stage the trigger is relatively free, and it suddenly required a greater pull to actually fire the weapon. (David 141, emphasis added)

If the Carcanos used in the CBS and HSCA simulations had this same kind of trigger pull, I am unaware of any comment to this effect by the riflemen who took part in those tests. Moreover, no two rifles, especially rifles as old as the Carcano was at the time of the assassination, have the exact same trigger pull.

As mentioned, three master-rated marksmen took part in the Army rifle tests, Hendrix, Staley, and Miller. The fastest of the three was Miller, who fired at a rate of 2.25 seconds per shot (which most researchers simply round up to 2.3 seconds per shot). With this in mind, it should be noted that these men were firing at stationary targets, that they took as much time as they wanted for the first shot, and that they fired from an elevation of only 30 feet (whereas the sixth-floor window was 60 feet high).

Renowned FBI rifleman and ballistics expert Robert Frazier conducted firing tests with the sixth-floor

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Carcano for the purpose of determining just how fast the weapon could be fired. Assisting Frazier were two other highly skilled riflemen. Frazier's time was the fastest of the three, but it was no better than Miller's, i.e., 2.3 seconds per shot. And this was the result even though the targets in the FBI tests were easier to hit than were those used in the Army tests. Frazier and his fellow riflemen fired at stationary silhouette targets which were positioned a mere 25 yards away. (Frazier was asked what would have happened if they had used moving targets. He replied, "It would have slowed down the shooting.")

The Carcano's Firing Time and the Timing of the Shots

Now let us address the issue of the sixth-floor Carcano's firing time as it relates to the photographic evidence and to the assassination scenario advanced by most contemporary WC defenders. The sixth-floor gunman's view of the limousine would have been blocked from frames 167-206 (some put the figure at 167-209). However, there is good evidence in the Zapruder film that a shot was fired between frames 186 and 207. Even the Select Committee's photographic panel agreed that this was the case. In fact, the Committee concluded Kennedy was struck by a shot just prior to Z190. Some lone-gunman theorists, such as Jim Moore, suggest that a shot was fired during the split-second break in the foliage of the intervening oak tree, i.e., at frame 186. The HSCA's photographic panel concluded Kennedy was first hit at right around Z188, and a bullet which struck the President at Z188 would have been fired at Z186, give or take a tiny fraction of a second. (Of course, one major problem with a shot during Z186-207 is that the sixth-floor gunman's view of the limousine would have been obscured by the oak tree, except for the split-second break in the foliage at frame 186. A shot taken during this frame would have required the shooter to aim and fire in 1/18th of a second, but the human eye takes 1/6th of a second to register and react to data. Even the WC rejected the idea that the sixth-floor assassin fired during these frames. Yet, as mentioned, the Zapruder film indicates that a shot was indeed fired during this time span.)

Nearly all contemporary WC defenders assert that the second shot was fired at Z223-224. But if a shot came between frames 186 and 207, then a lone gunman would not have been able to get off another shot by frame 223. Zapruder's camera operated at 18.3 frames per second. If the supposed single gunman fired at frame 186, he could not have fired again until 2.3 seconds later, i.e., at frame 228. (In order to avoid the problems associated with a first hit during Z186-207, many lone-gunman theorists resort to the highly implausible suggestion that the sixth-floor shooter fired his first shot at right around frame 160 and missed the entire limousine. For one thing, proponents of this idea are unable to explain how the gunman could have missed, not only JFK, but the entire presidential limousine, from a distance of less than 140 feet. Yes, this shot would have been at a much steeper angle than a post-Z210 shot, and it would have been "hurried" (though no more hurried than the alleged Z223-224 shot). However, it still boggles the mind to imagine how the alleged assassin, whose supposed shooting feat has never been duplicated, could have missed the entire limousine from such a short distance. As for the inadvisability of a Z160 shot, this brings up the question of why the sixth-floor gunman would have fired at this time when he was about to have a much better shot less than three seconds later. A shot, even a missed shot, at around Z160 time frame would be plausible if it were fired from the Dal-Tex Building or from the County Records Building, but not from the TSBD. Besides, the first shot was most likely fired at around Z145.)

And what about the firing time between the alleged shot at Z160 and the hit on Kennedy at around Z188? The HSCA photographic panel concluded the first shot came at around frame 160, and that JFK was hit by what it considered to be the second shot at right about frame 188, give or take a frame or two. Even assuming this hit didn't occur until frame 190, the sixth-floor gunman would have had less than two seconds to reload, aim, and fire after the first shot at frame 160. This would not have been enough time to operate the alleged murder weapon. (If it is assumed the first shot occurred at around frame 145, which I think the evidence shows is more likely, then the gunman would have had approximately 43 frames, or 2.3 seconds, to reload, aim, and fire, which still would have been extremely fast. Even some of the expert marksmen who have taken part in assassination reenactments have been unable to fire the Carcano this quickly.)

These are some of the reasons that establishing the firing time of the sixth-floor Carcano is important. When lone-gunman theorists claim that the weapon's firing time has been reduced below 2.3 seconds per shot, they need to be reminded that in the "simulations" in which this was done the sixth-floor Carcano itself was *not* used. In those reenactments in which the actual alleged murder weapon was tested, world-class riflemen could not operate it

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faster than 2.3 seconds per shot, even after practice and even when they fired for the purpose of determining how quickly the weapon could be operated.

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CHAPTER EIGHT

CE 399 AND GOVERNOR CONNALLY'S THIGH WOUND

According to the Warren Commission (WC), one bullet struck President Kennedy at the "base of the neck," exited his throat, hit Governor John Connally next to his right armpit, smashed through his chest, shattered his wrist bone, and then penetrated into his thigh, leaving a fragment embedded in the femur bone. Later, said the Commission, this same bullet "fell" or "plopped" out of the thigh wound and was found on Connally's stretcher at Parkland Hospital. This missile, also called the "magic bullet," is officially known as CE 399. The feat attributed to this bullet is known as the single-bullet theory (also referred to as the magic-bullet theory). This hypothesis is the central component of the lone-assassin scenario, because if Kennedy's and Connally's non-fatal wounds were not caused by the same bullet, then there must have been more than one gunman involved in the shooting. One of the most implausible aspects of the single-bullet theory is the assumption that CE 399 wounded Connally's thigh.

The First "Official" Scenario

Based on the original Parkland Hospital operative record on the thigh wound, it was initially assumed by many that CE 399 penetrated about two to three inches into Connally's thigh and then worked its way out. Whether this object was CE 399, another bullet, or a fragment, the assumption that it worked its way out of the thigh is clearly invalid. Dr. Cyril Wecht, a noted forensic expert and the former president of the American Academy of Forensic Sciences, explains:

While the governor lay on the stretcher, officials said, the bullet must have plopped out

What absolute nonsense. The only time bullets plop out is when you have a big gaping hole. Governor Connally's leg wound was anything but large. It was also not a simple surface wound. The bullet went deep into the leg. When a bullet penetrates the skin and goes deeply into soft tissue, as happened with Governor Connally, it becomes immediately entrapped in the tissue because of the hemorrhaging and swelling. That fact, combined with the elasticity of the skin, would have made it impossible for the bullet to work its way back out, as the Warren Commission stated it had. (Wecht 30)

Dr. Wecht has certainly not been alone in pointing this out. Raymond Marcus consulted several coroners, pathologists, and criminologists on this matter. They ranged in experience from six to forty years, and had performed an aggregate of about 15,000 separate examinations of bullet wounds. Marcus reported that these experts were unanimous in stating the following:

One, they had never seen a case involving "fall-out" through the entrance wound by a bullet that had completely penetrated *the skin*, let alone two or three inches of tissue.

Two, they had never heard, through their colleagues or professional journals, of such an occurrence.

Three, that the only cases of "fall-out" they could conceive of--and had occasionally dealt with--were those in which the bullet had come to rest *partially protruding from the skin*; either as a result of failing to completely *enter* the body; or, after almost piercing it entirely, failing to completely *exit*. (Marcus 74, original emphasis)

Marcus requested that these experts explain why a bullet could not fall out once it had penetrated into soft tissue, and their reason was the same as that cited by Dr. Wecht. Said Marcus,

The reason given by all six experts as precluding "fall-out" was that the missile, upon striking the body, forces its way through the skin and tissues, which immediately contract behind it; thereby leaving a free passage smaller than the diameter of the bullet. (Marcus 74)

What Really Caused the Thigh Wound?

Did a whole bullet cause the thigh wound? The original police report on the wound, quoting Parkland doctors, said the wound was caused by a fragment, not by a whole missile. Connally's press secretary, Bill Stinson, said the same thing on the afternoon of the shooting. Dr. Robert Shaw, Connally's chest surgeon, has also stated that the thigh wound was caused by a fragment. Dr. Malcolm Perry, who assisted with the thigh surgery, echoed this position in an interview with Harold Weisberg (Weisberg 203-204). Dr. Tom Shires, who was in charge of the thigh surgery, told the HSCA that he leaned toward the view that the wound was not caused by a whole missile (7 HSCA 340).

Was the thigh wound a deep wound? Initially the impression was that it was fairly deep. This was based in part on the belief that a tiny fragment imbedded itself in Connally's femur bone. The wound was debrided down to this level. Dr. Shires told the HSCA he tended to believe a fragment did in fact lodge in the femur bone, even after he reexamined the x-rays (7 HSCA 158-159). Additionally, in an interview with respected researcher Josiah Thompson, Dr. Shires "confirmed . . . that a fragment was indeed *embedded* in the bone."

The belief that a fragment had been deposited in the femur bone was what led to the belief that the thigh wound was two to three inches deep. However, radiologists told the Select Committee that the thigh x-rays showed the fragment had stopped slightly below the level of the skin, and had not lodged in the femur bone. On the other hand, the Committee's medical panel did admit there was a "density" in the femur bone, but it concluded the density was an artifact (7 HSCA 162).

It is possible that the object that injured the thigh only penetrated about half an inch, maybe even slightly less. The available evidence seems to favor this conclusion. Some lone-gunner theorists, in fact, have adopted this position, in order to avoid having to explain how CE 399 could have worked its way out of a deep wound.

However, if the offending object traveled no more than half an inch into the thigh, this presents another problem for the single-bullet theory. Are we to believe that the magic bullet was traveling just fast enough to penetrate only half an inch into the thigh and then stop? Moreover, CE 399 is nearly 1.2 inches long. If only half an inch of the bullet lodged in the thigh, then the remaining three-quarters of an inch would have been sticking out of the wound and through the pants. If such was the case, wouldn't it have quickly plopped out of the thigh given Connally's movements immediately after he was shot? And, if the missile had somehow remained in the thigh until Connally was lifted onto his stretcher, wouldn't Mrs. Connally have noticed it sticking out of her husband's leg on the way to the hospital? Wouldn't one of the nurses who moved him onto the stretcher have noticed it? Why didn't any of the nurses or attendants who handled the stretcher before it was finally left in a hospital corridor see a bullet lying on it?

Problems with the Stretcher Story

CE 399 was allegedly found on Connally's stretcher after Parkland Hospital engineer Darrell Tomlinson removed the stretcher from the elevator and left it in a corridor on the ground floor. According to the Commission, Tomlinson removed Connally's stretcher from the elevator and placed it in a corridor near another stretcher that was already there. Then, said the Commission, he returned a few minutes later, moved the Governor's stretcher, and accidentally bumped it against the wall. When the stretcher was bumped against the wall, the bullet rolled out. Tomlinson said the bullet had apparently been lodged *under the edge of the mattress*. Tomlinson didn't see the bullet roll out from beneath the mattress, but he logically assumed it had done so because he had not seen it on top of the mattress and because it didn't roll out until he bumped the stretcher against the wall. How, it is fair to ask, could the bullet have become lodged beneath the edge of the mattress?

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More importantly, was the stretcher in question Connally's stretcher? The preponderance of the evidence clearly indicates that the answer to this all-important question is *no* (Lane 79-80; Meagher 174-176; Marcus 16-36). Tomlinson himself, though under tremendous pressure from WC counsel Arlen Specter, refused to say that the stretcher on which he found the bullet was Connally's stretcher. In fact, Tomlinson said it was his "best recollection" that he found the bullet on the stretcher that was already in the corridor, and not on the Governor's stretcher. Other evidence likewise indicates that the stretcher in question was the corridor stretcher. Tomlinson said Connally's stretcher only had sheets and a white covering on the pad, and no other items. However, the stretcher on which CE 399 was found contained rubber gloves, a stethoscope, and "other doctor's paraphernalia," according to (1) an 11/22/63 Secret Service report, (2) an 11/22/63 Parkland Hospital security report, and (3) Tomlinson himself.

Whether or not the offending object penetrated deep into the thigh, it is a virtual certainty that it could not have been CE 399. The weight of the evidence indicates that only a fragment injured the thigh, and that CE 399 wasn't even found on Connally's stretcher. What are the implications of this evidence? Three are immediately apparent:

- CE 399 must have been planted.
- Since the FBI established through ballistics tests that CE 399 was fired from the alleged murder weapon, someone must have fired CE 399 from the rifle *before* the assassination, with the obvious intent of planting the bullet in a future effort to link both it and the weapon to the shooting.
- Dr. Vincent Guinn's famous neutron activation analysis test, which supposedly proves that CE 399's composition "matches" that of bullet fragments from JFK's skull and from Connally's wrist, is worthless as evidence of the lone-gunner theory.

All of this, of course, clearly indicates there was a conspiracy to kill President Kennedy, and that this conspiracy created and then planted phony evidence in an effort to conceal the truth about the assassination from the American people.

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CHAPTER NINE

**GERALD POSNER, THE DALLAS DOCTORS,
AND THE LARGE WOUND ON PRESIDENT KENNEDY'S HEAD**

Posner and Seven Dallas Doctors

Gerald Posner reportedly interviewed seven of the Dallas doctors who saw JFK's body at Parkland Memorial Hospital, and supposedly they agreed with the WC's claims about the President's wounds (Posner 286-316). The seven doctors who reportedly told Posner they accepted the Commission's medical claims were Pepper Jenkins, Malcolm Perry, Charles Carrico, Adolph Giesecke, William Midgett, Paul Peters, and Ronald Jones. According to Posner, these doctors now say the head wound was on the right side of the head and that the throat wound was an exit wound, which is what the WC asserted. Posner denies there was a large defect in the back of Kennedy's skull, for this would indicate a shot from the front.

According to Posner, the fatal head shot came from behind and exploded out of the "right side" of Kennedy's head (Posner 307-316). There is massive eyewitness testimony against this view and for the belief that the fatal head shot came from the front and exited the right rear portion of the President's skull, which is referred to medically as the right occipital-parietal area. Virtually all lone-gunman theorists deny there was a large defect in the rear of JFK's head, but the wound was closely observed by numerous witnesses, including Parkland and Bethesda medical personnel. Harrison Livingstone has superbly documented this eyewitness evidence in his books *High Treason 2* and *Killing the Truth*.

Crenshaw and McClelland

Posner attacks two of the Dallas doctors who continue to maintain that the large wound was in the back of the head, Dr. Robert McClelland and Dr. Charles Crenshaw, who recently wrote a book rejecting the autopsy findings.

Posner engages in a scurrilous attack on Dr. Crenshaw, questioning his sanity and veracity. As part of his attack, Posner quotes some disparaging comments about Crenshaw made by an *anonymous* "close Crenshaw friend" (Posner 313-314). Posner does not inform his readers that Dr. Crenshaw, a man of impeccable reputation, is Clinical Professor of Surgery at the University of Texas Southwestern Medical School and is on the staff of John Peter Smith Hospital and St. Joseph Hospital in Fort Worth, Texas. In addition, Dr. Crenshaw has been honored with inclusion in several medical and professional societies and has published extensively.

Dr. Crenshaw was present during the efforts to save JFK's life. He noted "much of what was going on, and his recollections are extensive" (Livingstone 110). Dr. Crenshaw says the large defect was in the back of the President's head, and he is certain the wound could only have been caused by a shot from the front. After the President had been pronounced dead, Dr. Crenshaw stood right behind Aubrey Rike as Rike helped to put Kennedy's body in the coffin. He remembers Rike commenting that he could feel the edges of bone around the hole in the back of the President's head (Livingstone 112). Rike has confirmed this in interviews (e.g., Livingstone 118).

Apparently Posner couldn't find an anonymous "close friend" of Dr. McClelland's to assail his sanity and character, so he questions the doctor's judgment and memory. Three of the other Dallas doctors, along with Dr. Michael Baden, a long-time defender of the single-assassin theory, are enlisted to assist in the attack (Posner 312-313). However, Dr. McClelland, a deeply religious man, has been consistent in his descriptions of JFK's head wound. He told the WC that the large defect was in the back of the head, and, unlike some of the other Dallas doctors, he has never had a convenient change of memory. Moreover, it is strange that when Dr. McClelland testified before the WC, not one of the other Parkland doctors questioned or disputed his testimony on this issue. In fact, all but one of the Dallas doctors who testified on the subject the head wound in the right rear part of the skull, just as Dr. McClelland did (Lifton 308-337). And, the one Dallas doctor who seemed to differ with his colleagues

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on the head wound later placed it more toward the right rear part of the head in a filmed interview (Groden 87).

Dr. Peters and the Large Head Wound

Dr. Peters' change of memory seems to be especially pronounced, assuming Posner has accurately relayed what Dr. Peters said to him. According to Posner, Dr. Peters now accepts the WC's placement of the head wound. However, when asked about the wound for the 1988 documentary *The Men Who Killed Kennedy* (which was redone a few years later by the A&E Network), he said,

I could see that he had a large, about seven-centimeter, opening in the right occipital-parietal area [i.e., the right rear part of the head]. A considerable portion of the brain was missing there, and the occipital cortex, the back portion of the brain, was lying down near the opening of the wound, and blood was trickling out.

As Dr. Peters gave this description of the head wound, he repeatedly illustrated his explanation by placing his right hand on the *right rear part of the head*, exactly where Crenshaw and McClelland locate the wound.

Other Descriptions of the Large Head Wound

Just what is the evidence that there was a large wound in the back of President Kennedy's head? The following individuals got a good look at, and in many cases also handled, the President's head and are on record that the large wound was in the rear of the skull:

- Audrey Bell, a nursing supervisor at Parkland Hospital.
- Diana Bowron, Parkland Hospital nurse. Nurse Bowron actually cleaned the large defect and packed it with gauze squares in preparing the body for the casket. She vividly remembers that the large head wound was in the right rear part of the skull.
- Dr. Kemp Clark, Parkland Hospital.
- Dr. Charles Crenshaw, Parkland Hospital.
- Jerrol Custer, the x-ray technician at Bethesda Hospital who took the President's autopsy x-rays.
- Dr. Richard Dulaney, Parkland Hospital.
- Dr. John Ebersole, Bethesda Hospital radiologist. In an extensive interview with his hometown newspaper in 1978, Dr. Ebersole said, "When the body was removed from the casket there was a very obvious horrible gaping wound in the back of the head" (Lifton 543).
- William Greer, Secret Service agent, who drove the presidential limousine.
- Clint Hill, a Secret Service agent who was taken to the morgue for the express purpose of viewing the President's wounds and who was also in the Parkland trauma room when the President was being treated. It was Agent Hill who climbed onto the back of the limousine to get Jackie Kennedy to return to her seat. Hill testified that as he was lying over the top of the back seat "I noticed *a portion of the president's head on the right rear side was missing* and he was bleeding profusely" (Menninger 285, emphasis added).
- Patricia Hutton (now Patricia Gustaffson), a nurse at Parkland Hospital who placed a bandage against the wound in the back of the head.
- James Curtis Jenkins, a Navy lab technician at Bethesda Hospital who was present at the autopsy.

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- Dr. Robert Karnei, Bethesda Hospital, who was present at the autopsy.
- Roy Kellerman, a Secret Service agent who was present at the autopsy.
- Dr. Robert McClelland, Parkland Hospital.
- Doris Nelson, a chief nurse at Parkland Hospital. Nurse Nelson, who got a very good look at Kennedy's head in the trauma room at Parkland Hospital, balked when shown the alleged autopsy photos of the back of the head:

Doris Nelson, the supervising Emergency Room nurse, carefully inspected the body. Ben Bradlee, Jr., asked her, "Did you get a good look at his head injuries?" "A very good look," she replied. "Oh, I did see it. When we wrapped him up and put him in the coffin. I saw his whole head." She was then asked if the alleged autopsy photos were accurate. "No. It's not true. Because there was no hair back there. There wasn't even hair back there. It was blown away. Some of his head was blown away and his brains were fallen down on the stretcher." (Grodan and Livingstone 454)

- Floyd Riebe, a photographic technician who took pictures of the President's body at Bethesda Hospital.
- Aubrey Rike, an ambulance driver and funeral home worker in Dallas. Rike was called to Parkland Hospital soon after the shooting and assisted in placing the President's body in the casket. Rike could actually feel the edges of the large wound in the back of the head.
- Tom Robinson, the mortician who had the job of putting the President back together after the autopsy in case the family wanted to take one last look at him. Robinson, of course, had to spend a good part of his time handling the President's head. He saw and felt the large wound in the back.
- Jan Gail Rudnicki, a lab assistant at Bethesda Hospital who was present at the autopsy.
- Roy Stamps, a Fort Worth newsman who saw Kennedy lying in the limousine before he was moved into Parkland Hospital. Said Stamps, "I rushed up and saw Kennedy lying in the car. . . . *the back of his head was gone*" (Marrs 362, emphasis added).
- Dr. David Stewart, Parkland Hospital.

Below is a brief look at the initial statements made by several of the Dallas doctors showing that they located the large head wound in the right rear part of the skull. The remarks are taken from the doctors' hospital reports and from their subsequent Warren Commission testimony as presented in volume 6 of the HSCA appendices (pp. 303-304):

Dr. Kemp Clark:

Two external wounds, one in the lower third of the anterior neck, the other in the occipital region of the skull, were noted. There was a large wound in the right occipito-parietal region . . . both cerebral and cerebellar tissue were extruding from the wound. There was a large wound beginning in the right occipital extending into the parietal region.

Dr. Charles Carrico:

Dr. Jenkins attempted to control slow oozing from cerebral and cerebellar tissue via pads instituted.

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Dr. Malcolm Perry:

A large wound of the right posterior cranium was noted.

Dr. Charles Baxter:

The right temporal and occipital bones were missing and the brain was lying on the table. A large gaping wound in the back of the skull . . . literally the right side of his head was blown off.

Dr. Marrion T. Jenkins:

There was a great laceration on the right side of the head (temporal and occipital) causing a great defect in the skull plate . . . even to the extent that the cerebellum had protruded from the wound.

Dr. Ronald Jones:

What appeared to be an exit wound in the posterior portion of skull.

Dr. Gene Akins:

Back of the right occipital parietal portion of his head was shattered, with brain substance protruding.

Dr. Paul Peters:

We saw the wound of entry in the throat and noted the large occipital wound.

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CHAPTER TEN

AN OSWALD DEFENSE BRIEF

If Lee Harvey Oswald were still alive and were to stand trial for the assassination of President Kennedy, what would his defense team be able to say in his behalf? Here are *some* of the points that could be made in Oswald's defense:

Oswald's Marksmanship

The marksmanship feat attributed to Oswald by the Warren Commission (WC) has never been duplicated, not even by experienced, Master-rated riflemen. At his best in the Marines, Oswald barely qualified at the middle of three qualification levels. On his final record firing, he barely managed to qualify at all, scoring one point above the minimum needed for the lowest marksmanship category.

The closest thing to a genuine simulation of Oswald's alleged feat was the CBS rifle test held in 1967. All of the shooters who took part in the test were experienced, expert marksmen. Not one of these experts even semi-duplicated Oswald's supposed feat on the first attempt. Yet, Oswald would have had *only* one attempt. The best marksman in the group required three tries before scoring at least two hits out of three shots in less than six seconds (he scored three hits).

WC supporters claim that the lone-gunman scenario isn't quite so difficult because the assassin really had over 8 seconds to fire. But in making this assertion, they are assuming the gunman fired, and completely missed both Kennedy and the huge limousine, at around frames 145-160 of the Zapruder film. For one thing, how could the gunman have missed, not only JFK, but the entire limousine? This would have been a staggering miss from the sixth-floor window. (On the other hand, a gunman firing from a lower floor of the nearby Dal-Tex Building and barely missing JFK's head could have plausibly missed the limousine.) The most plausible lone-gunman scenario, assuming that all the shots were fired from the sixth-floor window, is that the gunman didn't fire at the limousine until it had cleared the oak tree, i.e., that he didn't fire until around frames 207-210 of the Zapruder film. That would have the alleged lone assassin scoring two hits out of three shots in less than six seconds.

Ammunition and the Rear Entry Wound on the Head

Oswald allegedly used 6.5 mm full-metal-jacketed Mannlicher-Carcano bullets. However, the autopsy doctors reported that the rear entry wound on President Kennedy's head was only 6.0 mm wide. Ballistics expert Howard Donahue believes this fact refutes the claim that the fatal head shot was caused by the kind of ammunition supposedly used by Oswald. Forensic experts point out that the size of a missile's entry point on the skull is *always* larger than the caliber of the bullet itself (see, for example, Menninger 207). In 1964 the WC conducted a ballistics experiment in which Carcano bullets were fired into human skulls. Donahue studied a rear-view photograph of one of the test skulls and found that the entrance wound in the skull was between 8 and 9 mm wide.

WC supporters have suggested that the wound was "mismeasured." But this explanation seems unlikely. With as much time as the autopsists spent examining the back of the head, and given their comments about the entry wound, it seems hard to believe that they didn't measure it carefully and precisely. When asked about the errant-measurement theory, Dr. Cyril Wecht, a nationally recognized forensic pathologist and a former member of the medical panel of the House Select Committee on Assassinations (HSCA), replied, "that's not really a very good answer. There's no reason that the measurements shouldn't have been precise."

When asked about the discrepancy between the size of the entrance wound and the size of the ammunition that was alleged to have been used, Dr. Humes replied that the difference was due to the elastic recoil of the skin (2 H 359). Yet, the back wound, which was supposedly made by the same kind of bullet that caused the rear head entry

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wound, measured 7 x 4 mm, according to Humes (subsequent pathologists measured the wound as being somewhat larger). The Clark Panel concluded the back wound was 7 mm wide and 10 mm in length. So, if the hole in the scalp "recoiled" to 6 mm after supposedly having been made by a 6.5 mm missile, how did the hole in the back end up being 7 mm wide? Moreover, Humes did not explain his earlier testimony that the wound in the bone beneath the scalp corresponded to the wound in the scalp. The autopsy report says the same thing. Humes did say, however, that the hole in the inner table of the skull was larger than the hole in the scalp, though he did not elaborate (2 H 352, 359). Significantly, Humes did *not* say that the hole in the outer table of the skull was larger than the hole in the scalp. As mentioned, when Howard Donahue was able to measure the entrance point on one of the skulls from the WC's ballistics test, he found that the hole in the skull was 8 to 9 mm wide.

The Clark Panel and the HSCA medical panel identified a slightly larger entrance wound on the alleged autopsy x-rays of Kennedy's skull. However, this entry wound was *four inches* higher than the wound described by the autopsists, and some experts doubt that the image in question is really an entry wound at all (see, for example, Dr. David Mantik's analysis in Livingstone, *Killing the Truth*, 612-613). Even Dr. William Seaman, one of the radiologic experts consulted by the Select Committee, stated that the x-rays were *not* conclusive on this point. Additionally, WC critics are justifiably doubtful of the idea that the autopsy doctors could have "mislocated" the rear entry wound by a whopping four inches, especially since the wound's position was established in reference to the external occipital protuberance (EOP), and since one of the autopsists prepared a medical diagram in which he in effect triangulated the wound to the EOP (Livingstone, *Killing the Truth*, 130, quoting from an analysis written by Dr. Gary Aguilar). (For that matter, the authenticity of the alleged autopsy x-rays themselves is still in dispute. The rad-tech at the autopsy, Jerrol Custer, insists that the radiographs in evidence are *not* the ones he took. Other critics maintain that the x-rays are authentic but that the government-hired doctors who have examined them have misread them.)

CE 399 and Neutron Activation Analysis

According to the WC, the missile that struck President Kennedy in his back exited his throat and then went on to cause all of Governor John Connally's wounds. This bullet is officially known as Commission Exhibit 399, and was linked ballistically to the alleged murder weapon. However, neutron activation analysis (NAA) of samples from the wrist fragments from Connally's wrist done by Dr. Vincent Guinn for the HSCA appear to have proved that a different kind of missile struck the Governor's wrist. The wrist fragments had over fifteen times more copper than the sample from CE 399's lead core. Most of that copper, therefore, must have come from the jacket of the fragments' bullet. Since the jackets on the type of Carcano missiles allegedly used by Oswald were 8 percent zinc, and since there were 994ppm copper in the wrist fragments, there should have been about 80-90ppm of *zinc* detected in those fragments as well--again, *if* they came from a Carcano missile's jacket. But, according to Dr. Guinn's own results table, *no zinc was found*.

WC defenders claim that Dr. Guinn "didn't test for zinc." But that's not how NAA works, according to the technical sources I have consulted. NAA detects the elements in a given sample, including minute trace elements, down to around one-billionth of a gram. Each element is "measured precisely so that substances having apparently identical composition as far as their ingredients are concerned will be found to differ in their trace elements" (B. Lane 432; see also Ragle 174-175). In fact, when Guinn tried to test a copper-jacketed bullet using NAA, he encountered copper *and* zinc in such large amounts that "you couldn't see anything else." Guinn even presented the Select Committee with a table showing his NAA results, and he assured the Committee that it contained *all* of the information on his test samples. No zinc was listed for the wrist fragments.

The Nick in the President's Tie

According to the WC's infamous single-bullet theory, a key component of its case against Oswald, CE 399 struck JFK in the back exited his throat and nicked the left edge of his tie's knot after leaving the throat. However, a photograph of the tie shows the knot to be visibly inward from the knot's left edge, and the HSCA confirmed that there were no holes or marks at any point on the tie beneath the nick.

The tie was probably retied. Assuming the nick was originally on the knot's left edge, the nick still could not have been caused by CE 399 because, among other things, it could not have gone on to hit Connally beneath his right armpit as the WC claimed it did. If the nick was on the knot's left edge and was caused by an exiting bullet, the bullet would have had to be traveling at a sharply leftward angle and thus could not possibly have struck Connally beneath his right armpit. WC supporters really have no explanation for this problem. Some have weakly suggested that Kennedy's tie was markedly off-center, but photos taken during the motorcade show that his tie was in fact neatly centered between the collar and that it remained in this position even when he turned his head to the right or left.

The Sixth-Floor Gunman's Clothing and Hair Color

Oswald wore a long-sleeved brownish button-down shirt to work on the day of the assassination. Yet, the five witnesses who saw a gunman firing from the sixth-floor window of the Book Depository stated that the man was wearing a light-colored shirt.

WC defenders have suggested that Oswald had removed his brownish shirt and was wearing his T-shirt during the shooting. However, four of the five witnesses reported that the upper-body garment worn by the gunman had a collar (the fifth witness said it was either a regular shirt, i.e., a shirt with a collar, or a T-shirt).

Two of the witnesses who saw a man in the sixth-floor window said he had light-colored hair. Robert Edwards told the Commission that the man's hair was "light brown" (6 H 204). Ronald Fischer described the man as "light-headed" in his 11/22/63 statement (6 H 198). Fischer later waffled severely on this issue when he testified before the WC, but he expressed no doubts on the subject on the day of the shooting. Oswald's hair was certainly not light-colored in any way; it was brown. Furthermore, Fischer said the man he saw "was back in the shadow of the window" (6 H 197). If anything, if Oswald had been the man whom Fischer saw, his hair would have appeared black or a very dark shade of brown in shadow.

The Large Paper Bag

The WC said Oswald carried the Carcano to work in a large paper bag. The Commission said this bag was 38 x 8 inches. Former Dallas Crime Lab Detective Rusty Livingston says the bag was about 42 inches long (Savage 155). In the photo of the bag (WCR 132; CE 1304), the bag, as shown, measures 38 inches in length. However, there appears to be a flap that seems to be folded over on the bag's left edge, and the flap is approximately 4 inches long. In any case, I will use the Commission's measurement. But, whether one assumes the bag was 42" or 38" long, two witnesses who saw the bag that Oswald brought to work that day insisted it was around 27 inches long. When shown the bag claimed by the Commission to be the one Oswald had carried, both were firmly of the opinion that it was much too long. Furthermore, one of those witnesses, Buell Frazier, told the Commission he was certain about how he had seen Oswald carry the bag (2 H 243; Meagher 56). This is important because Frazier said Oswald carried the bag with one end cupped in his hand and the other end tucked under his armpit. Oswald could not have carried a Carcano rifle, assembled or disassembled, in this manner. Frazier even marked the spot on the back seat of his car where he had seen the package lying, and that measurement came out to 27 inches. The Carcano in evidence as the alleged murder weapon is 35 inches long when disassembled.

The 38" x 8" bag was supposedly found in the sniper's nest on the Depository's sixth floor. However, many researchers doubt this claim. Why? For starters, because, incredibly, the police failed to photograph the bag lying in the sniper's nest. Some WC supporters have suggested that the two policemen who were taking crime-scene photographs "missed" the bag because no one pointed it out to them. But this explanation is surely farfetched. The bag was allegedly lying next to the two pipes that ran down the left side of the window. It would have been in plain view and could not possibly have been "overlooked," even if it had been folded twice, as some policemen later claimed (three other policemen who examined the nest saw no long bag, folded or unfolded). The three shells supposedly left in the nest by the assassin were photographed, yet not a single picture was taken of the bag. Nor does the bag appear in any of the photos that were taken of the sniper's nest. Lt. J. C. Day, the crime lab officer responsible for ensuring that adequate photos were taken of the crime scene, claimed the bag had been removed before any pictures of the nest were taken. But Day, who was already an experienced crime-scene technician at the

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time, didn't explain *why* the bag was removed before it could be photographed, nor *who* had moved it in violation of standard police procedure.

WC supporters point to the fact that two of Oswald's prints were found on the bag. But this proves nothing. Indeed, given the nature of the prints, it only raises more questions. Only two prints were found on the bag, one fingerprint and one palm print, both identified as Oswald's. Yet the bag was reportedly handled by Dallas police Detective Robert Studebaker. Oddly, when Studebaker handled one of the boxes found near the window, his prints were readily identified on the box (WCR 566). Moreover, if, as the Commission claimed, Oswald had made the bag, wrapped it around the Carcano, and then removed it from the Carcano, surely he would have left more than two prints on the bag. Why, then, were only two prints found on it? WC critics point out that since Oswald worked at the Depository and doubtless handled paper there from time to time, some of the paper that he had handled could have been used by someone else to make the suspect 38" x 8" bag in an effort to frame him. This could explain why only two of Oswald's prints were found on the bag, and why there was a two-to-three-hour delay in removing the bag from the building.

Not one drop of gun oil was found on the bag, yet the Carcano was well oiled. Not only was the rifle determined to be well oiled, but oil was found on the surface of the weapon when the FBI examined it on 11/23/63. Yet, not a trace of gun oil was found on the paper bag. In relation to this point, it should be noted that FBI questioned-documents expert James Cadigan told the Commission he found nothing on the bag by which he could associate the bag with the alleged murder weapon (Weisberg 20).

The Blanket

Oswald supposedly stored the Carcano in a blanket, which he reportedly kept in the garage of Michael and Ruth Paine. However, no gun oil was found on the blanket, even though the rifle was well oiled when found and had allegedly been cleaned (and thus presumably oiled) on a regular basis. Not only did Ruth Paine say she never saw the blanket in New Orleans, though Oswald supposedly possessed the rifle there, but she also testified that she never saw the blanket until October of that year.

The Commission claimed that Oswald retrieved the rifle from the blanket in the Paine's garage on Thursday night, between 8 and 9 p.m. But that claim rests solely on Ruth Paine's testimony that she found a light burning in the garage at 9 p.m. and on her *assumption* that Oswald must have been there and neglected to turn off the light when he left. Neither she nor Marina Oswald could offer any solid evidence that Oswald had entered the garage at all that night. In fact, Mrs. Paine said that she could *always* hear the garage door being opened but that at no time that evening did she hear the door opening (Meagher 54). Oswald could have used the door on the side of the garage, but Mrs. Paine further testified that she did not see Oswald in the garage at any time that evening. Marina didn't see him there that night either.

The Weapon Seen in the Sixth-Floor Window

The rifle that Oswald supposedly used had a scope on it. But, the Commission's star witness, Howard Brennan, said he saw about three-fourths of the rifle used by the sixth-floor shooter and that he saw no scope. Yet, if the rifle had been the Carcano in question, the scope would have been visible to Brennan. Brennan, it should be pointed out, was farsighted. His vision for anything at a distance was "extraordinary" (Posner 250). However, again, Brennan, though he could see three-fourths of the rifle, saw no scope.

Was Oswald Seen in the Sniper's Window?

Only one witness ever claimed to have seen Oswald firing from the sixth-floor window, and that was the abovementioned Howard Brennan. However, when taken to a lineup on the night of the assassination, Brennan failed to positively identify Oswald, even though he had seen photographs of him on TV beforehand. Only after weeks of "questioning" by federal agents did Brennan finally go along with an Oswald identification. Moreover, Brennan insisted that the man he saw in the window was wearing a light-colored regular shirt or jacket, while

Oswald, as mentioned, wore a brownish shirt to work that day.

Brennan's boss believed that the federal agents who "interviewed" Brennan "made him say what they wanted him to say" (Marrs 26). The boss added that after Brennan was repeatedly interviewed by the agents for weeks, Brennan "came back a nervous wreck."

Oswald's Whereabouts Less Than 90 Seconds After the Shooting

Oswald was seen in the second-floor lunchroom no more than 90 seconds after the shots were fired. The evidence indicates that Oswald could not have made it from the sixth-floor window to the lunchroom in this amount of time. In the WC's reenactments, the Oswald stand-in, walking at brisk pace, could only get to the lunchroom by skipping and fudging on several of Oswald's alleged actions. Similarly, the man who spotted Oswald in the lunchroom, Patrolman Marrion Baker, in "reenacting" his 11/22/63 movements, made it to the lunchroom in only 75 seconds, even though he moved considerably slower than he did on the day of the shooting, indicating that he saw Oswald in the lunchroom 60-75 seconds after the shots were fired.

Two witnesses who were watching the motorcade from the window beneath the sniper's nest said they heard shells hit the floor above them during the shooting. However, they said they heard no movement in the nest after the shots were fired.

One highly credible witness, Lillian Mooneyham, a law clerk working in a nearby building, told the FBI she saw a man standing a few feet back from the sixth-floor window four to five minutes after the shooting. The HSCA photographic panel formally concluded that photographs taken of the sixth-floor window showed a rearranging of boxes within two minutes of the assassination. Who was the man seen by Mrs. Mooneyham? Who was rearranging the boxes in the window? Whoever it was, it could not have been Oswald.

WC supporters point to lone-gunner theorist Dale Myers' research as evidence against the HSCA photographic panel's conclusion about the box movement. However, according to critics of Myers' work, he did not analyze the photos themselves, but rather his own computer-generated "reproductions" of them. The photographic panel studied the actual photos, as well as enhancements of them, and after careful study concluded they showed boxes being rearranged in the window within two minutes of the shooting.

While giving his final sworn statement, Patrolman Baker initially said that when he spotted Oswald, Oswald was *standing* in the lunchroom *with a coke in his hand*. Dallas Police Chief Jesse Curry told reporters on 11/23/63 that when Oswald was seen in the lunchroom, he had a Coke in his hand. As late as ten days after the shooting, major press releases were still mentioning the detail that Oswald was holding a Coke when first spotted in the lunchroom. Oswald himself told the police that he was standing by the soda machine in the lunchroom holding a Coke when Baker confronted him. The importance of this detail can't be overemphasized, for it constitutes further evidence that Oswald was not on the sixth floor during the shooting. The WC had a hard enough time in its reenactments just trying to get the Oswald stand-in down to the lunchroom in time to be spotted by Baker *without* factoring in the Coke-buying. That is, the Commission had to assume that Oswald bought the Coke *after* he was seen by Baker.

When Baker approached Oswald in the lunchroom, he noticed that Oswald was perfectly calm and relaxed, and not out of breath at all. This does not sound like the description of a man who had just shot the President of the United States and who had then made it from the sixth-floor window down to the lunchroom in less than 75 seconds. Similarly, when Oswald took a taxi back to his boarding house, he was, according to the cab driver, perfectly calm. Indeed, the cab driver reported that Oswald even offered his cab to an elderly lady.

According to the WC, Oswald walked through the second-floor foyer door leading to the lunchroom just "a second or two" before Baker allegedly spotted "movement" through the foyer door's window (WCR 151). However, the Commission never explained how Oswald could have done this without being seen by Roy Truly, who was running *ahead* of Baker. Furthermore, Baker himself said that the foyer door was shut or nearly shut when he spotted the unspecified "movement." This is important because that door had an automatic closer. In order for the door to be shut or almost shut when Baker discerned "movement," Oswald would have had to go through it a good

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three to four seconds beforehand. But, if Oswald did so, (1) he would not have been visible to Baker through the window by the time the door was shut or nearly shut, and (2) he would have been easily spotted by Truly, who, again, was running ahead of Baker.

If one wants to allow a second or two from the time Baker reached the top of the stairs and the time he spotted "movement," that only makes things worse for the WC's scenario. Supposedly, Oswald was a fleeing assassin. Assuming that he came down the stairs in an effort to escape, he naturally would have wanted to get away from the stairwell as fast as possible so that no one would suspect he had just come down from upstairs. Yet, if one theorizes that Baker didn't spot "movement" until a second or two after he reached the top of the stairs, and that Oswald went through the foyer door early enough not to be seen by Truly, then it becomes even harder to understand (1) how the foyer door would not have been completely shut by the time Baker caught his alleged "glimpse of movement," and (2) how Baker could have seen any "movement" at all since Oswald would have been well out of his sight by then.

The Alleged Murder Weapon: Was It Too Slow?

The HSCA photographic panel concluded that the Zapruder film of the assassination showed that shots were fired at around frames 160 and 188. Zapruder's camera operated at 18.3 frames per second. The amount of time from frames 160-188 is 28 frames, or well under two seconds. However, the FBI and the Army established in 1964 that the alleged murder weapon could not be operated faster than 2.25 seconds per shot (which most researchers round up to the figure of 2.30 seconds per shot).

WC defenders claim subsequent tests showed the Carcano could be fired in under two seconds per shot, but these tests did not use the alleged murder weapon itself but employed different Carcanos. After extensive testing, the FBI and the Army found that *the* Carcano, the alleged murder weapon, could be fired no faster than 2.3 seconds per shot.

Oswald's Palm Print on the Alleged Murder Weapon?

The WC claimed that the Dallas police found Oswald's palm print on the barrel of the alleged murder weapon. However, the palm print had no chain of evidence, and the Dallas police did not tell the FBI about the print until *after* Oswald was dead (he was shot by Jack Ruby on November 24). Incredibly, the detective who said he found the palm print failed to photograph it, even though it was standard procedure to do so, and even though he photographed the worthless partial prints on the trigger guard. Until late in the evening of the 24th, journalists assigned to the Dallas police station were reporting that, according to their police sources, Oswald's prints had *not* been found on the rifle (Lifton 356 n). Dallas police officials said the same thing during public interviews, i.e., that Oswald's prints had *not* been found on the weapon. When the FBI examined the Carcano on November 23, it did not find Oswald's prints on the weapon. Moreover, the FBI expert said that the rifle's barrel did *not* look as though it had even been processed for prints. There is evidence that suggests the palm print was obtained from Oswald's dead body at the morgue, or later at the funeral home. So suspicious was the palm print that even the WC privately had doubts about the manner in which it was obtained (Marrs 445).

Oswald and Fingerprints on the Sixth Floor

Not a single fingerprint of Oswald's was found on any of the boxes that were used to make the shield behind the sniper's nest. Nor were Oswald's prints found on any of the boxes under and between which the alleged murder weapon was hidden.

Some WC supporters have claimed that the authorities never *looked for* any fingerprints on those boxes. This seems very hard to believe. Yet, if true, one can only imagine *why* they didn't search for prints on those boxes. The logical assumption is that the authorities *did* look for Oswald's prints on those boxes but just didn't find any.

WC supporters point out that Oswald's prints were found on two of the four boxes that were positioned near the window. However, since Oswald worked at the Depository and handled many boxes in the course of his

daily duties, the presence of these prints proves nothing. Moreover, only three of Oswald's prints were found on the boxes, and their distribution was such that they could easily and logically have been made during the routine movement of the boxes. In fact, what is puzzling is that *more* of Oswald's prints weren't found on the boxes, especially if, as the Commission claimed, he was the one who used them to construct the "gun rest." One of the three prints was found on the box *behind* the so-called "gun rest." Only two of Oswald's prints were found on the boxes constituting the "gun rest" itself, and both of them were on the same box, at the corners. Why were only two of Oswald's prints found on those boxes, when Detective Studebaker left multiple prints on all the boxes he handled?

More on Oswald's Marksmanship

As any marksman knows, maintaining one's shooting skill requires frequent practice. However, there is no evidence that Oswald engaged in any target practice during the forty days preceding the assassination. The FBI conducted an exhaustive investigation in an effort to find evidence of target practice by Oswald, but it found no such evidence. In fact, the WC could only come up with twelve so-called "examples" of target practice by Oswald during the *four years* between the time he left the Marines and the day of the shooting, and these included rabbit hunting with a shotgun or a .22 and simply working a rifle's bolt, and none of these occurred during the month before the assassination.

Oswald, Ammunition, and Gun-Cleaning Supplies

Not one shred of evidence was ever produced that Oswald purchased ammunition for the alleged murder weapon, and no Carcano ammunition was found in Oswald's apartment.

No gun-cleaning supplies or lubricants were found in Oswald's apartment, yet the Carcano was clean and well oiled when it was discovered by the police, and oil was found on the surface of the weapon when it was examined by the FBI the day after the shooting.

The Cab Ride

The Commission claimed that Oswald made it from the bus station near Dealey Plaza to the 700 block on North Beckley (near his boarding house) in no more than 6 minutes. This was crucial to the Commission's case because it claimed that Oswald arrived at his rooming house at 1:00 p.m., give or take a minute. However, reenactments done for the Commission by the Dallas police proved that the cab ride almost certainly took at least 8 minutes. The first simulation, done by a Dallas policeman, took 11 minutes. The next simulation was done by Whaley himself, and he proudly told the Commission that he shaved the time down to 9 minutes, mainly by hitting all the lights "right," i.e., by not hitting any red lights. In 1992 a team from All American Television (AAT) conducted a simulation. The team's cab traveled at a normal rate of speed in virtually no traffic and apparently hit only two red lights, yet the trip took 8 minutes and 16 seconds. There is some question about the number of lights encountered by the AAT team's cab, since this is not absolutely clear from the video of the simulation. Some have claimed that the cab hit three lights. Assuming the team's cab did hit three red lights, and allowing 15 to 30 seconds for each light, this would mean the cab would have made the trip in 7:46 or 8:01 if it had only encountered two red lights. But the WC could only keep Oswald on his incredibly tight schedule by assuming that his cab ride took no more than 6 minutes.

WC supporters point out that in Whaley's final simulation he made the trip in 5.5 minutes. But this trip was surely rigged---it wasn't even done in a cab but rather in a Secret Service car. Since Whaley's first test, in which he hit no red lights, took 9 minutes, and since the AAT team's simulation took 8:16 with the cab traveling at normal speed in virtually no traffic and hitting only two red lights, one can only imagine how fast the Secret Service car must have traveled to make the trip in 5.5 minutes. Moreover, news accounts reported there was heavy downtown traffic in Dallas after the assassination. Lunch-time traffic in a major city is usually a little heavy anyway. Additionally, Oswald's cab ride started at a bus station, and bus stations often attract a good deal of traffic, with people driving to and from the station, buses coming and going, cabs coming and going, etc.

Oswald Impersonations

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There is persuasive evidence that Oswald was being impersonated prior to the assassination and that the false Oswalds were leaving behind a trail of incriminating evidence that could later be used against him.

WC defenders have strained to cast doubt on the impersonation accounts. However, these accounts were reported by credible witnesses, and in many cases they were solidly corroborated by other witnesses.

I stress that this is only a "partial" Oswald defense brief. There are serious problems with, and numerous questions about, all of the other items that allegedly incriminate Oswald.

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