

# The shadow of a gunman

An account of a twelve-year  
investigation  
of a Kennedy assassination film

by MAURICE W. SCHONFELD

**O**nce, motivated by a combination of curiosity, circumstance, and ordinary commercial greed, I joined the team of nonconformists who have made the investigation of the assassination of John F. Kennedy a way of life. It is only now, nearly twelve years later, that my minor role in that investigation has come — I hope — to an end.

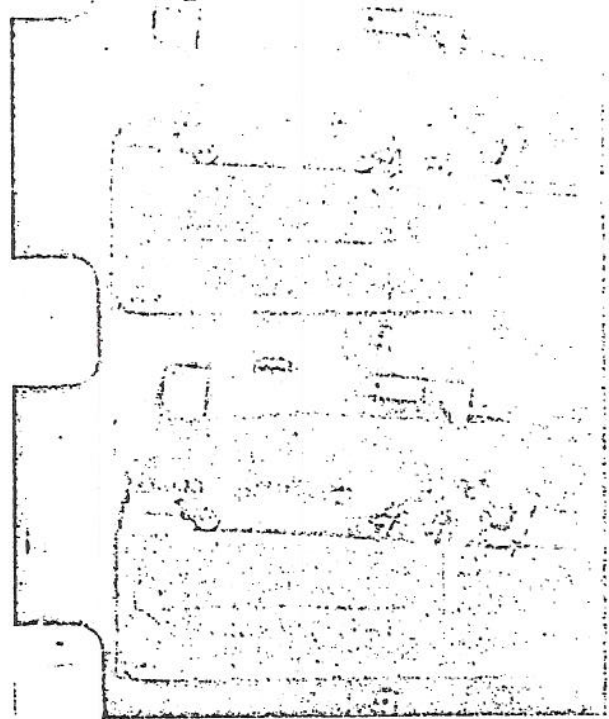
I was managing editor of UPI Newsfilm, the film service of United Press International, at the time President Kennedy was killed. As such, I was the custodian of two films taken of the assassination — which is how I became involved in the investigation. My part in that investigation ended this February when Dr. Kenneth Castleman, of the California Institute of Technology, and Alan Gillespie, of the image-processing center of Caltech's Jet Propulsion Laboratory, concluded their part of the investigation.

But to take it from the beginning: three eight-millimeter cameras were pointed at or across the presidential car as Lee Harvey Oswald did or did not, alone or with others, fire the shots that killed John F. Kennedy on November 22, 1963. One camera belonged to a Dallas woman named Marie Muchmore, the others to Orville Nix and Abraham Zapruder, also of Dallas.

Standing in Dealey Plaza, shooting a camera which she seldom used, Miss Muchmore exposed several seconds of film as the last shot hit President Kennedy and as Secret Service man Clinton Hill climbed aboard the presidential limousine to shield Jackie Kennedy. Miss Muchmore brought her film to UPI's Dallas bureau on November 25. The deskman promptly telephoned Burt Reinhardt, general manager of UPI's newsfilm division, who had flown to Dallas to acquire amateur footage of the assassination. "I've got a lady here who says she has a movie of the assassination. What do I do with her?" asked the deskman. "Lock the door," said Reinhardt.

Reinhardt hurried to the office and set about shaking Miss Muchmore's confidence in the value of her film by asking if she was positive that she was filming at the very moment of the assassination, if the film was in focus, if the exposure

*Maurice W. Schonfeld is a TVN executive.*

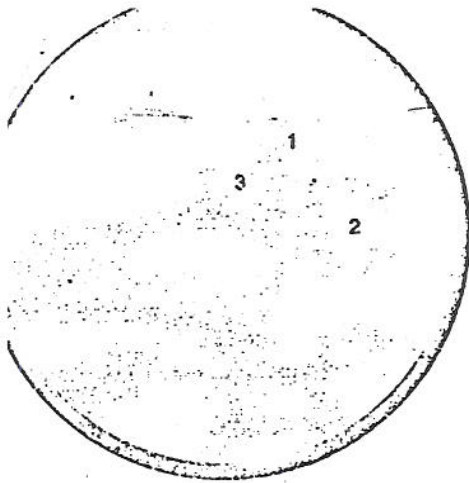


*The picture above shows frames from the Nix film. The circled area is the focus of controversy: Is there a rifleman here or only the illusion of one? Above right, a computerized photographic recreation of the frame. Figure one is the supposed head of the supposed assassin; two, his arm extended, with rifle; three, his elbow. Below right, the computer's analysis of that frame. The squiggles indicate depth and contrast.*

was right. UPI would be pleased to develop the film and see if it was any good and then make an offer, Reinhardt said, or, if Miss Muchmore preferred to play it safe, UPI would make a blind cash offer. Miss Muchmore chose to play it safe and accepted a check for \$1,000.

Reinhardt took the film to the Eastman Kodak lab in Dallas. At first it seemed that Miss Muchmore had gotten the better of the deal. All we had was a grainy, jerky glimpse of the last seconds of the assassination and the confused aftermath; but back in New York we slowed the picture down, blew it up, zoomed in and stopframed and turned it into two minutes of respectable TV news. By the time we released the edited sequence, however, Jack Ruby had killed Oswald, the president's funeral had just occurred, and showing the film seemed in such poor taste that most UPI client stations chose not to show it.

Orville Nix, too, had been filming at the moment of impact, but his camera was aimed across the president's limousine, right at the "grassy knoll" further down the street from the Texas School Book Depository. That evening Nix returned to Dealey Plaza to complete what he considered souvenir film by filming the Hertz time sign on the roof of the Book Depository. He then gave his camera to his son, who went to a high school football game and filmed



er's daughter, a majorette, as she paraded at halftime. Nix sent this bizarre mix — an assassination, the Book Depository at dusk, two minutes of baton-twirling majorettes to a laboratory to be developed.

The FBI, which had learned of the existence of the Nix film from the laboratory, had screened it, analyzed it, and had then returned it — now badly scratched to Nix as being of no further use in the investigation. Reinhardt had met Nix in Dallas when the film was still in the FBI. Now, in January 1964, Nix called Reinhardt in New York, told him that the FBI had returned his film, and asked if UPI would like to bid for it. *Life* was interested, he said, and was flying him to New York. Reinhardt asked Nix not to make a deal with anyone before he had seen the film — and offered to pick him up at the airport. Nix had been using one of the cheapest brands of eight-millimeter film, and either it had been underexposed or it had been underdeveloped at the lab: the colors were dark and strassy, the grain structure was heavy, and the edges of figures and shapes were fuzzy. After some haggling, a deal was made: \$5,000 — which Time Inc. had also offered — plus a good dinner and a new hat.

Stills from the Nix film appeared in the UPI/American

Heritage book *Four Days*, and some of the footage was used in a David Wolper documentary feature movie of the same title. UPI made money on the footage, but no one found it particularly noteworthy until, early in 1965, an assassination buff named Jones Harris came upon stills from the Nix film in the *Report of the President's Commission on the Assassination of President John F. Kennedy*, commonly known as the Warren Report. Harris, a New Yorker of independent means, did not believe that Lee Harvey Oswald had pulled the trigger. He had found a picture that had led him to believe that Oswald was standing in the street in front of the Book Depository at the time of the shooting. Working with Bernie Hoffman, a talented film technician and photographer, he had sought to prove that the man in the street was, indeed, Oswald, but their findings were inconclusive.

In some of the pictures published in the Warren Report, Harris found something new. First off, he saw a station wagon with a machine gun mounted on the roof. Such a station wagon did exist in Dallas — it was used to advertise a Dallas gun shop — and it was Harris's theory that the station wagon and the shop were involved in some way in the Kennedy assassination. Then he found a curious shape on the grassy knoll, a shape that could be read as a man aiming a gun at John F. Kennedy.

We gave Harris some of the key stills made from the Nix film. They showed the knoll and, atop the knoll, "the pergola" — a concrete structure consisting of two octagonal towers connected by a wall thirty-eight inches high and 100 feet long. In the process of enlarging these stills, two things happened: the station wagon went away and the head, shoulders, arms, and gun of the rifleman emerged more clearly. Also, the blowups brought out the roof of a car parked not in the parking lot some distance behind the wall but directly behind it. It now appeared that the rifleman was standing behind this car, leaning on it, as he took aim.

Harris wanted Hoffman to analyze the key frames of our original film, hoping to be able firmly to establish the existence of the rifleman. If the UPI-owned Nix film bore out Harris's theories, it would obviously be worth a lot of money. Reinhardt and I cooperated. We produced the original so that Bernie Hoffman could make the best possible reproductions. As the custodian of the original, I worked through the winter of 1965-66 with Hoffman and Harris in Hoffman's photo lab, searching with them for the frame that would prove, once and for all, that there was a man with a gun on the grassy knoll, where no man was supposed to be, as well as a car parked where no car was meant to be parked.

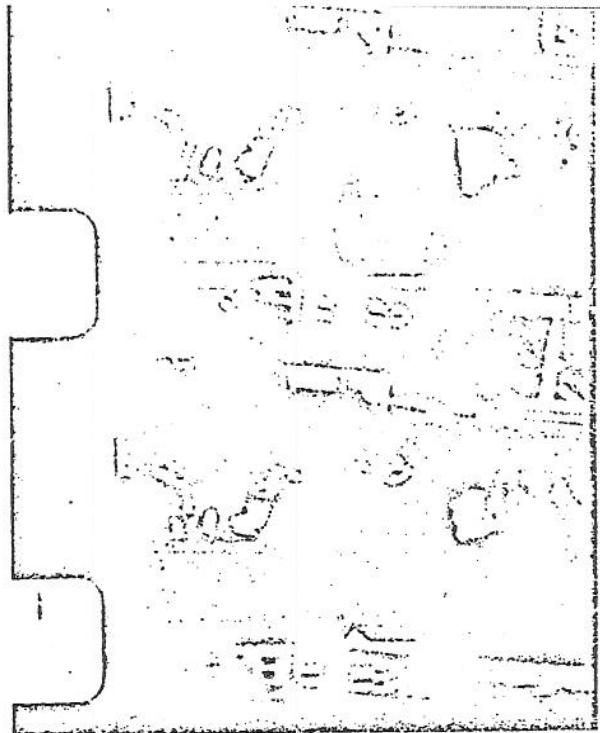
As both man and car seemed to emerge, I began to won-

der how safe the three of us were. From the start, Harris had believed that some part of the government's investigative apparatus was covering up. Certainly the malevolent powers that had executed John F. Kennedy and Lee Harvey Oswald and then covered up their crimes would be able to reach me as I walked the deserted streets of midtown Manhattan with the tiny roll of eight-millimeter film clasped tightly in my hand. But each night I reached home safely, the film intact.

At last Hoffman finished. He had gone as far as he could. Harris had his pictures. They were interesting enough to justify UPI's sending Jack Fox, one of our best reporters, to Dallas. He wrote, and our wire service carried, a story which said that there might have been a rifleman on the knoll — although the shadowy figure might equally well be "a brown cow grazing."

At this point, the question was how to proceed. Jones Harris wanted the publicity which only a national magazine could provide, but he seemed reluctant to carry his research any further. Additional research into the film would be extremely costly. UPI was unwilling to pay for it, since there would be no immediate financial return (UPI does not sell exclusive stories and it is impossible to assign a dollar value to a wire service scoop). Also, there was always the chance that further analysis would reveal that the shape which seemed to be a man was nothing but a mass of shadows, so that a great deal of money would be spent for what would finally be an epic nonstory — about a frame from a film no one had heard of which proved only that there was nothing remarkable to be seen. But if this sort of nonstory could hardly succeed as a wire-service piece, it could very well go over big on the cover of a national magazine: a blown-up frame of the knoll, a white circle drawn around the shadowy shape, and a bold title reading "WAS THERE AN ASSASSIN ON THE KNOLL? See page 6." So, though as a journalist I hated giving up control of the story, as a businessman I realized that it made more sense to take it to a magazine than for UPI to go on with it.

I approached *Life*. The magazine seemed the natural customer for our film; it owned the best film of the assassination — the one made by Abraham Zapruder, for which *Life* had paid \$150,000. I spoke with Dick Billings, an assistant editor at *Life*, and set up a second meeting at which Jones Harris would be present. The non-Oswald-grassy-knoll-rifleman theory was, after all, Harris's perception, and he had paid for the research. Billings listened to Harris, looked at the film, saw the shape, and was interested. He told us that he had just read the proofs of *Inquest*, Edward Jay Epstein's book on the Warren Report, which for the first time cast respectable doubt on the report's reliability.



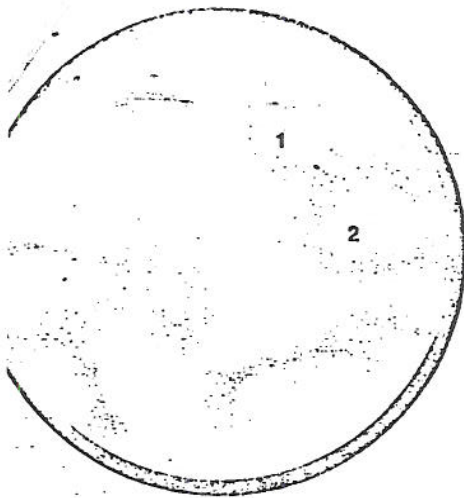
*The larger middleground figures in the picture above show that Nix has run forward to film from another position, thus making possible the depth analysis of his pictures. Above right, the computer's photographic recreation of the circled "rifleman" part of this frame shot by Nix after he had run forward. Below right, the computer's analysis of the circled area.*

Billings was unable to interest his superiors at *Life*, however. They felt that they had already given sufficient space to the Kennedy assassination, Billings said.

Having lost out with the editorial side of *Life*, I approached the picture side at *Newsweek*. Photo editor Tim Orr didn't know what to make either of the pictures or of Harris's theory. He made it quite clear, however, that he felt that, as a UPI client, he was entitled to the pictures as a matter of routine. I left, taking the pictures with me. His response had frightened me. I knew that UPI and UPI Newsfilm were separate corporations, but if clients were not going to recognize this distinction, my peddling of what they thought was theirs by right could only lead to trouble. The film went back to a vault at the Chase Manhattan Bank.

Then Jones Harris began to dine out on the story. Word spread fast. A European journalist wrote an article about a UPI film, locked up in a bank vault, that showed an assassin firing from the knoll. Other assassination buffs began to inquire about the film. CBS came over to view it. Nobody knew how to handle the story; nobody wanted to assume the cost of further investigation.

In this story full of starts and halts, things began to move again when, in December 1966, *Esquire* published an article by Epstein called "Who's Afraid of the Warren Report:



Primer of Assassination Theories." In his article, Epstein described the man-on-the-knoll theory — and named Burt Reinhardt, Jack Fox, and me as its proponents. *Esquire's* PR people, who decided that "our" theory was the high point of the issue, used it as the lead in their press release. *The New York Times* carried the story. I called Epstein, who told me that he was well aware that Jones Harris was the theory's original proponent and that he had discussed the theory with Harris, but, Epstein said, Harris had refused to allow his name to be used and had suggested us as alternate proponents. Reinhardt then called *Esquire*, requesting that the release be changed, and the magazine amended its original release, after a fashion: "proponent" was redefined to mean one who believes a theory should be investigated but does not necessarily believe the theory to be true.

Shortly after Epstein's article appeared, an RCA public-relations executive — the only man in this long saga whose name I cannot recall — called to suggest that the Nix film might yield up its secrets if it were electronically scanned by devices which RCA had developed for the U.S. government. Reinhardt and I were eager for RCA to do the work. The executive attempted to get RCA clearance, but RCA found the project too controversial.

At this point — around Christmas 1966 — I was, again, about to give up. Then I saw a preview screening of Antonioni's *Blow-Up*. As I watched actor David Hemmings studying frame after frame of his roll of film on which he thinks he has caught a murder in progress, I was back in the developing room at Bernie Hoffman's lab, waiting for that one clear frame to emerge. When Hemmings returned to the park where he had shot his film, I made up my mind to give the Nix film one last try.

I called the RCA man and asked if there were any other companies that could electronically scan the film. He mentioned two: General Electric and Itek. Afraid that General Electric, like RCA, would shy away from the project on the ground that it was too controversial, I decided to try Itek, a firm I had never heard of. It was on Route 128, outside of Boston, the RCA man told me.

Our Boston cameraman set up an appointment with Howard Sprague, assistant to Itek's president, Franklin T. Lindsay. I flew to Boston. Sprague told me that he was very interested in the film and said that Itek would welcome the opportunity to demonstrate publicly the sophisticated techniques it had developed for classified use. Itek would publish its findings; UPI would, I hoped, finally find out just how important our film was.

Sprague, myself, and three types of Itek experts — the optical physicists, the aerial reconnaissance experts, and an ex-policeman — reviewed the film. We all saw the shape on the knoll and everyone agreed that it could be a man with a gun. Frank Lindsay insisted that UPI must promise to delay publication of the results, if the shadow proved to be a man, until he had a chance to inform his friends Ted and Bob Kennedy. The stipulation reflected the shared feeling that the shape was more than a shadow.

I spent three days at Itek taking the eight-millimeter film from investigator to investigator. Some worked from stills Hoffman had made; some made color separations from Nix's film; others fed it into monitors for scanning.

Since Nix had run from one position to another while filming, the Itek experts were able to triangulate and gauge the depth of the figures and of the car on the knoll. I assigned a photographer in Dallas to take detailed pictures of the knoll and then to write on the film the distances from point to point — from Nix to the knoll, from the corner of the wall to the shadowy shape, and so on. The photographer acquired an aerial survey of the area and the original design plans for the pergola atop the knoll. Itek studied the film, free of charge, from January until May of 1967.

None of Itek's sophisticated techniques, however, could completely clear away the shadows and tell us definitely what was there. But all the approaches led to one conclu-

sion: the shape that could be taken for lacked depth, therefore it must be a shadow. As for the car, it was a car all right, but triangulation indicated that it was directly behind the pergola wall, as it seemed to be, but back in the parking lot, where it ought to be.

Jack Fox and I flew up to Boston. We wrote a story about the Itek findings. There were no headlines. That week — the week of May 26 — *Time* magazine, alone of the news-weeklies, played up the story. Perhaps *Time* would continue — and pay for — the investigation elsewhere? I mentioned this to Howard Sprague. He thought it unlikely. It was at this point that he let drop the remark that Time Inc. owned a sizeable chunk — 60,000 shares, or roughly 5 percent — later found out — of Itek, then a very hot stock.

Time Inc.'s interest held up. Dick Billings of *Life* was assigned to create a story by using Itek to analyze several pictures that had been shot in Dealey Plaza both before and after the assassination and some at the moment of impact but not of Kennedy himself. The UPI story on the Itek report had at least tried to establish that the Nix film proved nothing. *Life's* story didn't set out to prove or disprove anything.

On December 19, 1967 another and more surprising link came to light. In that day's issue of *The New York Times* I read the transcript of an *Izvestia* interview with Kim Philby, the British counterespionage officer who had defected to Moscow. In the transcript Philby recounted what he considered to be his greatest coup — the foiling of the CIA's Albania caper. As Philby told it, in 1951, shortly after Tito had broken with the Soviet Union, thus geographically cutting Albania off from the rest of the Communist world, the CIA arranged to airdrop anti-Communist Albanians into the mountains of their home country to lead a counterrevolution. Before the drop, the CIA checked out the operation with the great British anti-Communist spy Kim Philby. From that moment on, the air drop was, of course, a disaster. According to Philby, the CIA agent in charge of the Albanian operation was named Franklin T. Lindsay.

I called Sprague, who had told me early in the game that he himself had worked for the CIA, and asked whether the Franklin T. Lindsay mentioned by Philby was Itek president Lindsay. Indeed, he was, Sprague said.

Of course! I thought. Who else but a former CIA man would head a company 60 percent of whose business came from the government, much of it consisting of analysis of aerial photographs shot for intelligence purposes? Perhaps, then, Itek's report might not be considered conclusive — at least by those who saw a CIA conspiracy behind every grisly happening anywhere in the world. Of course, Itek had published, and widely distributed, its report, so that if the results had been fudged, other scientists would have caught it. On the other hand, how many people were there with the scientific ability to challenge Itek's report — and with no links to the CIA?

I gave up. Enough was enough. But I love to tell the story on myself, and maybe on all of us, of how, in the end, the only people I could get to investigate a picture that might (by a stretch of conspiratorial imagination) involve the CIA were people who worked for the CIA.

## Epilogue

Among the people I told my story on myself to was Richard Sprague, one of the most dedicated investigators of the Kennedy assassination — and, no, not related to Itek's Howard Sprague. It was, perhaps, inevitable that Richard Sprague would make contact with assassination buff Jones Harris. Perhaps it was equally inevitable that — given Watergate and the question of whether agents had assassinated (or had tried to assassinate) Fidel Castro and other political leaders — Harris would conclude that UPI and Itek had engaged in a conspiracy to destroy his theory and cover up the facts of the assassination. In the summer of 1973 he informed Reinhardt and me that he had come to just this conclusion.

The art of electronic analysis had advanced in the more than six years that had elapsed since Itek had completed its study. So I decided to try one more investigation, this time with a California company called Image Transform.

At this point, in late August 1973, the producers of the film *Executive Action* inquired about use of the Nix film. I flew out to the Coast, made a deal — the film would be used only as stock shots, not as evidence of Harris's theory — and then went out to Image Transform's Los Angeles laboratories. There I learned that commercial apparatus could do little to enhance the quality of the Nix film. A technician suggested that, as a last resort, I should take the film to Dr. Kenneth Castleman, a scientist at the California Institute of Technology at Pasadena.

I took a taxi to Pasadena. Dr. Castleman and I viewed the film. He saw the shape. He suggested that more sophisticated digital computer techniques developed by Caltech to reconstruct lunar photographs could, perhaps, solve the riddle of the grassy knoll shadow. He found an interested Caltech graduate student, James Latimer, who did the computer image processing as a class project in a course on digital image processing. The processed images were then analyzed by Dr. Castleman and by Alan Gillespie, of Caltech's Jet Propulsion Laboratory.

Fifteen months went by. In February 1975 I received a report marked "PRELIMINARY FOR INFORMATION ONLY." The report concluded:

In this analysis the Nix film fails to support strongly "the grassy knoll assassin" theory. No errors were found in the Itek report and its conclusions remain the most likely. A study of the area between the stairs and the [pergola] found no new evidence of assassins there. However, in the light of the poor image quality and the availability of suitable hiding places, a grassy knoll assassin cannot be positively ruled out.

The report also states that it is "remotely possible" that certain features are "due to an assassin immediately behind the wall who moved to his right, as Nix moved. . . ." After receiving this report, which I believed to be the nearest thing to a conclusive answer about the film, I learned that assassination buffs have detected *three* assassins — two of whom supposedly bear a resemblance to Watergate figures E. Howard Hunt and Frank Sturgis — in the Nix film, this time on the steps leading down from the knoll. Now Castleman and Gillespie have those frames — and this whole thing may start up again. God forbid. E