The phantom

A noted defender of the Warren Report now that there was a second assassin in Dealey

by Jacob Cohen

ate in the afternoon of December 29. after listening to the House Assassinations Committee's sensational final hearing on the new acoustical evidence in the assassination of John F. Kennedy, I remembered a New Yorker cartoon that I love. It shows an oldfashioned baseball scoreboard with the inning-by-inning results of a game between the Realists and the Idealists. The Realists have scored six runs in the first inning, seven in the second, 26 in the third, and many other runs in each of the remaining six innings. And the Idealists have been shut out for the entire game. But in the last column, where the final score is entered, it says: Idealists, 1; Realists. 0.

An inveterate Realist, I have beenstudying and writing about the IFK assassination for 15 years. Readers who recognize my name will know that I have been, I don't think it immodest to say, one of the more prominent defenders of the Warren Commission. And until very recently - indeed, until I began to study the new acoustical material - I have had the Warren Commission's and my own independent judgments about the case confirmed, inning after inning. My book, Conspiracy Fever, is in page proof and scheduled to come out in February. After following the results of the House Assassinations Committee hearing closely over the last five months, I was, frankly, feeling bullish about it.

Nearly everything the new committee had learned about the assassination tended to confirm the Warren Commission's conclusion that one man, in all likelihood Lee Harvey Oswald, fired

BOSTON PHOEMY

gunman

concludes

Plaza that day

the two shots that struck the president and John Connally (then Texas's governor), as well as a third shot, which missed.

Not at all to my surprise, the famous "single bullet" theory, one bullet passing through Kennedy and hitting Connally, which is so crucial to the Warren Commission's thesis, had been powerfully confirmed by a battery of new scientific tests. And a medical panel had made clear, if it was not so already, that the bullet responsible for the fatal head wound was fired not from the grassy knoll, as critics had argued, but from a point above and behind the president. Indeed, working backward from the president's and the governor's wounds, the committee's experts on bullet trajectory had traced the source of the shots precisely to the single window on sixth floor, southeast corner, of the Texas Book Depository, where the Warren Commission had so persuasively placed the rifle of Lee Harvey Oswald. The committee even found the famous "umbrella man," who denied that he had either shot the president with that diabolical weapon or used it to coordinate the fire of others.

of speculation about the grassy knoll, where about 21 percent of earwitnesses, by the House Committee's count, placed a gunman. However, earwitness testimony is notoriously unreliable, and proved to be so in this instance. For only one of those who placed a gunman on the knoll indicated that there were also shots from the depository. Nearly everyone thought the shots came from one direction, when the hypothesis of a gunman on the knoll clearly necessive.

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their coming from two drastically different locations. As for the number of shots, 90 percent of the earwitnesses thought they heard three or fewer, although a shot or shots from the knoll entails at least four, since there were three from the Depository.

What is important is that, while eight people had seen a gun or gunman in the sixth-floor window of the Depository, no gunman or gun had been seen on the knoll, even though an assassin shooting from, say, behind the picket fence on the top of the knoll would have been in sight of perhaps 100 people. Through the years, critics doted on photographs taken of the knoll during the shooting, perceiving assassins everywhere in the maze of swirling shapes and dots. On further analysis, each of these proved to be a mirage — except perhaps one.

By far the most urgent arguments for a gunman on the knoll contended that he hit the president from there, but this claim was strongly discouraged by the House Committee's medical panel, which once again found no signs of a source for the hits other than the sixth floor of the Book Depository, southeast corner.

For these reasons and many others, the Warren Commission's conclusions seemed as persuesive as ever to me. They apparently were to the House Committee as well, which until the very end, when it heard an analysis of the new acoustical evidence, was about to endorse the Warren Commission's findings.

However, I have long been haunted by a possibility that conceded the foregoing and went beyond it. Suppose that an unseen gunman had fired a bullet which hit no known thing or person and was never recovered, and also that he then disappeared, like a phantom, leaving no clear trace. Obviously, such a proposition

could be neither proven nor disproven. Does the tree that falls unheard in the forest make a sound?

What is so significant about the House Committee's new evidence is that it saves the matter of President Kennedy's murder from this conundrum. The falling tree, it now appears, may actually have been recorded on a Dictabelt in the Dallas Police Department, and if it was, if that is truly a fourth shot, from a second assassin, which is to be found on this newly discovered tape, then we are forced to contemplate a version of the assassination with radically new implications.

s the new evidence authentic? The story of how the House Committee obtained it is extraordinary and raises many serious questions.

According to chief counsel Robert Blakey, in September of 1977 the committee learned (how?) of the existence of a Dallas police tape that allegedly had recorded the assassination through the transmitter of a motorcycle policeman at the scene who, the story went, accidentally left his microphone on. The tape and the Dictabelts from which it was made were never turned over to the Warren Commission by the Dallas police (why?). Indeed, the police denied knowledge of their whereabouts when queried by the House Committee.

According to Blakey, the committee then obtained a copy of the noisy tape from Mary Ferrell, whom Blakey describes as "a critic of the Warren Commission who lives in Dallas." Who is she? Where did she get the tape? How did the committee come upon her? All these questions are unanswered. The Ferrell

Newman, of Cambridge, the committee's acoustical consultants, which reported that it could discern "no audible sounds" on it. (Did Ferrell hear something the experts failed to?)

Having struck out with Ferrell's copy, the committee then turned to Paul McCaghren, who may have provided Ferrell with her copy. He is a retired Dallas assistant police chief who had participated in the original police investigation of the assassination, and he proceeded to provide the committee with numerous documents and tapes that he apparently had squirreled away and kept secret for some 13 years. Among these materials, about the contents of which we know nothing, was, says Blakey, the original dispatch tape and the Dictabelts from which it was made, and these were promptly forwarded to Cambridge for analysis.

How could such vital evidence have remained secret for so long? Why, in particular, would Mary Ferrell, a critic of the Warren Commission, have held on to it? Why did she contact the committee, if that indeed is what she did? She has not been interviewed in public and, when I called, I found that her phone had been temporarily disconnected. Did McCaghren have any idea of what he had, and, if so, why in the world did he keep it to himself?

To say the least, the sequence of possession between the time of the original transmission and the discovery of the tape, in 1977, is unclear. Indeed, even the fact of the original transmission has not been established. The committee found the motorcycle policeman who, by acoustical reconstruction, would have to have had his microphone on. He agreed that it was possible he left it on accidentally, but he had no independent

memory of the matter. He remembers that moments after the shooting he received an order to proceed immediately to Parkland Hospital, which reception would have been impossible if the mike was on. When the committee suggested that he may have heard the order from the receiver on another motorcycle across the road, he agreed it was possible.

gain, questions swarm to mind. Had the motorcycle policeman ever heard about the tapes before? Had he ever been asked before or heard of others' being asked about the matter? Could such a tape have existed for so long without raising a swirl of rumor? Is it possible that additional sounds somehow were superimposed on an authentic tape? Why are police sirens not heard on the tape?

While I raise these questions and urge that they be answered, I must add that I now believe the tapes are authentic and that the sounds to be found on them probably are what the experts who testified before the House Committee think they are: four shots, including one from the grassy knoll. And that is not at all easy for me to say.

Incidentally, it is misleading to talk about what the experts "heard" on the tapes. Far more important is what they aw in the figures and graphs that converted the impulses on the tape into something analyzable. At one point in his testimony, the committee's most persuasive acoustical consultant, Professor Mark R. Weiss of Queens

College, observed that he had never actually "listened," in the everyday sense of the term, to the alleged shots on the tape.

Each gunshot in Dealey Plaza would have provoked several sets of

impulses that might find their way onto a police Dictabelt: the sound created by the muzzle blast of the gun; the pattern of echoes as the sound bounced off the surface of buildings and other objects in Dealey Plaza; and the shock waves set loose, like miniature sonic booms, by the supersonic bullets that preceded the sound of the muzzle blast en route to the open microphone. As many as 22 'sounds," not just one, might be associated with each shot. And theoretically, all of these, in their exact configurations of time and intensity, would be recorded in that noisy tape, if it is authentic.

Last August, a team of acoustical technicians and scientists from Bolt, Beranek and Newman went to Dealey Plaza and set up microphones along the JFK parade route. For five hours, shots rang out again as the experts attempted to see if they could record sound-impulse configurations that matched those on the police tape. The match was never exact, but several comparisons were close enough to suggest the locations of a gun or guns and of the open microphone.

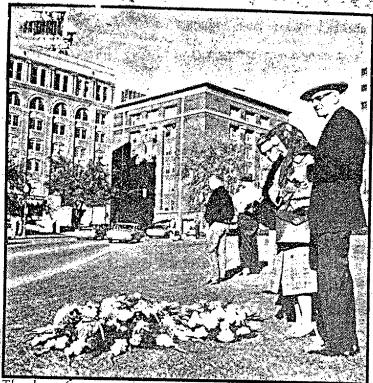
The scientists also brought theory to bear on the problem. The physics of sound is elementary. If you assume the position of a gun and you know the speed of the bullet and the exact contours of the area and the exact location of the microphone (and the temperature, wind direction and wind speed), you should be able to predict with great accuracy what pattern of sounds will be imprinted on a tape recording of the event. When one works forward from these projections, it is possible to predict the impulses that would be on the tapes, assuming a shot here and a microphone there. When the predictions approached the actuality, confidence grew that these were indeed

shots from certain specific locations.

What it all amounts to is this: while every expected impulse was not found and unexpected impulses (what one expert called "false alarms") surfaced occasionally to confound the reckoning, the match was finally close enough to suggest that what may have happened probably did - that there were four shots, and that three were from the sixth floor, southeast corner of the Depository, and one was from a spot on the top of the grassy knoll, perhaps immediately behind the five-foot picket fence that runs along the top of the knoll, about 13 feet from the corner where the fence turns abruptly toward the parking lot behind. What else but shots, from those specific locations, could have caused such similar patterns of impulses? Unable to imagine plausible alternatives, the experts convinced the committee - and have convinced me that they probably are right.

hen Dr. James Barger, chief scientist at Bolt, Beranek and Newman, testified before the House Committee on September 11, he estimated that there was a 95 percent chance of two shots from the Depository, a 60-70 percent chance of a third from that source, and a 50-50 chance that there was a fourth shot, actually the third in the sequence, from the grassy knoll. Barger was a fidgety and difficult witness, and by the time committee members finished asking him about the grassy-knoll shot, they seemed totally confused and he seemed less sure of himself. And listening to a tape made by Bolt, Beranek and Newman in August that duplicates in clear sound what the undistinguishable police tape showed

Continued on page 34



The day after

JFK

Continued from page 7
when it was graphed
reinforced the committee's
confusion. The first, second and
fourth shots, from the
Depository, come across as sharp
bangs; the sound of the third shot
is more a murky pop.

However, Professor Weiss, whom the committee then asked to look into the third shot (using Barger's data), convinced everyone that the ears are not the final judge in these matters. In the end, his clear and confident testimony, on December 29, changed the committee's mind, and mine. Weiss explained that while he was relying on the same information as Barger, he had improved on Barger's theoretical model by assuming a moving microphone rather than a series passing jerkily from one fixed microphone to another. With this. assumption, the match between theory and reality improved markedly, and with it the chances of a shot from the knoll. Asked a committee member, "Did you say the chances were 95 percent of a shot from the knoll?" Weiss responded, "95 percent and better," adding that if he were a lawyer he would not hesitate to say "beyond a reasonable doubt." Later in the day, Barger appeared

again, to say, at one startling point ambiguously, that he fully accepted Weiss's upward revision of his earlier estimate, sort of.

No doubt we have not heard the last of the matter. But let us assume for a moment that the tale which has been told of this tape is true. What picture of the assassination does it give us?

First, there was another assassin, on the knoll, probably just behind the fence, within five feet of the spot where Weiss confidently placed him. At one point, the assassin appears above the fence and shoots at the president with a rifle or pistol,

and we now know exactly when this shot must have taken place. Second, the shot missed and was never recovered. It did not hit or graze any known thing or person, not the car or anyone in it or anyone across the street. Third, neither the gun nor the gunman was seen, though he would have been clearly visible if any one of many spectators, policemen, or Secret Service men scanning the crowds had glanced his way. He was not seen by Connally, who would have been facing him when he fired. Nor was he seen or noticed by Abraham Zapruder or Zapruder's secretary, who were standing on a concrete pedestal just 40 feet to the gunman's left. and above him. From their perch, either Zapruder or his secretary could look down at the whole area behind the fence. Apparently, they simply did not notice that a shot had just gone off directly to their right, fired by a man in clear line of sight 40 feet away. The motion-picture camera in Zapruder's hands did not even shake as he took his historic film of the assassination, though it had earlier at the time of the first. shots.

ight after the assassination, a man who claims to have seen smoke hovering above the grassy knoll, S.M. Holland, ran behind the fence and found cigarettes and what to him were suspicious footprints. Are these the signs of our assassin? That is an open parking lot back there; cigarettes and footprints are not uncommon sights in parking lots. As for the smoke, in my researches I have not heard of a modern weapon that produces puffs of smoke which linger over the weapon, though apparently 16th-century Spanish blunderbusses produced something like that effect. I have always assumed that the smoke, if smoke there was, was probably caused by the steampipe behind the fence, which burned the hand of one policeman when he

climbed back there to examine the area. Holland, I might add, also reported seeing a man holding a machinegun rear up in the back of the president's car after the shooting, a misobservation that did not enhance my respect for his powers.

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Following the shooting, a Dallas policeman ran from the corner of Elm and Houston to the top of the knoll, where, gun drawn, he says, he encountered someone who identified himself as a Secret Service agent, flashing credentials. Critics have made a great deal of this encounter, and since I now must seriously consider the probability of an assassin on the knoll, I must agree that if the policeman's memory is accurate, we may have something. But I have often wondered why a gunman or his accomplice would by this lie have so conspicuously pointed to the existence of a conspiracy, when his presence on the knoll, in a public parking lot, was so entirely unexceptional.

So we must turn to a photograph, for, amazingly, it appears that a Polaroid shot of the knoll was taken just about when the shot would have occurred. This moment can be established almost exactly because we know that the final, fatal shot, from the Book Depository, took place just before frame 313 of Abraham Zapruder's film of the assassination, wherein we see the ghastly explosion out of the right side of President Kennedy's head. Since we know pretty much the speed of Zapruder's camera and the timing of the shots can be measured on the police tape, it is, possible to work back from the last shot to the third, the one from the knoll, and ascertain that it

occurred in frame 296.

Mary Moorman, who took the photo, was standing almost directly in the second line of fire (which she did not notice). Her picture shows the president slumping to the left, his chin near. his chest, and his wife at his side, turned toward him. Over their heads loom the knoll and the picket fence on top of it. A tree on the knoll in front of the fence intersects it about 15 feet from the corner where the fence turns back toward the parking lot. The assassin should be just to the right of the tree, his head above the fence. When one compares the Zapruder frames with the position of the president and Mrs. Kennedy in the Moorman photo, it is clear that the photo was taken within less than a second (18.3 frames) of the actual shot.

Tor 14 years the finest photographic expertise available has pored over this photo and failed to tease a gunman or a gun out of it. There seems to be something just to the right of the tree and just above the top of the fence (Josiah Thompson's comparison photo of the same spot seems to establish that), but what this something is is impossible to say, at least from the photograph.

the photograph.

If the Dallas police tape is to be believed, however, this something must be the top of an assassin's head. He probably popped up as fast as he could, shot at the president, perhaps with a pistol that fired bullets at supersonic speed (the police tape established that the bullet must have been moving that fast; few pistols have that great a velocity), and then ducked down as quickly as possible out of most people's sight, though not Zapruder's or his secretary's.

No wonder he missed. And that is just about the sur of what we can imagine about th

phantom gunman.

However, we have not exhausted the anomalies forced on us by the data trapped in the police tape; we have also learnesome strange new things about Continued on page 35

JFK

Continued from page 35 the shots from the Depository.

If the tape is to be believed, the first shot was fired in approximately frame 166 of the Zapruder film, and the second, 1.59 seconds later, at approximately frame 196. The times are exact because the police tape establishes them with precision; the frames are approximate because the speed of Zapruder's camera is not absolutely certain.

Anyone familiar with the assassination will recognize two surprises in this information. For one thing, it requires the gunman, Oswald in my view, to have fired Oswald's rifle faster than has ever been thought possible. The FBI and military marksmen with whom the Warren Commission consulted could not fire and refire Oswald's rifle in less than 2.3 seconds. When CBS television asked a team of volunteers to aim and fire the rifle as fast as possible, the best of them could get off a second shot only in 2.05 seconds, and a BBC team in London produced the same results.

The mistake in these tests may be that they tried to fire the gun very accurately. How fast could it have been operated if a pumpedup gunman, operating the bolt as quickly as possible, simply refired without taking the trouble to aim very carefully? Chief counsel Blakey, of the House Committee, claims that his team did fire a rifle like Oswald's in the required 1.6 seconds, and accurately, but his team was firing one without a telescopic sight and Oswald's had one. Furthermore, the follow-up studies on the rifle's capacity, which Blakey promised the committee, had still not been made when the committee went out of business.

This leads to a second surprise. If the firing began in frame 166 and continued in 196, then it began earlier than anyone has thought likely and establishes that Oswald fired the shot which hit Kennedy and Connally through the leaves of a tree in front of the Book Depository. For the committee established quite persuasively that it was the second shot which struck the president.

Let us imagine what happened

The president's car turns from Main onto Houston, and for six seconds he faces his killer, who has a clear view of him. The car then turns to the left, Oswald's right, just below him, and heads away behind a thicket of leaves and branches. Did Oswald measure JFK all the time as the car approached, follow him around the turn and then shoot just as the car passed behind the tree? If he did, he missed anyway, for it was the second shot, fired in record time into the leaves, which hit his mark. I have always thought it was a lucky shot, but I had never realized how lucky it was.

Where does all this leave us? A

gunman on the knoll pops his head up, shoots and ducks, missing his target, and leaves at best only the most tenuous signs of his existence. An assassin in the Depository fires wildly into the trees, luckily hitting his target.

dear friend of mine called the other day, begging me to reconsider my new position. In view of the paucity of evidence confirming the existence of the gunman on the knoll and the difficulties in the scenario of shots from the Depository, not to speak of the mysteries surrounding the police tape, why had I accepted its apparent message? There are so many good reasons not to trust it, he said, not to speak of motives.

My answer is simple. The impulses on the tape are there and I cannot think of how else they could be there in that particular pattern except that the two gunmen caused them to be. These are not just sounds, I remind you, but sounds and echoes and shock waves, from a very specific spot. Not just any spot, but the very spot where I know three shots were fired, and a second spot that has been the subject of so much speculation. Who could have fabricated such a cunning tape? Mary Ferrell? I have heard myself say that I believe in the truth, and have summoned my students and readers to do the same. I don't see what I can do when it conspires against me, except listen.

But the games are not over, and the Realists have not lost the pennant. I do not doubt that if there were two gunmen, there was a conspiracy of some sort; ent rtaining the notion of two lonely assassins humiliates the imagination. Whether it was as grand, middle-sized, or tiny conspiracy remains to be discovered. I am strongly inclined to the last view. John Wilkes Booth shot Lincoln with a little help from his friends yet a century of conspiracy-mongering has not traced the conspiracy beyond the imaginings and obsessions of that small band

I am much impressed by the fact that Oswald shot the president from the building where he worked and that he took the job three weeks before decisions were made which sent the president precisely past his doorstep. I have studied those decisions exhaustively and they are clean. Oswald and/or his boss or friend had at most eight days to anticipate the president's arrival at his doorstep, more likely only six. My conviction that he was the assassin is unaltered, and my sense that Oswald is still Oswald, the lonely man that I have studied and thought about for so long, is not entirely shaken either.

What manner of conspiracy? That's the new game. But one final point: it is essential that the Justice Department or a reconvened Committee (I prefer the former) follow up the House Committee's leads and especially restudy the acoustical evidence.