Mr. McCloy. Do you solemnly swear the testimony you give in this case, this hearing will be the truth, the whole truth and nothing but the truth, so help you God?

Mr. Shanoyfelt. I do.

I'r. McCloy. You know why we are here? It is to gain us all the facts and circumstances which seem to be relovant to the assassination of the Prosident and the death of his alleged assassin, and there are certain identifications which I believe you can be helpful to us with, and with that I will just ask you to respond to the questions.

TESTIMONY OF LYNDAL L. SWANDYFELT

Mr. Eisenberg. Mr. McCloy, the Chief Justice when he opens you can road the statement which I have prepared, a brief description of the witnesses.

Mr. McCloy. I don't think I need to add to what I have said.

Mr. Eisenberg. Mr. Shanoyfelt, can you state your full name, pleaso?

Mr. Shanoyfelt. Yes, Lyndal L. Shanoyfelt.

(At this point the Chief Justice entered the hearing room.)

Mr. Eisenberg. Can you give us your position?

Mr. Shancyfelt. I am a Special Agent with the Federal Buzcau of Investigation assigned to the Full laboratory.

We. Shanoyfolt. A real of the focument section here in agton. Washington.

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Mr. Eisenbeeg. Does your work in that section customarily include photographic work as well as written documents?

Mr. Shanoyfelt. That is true.

Mr. Eisenberg. Could you briefly give us your qualifictions as an expert in photography, Mr. Shanoyfelt.

photographic work since about 1937. I can with the FDD, started working with the FBI in 1940. Three years prior to this I had worked to a newspaper photographer in Eastings, Mebraska, and on entering the FBI I worked in the photographic section of the FBI For about 8 years before I became a Special Agent. I became an agent in1951, spent a year in Detroit as a field investigator and then was returned to the laboratory and assigned as a document examiner. I work a society of the communications because of my extensive experience in photography.

a B.C.S. degree from Southeastern University here in Washington.

Mr. Disenberg. Can you estimate the number of photographic comminations you have made?

estimate approximately

estimate approximately

a hundred, between a hundred and three hundred.

I couldn't come any closer than that.

Fir. Eisenberg. Have you testified in court on the subject?.

im. Shaneyfelt. Yes, I have.

Mr. Eisenborg. Mr. Chairman, may this witness'testify as

an expert in the area of photography?

Mr. McCloy. Yes, I think he is qualified.

Mr. Eisenberg. Mr. Shaneyfelt, I now hand you two small photographs which have been already marked as Commission Exhibit 133, and I ask you whether you are familiar with these photographs Mr. Shaneyfelt. Yes, I am.

Mr. Eisenberg. Now, for the record, these photographs

uppear to show Loe Harvey Oswald in two different poses, and they

use found by police officers following his apprehension at one

of the premises at which he resided.

Mr. Chairman, I would like your permission to mark these publication "A" and "B" for easy identification, they have already been marked Commission Exhibits 133.

Again for the record there are two poses represented in these prographs. In one the rifle is held, a rifle is held in front the body, and in one it is held somewhat above the torso, and I am marking the rifle — the photograph in which the weapon is held in front of the body as "A" and the photograph in which the weapon is held somewhat above the body as "B".

Mr. McCloy. When you say above the body you mean above and to the right side of the body as Oswald faces the viewer.

Mr. Eisenber. Yes, sir.

. Mr. Shancyfolt, have you prepared reproductions of Exhibit
133% to show the weapon pictured therein in further detail?
:r. Shancyfelt. Yes, I have.



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Mr. Eisenborg. Could you show us those reproductions.

Did you prepare these yourself, Mr. Shaneyfolt?

Fr. Shanoyfolt. Yes, I did. They were prepared by rephotographing Commission's Eshibit 1332, prepare a negative from which I made a variety of princes of different densities to bring out the detail of the rifle.

Mr. Eisenberg. When you say of different donsities could you explain that in lay terms?

Mr. Shancyfelt. Yes, to try to got greater variation betwee the light and dark areas of the photograph or to bring out or chance the contrast so that the detail is more apparent.

Mr. Eisenborg. Mr. Chairman, I would like these photographs admitted as Commisson's Exhibit 746.

Mr. McCloy. You want to put them all into one exhibit?

Fir. Eisenberg. And I will subnumber them 1, 2, 3, 4.

Mr. McCloy. Have you identified these sufficiently.

Er. Eisenberg. Yes, I have.

Mr. McCloy. 'I wonder whether you have.

Mr. Eisenberg. The witness has identified these as subphotographs of 133a. There are five photographs, is that correct Mr. Shaneyfelt.

Mr. Shaneyfelt. That is correct.

Mr. McCloy. Different dimensions.

Mr. Eisenberg. Two photographs being what size?

Fr. Shanoyfelt. Two 11 by 14 and three 8 by 10.

(At this point Rep. Pord entered the hearing room.)

Fir. McCloy. very well, they will be admitted.

(Commission's Exhibit 746 was marked for identification and received in evidence.)

Exhibit 746 A, B, C. D and , the two larger photographs marked A and B and the three smaller photohraphs being marked C, D and E.

Mr. Shaneyfelt, I now hand you a rifle, Commission Dimibit
139, which for the record I will state is the rifle which was used
in the assassination, and I ask you whether you are fmiliar with
this weapon.

Ir. Shaneyfelt. Yes.

Mr. Bisenberg. Have you prepared a photograph of this weapon, Mr. Shaneyfelt showing it in approximately the same manner as it is shown in Commission Exhibit 133A, but without it being held by anyone?

Mr. Shanoyfelt. That is correct.

Fir. Disenberg. Did you propare this photograph?

Mr. Shaneyfelt. I prepared it myself.

Mr. Eisenberg. And that is an 8 by 10 photograph, is it?

Mr. Shaneyfelt. That is correct.

Fr. Eisenborg. Fr. Chairman, may I have this admitted as

747?

Mr. McCloy. It may be admitted.

Mr. Disenberg. Have you prepared a simulated photograph



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Mr. Shancyfelt. I have, yes.

Mr. Eisenberg. And that is an 8 by 10 photograph?

Mr. Shaneyfelt. That is correct.

Mr. Eisenborg. Which you prepared yourself?

Example 1. Yes, I prepared the photograph myself laving the rifle held in approximately the same position as in the 133A, and attempted to Suplicate the lighting of the photograph, in Exhibit: 133A.

Mr. Eisenberg. Mr. Chairman, may I have this admitted?

Mr. McCloy. It maybe admitted.

Mr. Eisenborg. Where was this photograph prepared, Mr. Shaneyfelt.

Mr. Shaneyfelt. This was parepared in the FBI laboratory.

Mr. Eisenberg. Was this inside or outside?

. Mr. Shancyfelt. Outside. . .

Mr. Eisenborg. On the roof?

Mr. Shanoyfelt. On the roof of the Justice building.

Hr. Bisenberg. I see the head of the individual of the photograph is blacked out. Can you emplain the reason for that?

Mr. Shanoyfolt. I blanked out the head because it was one of the employers of the FBI, and I felt it dosirable to blank out the head since it was not portinent.

Mr. Eisenberg. Now, Mr. Shaneyfelt, based upon Exhibit 13:

upon your reproductions of Exhibit 13:A, consisting of the
Exhibits numbered 746 A through E, and upon your photograph of
the rifle, Exhibit 7:7 and your simulation of 133A, Exhibit
748, have you formed an opinion concerning whether Exhibit 139,
the rifle used in the assassination is the same or similar to the
rifle pictured in Exhibit 133 A?

Mr. Shancyfelt. Yes, I have.

Fir. Eisenberg. Con you give us that opinion?

Mr. Shaneyfelt. Yos, Icompared the actual rifle with the photograph, Exhibit 133 A, and with the photographs that I prepared from Exhibit 133A as well as the other simulated photographs and the photograph of the rifle, attempting to establisher or not it could be determined whether it was or was not the same.

I found it to be the same general configuration. All appearances were the same. I found no differences. I did not fi any really specific peculiarities on which I could base a positi identification to the exclusion of all other rifles of the same general configuration.

very faintly in the photograph, but is not sufficient is get

Mr. Bisenborg. Then you say this point, you are point it to the right side of the weapon to a point approximately 14, 15

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inches in front of the bolt, when the bolt is turned down, is that correct?

Exhibit 139, the weapon, I see that the stock is curved downward about 8 inches, at a point approximately 8 inches from the latt of the weapon, and that then recurves upward at an angle of approximately ten degrees to the plane of the forepart of the butt, is that correct?

I'm. Shaneyfelt. That is correct.

Mr. Eisenberg. Now, I will hand you Commission Exhibits 7.56% through E and I will ask you to select from those exhibits the photograph which best brings out the various details of the meapon.

Mr. Shaneyfelt. I believe that the contour of the stock is best shown in Commission Exhibit 746E.

Mr. Eisenberg. Now, could you take --

Im. McCloy. Is that better shown in the larger pictures?

Mr.Shanoyfelt. I believe it is. Yes.

In. Eisenberg. Could you take a marking pencil, Mr. Ehaneyfelt, and circle the point at which the curve and recurve appear to show and mark that circle with an "A"?

.m. Shancyfelt. Yes.

Mr. Disorberg. You circled a point which is marked predeminantly by a highlight, is that conroct?

Mr. Shanoyfelt. That is correct.

Mr. Bisenborg. Now, without tampering with the original 133A. I wonder whether you could show to the Commissioners present the highlight as it appears on the original photograph?

In. Shanoyfelt. You. The highlight is right at that point there, the highlight apot at that point.

Tallers you identified the place whose these photographs were supported to be sited.

... I understand it there are from the Moely residence?

Mr. Eisenberg. No., six, I think they were located in the
paine gazage. The Maely residence--

Mr. McCloy. The photographs were located in the Paine garage,

in. Bisemberg. Yes, sir, I think we will show it with independent testimony.

Mr. McCloy. In the garden of the Meely residence.

Mr. Bisenberg. Mr. Shaneyfelt, I will hand you Emiliated and the simulated picture approximating 133%, and I will ask you to again mark with a circle designated "A" the curve and recurve of the stock of 139.

Mr. Shaneyfelt. Here.

im. Mischborg. Could you compare the mannor in which the

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curve and recurve marked "A" appears on these photographs with the manner in which it appears on 746, the photographs you have -- 746E, the photograph you circled earlier?

Mr. Shaneyfelt. Yes. At a point approximately six to eight inches from the base of the stock, where the stock curves downward, there is a nob formed, and on that nob there is a strong highlight which appears in photograph 745E, and in the simulated photographs and the photograph of the rifle. The actual stock curves clightly around that highlight, and then recurves back up toward the bolt, and this is visible in Exhibit 746E, and in simulated photograph 743.

Mr. Eisenberg. So again in 747 and 748 the recurve opposes primarily as a highlight, is that correct?

im. Shancyfelt. That is correct. That is the most outstand-

Mr. Bischberg. I also observe, Mr. Shaneyfelt, the telescopic sight on Exhibit 139, the weapon. Referring again to 746E, your reproduction which shows somewhat greater detail because of the contrasts, could you circle the telescopic sight appearing in that picture and mark it "B"?

Mr. Shanoyfolt. Right hoze.

Mr. Disemborg. I wonder whether you could again show to the Commissioners the telescopic sight on the original 133A?

Im. Shaneyfelt. Yes. Along that area, just at the base of the hand. It runs right across from this area to the base of the

hand, below the lifle and above the bolt.

Mr. McCloy. It is quite apparent, isn't it?

Mr. Shancyfelt. Yes, it is quite apparent.

- Mr. Bisonburg. Now, Mr. Shaneyfelt, again referring to 746E, could you circle the ends of the weapon, the ends of the barrel of the weapon and marks it "C"?

Mr. Shanoyfelt. Hero.

Mr. Eisenberg. Now, towards the upper right of the point you have marked as the end of the weapon there is a little mark of some type right near the point which you have marked "C".

Is that mark part of the end of the weapon?

Fir. Shancyfelt. No. I interpret that mark as a shadow on the building, a slight shadow on the building.

Mr. Eisenberg. Just to make that clear, could you draw an arrow within your circle pointing to the end of the weapon?

Mr. Shaneyfelt. Yes, I have domit.

Mr. Eisenberg. Now, Mr. Shaneyfolt, I hand you a negative which, for the record, appears to be a negative of 133B, which is the photograph showing the weapon held slightly above and to the right and I ask you if you are familiar with this negative.

Mr. Shanoyfelt. Yes, I am.

Mr. Eisenberg. Mr. Shanoyfelt, have you examined this negative to determine whether the picture 133B is infact a print made arectly or indirectly from the negative?

Mr. Shaneyfelt. That is correct. I have examined it for that



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purpose and determined that Exhibit 133B is a print from this mgative.

Mr. Bisenborg. May I have this negative introduced into

Mr. McCloy. Have you any other identification as to this negative as to where it was found?

Mr. Eisenberg. Yes, for the record only, nothing that this witness can testify to --

Mr. McCloy. State for the record where it was found.

Mr. Eisenberg. For the record this was also found at one of Oswald's residences, I believe the Paine address at which Marina was staying at the time Oswald was apprehended.

Mr. McCloy. This will be proved?

Mr. Eisenberg. This will be proved separately.

The Chairman. Will this negative deteriorate as time

Mr. Shaneyfolt. No.

The Chairman. It will not. .

Mr. Shancyfelt. It should not.

The Chairman. Yos.

Mr. Shanoyfelt. Normally this depends on the processing, how well it has been processed and how well it has been processed and how well it has been processed. If it were going to deteriorate it would have begun by now.

The Chairman. I see and it has not yet begun?

Mr. Shaneyfelt. It has not begun. There is no indication that there will be any extensive detoriation.

Rep. Ford. Have we shown any place in the record that that print of negative came from a camera --

Mr. Eisenberg. That is what I was going to proceed to do.

Mr. Chairman, may we have this admitted as Exhibit 749?
Mr. McCloy. Admitted.

(Commission's Exhibits Nos. 747, 748 and 749 were marked for identification and received in evidence.)

Mr.Eisenberg. I asked you before whether you could say this regative, which is now 749, had been used directly or indirectly to make the print 133B?

Mr. Shancyfelt. That is correct.

Mr. Eisenberg. Couldyou say whother it had been used either directly or indirectly?

Mr. Shenayfelt. It is my opinion that it was used directly to make the print. However, I cannot specifically eliminate the possibility of an internegative or the possibility of this photograph having been copied, a negative made by copying a photograph similar to this from which this print was made.

I think this highly unlikely because if this were the result of a copy negative, there would normally be evidence that I could detect such as a flattuning of detail and a loss of detail and these imperfections that show up detail this added process.

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cannot positively climinated to the negative.

Mr. Eisenberg. but at any rate if it was not made directly it was made indirectly. The only process that intervened was a rephotographing of the photograph and making a negative and then a new print.

Mr. Shaneyfelt. That is correct.

<u>:</u> -

Mr. Bicenberg. Mr. Shanoyfelt, I now hand you an imperial affect the dual lens camera. Let me state for the record, that this camera was turned over to the FDI by Robert Oswald, the brother of Lee Harvey Oswald, on Pohenamy 24, 1964.

Robert Oswald identified the camera as having belonged .

to Lee Oswald and stated that he, Robert, had obtained it from

the Paine residence in December, 1863, several weeks after the

mesassination.

On Pebruary 25, 1964, Marina was given the camera and she identified it as the one which she had used to take the pictures.

133A and 133B.

Fig. Shaneyfelt., are you familiar with this camera?

Mr. Shaneyfelt. Yos, I am.

Mr. Eisenberg. Mr. Chairman, may I have this admitted to 750?

Mr. McCloy. It may be admitted.

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(Commission's Exhibit No. 750 was marked for identification and received in evidence.)

Mr. Eisenberg. When did you receive the camera, Mr. Shaneyfelt.

Mr. Shaneyfolt. It was -- I can't pinpoint the date exactly, I don't have the notes here for that. It was, I would say the beer part of February, not too long after it had been provened on February 24, i believe.

Hr. Eisenberg. Was it in working order when you received it?

Mr. Shanoyfelt. No, It had been slightly damaged.

In. Eisenberg. Could you explain that?

Er. Shanoyfelt. I. In order to be able to make a photograph with the camera, I had to it slight repairs to the shutter lever which had been bont, and straighten and clean the remove in order than the dirt which had accumulated, in the dirt which had accumulated, in the dirt which had accumulated to be done before it was useable in error to make pictures with it.

In. Eisenberg. Did you clean the inside or the outside of the lens?

Er. Shanoyfelt. The outside the lens.

is the little red tipped lever protruding at the outside of the comora?

In . Shaneyfolt. That is correct.

Er. Eicenberg. What did you do with it exactly?

Mr. Sheneyfolt. I ben. it out semight. It was bonk over.

Hr. Eisenberg. Could a layman have performed these repairs?

Mr. Shanoyfolt. Yee, he could have.

Mr. Eisenberg. How would you characterize this camera in terms of expense, Mr. Shaneyfelt?

Ir. Shancyfelt. If is a relatively inexpensive camera. It is what we refer to as all fixed focus box type camera. A simple box type camera with a simple one shutter speed and no focusing ability, fixed focus.

im. Eisenberg. Do you know where the camera was made?

Mr. Shancyfelt. It was made in the United States. At the base of the camera it has the made ImperiolAnd Advisor, made in USA, as the base of front, below the lons.

Mr. Shaneyfelt, Yos, I did.

Mr. Eisenborg. What conclusion did you come to?

lim. Shaneyfelt. I reached the conclusion that the negative, which is Commission Exhibit 749 was exposed in the camera, Commission's Exhibit 750, and no other camera.

Er. Dischberg. Can you explain how you were able to arrive at such a conclusion?

Mr. Shanoyfelt. Yes, I can.

In order to make the examination of this type, it is neceseary to make a negative with the camera, using the camera, because the examination is based on the aperture at the back of the camera, at the film plane.

Fir. Eisenborg. Have you prepared a photograph of that aperture the film plane?

Mr. Shanoyfelt. Yes, I have an onlarged for of that aperture that I made so that it would better show the back of the enera with the back removed to show the film plane opening or aperture.

Mr. Eisenburg. Did you take this photograph of the back of the camera yourself, Mr. Shaneyfelt?

Mr. Shaneyfolt. It was made under my supervision.

Mr. Eisenberg. May I have this admitted as 751?

Mr. McCloy. It may be admitted.

(Commission Exhibit No. 751 was marked for identification and received in evidence.)

Mr. Eisenberg. What is the enlargement here by the way?

Er. Shancyfolt. Approximately 2 and a half times ..

Mr. Eisenborg. Now, having reference to the chart, Mr. Sheneyfelt, could you explain it in a little more detail, the basis of your examination?

Mr. Shaneyfelt. Yes. The basis of the examination a close microscopic study of the negative made in the camera to study the shadowgraph that is made of the edge of the aperture.

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and the shutter is opened, light comes through and exposes the film only in the opening the edges. Where the film is out over the edges of the aperture it is not exposed, and the result is an exposed negative with a clear edge, and the negative fien, the edges of that exposure of the photograph is actually shadowgraphs of the edges of the aperture.

edges of the aperture opening at the plane of the film?

Mr. Shaneyfolk. Yes.

Rep. Perd. This would be true in every picture taken?

Mr. Shanoyfelt. That would be true of every picture taken and is true of virtually every camera. Every roll of film type camera. It would not be true of a press type camera where the film loaded into coparate holders, then the holder becomes the thing that will leave of identifying characteristics.

Cameras of all types, have the arrangement where they have that an appropriate the film goes across the opening leaving an exposed area at the aperture and unexposed area around the aperture this would be true.

Mr. Bisenberg. When you say virtually every camera you are including every type of camera with this type of aperfoure?

Mr. Shancyfelt. Yes, I would include every camera with

this typo of film arrangement and aperiture.

Mr. Eisenborg. You held up a negative before ---

The Chairman. Just a moment, gentlemen, you will excuse me,
I must go over to the Court now. You will be able to proceed
the rest of the day, will you?

Pine. I will be back as soon as Trinish.

(At this point the Chief Justice left the hearing room.)

Mr. Eisenborg. Mr. Shaneyfelt, you were holding up a negative which appears to be a negative of a simulated photograph.

you showed us before, Exhibit 748, is it such a negative?

In. Shaneyfelt. It is true. That is the negative from which that exhibit was made. The negative was exposed in the camera which is tarked Commission Exhibit No. 750. I exposed it myself.

Fir. Eisonberg. Mr. Chairman, may I have this negative

Mr. McCloy..It may be admitted. That is the negative from which that exhibit was made?

Mr. Chancyfelt. Yos.

(Commission's Ethibit No. 752 was marked for identification and received in evidence.)

Ir. McCloy. And you took that picture?

Mr. Shanoyfolt. I took that picture myself.

Rop. Pord. Is this a recognized technique or procedure

Mr. Shanoyfelt. Yes. We have used this technique of comera

identification with film converse on several occasions. It
deesn't exist too often. As it normally arises, the
majority of examinations that I have made in connection with this
with identification of a camera that has been stolen and the
serial number removed so that it can't be identified, the owner
cannot identify it. We then take the owner's film and the camera
that has been recovered and make this examination and determine
that this is in fact the camera that the owner's film was exposed
in, thereby showing its make camerahip.

so, it is a recognized water, we do it regularly.

Mr. Bisenberg. And you have performed such examinations yourself, Mr. Shaneyfolt?

Mr. Shancyfolt. Yes.

Mr. Eisenberg. Mr. Shaneyfelt, what is the basis of your, thatement, the theoretical basis of your statement, that every camera with this type of back aperture arrangement is unique in the characteristics of the shadowgraph it makes on the negative?

Variations that even two cameras from the same mould will have.

Additional handwork on cameras affiling the edges where a

little bit of plastic or a little bit of metal stays on make

individual characteristics apart from those that would be general

In addition, as the film moves across the camera and it is used for a considerable length of time, dirt and debris

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tend to accumulate and little -- or if the aperature is printed, little lumps in the paint will make little bumps along that edge that would make that then individually different from every other man's Camera.

Ir. Eisenberg. Is this similar then to toolmark identifi-

ir. Shaneyfolt. Very similar, yes.

Mr. Eisenberg. Haveyou prepared a chart on which you have - illustrated some of the more prominent points which led you to your identification, Mr. Shaneyfelt?

: Shanoyfelt. Yos, I have.

Fr. Eisenberg. Now, this chart shows on the left a copy of your simulated picture number 748 and on the right a copy of the picture 133B, is that correct?

... Shancyfolt. That is correct.

Mr. Disonbarg. And you prepared this chart yourself?

Ir. Shaneyfolt. Yos, I did.

Mr. Eisenberg. May I have this admitted as 753, Mr. Chair-

Fx. McCloy. It may be admitted.

(Commission's Exhibit No. 753 was marked for identification and received in evidence.)

Mr. Bisenborg. Before we get to this chart, I wonder whicher you could take the negative itself, that is Exhibit 749, and place it over the camerachibity 750, so that the Commissioners

can see how it rules across those -- across the sides of the perture you have been discussing?

Mr. Shancyfolt. Yes. I might state that this film at the time it is put in the camera is in a long strip, and at the time of processing it is cut apart into separate negatives.

There is an unexposed area between each emposure and they are cut apart for printing and stronge and returning, so that then this in a long strip of film —the camera being held inchis position which is the normal position for taking a photograph.

Mr. Disenberg. And that is upright?

Wr. Shanoyfelt. Upright -- will give you an image which on the film is upside down because of the light reflecting from the face, going through the lens and going down here, so this negative, Commission Embibit 759, would have been on the film plane in this cannor at the time the exposure was made.

omposed, because of the aperture frame, entrancement the clear area around the edge was not expected.

Er. Eccloy. Yes.

Wr. Shanoyfolt. And this edge between the dark and the file light then becomes the shadowgraph of this aperture of the camera.

Mr. Eisenborg. Your Commission Embibit 752 illustrates that shadowgraph or actually shows that shadowgraph, Mr. Shaneyfelt.

Ir. Shaneyfelt. That is correct, the charts were printed to



show the entire negatives and reproduce the shadowgraphs of Commission Exhibit 759 and Commission Exhibit 752.

Kr. Bisenborg. Could you refer now to that chart?

the examination was made comparing the edges, not only for size but general contour, and I have marked with numbers from one through eight some of the more outstanding points of identification.

for the identification. The identification is based on the fact that not only those eight points but every place else is the same on both negatives.

Mr. Bisenberg. And the contours are also the same?

Mr. Shaneyfelt. The contours are the same, yes.

If . Eisenborg. So you have taken these eight points for demonstrative purposes?

Mr. Sheneyfelt. That is correct.

Mr. Eisenberg. Rather than as being actually what you rested your identification on, is that correct?

Wr. Shanoyfolt. That is correct.

Point No. 1 which is in the lower right hand corner, as

Mr. Eccloy. Lower left-hand corner.

Ex. Eisenberg. As you view it, lower lefthand.

Ex. Shancyfelt. As you view it, lower lefthand of both of

the charte shows a noted that makes the shadowgraph other than a straight line.

Rep. Ford. This is very clear.

Point No. 2 is another similar notch except that it is a double car, and the little notches are smaller. This again was the same in both charts.

Point No. 3 is more of an indentation, a slight curvature where the edge curves out a little and back in toward the corner. It is not as pronounced a dent.

Point No. 4 is only visible by looking at the chart in this direction because --

In. Eisenberg. This direction being from left to right as you look.

Fir. Shoneyfelt. Left to right because although this line, locks straight it actually dips down and back up again.

In. Bisenberg. This line is the line at the top of thet?

In. Shoncyfelt. The line of the shadowgraph at the top of the photograph.

Rep. Ford. That is point number 4?

mr. Shanoyfelt. Four.

Point No. pagain is a slight Gent or bulgo in the edge and shows in both charts.

No. 6 is a more shallow and wide indentation along the

Point No. 7 is again the same type of a characteristic

point No. 8 is a little fragment of bacelite or debris extending out from the edge that shows in both of the charts in the same manner. In addition the corner of 8 tends to curve in towards the picture as it approaches the corner, there tends to be a curvature in, and not a nice neat square corner.

In addition, between points 2 and 3 there is a very definite bakelets

Securve where the best light from which the camera is made,

spaceatly warped slightly making this Securve and this is apparent in both charts.

Again more apparent as you hold the photograph flat and here the line.

If Eisenberg. Now, the margins of the shadowgraph in the right hand side of the chart, which is based upon 133B, look comewhat larger than the margins on the lefthand side.

could you explain that?

Mr. Shanoyfelt. That was morely a matter of with the masking during the printing process.

Mr. Eisenberg. That is to say it is the interior which is crucial rather than the width of the margin?

Hr. Shaneyfelt. Thatis correct.

Ir. McCloy. This mark along the bettem appears in one.

Mr. Bisonberg. Mr. McCloy is pointing to a mark along the

righthand side, a white mark along the bottom of the shadougraph.

the chart and represents the negative of the negative

The other three edges of that negative and all four edges of the other negative to not show in the photograph.

Mr. Bicenberg. Was this chart actually prepared by use of exhibits, by the negatives, Exhibits 749 and 752, Mr. Shanoyfelt?

mr. Shaneyfelt. Yes, ander the charts directly from those negatives.

ir. Disenborg. Approximately what is the enlargement here?

Mr. Shaneyfelt. Approximately 8 times.

im. Bisenberg. Now, can you emplain why -- 8 times?

Mr. ShaneySelt. Six to eight, it is in that area.

Mr. Eisenberg. Can you explain why the enlargement of 133E is heloed with a white light helo?

print the photograph so that it would be elearly a photograph of the negative and show it the photograph of the individual in the picture but not print too Cark around the outside edges in the give the best possible reproduction of the shadowgraph.

Im. Dicemberg. Now, Captain Fritz of the Dallas police .



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has stated that in his intermedation covald, Lee Harvey covald stated that in call it that which the face in Exhibit 133A was his face, the real of the picture was not of him, that is that it was a composite of some type.

Have you examined 1888 and 188 B to determine whether either or both are composite pictures?

I'm. Shaneyfelt. Yes, I have.

Mr. Eisenberg. And have you -- can you give us your con-

Position. Again with very, very minor reservation, because I cannot entirely eliminate an extremely employe composite.

I have examined many composite photographs, and there is always an inconsistency, either in lighting of the portion that is the part that was added to the original photograph, things tany times that you can't point to and say this is a characteristic or that is a characteristic but they have a definite variations that and not consistent throughout the picture.

I found no such characteristics in this picture.

In addition, with a composite, it is always necessary to make a print that you then pasts your make a past of the face in, and rephotograph it, and then retouch out the area where the head was not which would leave a characteristic that would be retouched

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out on the negative and then that would be printed.

normally, this retouching can be seen under magnification in the resulting composite or points can be seen where the edge of the head had been added and it hadn't been entirely retouched cut.

This can nearly always be detected under magnification.

I found no such characteristics in these pictures.

Rep. Ford. Did you use the technique of magnification in your analysis?

im. ShaneySolt. Yes.

In addition, in this instance regarding Commission's Dimibit 133 B which the instance regarding Commission's identified as being photographed or emposed in the campra which is Dimibit 750, for this to be a composite, they would have had to make a picture of the heart cand with an individual standing there, and then substitute the face, and retouch it and then possibly rephotograph it and retouch that negative, and make a print, and then photograph it with this camera which to Commission Exhibit 750 in order to have this negative which we have identified with the camera, and is Commission Exhibit 749.

This to me is beyond reasonable coubt, it just doesn't seem that it Would be at all possible, this particular photograph.

Mr. Eisonborg. Mr. Shanayfolt, did you attempt to determine

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wither 133A had been photographed through the camora, Commission

Ar. Shaneyfelt. No. I did not, because an examination to determine whether a photograph is made with a particular camera you must have the negative or you must have a print of the negative that shows that shadowgraph area, and Commission Exhibit 133A does not show that shadowgraph area.

Therefore, no comparison could be made. It is not possible.

Mr. Eisenberg. Does the shadowgraph area show on 133B?

Mr. Shanoyfelt. No. it does not ..

Fr. Bisenberg. Why does it not show on either 133A or E?

ossing procedure where this area is normally blocked out to give a nice white border and make the picture a little more artistic. In the printing process masks are placed over the area, or the shadowgraph in order to cover it up, and the resulting print is a photograph with a nice white border.

Mr. Eisenberg. So that you have to have the negative to make the kind of identification you have made for us earlier?

Mr. Shanoyfolt. That is correct.

Mr. Eisenberg. Looking at 133B, are the observable characteristics of the weapon pictured in this picture, shown in this picture, similar to the observable characteristics of Exhibit 139, the weapon used in the assassination?

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because it is a photograph of the bottom, or the base of the rifle, the bottom of the rifle along the trigger guard area, but it does show this bottom of the rifle in that photograph.

Mr. Eisenberg. Looking at 133A and 133B, do the lighting conditions soom to have been similar?

.

in both photographs, the lighting on the faces is the same, the lighting on the background is identical, there appear to be no major differences or no significant differences.

for a moment to this sling on Exhibit 139, and I would like to state for the record that this sling in not thought to be actually a rifle sling but some type of home made sling, that is the firearms experts have so testified.

Doos this sling appear in either Commission Exhibits 133A or 133B?

Mr. Shaneyfelt. It is my opinion that it does not.

Commission's Exhibit 133A has such a small portion of the sling thought that it is or is not the same sling that is presently on the rifle.

it chows the bottom of the rifle and I find it to be different to the sling that is presently on the rifle. It has the appearance of being an even piece, a rope that is tied at both

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ends rather than a leather sling, and it is my opinion that it is a different sling than is presently on the rifle.

Mr. Disonborg. Just again a homomade simulated sling.

Mr. Shanoyfelt. It has that appearance, yes.

view of the sling or what passes for a sling on 133A than on 132D. Is the sling or simulated sling on 133A, that portion of it which is visible, consistent with the sling on 133B?

ir. Shancyfolt. Yes, it is entirely consistent.

Mr. Disenberg. Also looks like a piece of rope, is that it?

Mr. Shaneyfelt. Yes, it has that appearance.

Rop. Ford. Can you tell from a negative about when it was, the picture was, taken or can you develop any time from that?

instance it is not. On some negatives there is a numbering system along the edge that is coded by the company that indicates manufacturing date, approximate manufacturing date and it is usually by year so that you could state that a film was coded by the company in 1947, therefore, it could not have been used prior to 1947.

This is about as far as one can go in the establishment of time that a picture was taken from the actual film. This cannot be done in this instance.

Rop. Ford. I noticed on come prints which are now developed

compressely that they have a date on the etgo.

Mr. Shanoyfolt. Yes.

Rop. Ford. Is this a universal practice now?

Mr. Shaneyfelt. No. This varios with the different processors. It is used by the large companies, I believe Eastman Kodak uses it. Your larger processing companies use it, but your saller, maybe one-man shop or small photographic shop will mobably not use it. It is at the discretion of the shop actually.

Rep. Ford. Can you tell from a print which has been Gweloped which processing plant processed that print?

Mr. Shanoyfelt. Not without some specific stamp of the processing company on it.

Mr. Eisenberg. I think we should add here for the record that the sling which he presently on the rifle is as any other sling a removable sling and not one that is fixed into the rifle.

Mr. McCloy. It soems to me that this band here in Exhibit.

746 is a, might very well be a, reproduction of this, this lighter side of this rather enlarged leather part of the sling.

It sooms to be just about the same length.

Rep. Ford. That is what is on the rifle.

Ar. McCloy. Which is on the rifle. I wonder, and hore it is again in Commission's Exhibit 133A. 133A has that which is an enlargement of it. Isn't it possible that is a reproduction of that leather sling?



:r. Shaneyfelt. It could be possible.

Ir. McCloy. This is not a string by any means.

sion by this shadow should the top, closest to the rifle just below that there is a faint shadow of there that would indicate a faint shadow of there that would indicate a faint string or rope and it then turns into a narrower, and you are being at the two ropes lying together.

on the Exhibit 1338 I got the same interpretation of a double control client partly because of the knot tying and so on, and you the shades between the slightly in some areas, and as I stated before, I cannot because of the limited amount of that showing, say that it is not the sling.

I find it more consistent with the pling showing in Exhibit
1323 which is very definitely ---

m. Recloy. A bow knot, 1330 seems to have a knot at the arrels.

m. Shanoyfelt. Yes.

Er. McCloy. Which doesn't appear on the rifle now.

Mr. Eisenberg. Mr. Shaneyfelt, I now hand you the cover of Life Ingazine for Pebruary 21, 1964, which consists of a covernment quite similar to Exhibit 133A, and I ask you whether you are familiar with this photograph cover.

Mr. Shanoyfolt. Yos, I am.

The Disconding. May I have this introduced, Mr. Chairman



mr. McCloy. It may be admitted.

(Commission Exhibit No. 754 was marked for identification and received in evidence.)

Itr. Disanborg. Have you compared Exhibit 754 with Commission Exhibit 133A?

im. Shancyfolt. Yos, I have.

ir. Eisenborg. What is your conclusion on the basis of that comparison?

Mr. Shenayfolt. It is my opinion that it is the same picture reproduced on the Front of Life Magazine which is Commission Ethibit 754.

Ex. Eisenberg. Does Commission Exhibit 754 appear to have been retouched in any significant way?

Fr. Shanoyfolt. Yes, it does.

ir. Discuberg. Could you show the Commission that retouching?

Ir. Shanoyfelt. Yes, I could. I might that it has been my emperioned in the field of reproduction of photographs for publication in which a halftone screen is made in which the photograph is then printed, it is normal procedure and was at the time.

I worked for have newspaper, to retouch the photograph to intensify highlights, take out undesirable shadows, generally enhance the picture by retouching the photograph so that when it is then made into a halftone which pattern for reproduction by printing, this retouching, if it is done well, does not show as retouching but the original

photograph.

This retouching is done either by brush or by air brush thich is a device for spraying term gray or shades of gray or black onto the photograph.

I point to the area between the legs of the individual on

ir. Risenberg. Could you circle that and mark it "A" on Emilit 754?

Ir. Shonoyfelt. Suppose I use arrows.

Ir. Disonborg. Oh, sure.

ir. Shanoyfelt. On Exhibit 746B, there is a shadow between the individual's logs.

Im. Discoberg. Could you mark that "A"?

Mr. Shanoyfelt. will mark that "A".

In that same area of the photograph on Exhibit 754 that cark shadow has been removed in this area, I will mark that A"

lir. Eisenberg. It appears there is a continuous fence

ir. Shanoyfelt. Yes, the shadow has been removed.

Lower down in that same area of the legs, near the calf of the leg, again and I will mark that "B", the shadow --

Er. Eisenberg. "H" on 754?.

Mr Shanefelt. 754, has been softened but not entirely thin inted. That same area is marked "B" on Commission Exhibat

it. Eisenberg. Has the weapon been estouched?

ighlight along the stock almost up to the end of the bolt.

The highlight is brushed right across the top of the highlight that we have previously discussed at the nob or the curvature of the stock, I good down and then back up to the curve.

Im. Bisonberg. Could you put an arrow pointing to the brushed-in highlight and marks it "C"?

Mr. Shanoyfolt. You

Mr. Eisenborg. Can you put an arrow pointing to the original highlight and mark it "D", both on 754?.

You had carlier marked with a circle 746E at point "A", showing the highlight as it appears in 133A.

Mr. Shancyfelt. Of course, this highlight does not appear in that same area of Commission Whibit 746B.

Hr. Eisenber. You mean the highlight marked "D" on 746A.

Looking at the photograph, at the weapon, the stock appears
to be straight which does not correspond to the Exhibit 139.

As I understand your tostimony this is simply a retouching, this effect of a straight stock is simply achieved by retouching the photograph or doctoring it.

Mr. Shaneyfelt. That is my opinion. I would refer to it as the retouching rather than doctoring because what has been done has been retouched, and doctoring infers an attempt to disguise.

Mr. Eisenborg. I didn't mean to imply any such thing but retouching them.

Mr. Shanoyfelt. Yes.

Mr. Bisonberg. And the actual highlight showing the curve

m. Shaneyfelt. That is correct.

Mr. Disenberg. Can you circle -- do you see a telescopic sight on the Life cover of 754?

ir. Shanayfelt. Yes, I do.

Mr. Eisenberg. Could you draw an arrow marking that "B".
Would it have been possible to recouch the photograph
to that telescopic sight does not appear?

tone process. It is possible by this half-tone process to retouch and then the half-tone process destroys the characteristics that makes it appear as a normal photograph rather than a retouched photograph.

Mr. Eisenberg. And again based upon your newspaper experience and your experience as a photographer generally, could you tate the possible purpose of such retouching?

Mr. Shaneyfelt. The purpose of the retouching in reproduction work is morely to enhance the detailso that it will not be lost in the engraving process.

Mr. Encemberg. When you say onhance the detail, why would a stock to retouched so as not only to enhance the detail but

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actually to change the apparent configuration?

Could you conceive of any reason for that?

retouched straight in the photograph on Life Magazine and my interpretation would be that the individual retouching it does not have a familiarity with rifles and did not realize there was curvature there and in doing it just made a straight line high-light without even considering whether that curved or not.

There was curvature in that area which is not readily apparent. It is quite indistinct and I think it was just made without realizing that there was curvature there.

Air. Eisenberg. That is the individual might have thought he was actually enhancing detail rather than putting in detail which was not present in the original.

Is there anything else you would like to point out in this exhibit, photograph 754?

Mr. Shaneyfelt. There are other retouching the choulder to the left of the photograph as we view it, that area has had some retouching of the highlights which Along the barrel of the gun or the stock of the gun above the hand there is ** retouching, a little highlight enhancement there.

Ing that we have previously discussed and I have previously pointed out.

Rep. Ford. I am not clear they they would retouch from a

photographic point of view.

ers, there is a loss of detail, and had they not retouched this photograph, they had not put the highlight along the rifle stock then you would only have seen a black area. They were afraid you would only see a black area and you wouldn't get the definition here of the rifle.

you lose the detail and you would lose the view of the rills. You wouldn't see the rifle there because this line would be lest.

The same way along here. This one very definitely had they not retouched it would have blended in and been a continuous tone of dark gray all across there.

Rop. Ford. That is up here -- that is above the hand on the week.

Mr. Bisenberg. When you said a highlight along the rifle stock, you actually meent on top, above the rifle stock?

Er. Shaneyfelt. The upper edge.

Mr. Eisonborg. Is it the uppor edge or is it a place that Goss not correspond to the rifle stock?

Mr. Shaneyfolt. It is an edge along the rifle stock that corresponds, I am speaking now of the highlight above the hand.

Mr. Bisonborg. Ro, no, you said before in deccribing the highlight which you can soe, you say they drew a highlight flory the rifle, the rifle stock. Actually it was Grawn, as I

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enderstand it, considerably above the edge or the actual rifle stock.

fr. Shanoyfelt. Yes, that is true.

Hr. Eisonborg. Have you used this technique yourself?

ir. Shenayfelt. Yes, I have done retouching of photographs for half-tones, Yes.

in. Discoberg. When you said before that this retouching is cone by air brush or brush, what medium is used in the brush or brush to achieve the effect?

wailable in varying shades of the white to black, it is wailable in varying shades of gray tones so that you could wailable different shades of gray tones so that you could estually match the gray tone of the picture since in these instances we are dealing entirely with gray, shades of gray, and you select a gray that is not too prominent that would give you a highlight the would look normal.

Mr. Eisenborg. So that the negative is painted, so to speak.

ir. Shanoyfolt. The actual photograph is painted.

im. Disenborg. 'The photograph is painted.

Now, would there be any conceivable reason for eliminating in a retouching the telescopic sight?

the Cotail. I cannot determine from Commission Exhibit 754 whether there was retouching around the stock. There are indications

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that there is some retouching, I mean around the telescopic sight. It appears to me they did do some retouching around the telescopic sight which we have marked as point "E" on Commission Txhibit 754.

Mr. Disenborg. With that specific reference to 754 might on individual without experience in rifles have thought that the corresponding to the telescopic sight was extraneous detail and blocked it out?

Mr. Shancyfelt. Yes, it could be done.

Mr. Eisenberg. I have no further questions, Mr. Chairman.

Ur. Ikcloy. Do you have anything?

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Rep. Ford. Mo further questions.

Mr. McCloy. It may be because I am, and I am sure it is, because of my ignorance in regard to this composition of photographs. but the negative of which we have a copy is from which this photograph was taken, isn't that right?

Mr. Shanoyfelt. We do not have the protection the negative of this photograph.

fr. McCloy. You have the negative of this?

Mr. Shaneyfolt. We have the negative of 133B.

Kr. NcCloy. You have the negative of 133B. That negative in itself shows no doctoming or composition at all?

Mr. Shanoyfelt. It shows absolutely no doctoring or composition.

I'm. McCloy. So that the only composition that could have bet

ends would have been in this process which you have described of picture on picture and negative and then photographing.

pr. Shanoyfelt. And then finally rephotographing with

Ir. McCloy. Rephotographing with this camera, this very

In. Shancyfelt. That is correct, and this then to me be-

Mr. McCloy. Yes.

There is nothing in Exhibit 754 that to you insinuates any sinister type of touching up?

Mr. Shaneyfelt. That is correct. This is entirely innocent retouching, completely normal operation for a newspaper cut or a magazine reproduction.

Mr. McCloy. I think I have no other questions.

Mr. Excemberg. Just two other questions.

Is there anything in the negative of 133B that is Commission Disbit 749 to indicate whether it was developed commercially or not commercially?

Mr. Shancyfelt. No, I cannot determine that from the negative.

Mr. Eisenberg. And finally, I hand you a page from that mome issue of Life, the issue of February 21, 1964, page 80 which has a photograph similar to the cover photograph, and I ask you whether this photograph appearing on page 80 appears to you to be the same at the photograph used on the cover?

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ir. Shancyfelt. Yes, it appears to be the same photograph.

Mr. Bisenberg. Does the retouching appear to be the same in

both?

pr. shanoyfelt. The recouching is consistent, yes. It appears to be slightly clearer in the photograph on page 80, the high-light along the stock is sharper and more crisp and in more detail.

Er. Bisonberg. Again you cay highlight along the stock.

ir. Shanoyfelt. Along the stock.

Mr. Eisenberg. You mean the highlight introduced by the re-

Mr. shaneyfelt. Yes, and the scope appears to be much clearer in the photograph on page 80 than the photograph on the fonc cover which is Exhibit 754, and is much clearer than is apparent in the photograph 133A.

Mr. Eisenborg. Can you account for that?

Mr. Shaneyfelt. My only explanation would be retouching, from retouching around the scope. The primary reason for the additional clarity between the entire photograph without specific reference to the scope, the clarity that I mentioned in the entire photograph on page 80 as compared with the cover is, I believe, basically the fact that the cover is so enlarged, there is a tendency on big enlargements to separate, the detail out by enlargement so it appears not as clear, so a smaller picture will semetimes look clearer than one of the same picture that has

been enlarged. This would account for some of the additional,

the photograph.

Mr. Eisenborg. May this photograph on page 20 be introduced as 755?

Mr. McCloy. It may be admitted.

(Commission Exhibit No. 755 was marked for identification and received in evidence.)

fir. Eisenberg. One final question: Can you compare the flarpness of the scope on Exhibit 755 with the sharpness on Exhibit 746E, one of the reproductions you prepared?

aharpaess between the photograph on Commission Exhibit 755, which is page 80 of Life Magazino, and the photograph which I made from the Government's Exhibit 133A, which is Commission Exhibit.

Again this the part, difference in sharpness, I believe is due to retouching in part, and in part to the picture in Life Augazine being smaller, and thereby the detail

not dictorted, is not spread out so much.

It is a combination of retouching of the photograph and size.

Mr. Bisenberg. Mr. Thairman, this concludes my examination.

Mr. McCloy. I am further interested as you look at this rifle as it lies on the table you can see the highlight even without any photograph very clearly. The shine centers on the

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curvature of the stock. It is quite interesting.

ir. Shanoyfelt. That is very apparent on Exhibit 748 also, where you get the duplication of the lighting. This nob tonds to reflect more light.

rection. It is obvious that it is right upthere as a completions highlight. I didn't realize that it was so indicative of the curve of the stock of the rifle.

Thank you very much indeed for your cooperation and very

::. Shanoyfelt. Thank you.

(Recess.)

Mr. McCloy. Mr. Bouch, you know the purpose for which you are here?

ir. Bouck. Yos, I do.

tr. McCloy. And we are very happy to have you help us to tequit ourselves of our responsibility here in determining all ef the relevant circumstances in connection with the assassination of the President.

I believe you are going to give us something of the routine by which Presidents are protected?

E. Bouck. Yes.

Mr. McCloy. I will ask you to-raise and hold up your right hand.

to you solumnly smoor the testimony you give in this year-

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