

1 which is approximately a thirty-two inch windowsill, and  
2 approximately one inch from the side. Whether that's the  
3 front side or the rear side, I am not sure. It is the side  
4 opposite the painting, and, therefore, I would assume that  
5 it was the outside; though this is something that I couldn't  
6 determine without matching nailholes in the windowsill to  
7 the actual window casing.

8 Q. First, did you examine it microscopically?

9 A. Yes; with a Spero Binocular microscope.

10 Q. Were you able to form an opinion as to whether or not  
11 the indentation in the windowsill contained sufficient detail  
12 to determine the nature of the object that made it?

13 A. Yes, I was.

14 Q. What was your opinion?

15 A. Using several cross-lightings to highlight this, it  
16 was possible to detect the indentations and ridges that  
17 might result from tool work, such as chisel marks, something  
18 of this kind, but I could not find sufficient detail to  
19 indicate general characteristics, let alone individual  
20 characteristics, and based upon the examination I conducted,  
21 I do not believe it possible to determine even the class of  
22 the object that made that indentation, let alone a specific  
23 or positive identity of that object.

24 Q. At the guilty plea hearing March 10th, 1968, it was  
25 stated that Mr. Robert A. Frazier, of the FBI, examined the

1 windowsill, and I will read you a single paragraph which,  
2 Your Honor, comes at pages 96 and 97 of the Otwell transcript,  
3 quoting -- "That he also made microscopic comparison between  
4 the fresh dent in the sill of the window at the bathroom,  
5 422½ South Main, and concluded that the microscopic evidence  
6 in this dent was consistent in all ways with the same  
7 microscopic marks that appear on the barrel of this rifle,  
8 30.06 rifle."

9           Could we have your comments on that conclusion by  
10 Mr. Frazier?

11 A.       Well, I don't think it is possible to make a micro-  
12 scopic comparison of the machine marks on the barrel, which  
13 from this cut would have to be the muzzle to it, that would  
14 be the only portion of the barrel that would be capable of  
15 making such a clean, fine cut. It certainly couldn't be  
16 made further back from the muzzle toward the stock, and  
17 there just isn't enough detail there to make that examination  
18 in raw weather wood and conclude that a positive identification  
19 could be made; so I disagree with that.

20 Q.       If I understand you correctly, you say if it could  
21 be made by the gun at all, in your opinion it would have to  
22 be made by the muzzle being rested on the windowsill and not  
23 the barrel further aft?

24 A.       That's the only ninety-degree portion of the barrel  
25 that is exposed that could allow such a dent or cut to be

1 made. So if it was made with the barrel, it wasn't with  
2 the circumference or the periphery of the barrel. It would  
3 have to be made with the muzzle or possibly the front sight.

4 Q. If it had been the muzzle or the front sight, would  
5 there have been other markings on the windowsill?

6 A. Not necessarily. It could have been just bumped or  
7 hit in a rather awkward configuration.

8 Q. Suppose the gun was fired with the muzzle resting  
9 there? What would have been the result?

10 A. Well, it would have torn up the windowsill. If the  
11 bullet itself or the projectile did not track the barrel,  
12 the muzzle blast would have left indelible markings that  
13 would have been very evident.

14 Q. Did you find such markings?

15 A. None whatever.

16 Q. And you say that you cannot match up that indentation  
17 with any part of the record?

18 A. No, I could not. For two reasons -- not only the lack  
19 of individual characteristics or fenestral characteristics,  
20 but the spacial relationship of the window and the geometric  
21 location of the windowsill preclude that instrument, at a  
22 nominal length of forty-two inches, fitting in the available  
23 space with the angle of that mark. Maybe I could diagram  
24 that and make it more simple.

25 MR. FENSTERWALD: I think it would be.

1           THE COURT: All right. There is a grease  
2 pencil over there, please.

3           THE WITNESS: The windowsill is approximately  
4 thirty-two inches in its longest dimension, approx-  
5 imately thirty-one and three-quarters, and at approx-  
6 imately the center, which is sixteen inches and a  
7 quarter, and at the beginning of this measurement  
8 of sixteen and a quarter is a seven millimeter long  
9 cut, and the cut is outlined in chalk, which I will  
10 indicate the chalk in red, and approximately fifteen  
11 inches to the other end, and the length of this  
12 (indicating) is approximately, therefore, a half-  
13 inch. This dimension is five inches, and the  
14 thickness is one inch (indicating). Not having a  
15 protractor I simply placed two rulers along here  
16 to determine the angle, which could be easily  
17 determined from the markings. This is three inch  
18 by five and one-quarter inches (indicating) --  
19 I will say, approximately, because without a  
20 drafting board, it is not possible to make measure-  
21 ments to a hundredths of an inch, of course. None-  
22 theless, this well defines the angle of the markings,  
23 the cut. The photograph, Exhibit 106, shows the  
24 windowsill approximately eighty-eight, eighty-nine  
25 millimeters, and by simply scaling that up into

1 five to six millimeters on the photograph to the  
2 wall, I -- I don't know which wall it is. I will  
3 call it the wall to the left of the window behind  
4 the bathtub. I don't know the direction. That  
5 makes this approximately one point eight inches.  
6 We will call it two inches to be generous.  
7 Projecting back in a straight line from this mark  
8 at the angle and perpendicular, normal or ninety  
9 degrees to the marking, which would, of course,  
10 be the only way that a cut could be made if it  
11 were, in fact, made with the barrel, as I believe  
12 the affidavit states, and not being possibly made  
13 with the curved area or the circumference of the  
14 barrel, and this then projects back in a straight  
15 line looking directly down on it, to be thirty-  
16 two inches, and I would then be very liberal and  
17 put plus or minus ten percent, or let's say four  
18 inches in round figures.

19 Now, recognizing the fact that if the windowsill  
20 in cross section, had the barrel really gone on it --  
21 the barrel B -- A in the lower right, and this B,  
22 and then any point of impact would have to result  
23 only if the barrel were tipped at some angle,  
24 indicated by the dotted line, and the line circled  
25 "A" before that cut could be made, and recognizing

1 further that as one brings up the barrel along  
2 the wall, the dimension increases, I simply --  
3 perhaps I should go to another sheet. I simply  
4 took the thirty-two inches in the horizontal, in  
5 the available space between the marking and the wall,  
6 and projected it up to that point, that would allow  
7 forty-two inches, which is the length of the Model  
8 760 Game Master Remington rifle, and it approximates  
9 a height of twenty-six inches. Again, to be liberal,

10 I will say plus or minus four inches, because I  
11 do not have architectural drawings and protractors  
12 to work with. But this type of measurement should  
13 be, and I would presume already had been made, to  
14 just determine how can a weapon fit into the  
15 available space to make that cut, and that is the  
16 only possible configuration. If indeed the marking  
17 is on the outside of the window, as I have indicated  
18 the paint in the room in the first diagram, then  
19 wherefore the window itself would be -- it would  
20 intercept, since the marking is out further like  
21 that, and there has to be an interception there,  
22 and perhaps that would explain how it was caused,  
23 if the window stuck and someone put it in there  
24 and pried it up, but that would certainly leave  
25 another marking on the window. But just a matter

1 of whether or not it can fit the available space  
2 and if it is tipped up at something approximating  
3 thirty to forty-five degrees, that's the only way  
4 it would fit if the stock or butt plate were against  
5 the wall.

6 Going back to the windowsill, if we reversed  
7 the windowsill, because I am not certain which is  
8 inside and which is outside, as I previously stated,  
9 then that would put the mark even closer to the wall  
10 and inside so that the distance -- that it shifted  
11 to the left, from fifteen, rather from sixteen and  
12 a quarter to fifteen inches, and it would have  
13 shifted to the inside and make it even a shorter  
14 distance. This distance, of course, is shorter than  
15 that distance -- the red is shorter than the black  
16 (indicating throughout).

17 So, in other words, by proportioning up from  
18 the photograph to determine the distance of the  
19 windowsill edge to the wall, there is a maximum  
20 distance available, and if a forty-two inch weapon  
21 will not fit into it, then there is no possible way  
22 it could have been the marking from the muzzle end,  
23 which is the only one, in my opinion, that could  
24 have made it.

25 Q. Do you know the approximate angle at which the bullet

1 would have to travel from that window to the target, downward  
2 angle?

3 A. You mean in the actual shooting?

4 Q. If it was fired from there and hit Dr. King on the  
5 balcony.

6 A. Not of my own knowledge. I have seen a diagram that  
7 indicates the distance from the horizontal, the windowsill  
8 to the position that Dr. King was standing is not much of a  
9 drop, as I recall, which means that it would be a very  
10 slight downward angle.

11 MR. FENSTERWALD: Your Honor, from yesterday's  
12 testimony, I think the record will reveal that it  
13 is approximately four degrees.

14 THE COURT: All right.

15 BY MR. FENSTERWALD:

16 Q. In your diagram there you would indicate that the butt  
17 of the gun, if fired at a flat angle or four-degree angle or  
18 something of that nature, would be back through the wall?

19 A. Yes. It would stick in the wall about as much as ten  
20 inches. It just won't fit.

21 Q. And that doesn't account for somebody trying to hold  
22 the rifle and firing it at the same time?

23 A. No. That would be just sticking it in the corner and  
24 not using the sights or anything.

25 Q. Well, could you hit a target at two hundred feet that



1 way?

2 A. I think you could hit it. But you wouldn't know you  
3 were going to. It would be pure accident.

4 Q. Purely by accident?

5 A. Yes.

6 Q. Are you familiar in detail with the 760 Game Master  
7 rifle?

8 A. No, I am not; not particular. I have some of the  
9 722's and Model 700's, but not the 760 itself.

10 Q. How can you say there is nothing on the bottom of  
11 the barrel that would leave a mark?

12 A. I have seen photographs of it, and catalogue advertise-  
13 ments, and I see nothing that would be there. Very few  
14 weapons like that would have a strap, and the leather strap  
15 is on the curved nature of the swivel strap holder, and would  
16 not produce that kind of cut. Now, if it were not the  
17 barrel, it seems to me whoever made the comparison would  
18 write up that it was something else. They would say swivel  
19 strap or fore-piece, front end, or something, or say sight  
20 even.

21 Q. Would a marksman rest the barrel of the rifle on the  
22 sill, or would he cushion it with something flexible such as  
23 his hand?

24 MR. HAILE: I object to that. If he wants to  
25 qualify him as a marksman --

1 THE COURT: (Interposing) I sustain the  
2 objection.

3 MR. HAILE: Or if he wants to qualify  
4 Mr. Ray as a marksman.

5 THE COURT: I sustained the objection,  
6 Mr. Haile. Go ahead.

7 MR. FENSTERWALD: Thank you.

8 Q. Mr. MacDonell, I would like to return to the question  
9 of the bullet and bullet fragments. Did you examine the  
10 large part of the bullet that was removed from the body of  
11 Dr. King?

12 A. Yes, I did.

13 Q. Could you describe in as much detail as possible its  
14 size, shape and distortion?

15 A. Well, it is a mushroom jacketed projectile, bullet,  
16 which has lost the lead core through mechanical disruption  
17 or impact. The casing or jacket, as it is accurately called,  
18 the jacket exhibits excellent striations. There are six  
19 righthand rifle grooves. The width and all the dimensions I  
20 have here are consistent with a 30.06, and in my indexing or  
21 assigning values to land and groove, I arbitrarily took this  
22 as rifle groove No. 1, to correspond to the folded over line,  
23 which Q-64 RF is inscribed on the inside of the jacket where  
24 it is folded over, and I arbitrarily took that as No. 1.  
25 Looking at the base and going in a clockwise fashion, there