Dr. Jenkins. I felt quite sure at the time that there must have been two bullets—two missiles.

Mr. Specter. And, Dr. Jenkins, what was your reason for that?

Dr. Jenkins. Because the wound with the exploded area of the scalp, as I interpreted it being exploded, I would interpret it being a wound of exit, and the appearance of the wound in the neck, and I also thought it was a wound of exit.

Mr. Specter. Have you ever changed any of your original opinions in connection with the wounds received by President Kennedy?

Dr. Jenkins. I guess so. The first day I had thought because of his pneumothorax, that his wound must have gone—that the one bullet must have traversed his pleura, must have gotten into his lung cavity, his chest cavity, I mean, and from what you say now, I know it did not go that way. I thought it did.

Mr. Specter. Aside from that opinion, now, have any of your other opinions about the nature of his wounds or the sources of the wounds been changed in any way?

Dr. Jenkins. No; one other. I asked you a little bit ago if there was a wound in the left temporal area, right above the zygomatic bone in the hairline, because there was blood there and I thought there might have been a wound there (indicating).

Mr. Specter. Indicating the left temporal area?

Dr. Jenkins. Yes; the left temporal, which could have been a point of entrance and exit here (indicating), but you have answered that for me. This was my only other question about it.

Mr. Specter. So, that those two points are the only ones on which your opinions have been changed since the views you originally formulated?

Dr. Jenkins. Yes, I think so.

Mr. Specter. On the President's injuries?

Dr. Jenkins. Yes, I think so.

Mr. Specter. Is the conversation you had with that Secret Service Agent the only time you were interviewed by anyone from the Federal Government prior to today about this subject?

Dr. Jenkins. As far as I remember-I don't believe so.

Mr. Specter. Now, you say that was the only time you were interviewed?

Dr. Jenkins. Yes, as far as I remember—I have had no formal interviews. I have been asked—there have been some people calling on the phone. As you know, there were many calls from various sources all over the country after that, wanting to know whether we had done this method of treatment or some other method and what principles we followed.

Mr. Specter. But the only one you can identify as being from the Federal Government is the one you have already related from the Secret Service?

Dr. Jenkins. Yes.

Mr. Specter. And did you and I have a very brief conversation before the deposition started today, when you gave me some of your views which you expounded and expanded upon during the course of the deposition on the record?

Dr. Jenkins. Yes.

Mr. Specter. And is there anything which you think of to add that you believe would be of some assistance or any assistance to the President's Commission in its inquiry?

Dr. Jenkins. I believe not, Mr. Specter.

Mr. Specter. Well, thank you very much, Dr. Jenkins.

Dr. Jenkins. All right.

TESTIMONY OF DR. RONALD COY JONES

The testimony of Dr. Ronald Coy Jones was taken at 10:20 a.m., on March 24, 1964, at Parkland Memorial Hospital, Dallas, Tex., by Mr. Arlen Specter, assistant counsel of the President's Commission.

Mr. Specter. May the record show at this point that Dr. Ronald Jones has arrived in response to a letter of request to give his deposition for the President's Commission on the assassination of President Kennedy.

Dr. Jones, the purpose of the President's Commission is to investigate all the facts relating to the shooting and subsequent medical treatment of President Kennedy and we have asked you to appear to testify concerning your knowledge of that treatment.

With that statement of purpose, will you stand up and raise your right hand. Do you solemnly swear the testimony you give before the President's Commission during the course of this deposition proceeding will be the truth, the whole truth, and nothing but the truth, so help you God?

Dr. Jones. I do.

Mr. Specter. Would you state your full name for the record, please?

Dr. Jones. Ronald Coy Jones.

Mr. Specter. What is your profession, sir?

Dr. Jones. General Surgery—resident physician.

Mr. Specter. Are you duly licensed by the State of Texas to practice medicine?

Dr. Jones. Yes.

Mr. Specter. Will you outline briefly your educational background?

Dr. Jones. I graduated—I went to undergraduate school at the University of Arkansas from 1950 to 1953, in pre-med. From 1953 through 1957, I went to medical school and graduated from the University of Tennessee in Memphis, and in 1957 through 1958 I took an internship in Los Angeles County General Hospital.

From there I went to the University of Oklahoma and took a 2-year general practice residency, 1 year, the first year, entailing a year of internal medicine and its subspecialties, and a second year of surgery and its subspecialties, which was approved by the American Board of Surgeons for 1 year of surgical training, and from 1960 until the present time I have taken an additional 4 years of general surgery at Parkland, and have served as Chief Resident of Surgery.

Mr. Specter. Did you have occasion to aid in the medical treatment of President Kennedy on November 22, 1963?

Dr. Jones. Yes, sir.

Mr. Specter. Would you relate briefly the circumstances surrounding your being called into the case?

Dr. Jones. I was eating lunch with Dr. Perry and I heard the operator page Dr. Tom Shires of the staff on two occasions, and the second time I answered the phone and the operator told me that the President had been shot and was being brought to the emergency room.

I turned around and immediately notified Miss Audrey Bell, who is the operating room supervisor so that any arrangements could be made for immediate surgery, and Dr. M. T. Jenkins, who is the Chief of the Anesthesiology Department. From there I went across the room and notified Dr. Perry of the shooting and we both went together to the emergency room, and it was at that time we arrived shortly after the President had been brought in.

Mr. Specter. What is your best estimate as to the time you arrived at the emergency room?

Dr. Jones. It was, I would say, around 23 or 25 minutes until 1.

Mr. Specter. And who was present, if anyone, at the time you arrived?

Dr. Jones. Dr. James Carrico, and possibly Dr. Richard Du'any, and I'm not sure that he was there or was there for just a few minutes after we arrived. I do recall seeing him there as one of the first ones.

Mr. Specier. Was any nurse present at that time?

Dr. Jones. The head nurse in the emergency room was present and—

Mr. Specter. Do you know her name?

Dr. Jones. It's left my mind right now-I know her.

Mr. Specter. Could that be Miss Henchliffe?

Dr. Jones. She was there, I believe.

Mr. Specter. Mrs. Bowron?

Dr. Jones. No-just the-

Mr. Specter. Mrs. Nelson?

Dr. Jones. Nelson.

Mr. Specter. Was anyone else present then, other than those whom you have already mentioned at the time you arrived?

Dr. Jones. There were three nurses there—Mrs. Nelson, Miss Henchliffe and Miss Bowron.

Mr. Specter. And were any other doctors present when you arrived?

Dr. Jones. Dr. Carrico was the only doctor other than possibly Dr. Dulany, and I do know Dr. Carrico was there when I arrived.

Mr. Specter. Was Dr. Don Curtis there when you arrived?

Dr. Jones. I didn't see him.

Mr. Specter. And who arrived with you, if you recall?

Dr. Jones. Dr. Perry.

Mr. Specter. And what did you observe the President's condition to be upon your arrival?

Dr. Jones. He appeared to be terminal, if not already expired, and Dr. Carrico said that he had seen some attempted respirations, agonal respirations, and with that history, we went ahead with emergency measures to try to restore the airway.

Mr. Specter. When you say "attempted agonal respiration," do you mean an effort by the President?

Dr. Jones. Yes.

Mr. Specter. Or, an effort by someone else to induce respiration?

Dr. Jones. No, these apparently were as Dr. Carrico saw the President was attempting to respire on his own, however, I did not personally see this in the brief seconds that I stood there before I went ahead and started work.

Mr. Specter. What is the lay definition for agonal respiration?

Dr. Jones. These are the respirations that are somewhat of a strain, that is, seen in a patient who is expiring—just very short, irregular type respirations.

Mr. Specter. Would you continue now to describe what you observed to be the President's condition?

Dr. Jones. We felt that he was in extreme shock, merely by the fact that there was no motion, that he was somewhat cyanotic, his eyes were—appeared to be fixed; there was no evidence of motion of the eyes; and we noticed that he did not have a satisfactory airway or was not breathing on his own in a satisfactory way to sustain life so that we felt that either an endrotracheal tube had to be instituted immediately, which was done by Dr. Carrico. We felt that this was not adequate and since tracheotomy equipment was in the room, we felt that he would profit more by tracheotomy and that we could be certain that he was getting adequate oxygen.

Mr. Specter. What was done with respect to applying oxygen to the President

Dr. Jones. Well, a tracheotomy was done, and then an adapter was fitted to this tube, and we had an anesthesia machine there by this time with Dr. Jenkins available so that he could give him straight oxygen from the machine.

Mr. Specter. Did you observe anything else with respect to the President's condition at that time?

Dr. Jones. You mean as far as wounds-that he had?

Mr. Specter. Did you observe any wounds?

Dr. Jones. As we saw him the first time, we noticed that he had a small wound at the midline of the neck, just above the superasternal notch, and this was probably no greater than a quarter of an inch in greatest diameter, and that he had a large wound in the right posterior side of the head.

Mr. Specter. When you say "we noticed," whom do you mean by that?

Dr. Jones. Well, Dr. Perry and I were the two that were there at this time observing.

Mr. Specter. Did Dr. Perry make any comment about the nature of the wound at that time? Either wound?

Dr. Jones. Not that I recall.

Mr. Specter. Will you describe as precisely as you can the nature of the head wound?

Dr. Jones. There was large defect in the back side of the head as the President lay on the cart with what appeared to be some brain hanging out of this

wound with multiple pieces of skull noted next with the brain and with a tremendous amount of clot and blood.

Mr. Specter. Will you describe as precisely as you can the wound that you observed in the throat?

Dr. Jones. The wound in the throat was probably no larger than a quarter of an inch in diameter. There appeared to be no powder burn present, although this could have been masked by the amount of blood that was on the head and neck, although there was no obvious amount of powder present. There appeared to be a very minimal amount of disruption of interruption of the surrounding skin. There appeared to be relatively smooth edges around the wound, and if this occurred as a result of a missile, you would have probably thought it was a missile of very low velocity and probably could have been compatible with a bone fragment of either—probably exiting from the neck, but it was a very small, smooth wound.

Mr. Specter. Did you notice any lump in the throat area?

Dr. Jones. No: I didn't.

Mr. Specter. Was there any blood on the throat area in the vicinity of the wound which you have described of the throat?

Dr. Jenes. Not a great deal of blood, as if in relation to the amount that was around the head—not too much.

Mr. Specter. What further action was taken by the medical team in addition to that which you have described on the tracheotomy?

Dr. Jones. Well, as Dr. Perry started the tracheotomy, I started the cut down in the left arm to insert a large polyethylene catheter, to give an I.V. so that we could give I.V. solutions as well as blood, and at the same time another doctor or two were doing some cutdows in the lower extremities around the ankle. We made the cutdown in the left arm in the cephalic vein very rapidly and I.V. fluids were started immediately and as I was doing this, Dr. Perry was performing the tracheotomy, and it was about this time that Dr. Baxter came in and went ahead to assist Dr. Perry with the tracheotomy, and as they made a deeper incision in the neck to isolate the trachea, they thought they saw some gush of air and the possibility of a pneumothorax on one side or the other was entertained, and since I was to the left of the President, I went ahead and put in the anterior chest tube in the second intercostal space.

Mr. Specter. Was that tube fully inserted, Doctor?

Dr. Jones. I felt that the tube was fully inserted, and this was immediately connected to underwater drainage.

Mr. Specter. What do you mean by "connected to underwater drainage", Dr. Jones?

Dr. Jones. The tube is connected to a bottle whereby it aerates in the chest from a pneumothorax and as the patient breathes, the air is forced out under the water and produces somewhat of a suction so that the lung will reexpand and will not stay collapsed and this will give adequate aeration to the body, and we decided to go ahead and put in a chest tube on the opposite side; since I could not reach the opposite side due to the number of people that were working on the President. Dr. Baxter was over there helping Dr. Perry on that side, as well as Dr. Paul Peters, the assistant head of urology here, and the three of us then inserted the chest tube on the right side, primarily done by Dr. Baxter and Dr. Peters on the right side.

Mr. Specter. Then what other treatment, if any, was afforded President Kennedy?

Dr. Jones. After the tracheotomy was done, the intravenous fluid, blood was started—I believe that the President was also administered some hydrocortisone because of his history of adrenal insufficiency, and at this time an electrocardiogram had been connected and it showed no evidence of a heartbeat. Closed cardiac massage was then first begun by Dr. Perry and then I believe that after about 5 minutes no significant or no myocardial activity was present and he was pronounced dead.

Mr. Specter. What history did you refer to of President Kennedy's adrenal insufficiency?

Dr. Jones. As I recall, there had been in news that the President had several years ago been on some type of steroid therapy and that he possibly had

Addison's disease. We had no documented evidence that he did or did not, but caution was taken nonetheless in case his insufficiency was of severe enough nature, because at the time of severe trauma a patient with adrenal insufficiency often goes into a rapid degree of adrenal insufficiency and can expire from lack of steroids being produced from the adrenal gland in such a stressed situation.

Mr. Specter. Did you obtain that history from Mrs. Kennedy, or any other person on the scene?

Dr. Jones. No.

Mr. Specter. You just relied upon what had been occurring in the news?

Dr. Jones. Yes.

Mr. Specter. What would that reaction cause, if anything, if the President had no adrenal insufficiency?

Dr. Jones. This would not cause severe effects on any organ at all if the adrenal gland were producing enough steroids.

Mr. Specter. Did any other doctors arrive during the time this treatment was going on, other than those whom you have already mentioned?

Dr. Jones. Several doctors did subsequently appear in the room—Dr. Mc-Clelland appeared shortly after Dr. Baxter, within a matter of just a very few minutes, as well as Dr. Kemp Clark, who is head of neurosurgery here.

Mr. Specter. Any other doctors?

Dr. Jones. Dr. Jenkins was there and I think these are primarily the ones that actually had any part, as far as taking care of the President, although there were some other doctors in the room.

Mr. Specter. Dr. Jones, I now hand you a report which purports to bear your signature, labeled "Summary of treatment of the President," dated November 23, 1963, which I shall now ask the Court Reporter to mark as Dr. Jones' Exhibit No. 1.

(Instrument mentioned marked by the Reporter as Dr. Jones' Exhibit No. 1, for identification.)

Mr. Specter. I ask you if this in fact is your signature?

Dr. Jones. Yes.

Mr. Specter. And I ask you if this was the report which you submitted concerning your participation of the treatment of President Kennedy?

Dr. Jones. Yes; it was.

Mr. Specter. In this report, Dr. Jones, you state the following, "Previously described severe skull and brain injury was noted as well as a small hole in anterior midline of the neck thought to be a bullet entrance wound." What led you to the thought that it was a bullet entrance wound, sir?

Dr. Jones. The hole was very small and relatively clean cut, as you would see in a bullet that is entering rather than exiting from a patient. If this were an exit wound, you would think that it exited at a very low velocity to produce no more damage than this had done, and if this were a missile of high velocity, you would expect more of an explosive type of exit wound, with more tissue destruction than this appeared to have on superficial examination.

Mr. Specter. Would it be consistent, then, with an exit wound, but of low velocity, as you put it?

Dr. Jones. Yes; of very low velocity to the point that you might think that this bullet barely made it through the soft tissues and just enough to drop out of the skin on the opposite side.

Mr. Specter. What is your experience, Doctor, if any, in the treatment of bullet wounds?

Dr. Jones. During our residency here we have approximately 1 complete year out of the 4 years on the trauma service here, and this is in addition to the 2 months that we spend every other day and every other night in the emergency room during our first year, so that we see a tremendous number of bullet wounds here in that length of time, sometimes as many as four and five a night.

Mr. Specter. Have you ever had any formal training in bullet wounds?

Dr. Jones. No.

Mr. Specter. Have you ever had occasion to observe a bullet wound which was inflicted by a missile at approximate size of a 6.5 mm. bullet which passed

through the body of a person and exited from a neck without striking anything but soft tissue from the back through the neck, where the missile came from a weapon of the muzzle velocity of 2,000 feet per second, and the victim was in the vicinity of 160 to 250 feet from the weapon?

Dr. Jones. No; I have not seen a missile of this velocity exit in the anterior portion of the neck. I have seen it in other places of the body, but not in the neck.

Mr. Specter. What other places in the body have you seen it, Dr. Jones?

Dr. Jones. I have seen it in the extremity and here it produces a massive amount of soft tissue destruction.

Mr. Specter. Is that in the situation of struck bone or not struck bone or what?

Dr. Jones. Probably where it has struck bone.

Mr. Specter. In a situation where it strikes bone, however, the bone becomes so to speak a secondary missile, does it not, in accentuating the soft tissue damage?

Dr. Jones. Yes.

Mr. Specter. Dr. Jones, did you have any speculative thought as to accounting for the point of wounds which you observed on the President, as you thought about it when you were treating the President that day, or shortly thereafter?

Dr. Jones. With no history as to the number of times that the President had been shot or knowing the direction from which he had been shot, and seeing the wound in the midline of the neck, and what appeared to be an exit wound in the posterior portion of the skull, the only speculation that I could have as far as to how this could occur with a single wound would be that it would enter the anterior neck and possibly strike a vertebral body and then change its course and exit in the region of the posterior portion of the head. However, this was—there was some doubt that a missile that appeared to be of this high velocity would suddenly change its course by striking, but at the present—at that time, if I accounted for it on the basis of one shot, that would have been the way I accounted for it.

Mr. Specter. And would that account take into consideration the extensive damage done to the top of the President's head?

Dr. Jones. If this were the course of the missile, it probably—possibly could have accounted for it, although I would possibly expect it to do a tremendous amount of damage to the vertebral column that it hit and if this were a high velocity missile would also think that the entrance wound would probably be larger than the one that was present at the time we saw it.

Mr. Specter. Did you observe whether or not there was any damage to the vertebral column?

Dr. Jones. No, we could not see this.

Mr. Specter. Did you discuss this theory with any other doctor or doctors?

Dr. Jones. Yes; this was discussed after the assassination.

Mr. Specter. With whom?

Dr. Jones. With Dr. Perry—is the only one that I recall specifically, and that was merely as to how many times the President was shot, because even immediately after death, within a matter of 30 minutes, the possibility of a second gunshot wound was entertained and that possibly he had been shot more than once.

Mr. Specter. Did you observe any wound on the President's back?

Dr. Jones. No.

Mr. Specter. Was the President ever turned over?

Dr. Jones. Not while I was in the room.

Mr. Specter. What was he on when you first saw him?

Dr. Jones. He was on an emergency room cart, which is on wheels and can be changed to varying heights and also varying positions, as far as elevating the head or elevating the feet, lowering the head and so forth.

Mr. Specter. Was he ever taken off that cart from the time he was brought into the emergency room to the time he was pronounced to be dead?

Dr. Jones. No.

Mr. Specter. Doctor, are you working toward board certification at this time?

Dr. Jones. Yes.

Mr. Specter. And what is your status on your progress with that, generally? Dr. Jones. I will finish my formal training in surgery in July of this year, which will complete 5 years of general surgery residency.

Mr. Specter. How old are you at the present time, Dr. Jones?

Dr. Jones. Thirty-one.

Mr. Specter. Have you discussed this matter with any representatives of the Federal Government prior to today?

Dr. Jones. Yes, I believe the Secret Service has been here on at least two occasions.

Mr. Specter. And what did they ask you on those occasions?

Dr. Jones. I think, primarily, to verify that what I had written was true and that I had been one of the first doctors to be in the room with the President.

Mr. Specter. Did they ask you anything else other than that?

Dr. Jones. On one occasion they asked if there were any other pieces of paper that had been written on as to the care that had been administered to the President that I had not turned in, and I told them "No."

Mr. Specter. And did you and I sit down and talk for a few minutes before we went on the record in this deposition, with me indicating to you the general purpose and the line of questioning, and you setting forth the same information which we have put on the record here today?

Dr. Jones. Yes, sir.

Mr. Specter. Do you have anything to add which you think might be helpful to the Commission in any way?

Dr. Jones. No. sir.

Mr. Specter. That concludes the deposition. Thank you very much, Dr. Jones.

Dr. Jones. All right.

TESTIMONY OF DR. DON TEEL CURTIS

The testimony of Dr. Don Teel Curtis was taken at 9:25 a.m., on March 24, 1964, at Parkland Memorial Hospital, Dallas, Tex., by Mr. Arlen Specter, assistant counsel of the President's Commission.

Mr. Specter. Let the record show that present are Dr. Don Curtis and the court reporter, in connection with the deposition proceeding being conducted by the President's Commission on the Assassination of President Kennedy, which is inquiring into all facets of the assassination, including the medical treatment performed for President Kennedy.

Dr. Don Curtis is appearing here this morning in response to a letter requesting him to testify concerning his knowledge of that medical treatment of President Kennedy. With that preliminary statement of the general objective of the Commission and the specific objective of this deposition proceeding, Dr. Curtis, will you rise and raise your right hand, please?

Do you solemnly swear the testimony you give before this Presidential Commission in this deposition proceeding will be the truth, the whole truth, and nothing but the truth, so help you God?

Dr. CURTIS. I do.

Mr. Specter. Would you state your full name for the record, please?

Dr. Curtis. Dr. Don Teel, T-e-e-l (spelling) Curtis.

Mr. Specter. And what is your occupation or profession?

Dr. CURTIS. Oral surgeon.

Mr. Specter. Would you outline briefly your educational background?

Dr. Curtis. I attended my freshman year at Boulder, Colo., Colorado University, 2 subsequent years of undergraduate work at Texas University, 4 years at Baylor Dental College, and I have been interning here for a year and a half.