

Mr. SHANEYFELT. Yes; the retouching along the top of the rifle stock, the retouching around the right shoulder and around the head, to the right of Oswald's head, the retouching around the top of the rifle above the left hand, the elimination of the shadow between the legs just below the breech of the trousers are the same in both reproductions.

Mr. EISENBERG. Is there any notable difference between those reproductions, the Life and Journal-American reproductions?

Mr. SHANEYFELT. No; no notable difference in the retouching.

Mr. EISENBERG. Do you have any opinion as to the source of the Journal-American photograph?

Mr. SHANEYFELT. Yes; it is not possible to positively state, but I note in examining the Journal-American reproduction, which is Exhibit No. 7, that the face area in particular has a design in the light shadow areas which I recognized as being typical of a halftone reproduction made from another halftone reproduction. And because of the presence of this characteristic in the shadow area of the face, and the manner in which the photograph is cropped or trimmed, I am of the opinion that it is highly possible that the reproduction in the Journal-American, Exhibit No. 7, was made from a Life magazine cover, issue of February 21, 1964, containing the reproduction of the photograph of Oswald.

Mr. EISENBERG. Could you elaborate on your statement that the cropping is a factor in leading to this conclusion?

Mr. SHANEYFELT. Yes; on Exhibit No. 2, which is the Life magazine cover, if a straight line is drawn vertically past the right edge of the Life sign on the front of the magazine, so that the sign is blocked out, and that straight line is continued through a shadow area comparable to the shadow in the reproduction of Exhibit No. 7, the cropping along that edge of the photograph then becomes identical to the cropping on the Journal-American photograph. This would suggest that the picture was purposely cropped in that manner to eliminate the Life magazine printing in the upper left-hand corner of the magazine cover.

Mr. EISENBERG. Does the Life magazine picture, and also the Journal-American picture, show cropping as against the original, that is, Exhibit No. 133-A?

Mr. SHANEYFELT. Yes. The Life magazine photograph does not show all of the photograph that appears on Commission Exhibit No. 133-A, the photograph having been cropped down closer to the head, cutting out some of the overhead area. There has also been considerable cropping on both the right and left margins, when you compare the Life magazine and Journal-American reproductions with Exhibit No. 133-A.

Mr. EISENBERG. Is there any other feature on the Journal-American photograph which leads you to conclude that it was taken from the Life photograph?

Mr. SHANEYFELT. Yes; in the lower right-hand corner of the Life magazine cover, Exhibit No. 2, there is a strip set in, containing the printing "February 21, 1964, 25 cents." If the Journal-American did, in fact, reproduce this picture from a Life cover, it would have been necessary for them to retouch out this strip of printing in the lower right-hand corner of the Life magazine cover, and I find on examination of the reproduction on the Journal-American that there is retouching in this area. The background of the grass is inconsistent, in that it has been darkened around that area, and there is also darkening along the foot and leg, and the shadow area has been altered in between the two feet in a manner to strongly suggest that this strip has been retouched out in order to make the reproduction on the Journal-American, Exhibit No. 7.

Mr. EISENBERG. Mr. Shaneyfelt, do you have anything to add to your testimony?

Mr. SHANEYFELT. I believe not.

Mr. EISENBERG. Well, thank you very much then. That will be all.

TESTIMONY OF JAMES C. CADIGAN

The testimony of James C. Cadigan was taken at 3:45 p.m., on April 30, 1964,

at 200 Maryland Avenue NE., Washington, D.C., by Mr. Melvin Aron Eisenberg, assistant counsel of the President's Commission.

(The oath was administered by the reporter.)

Mr. CADIGAN. I do.

Mr. EISENBERG. Mr. Cadigan, the purpose for which we are here is to go into the facts of the assassination of President Kennedy, and in particular we have asked you to testify concerning analysis of questioned documents. Mr. Cadigan, could you state your full name and your position?

Mr. CADIGAN. James C. Cadigan. I am a special agent of the FBI, assigned as an examiner of questioned documents in the FBI laboratory in Washington, D.C.

Mr. EISENBERG. And how long have you been in this field, Mr. Cadigan?

Mr. CADIGAN. Twenty-three and one-half years.

Mr. EISENBERG. What was your training in this field?

Mr. CADIGAN. Upon being assigned to the laboratory I was given a specialized course of training and instruction which consisted of attending various lectures and conferences on the subject, reading books, and working under the direction of experienced examiners.

Upon attaining a required degree of proficiency, I was assigned cases on my own responsibility, and since that time I have examined many thousands of cases involving handwriting, hand printing, typewriting, forgeries, erasures, alterations, mechanical devices of all types, pens, paper, and ink. I conduct research on various problems as they arise and assist in the training of our new examiners.

Mr. EISENBERG. Have you testified in Federal or other courts, Mr. Cadigan?

Mr. Cadigan. Yes; in many Federal and State courts, and military courts-martial.

Mr. EISENBERG. Mr. Cadigan, I now hand you Commission Exhibit No. 773, and I ask you whether you have examined that item.

Mr. CADIGAN. Yes; I have.

Mr. EISENBERG. For the record, that consists of an application to purchase a rifle, addressed to Klein's Sporting Goods in Chicago. Mr. Cadigan, I now hand you an item consisting of a roll of microfilm labeled D-77, and ask you whether you are familiar with that roll of microfilm?

Mr. CADIGAN. Yes; I am.

Mr. EISENBERG. That microfilm will be marked Cadigan Exhibit No. 1.

(The article referred to was marked Cadigan Exhibit No. 1.)

Mr. EISENBERG. Mr. Cadigan, was Exhibit No. 773 developed from a negative contained in Cadigan Exhibit No. 1?

Mr. CADIGAN. Yes; it was printed from that roll.

Mr. EISENBERG. I now hand you Commission Exhibit No. 780, consisting of the Marine Corps file of Lee Harvey Oswald; Commission Exhibit No. 778, consisting of two letters extracted from Oswald's State Department file; Commission Exhibit No. 781, consisting of a passport application by Lee Harvey Oswald, dated June 25, 1963—at least "Passport Issued June 25, 1963"; and Cadigan Exhibit No. 2, consisting of a letter from Lee Harvey Oswald to John B. Connally, then Secretary of the Navy.

(The document referred to was marked Cadigan Exhibit No. 2.)

Mr. CADIGAN. This is in two parts.

Mr. EISENBERG. In two parts, and the second part consists of a letter from Lee Harvey Oswald to a Brigadier General R. McC. Tompkins, dated 7 March 1962, and a group of documents, comprising photographs of the balance of Lee Harvey Oswald's State Department file, labeled Cadigan Exhibit No. 3.

(The documents referred to were marked Cadigan Exhibit No. 3.)

Mr. EISENBERG. I ask you whether you have examined these various items.

Mr. CADIGAN. Yes; I have.

Mr. EISENBERG. Mr. Cadigan, can you explain the meaning of the term "standard" or "known documents" as used in the field of questioned-document examination?

Mr. CADIGAN. Yes. Known standards are samples of writings of an individual which are known to be in his writing and which are available for comparison with questioned or suspect writings.

Mr. EISENBERG. You have examined certain questioned writings allegedly prepared by Lee Harvey Oswald, have you, Mr. Cadigan?

Mr. CADIGAN. Yes.

Mr. EISENBERG. In your examination, what documents did you use as known documents?

Mr. CADIGAN. Cadigan Exhibit No. 2, Commission Exhibit No. 781, Commission Exhibit No. 778, Cadigan Exhibit No. 3, and Commission Exhibit No. 780.

Mr. EISENBERG. For the record, during the balance of the examination I will refer to these documents collectively as the known or standard writings. Mr. Cadigan, a portion of the known documents and a portion of the questioned documents are photographs rather than originals; is that correct?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Are you able to identify the handwriting of an individual on the basis of a photograph of that handwriting?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Would you make an identification, such an identification, if your only questioned document was a photograph if the photograph was sufficiently clear?

Mr. CADIGAN. If the photograph is sufficiently clear, it is adequate for the handwriting comparison.

Mr. EISENBERG. Similarly with standards, if your only standard was a photograph or your only standards were photographs?

Mr. CADIGAN. If your standards were also photographs, it is possible to make the comparison and arrive at a definite opinion.

Mr. EISENBERG. And were the photographs in this case, both the standard and the questioned documents, clear enough to form the basis of an opinion?

Mr. CADIGAN. Yes. I might point out that some of the known standards are original documents and not photographs.

Mr. EISENBERG. Yes; I am aware of that, but I wanted to set out on the record whether the standards which are photographs are adequate—

Mr. CADIGAN. They are adequate.

Mr. EISENBERG. To serve as standards.

Mr. CADIGAN. Yes.

Mr. EISENBERG. Returning to Commission Exhibit No. 773, did you compare the handwriting on that exhibit with the writing in the known standards to see if they were written by the same person?

Mr. CADIGAN. Yes; I did.

Mr. EISENBERG. And what was your conclusion?

Mr. CADIGAN. That the writer of the known standards, Lee Harvey Oswald, prepared the handwriting and hand printing on Commission Exhibit No. 773.

Mr. EISENBERG. Have you prepared photographs or charts which you could use to demonstrate the reason for that, Mr. Cadigan?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Will you produce them? You are handing me an enlarged photograph of Commission Exhibit No. 773, is that correct?

Mr. CADIGAN. Yes.

Mr. EISENBERG. This was prepared by you or under your supervision?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And constitutes an accurate photograph of Exhibit No. 773?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be Cadigan Exhibit No. 3-A.

(The document referred to was marked Cadigan Exhibit No. 3-A.)

And have you prepared photographs of the standards, Mr. Cadigan?

Mr. CADIGAN. Yes; I have.

Mr. EISENBERG. The first photograph is an enlargement of the letter to Brigadier General R. McC. Tompkins? Is that correct?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be Cadigan Exhibit No. 4.

(The document referred to was marked Cadigan Exhibit No. 4.)

Mr. EISENBERG. And the second photograph is an enlargement of a letter from the State Department file, is that correct?

Mr. CADIGAN. Enlargement of a letter in the State Department file.

Mr. EISENBERG. In the State Department file?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be Cadigan Exhibit No. 5.

(The document referred to was marked Cadigan Exhibit No. 5.)

Mr. EISENBERG. The third is an enlargement of a second letter in the State Department file, the first letter having been dated "Received November 1, 1962," and this letter dated "December 7, 1962, Received December 11, 1962," is that correct?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be Cadigan Exhibit No. 6.

(The document referred to was marked Cadigan Exhibit No. 6.)

(Discussion off the record.)

Mr. EISENBERG. Next is a letter to the State Department without an apparent date, beginning, "Dear Sirs: Please forward receipts to me for final payment of my loan" and so forth, is that correct?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be Cadigan Exhibit No. 7.

(The document referred to was marked Cadigan Exhibit No. 7.)

Mr. EISENBERG. Next is another letter from the State Department file, reading, "Dear Sirs, please add this \$10.00 to my account No. 38210" dated October 8. Is that also from the State Department file, Mr. Cadigan?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be Cadigan Exhibit No. 8.

(The document referred to was marked Cadigan Exhibit No. 8.)

Mr. EISENBERG. Next is the letter to then Secretary of the Navy John B. Connally and a page from the letter to Brigadier General R. McC. Tompkins, is that correct?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be Cadigan Exhibit No. 9.

(The document referred to was marked Cadigan Exhibit No. 9.)

Mr. EISENBERG. That is in two parts, is that correct?

Mr. CADIGAN. Yes; it is two pages.

Mr. EISENBERG. Next is a photograph of the passport application referred to earlier?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be Cadigan Exhibit No. 10.

(The document referred to was marked Cadigan Exhibit No. 10.)

Mr. EISENBERG. And, finally, a photograph of the reverse side of that?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Which will also be Cadigan Exhibit No. 10.

Now, in each case, Mr. Cadigan, were these photographs prepared by you or under your supervision?

Mr. CADIGAN. They were.

Mr. EISENBERG. And are they accurate photographs of the items described as being the subject of the photographs?

Mr. CADIGAN. They are.

Mr. EISENBERG. Now, Mr. Cadigan, with reference to your enlargement, Cadigan Exhibit No. 3-A, and your photographs of standards, Cadigan Exhibits Nos. 4 through 10, could you state some of the reasons which led you to the conclusion that Commission Exhibit No. 778, of which Cadigan Exhibit No. 3 is an enlargement, is in the writing of Lee Harvey Oswald, the author of the known documents?

Mr. CADIGAN. Yes; on Commission Exhibit——

Mr. EISENBERG. You can refer to your photographs.

Mr. CADIGAN. The enlarged photograph, Cadigan Exhibit No. 3-A, contains both handwriting and hand printing which was compared with the known standards, Cadigan Exhibits Nos. 4 through 10. I compared both the handwriting and the hand printing to determine whether or not the same combination of individual handwriting characteristics was present in both the questioned and the known documents. I found many characteristics, some of which I would point out.

On the order blank, in the "A. Hidell" and in the wording "Dallas Texas"

which constitutes a part of the return address, the letter "A" in Cadigan Exhibit No. 3 is made in the same manner as the capital letter "A" on Cadigan Exhibit No. 10. The letter is formed with a short straight stroke beginning about halfway up the left side. The top of it is peaked or pointed. The right side is straight, and is shorter than the initial stroke. The capital letter "D" in Dallas is characterized by a staff or downstroke slanting at about a 30° angle. The lower loop in some instances is closed. In the word "Dallas" the loop is closed, and the body of the letter ends in a rounded loop formation. The same characteristic I found in Cadigan Exhibits Nos. 4, 5, and 6 as well as other exhibits. The word "Texas" on Cadigan Exhibit No. 3-A is characterized with the letter "x" made in an unusual manner in that the writer, after completing the body of the letter, makes an abrupt change of motion to the following letter "a." This same characteristic I observed in the known standard on Cadigan Exhibits Nos. 6, 9, and 4.

In the address portion of the envelope, Cadigan Exhibit No. 3-A, appears the word "Dept." I noticed here, again, the same formation of the capital "D." In addition, the entire word "Dept" appears in the known standards on Cadigan Exhibits Nos. 5, 6, and 7. The characteristics I would point out here are in the letter "p" in Cadigan Exhibit No. 3, where the letter is made with a relatively long narrow staff, and the body of the letter is a rounded shape which projects above the staff. The letter "t" ends abruptly in a downstroke. In the handprinting appearing in the exhibit marked Cadigan Exhibit No. 3-A, the wording "Dallas, Texas" contains a number of the same characteristics as Cadigan Exhibit No. 5, where the same wording appears, and on Cadigan Exhibits Nos. 7 and 8. The writer uses a script-type "D," and prints the other letters in the word "Dallas." The "A" again is made in a similar way to the "A" in "A. Hidell," with a beginning of the downstroke approximately three-quarters of the way up the left side of the stroke. The letter is relatively narrow, and the right-hand side of the letter is straight. In the double "L" combinations there is a curve in the lower portion of the letter. The "S" has a flat top, slanting at approximately a 30-degree angle. In the word "Texas" in Cadigan Exhibit No. 3-A the writer has used a small "e" following the letter "T." The same characteristics will be noted on Cadigan Exhibits Nos. 5, 7, and 8.

Additionally, I noted that in addition to the shape of the letters themselves, the relative heights of the letters, the spacing between the letters, the slant of the letters in both the known and questioned documents are the same.

On Cadigan Exhibit No. 3-A, in the portion for address, appears the notation "P.O. Box 2915," and this same wording appears on Cadigan Exhibit No. 5, and on No. 7 and No. 8 except for the "P.O." portion. Here, again, I observed the same formation of the individual letters; the spacing, the style, the slant of the writings in both questioned and known were observed to be the same.

The tail of the "5" is made with a relatively long stroke and the same characteristic appears in the known standards. In the hand printed name "A. Hidell," on Cadigan Exhibit No. 3-A, another characteristic I noted was the very small-sized "i" in the name "Hidell." The writer makes this letter very short in contrast to the other letters in the name. This same characteristic I observed on Cadigan Exhibit No. 10, the passport application. With reference to the "i" dot on Cadigan Exhibit No. 3 in the name "Hidell," in the return portion, the dot is relatively high and between the body of the letter and the following letter "d." In the portion of the word "Chicago"—of the name "Chicago"—in the address portion on Cadigan Exhibit No. 3, the "i" dot is between the "o" and the "g" in "Chicago" and is well above the line of writing. On Cadigan Exhibit No. 4 I observed the same displacement of the "i" dot. In some instances, it is slightly to the right of the body of the letter, as in the word "citizenship" in the sixth line from the bottom, whereas in the word "direct" in the ninth line from the bottom the "i" dot is displaced one and a half letters to the right.

Based upon the combination of these individual characteristics which I have pointed out, as well as others, I reached the opinion that the handwriting and handprinting on Cadigan Exhibit No. 3-A were written by Lee Harvey Oswald, the writer of the known standards, Cadigan Exhibits Nos. 4 through 10.

Mr. EISENBERG. Now, Mr. Cadigan, the photographs which comprise Cadigan Exhibits Nos. 4 through 10 are actually somewhat more limited than the stand-

ards, in that they represent in some cases excerpts from the standards, is that correct? Such as excerpts from the Marine Corps file?

Mr. CADIGAN. That is correct.

Mr. EISENBERG. Now, when you refer to the standards, Cadigan Exhibits Nos. 4 through 10, do you mean by that that you based your conclusion only on the excerpts shown in Exhibits Nos. 4 through 10?

Mr. CADIGAN. No; the exhibits, Cadigan Exhibits Nos. 4 through 10, were merely prepared for demonstration purposes. The original examination and comparison was made using all of the writings, the handwriting and hand-printing in the State Department file, the Marine Corps file, the passport application and the two letters, one to Governor Connally and one to Brigadier General Tompkins.

Mr. EISENBERG. That is, the documents which you identified very close to the beginning of the deposition, and which I referred to collectively as the standards?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Mr. Cadigan, I now hand you Commission Exhibit No. 788, and ask you if you have examined that exhibit?

Mr. CADIGAN. Yes; I have.

Mr. EISENBERG. For the record, that is the money order which was included with the purchase order to Klein's. Have you prepared a photograph of that exhibit, Mr. Cadigan?

Mr. CADIGAN. I have.

Mr. EISENBERG. That will be Cadigan Exhibit No. 11.

(The document referred to was marked Cadigan Exhibit No. 11.)

Mr. EISENBERG. And this was taken by you or under your supervision?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And is it an accurate photograph of the money order, Exhibit No. 788?

Mr. CADIGAN. It is.

Mr. EISENBERG. Did you compare Exhibit No. 788 with the standards to determine whether Exhibit No. 788 had been written by Lee Harvey Oswald?

Mr. CADIGAN. Yes.

Mr. EISENBERG. What was your conclusion?

Mr. CADIGAN. That the postal money order, Cadigan Exhibit No. 11, had been prepared by Lee Harvey Oswald.

Mr. EISENBERG. The postal money order is Commission Exhibit No. 788 and your picture is Cadigan Exhibit No. 11, is that correct?

Mr. CADIGAN. That is correct.

Mr. EISENBERG. Could you explain some of the points of identity which led you to the conclusion that you formed?

Mr. CADIGAN. Yes; I think that using the wording "Dallas, Texas" appearing on Commission Exhibit No. 839 as an example of some of the handwriting characteristics present on this exhibit—

Mr. EISENBERG. You mean Cadigan Exhibit No. 11?

Mr. CADIGAN. Yes. In the wording "Dallas, Texas," the writing is quite characteristic. I noted, again, the overall size, spacing, slant, and relative proportions of letters on Cadigan Exhibit No. 11 were the same as on Cadigan Exhibit No. 6, and that the letter "D" was characterized on Cadigan Exhibit No. 11 with a relatively short staff, with a rather long retrace on the left side of the staff, the body of the letter ending in a large curling stroke. The small letter "a" is rather narrow and somewhat flat. There is a rather long smooth connecting stroke between the "a" and the double letter "l." The "s" is almost triangular in shape, and has no ending stroke or tail to the right.

Further, on Cadigan Exhibit No. 11, in the word "Texas" I noted again the rather unusual shape of the small letter "x," in that it appears almost as though it were a letter "u." The capital letter "T" in "Texas" has a very long curved beginning stroke and a small eyelet or loop in the lower portion of the letter.

I noted these same characteristics on Cadigan Exhibit No. 6 in the wording "Dallas, Texas," and certain of the letters on Cadigan Exhibits Nos. 6, 7, 8, and the entire word "Texas" in Cadigan Exhibit No. 4.

I noted also, again, that the small letter "p" in the word "sporting" on Cadigan

Exhibit No. 11 was made the same as the "p's" in the known standards as well as on Cadigan Exhibit No. 3 in the word "Dept," in that the staff is long, in the form of a long closed loop, and the upper portion of the letter extends above the staff and the body of the letter is not closed to the staff.

I further noted that on Cadigan Exhibit No. 11 the wording "P.O. Box 2915" contained the same characteristics as the same wording in Cadigan Exhibits Nos. 5, 6, and 7. And here again, based on a combination of personal handwriting characteristics in the entire writing, I reached the opinion that Cadigan Exhibit No. 11 had been written by Lee Harvey Oswald.

Mr. EISENBERG. Mr. Cadigan, I now hand you Commission Exhibit No. 135, which, for the record, is an order used for the purchase of the revolver that was apparently used to murder Officer Tippit, and I ask you whether you examined that exhibit.

Mr. CADIGAN. Yes; I have.

Mr. EISENBERG. And have you taken a photograph of that exhibit?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Which you now have before you?

Mr. CADIGAN. Yes; I have an enlarged photograph.

Mr. EISENBERG. And that would be Cadigan Exhibit No. 12.

(The document referred to was marked Cadigan Exhibit No. 12.)

Mr. EISENBERG. This was taken by you or under your supervision?

Mr. CADIGAN. Yes.

Mr. EISENBERG. It is an accurate photograph of Exhibit No. 135?

Mr. CADIGAN. It is.

Mr. EISENBERG. Mr. Cadigan, did you compare Commission Exhibit No. 135 with the standard or known writings of Lee Harvey Oswald?

Mr. CADIGAN. Yes; I did.

Mr. EISENBERG. What was your conclusion as to the origin of 135?

Mr. CADIGAN. That it was written by Lee Harvey Oswald.

Mr. EISENBERG. And can you give some of the reasons that led you to form that conclusion?

Mr. CADIGAN. Yes; here again, it is the presence of the same combination of individual handwriting characteristics, both handwriting and handprinting. For example, again the wording "Dallas, Texas," is handprinted on Cadigan Exhibit No. 12, and the same characteristics appear in the same wording on Cadigan Exhibits Nos. 9, 7, 6, and 8. The formation of the individual letters on Cadigan Exhibit No. 12, the spacing of the letters, the proportions of the letters, were found to be the same as on the known standards.

Additionally, the capital letter "D" in the name "Drittal" on Cadigan Exhibit No. 12 has a rather unusual appearance in the upper portion of the letter in that it is very pointed and wedge-shaped, and I found this same shape present on the reverse side of the passport application on Cadigan Exhibit No. 10, page 2 in the word "Dec."

Again, I noted the rather long tail or ending stroke on the number "5" in the address portion of this exhibit. Again, based on finding the same combination of individual handwriting habits in the questioned and known writings, I concluded that Commission Exhibit No. 135 was written by Lee Harvey Oswald.

Mr. EISENBERG. Mr. Cadigan, I hand you Commission Exhibit No. 791, which, for the record, is an application by Oswald for post office box 2915, dated October 9, 1962, and ask you whether you have examined that exhibit?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And have you prepared a photograph of that exhibit, Mr. Cadigan?

Mr. CADIGAN. I have.

Mr. EISENBERG. That will be Cadigan Exhibit No. 13.

(The document referred to was marked Cadigan Exhibit No. 13.)

Mr. EISENBERG. Was this prepared by you or under your supervision?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And is it a true and accurate photograph of 791?

Mr. CADIGAN. It is.

Mr. EISENBERG. Did you attempt to determine whether Commission Exhibit No. 791 had been prepared by the author of the standards, Lee Harvey Oswald?

Mr. CADIGAN. Yes.

Mr. EISENBERG. What was your conclusion?

Mr. CADIGAN. That Lee Harvey Oswald had prepared the hand printing, signature, and date on Commission Exhibit No. 791. This excludes the box number and the wording "Dallas, Tex.," in the lower right portion.

Mr. EISENBERG. Can you give some of the reasons why you came to that conclusion?

Mr. CADIGAN. Yes; the reasons are basically the same, the presence of the same combination of both handwritten and hand printed characteristics in the known and questioned exhibits. On Cadigan Exhibit No. 18 we have the hand printed wording—

Mr. EISENBERG. Cadigan Exhibit No. 18?

Mr. CADIGAN. Cadigan Exhibit No. 10, excuse me, the passport application, we have the wording "LEE OSWALD." This hand printed signature is quite distinctive in the formation of the individual letters, in the spacing of the letters, and their slant. For example, the letter "L" on both Cadigan Exhibit No. 13 and on Cadigan Exhibit No. 10, there is a small hook in the upper left portion where the downstroke begins, and there is a little tent or hill at the base of the letter. The double letter "E's" also have a curve, a dent at the base of the letter, although not so pronounced. Both letters, both letter "E's," are approximately the same height as the "L."

In the last name "OSWALD" on Cadigan Exhibit No. 13 and on Cadigan Exhibit No. 10 the "O" has a pointed or tented appearance in the upper right portion, and the ending stroke curves down into the body of the letter. The "S" and "W" in both the questioned and known are smaller than the following capital letter "A." This capital letter "A" in both instances is made in the same manner as previously described on other exhibits. The writer uses a lower-case or small "l," and a lower-case or small "d" for the last two letters of his name, the "d" portion or the letter "d" in both instances being made with a straight-slanted stroke, then an abrupt circular stroke to the left.

In addition on this same exhibit I noted the formation of the letter "i." The exhibit I refer to is Cadigan Exhibit No. 13—the "i" being made very small in relation to the other letters adjacent to it.

This document also bears the signature "Lee H. Oswald" which, again, is a very characteristic signature. It appears in Cadigan Exhibit No. 13, the questioned document, and Cadigan Exhibits Nos. 4, 5, 6, 7, 8, 9, and 10. The signature I noted was written rather rapidly. It is somewhat distorted in appearance. The initial "L" has a rather long curved beginning stroke and relatively narrow upper and lower portions of the letter. The letter "H" is made with two parallel strokes and it can be seen that there is a very little retrace from the base of the first stroke in the letter to the top of the second stroke in the letter.

The "O" combination is rather unusual in that the writer swings into the letter "s" from the top of the "O." Also, as the signature progresses to the right it increases in size, and very noticeably in the "ld" portion where the "d" stands well above the line of writing. And in this particular signature there is a long-swinging stroke from the top of the "d," having a shape similar to a "u" lying on its side. The base of the letter has a very sharp angular formation.

Again, based on a combination of the same individual handwriting and hand printing characteristics, I reached the opinion that Commission Exhibit No. 791 was prepared by Lee Harvey Oswald.

Mr. EISENBERG. Mr. Cadigan, I now hand you Commission Exhibit No. 793, consisting of a change-of-address card relating to box 2915. Have you examined that exhibit?

Mr. CADIGAN. Yes; I have.

Mr. EISENBERG. And have you prepared a photograph thereof?

Mr. CADIGAN. I have.

Mr. EISENBERG. That will be Cadigan Exhibit No. 14.

(The document referred to was marked Cadigan Exhibit No. 14.)

Mr. EISENBERG. This photograph is an accurate reproduction of Commission Exhibit No. 793?

Mr. CADIGAN. Yes; it is.

Mr. EISENBERG. Mr. Cadigan, getting back for a moment to Cadigan Exhibit

No. 13, I see that there is another picture shown on that exhibit, apart from the one as to which you testified.

Mr. CADIGAN. Yes.

Mr. EISENBERG. Can you describe that?

Mr. CADIGAN. Yes. That is a Post Office Department Form 1093, application for post office box, and the post office box number is 6225, and it is signed, "Lee H. Oswald."

Mr. EISENBERG. And why is that included on the picture with Cadigan Exhibit No. 13, or rather on the picture with Commission Exhibit No. 791? Is that because they were both from—

Mr. CADIGAN. No; it is part of another post office application that does not relate to box 2915.

Mr. EISENBERG. Did you have any particular reason for printing that up with the photograph of Exhibit No. 791?

Mr. CADIGAN. No. I think it may have been part of another exhibit which has not as yet been introduced.

Mr. EISENBERG. Does your identification of Exhibit No. 791 in any way depend upon that photograph?

Mr. CADIGAN. No; not at all.

Mr. EISENBERG. So we can disregard it for our purposes?

Mr. CADIGAN. If you want to, I can take it out.

Mr. EISENBERG. Well, it is in.

Mr. CADIGAN. I mean I can just cut it along here.

Mr. EISENBERG. I would rather leave it in, since it is in the record.

Mr. CADIGAN. All right.

Mr. EISENBERG. I just wanted to make sure that it didn't need to be discussed as part of the identification of Exhibit No. 791, and I take it it does not?

Mr. CADIGAN. No.

Mr. EISENBERG. Now, getting back to Commission Exhibit No. 793 and the photograph thereof, which is Cadigan Exhibit No. 14, did you attempt to determine whether Commission Exhibit No. 793 had been prepared by Lee Harvey Oswald?

Mr. CADIGAN. Yes.

Mr. EISENBERG. The photograph of which is Cadigan Exhibit No. 14. And what was your conclusion on that?

Mr. CADIGAN. Again, that Commission Exhibit No. 793 was written by Lee Harvey Oswald, again based upon finding the same combination of individual handwriting and hand printing characteristics in both the questioned writing and the known standards.

Mr. EISENBERG. Could you discuss some of those common characteristics?

Mr. CADIGAN. Yes. Here, again, the entire word "Dallas" and the word "Texas" is made in a very characteristic manner which I have described before, and which appears on Cadigan Exhibits Nos. 9, 6, 7, and 8.

The signature "Lee H. Oswald" was found to have the same characteristics as the known signatures, although here I noted that in the ending "d" in "Oswald" the stroke was less cursive than the ending "d" in Cadigan Exhibit No. 13, in that the writer makes a rather narrow loop and does not cross the staff of the letter "d." I noted this characteristic, also, in Cadigan Exhibits Nos. 9 and 10. I would like to point out that here, again, the writer varies his individual characteristics, which is entirely normal and expected, and actually it adds weight to the characteristic to find that it does vary to some degree. All writing, particularly signatures, are never exactly duplicated and some variation is normally expected, and finding the same variations in both questioned and known signatures increases the value of it, so that, again, the presence of the same combination of handwriting and hand printing characteristics in Cadigan Exhibit No. 14 in the known exhibits enabled me to reach the opinion that Commission Exhibit No. 793 was written by Lee Harvey Oswald.

Mr. EISENBERG. You used the term "cursive" in respect to this. Can you explain the meaning of that term?

Mr. CADIGAN. Yes; the ending "d" stroke is made with a flourish or a sweeping motion on Cadigan Exhibit No. 13, and on Cadigan Exhibit No. 14 the stroke ends abruptly at the staff of the letter.

Mr. EISENBERG. And why do you call one "more cursive"?

Mr. CADIGAN. Merely for description.

Mr. EISENBERG. Can you explain the meaning of the term "cursive" apart from your use in this instance?

Mr. CADIGAN. I think cursive has also been used to describe the roundness of writing as opposed to an angular shape. I think it also is sometimes used to distinguish between handwriting and hand printing.

Mr. EISENBERG. Mr. Cadigan, I now show you Commission Exhibit No. 795, consisting of an item purporting to be a Selective Service System notice of classification in the name of "Alek James Hidell"; Commission No. 801, a Selective Service System notice of classification in the name of Lee Harvey Oswald; Commission Exhibit No. 802, a registration certificate of the Selective Service System in the name of Lee Harvey Oswald; Commission Exhibit No. 803, a photographic negative; Commission Exhibit No. 804, a photograph negative; Commission Exhibit No. 805, a photograph negative; and Commission Exhibit No. 811, a photographic negative, and I ask you whether you have examined these various items?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Based on that examination, Mr. Cadigan, could you discuss your conclusions concerning Commission Exhibit No. 795?

Mr. CADIGAN. Yes. Commission Exhibit No. 795 is a fraudulent and counterfeit reproduction made from the retouched photographic negatives in Commission Exhibits Nos. 804, 805, and 811 which in turn were made from Commission Exhibits Nos. 801 and 802.

Mr. EISENBERG. And how were they prepared precisely, Mr. Cadigan?

Mr. CADIGAN. These are photographic reproductions. What was done was to take a genuine Selective Service System notice of classification, Commission Exhibit No. 801 in the name of Lee Harvey Oswald. From this, a photographic negative was prepared. Then various portions of the information, including the name, the selective service number, the signature of the clerk of the local board were obliterated with a red opaque substance, and I noted that in the course of this the individual preparing the negative had inadvertently cut off portions of the printed letters, had thickened printed lines, and especially I noted in the signature portion had destroyed portions of the printed letters, and I compared the Commission Exhibit No. 795 with the retouched negative itself, and observed that the defects in the Commission Exhibit No. 795 were due to the retouching of the negative. Although the negative has been blotted out, or the information has been blotted out, it is readily visible to the naked eye that on Commission Exhibit No. 803, which was also examined in connection with the examination of Commission Exhibit No. 795, the original writing, the original signature and the typed information "Lee Harvey Oswald" and selective service number is the same as it appears on Commission Exhibit No. 801. The opaquing is merely to remove this information photographically. There was an intervening step where a small negative or a reduced negative of the lower portion of the face of the card which refers to the penalty for violation concerning carrying the card itself was made. The individual responsible made a reduced photograph but, again, the same characteristics are apparent, and by comparing the print, the photographic print Commission Exhibit No. 795 with these negatives, it is possible to determine that the Commission Exhibit No. 795 was produced from the negatives and the negatives in turn were produced from Commission Exhibits Nos. 801 and 802.

In this connection, I would point out that the reverse side of Commission Exhibit 795 is the form used for a registration certificate, and it is not a proper face of a notice of classification. Here, again, the same procedure was followed. The original card is photographed. The unwanted information is painted out with an opaque substance, and then a photographic print is prepared. Then the individual responsible typed in the information "Alek James Hidell" with the selective service number, descriptive data on the reverse, and the number of the local board.

Further, an examination of the Commission Exhibit No. 795 shows the individual had placed the photograph in a typewriter and struck a number of keys which did not print. The indentations from the typewriter keys can be clearly

seen in side lighting. Also, in the selective service number on the face of the card and the data on the back of the card, indentations of typewriter keys were noted.

Mr. EISENBERG. Mr. Cadigan, returning to the negatives, I see that in Commission Exhibit No. 803, as you pointed out, the information that was originally on the card is visible.

Mr. CADIGAN. Yes.

Mr. EISENBERG. Whereas, in Commission Exhibit No. 804 it is not visible.

Mr. CADIGAN. Yes.

Mr. EISENBERG. Can you explain the difference?

Mr. CADIGAN. Yes; because Commission Exhibit No. 804 is an intermediate step. Commission Exhibit No. 803 was first prepared, and a print was made from this exhibit. The photographic print would not have the name "Lee Harvey Oswald" in red on it. In the place of "Lee Harvey Oswald" it would show as a blank. Then using the print, a second negative is prepared, and further retouching is done, and also the warning notice in a reduced form is inserted into the negative, so that the data from the original notice of classification issued in the name of Oswald appears on the first negative and does not appear on the second negative, but both negatives are directly linked to the original card of Oswald and to the counterfeit reproduction.

Mr. EISENBERG. Now, have you prepared photographs of this card showing some of the details you have been discussing?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be Cadigan Exhibit No. 15.

(The document referred to was marked Cadigan Exhibit No. 15.)

Mr. EISENBERG. This Cadigan Exhibit—

Mr. CADIGAN. Actually, there are four different photographs, photographic enlargements that comprise Cadigan Exhibit No. 15, the face and reverse of the notice of classification made in normal lighting, and the face and reverse of the card made with side lighting showing the typewritten indentations.

Mr. EISENBERG. Let's mark those, then, Cadigan Exhibits Nos. 15, 16, and 17, and 18.

(The documents referred to were marked Cadigan Exhibits Nos. 15, 16, 17, and 18.)

Mr. EISENBERG. Now, Cadigan Exhibit No. 15 shows the face with normal lighting?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Cadigan Exhibit No. 16 shows the reverse with normal lighting?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Cadigan Exhibit No. 17 shows the face with side lighting?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And Cadigan Exhibit No. 18 shows the reverse with side lighting?

Mr. CADIGAN. Yes.

Mr. EISENBERG. These exhibits also contain pictures of another questioned document which we will get to shortly, and that is the certificate of service in the name of Alek James Hidell, is that correct?

Mr. CADIGAN. That is correct.

Mr. EISENBERG. Now, starting with Cadigan Exhibit No. 15, could you discuss several of the features on which you base the conclusions you have given us earlier?

Mr. CADIGAN. Yes. The observation of this exhibit will show in the blocks for the selective service number fragmentary portions of the original selective service number. The lines have been thickened. In the space provided for "been classified in Class," in the middle, in approximately the middle of the space there is a heavy dotted line. By comparing this with the original card issued in the name "Oswald" is seen the lower portion of the capital letter "I."

Mr. EISENBERG. Have you taken a photograph of the original card?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That we will mark Cadigan Exhibit No. 19.

(The document referred to was marked Cadigan Exhibit No. 19.)

Mr. CADIGAN. On the right-hand side of the card the word "President" appears, and on Cadigan Exhibit No. 15 a portion of the "r" and the "e" is missing, due to the retouching. Examination of the corresponding area on Cadigan Exhibit No. 19 shows that this was due to retouching a portion of the signature of the local board. Similarly, in the wording "heavy penalty for violation" appearing below the signature, the word "violation" is considerably distorted in that portions of the various letters are missing. The negative shows this is due to retouching, and a comparison with the original card of Oswald, of which Cadigan Exhibit No. 19 is an enlargement, shows where the lower loops of the letter "f" cut into the letter, cut into the printed word "violation," which required retouching by the individual to remove it.

Mr. EISENBERG. Have you taken photographs of these negatives to illustrate these points?

Mr. CADIGAN. Yes.

Mr. EISENBERG. This is that photograph?

Mr. CADIGAN. Yes.

Mr. EISENBERG. That will be marked Cadigan Exhibit No. 20.

(The document referred to was marked Cadigan Exhibit No. 20.)

Mr. CADIGAN. And by referring to the Cadigan Exhibit No. 20, which shows the retouching, examination of the area in the word "President" will show where the portion of the "r" has been cut off. It will show where the capital letter "I" appears in the space provided "been classified in Class," the "I" being part of the classification, Roman numeral "IV-A," which appears on the original card.

Cadigan Exhibit No. 20 shows, also, the intermediate negative where the size of the warning appearing on the bottom of the card was reduced, and the additional retouching made that causes the distorted appearance of the word "violation" on the Commission Exhibit No. 795, so that it was based on my comparison side by side of the negatives; the photographic print, and the original exhibit in the wallet of Oswald, which enabled me to determine that this Commission Exhibit No. 795 was a fraudulent counterfeit made from retouched negatives which, in turn, were made from the original exhibits, Commission Exhibits Nos. 801 and 802.

Mr. EISENBERG. I think that Cadigan Exhibits Nos. 16, 17, and 18 are self-explanatory.

Mr. CADIGAN. They merely serve to illustrate the indented typewriting that appears on these exhibits.

Mr. EISENBERG. Mr. Cadigan, I now hand you Commission Exhibit No. 806, purporting to be a certificate of service that Alek James Hidell has honorably served on active duty in the U.S. Marine Corps, and ask you whether you have examined that document?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And I hand you Commission Exhibit No. 812, consisting of two negatives. Have you examined those negatives?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Based upon your examination, have you come to any conclusion as to the construction of Commission Exhibit No. 806?

Mr. CADIGAN. Yes; again, this is a fraudulent and counterfeit reproduction made from photographic negatives which, in turn, were made from the original card issued in the name of Lee Harvey Oswald.

Mr. EISENBERG. Have you taken a photograph of the original card?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And where does that appear? That is the photograph you are handing me now, which we will label Cadigan Exhibit No. 21?

Mr. CADIGAN. Yes.

(The document referred to was marked Cadigan Exhibit No. 21.)

Mr. EISENBERG. Cadigan Exhibit No. 21 includes the selective service registration certificate we have been discussing, is that correct?

Mr. CADIGAN. No; it includes an enlargement of the original Selective Service System registration certificate issued in the name of Lee Harvey Oswald.

Mr. EISENBERG. And that is the Selective Service System certificate on which the forgery in the name of Hidell was based?

Mr. CADIGAN. From which the reverse side of the forged or the fraudulent and counterfeit notice of classification was prepared.

Mr. EISENBERG. Focusing our attention on the certificate of service, could you illustrate by use of this photograph and any others you have already introduced some of the points which led you to your conclusion——

Mr. CADIGAN. Yes.

Mr. EISENBERG. As to Commission Exhibit No. 806?

Mr. CADIGAN. The two negatives in Commission Exhibit No. 812, which appear on Cadigan Exhibit No. 20, show the areas of retouching. Examination of the negatives themselves in Commission Exhibit No. 812 shows that the original entries on the face and reverse side can be seen. It appears in red. The face reads "Lee Harvey Oswald, 1653230." And the reverse side bears his signature.

From a study of the negatives and from the enlarged photographs, Cadigan Exhibits Nos. 15, 16, 17, and 18, I wish to point out some of the evidence that links these three items together. On Cadigan Exhibit No. 16, on the reverse side in the printed word "signature," the "u" is misshapen, due to some of the retouched substance crossing the letter, and this is exactly in the area where the upper portion of the name "Lee" appears on the original card. This is seen on Cadigan Exhibit No. 21.

Also on the line below, in which appears the printed wording "signature of certifying officer," in the letter "n" in "certifying" can be seen a long line which at first glance might appear to be a part of the signature "A. G. Ayers, Jr.," but which corresponds exactly to the ending stroke of the letter "y" in "Harvey."

Also, in the printed word "officer" on the same line can be seen the effects of the retouch in that the upper part of the first "f" has been cut off by the retouch substance. So that by a study and a comparison of the Commission Exhibit No. 806 with the negatives, with particular reference to where the retouching fluid has cut into lines or printing, and further comparing the same negative with the original card, as shown in Cadigan Exhibit No. 21, I determined and it can be seen that the Commission Exhibit No. 806 was produced from the negatives in Exhibit No. 812, which, in turn, were produced from the original card of which Cadigan Exhibit No. 21 is a photograph.

Mr. EISENBERG. Mr. Cadigan, in either the fraudulent selective service notice of classification or certificate of service, have attempts been made to reinstate portions of printed lines which were blocked out by the opaque substance?

Mr. CADIGAN. No; I didn't notice that, particularly. I noticed from a technical standpoint that the opaquing was rather crudely done, in that the opaquing of negatives is a common photographic technique, and with reasonable care you can avoid cutting into lines. I didn't particularly observe any areas where the lines had been put back in.

This does not eliminate the possibility, because it is a very simple matter of scratching through the opaque emulsion to produce such a line.

Mr. EISENBERG. Where the line is thickened, as is visible in Cadigan Exhibit No. 15, how would you account for that, Mr. Cadigan? I am looking now at Cadigan Exhibit No. 15 in the block, that portion of the rectangular block surrounding the number "224," and particularly the bottom of the block.

Mr. CADIGAN. A study and examination of Cadigan Exhibit No. 19 shows that these areas correspond to the figures "114" which appear in the second block of the Selective Service number, and which were not retouched off.

Mr. EISENBERG. So you feel that, rather than the bottom of that block being thickened in the retouching, what you have is a residue from the typed-in portion——

Mr. CADIGAN. Yes.

Mr. EISENBERG. Which appeared on the original card?

Mr. CADIGAN. Yes; and this can be further seen. The right-hand side of the block for the first two letters of the selective service number shows a thickened area which corresponds to the numeral "1" on the original card of Oswald.

Mr. EISENBERG. Mr. Cadigan, returning now for a moment to Commission Exhibit No. 795, were you able to identify either of the two signatures written in ink on that card, the one being "Alek J. Hidell," and the other a signature written over the caption "Member or clerk of local board"?

Mr. CADIGAN. No; I did examine the "Alek J. Hidell" signature appearing as the signature of registrant, but the known writings available of Lee Harvey Oswald were not sufficiently comparable with the signature to reach a definite opinion. I did note, however, some similarities in the letter "A" and in the last name, the letter "H" and the ending "l." But these were not of sufficient weight nor of sufficient number nor of sufficient combination to warrant a definite opinion.

Mr. EISENBERG. You say you compared this item, this signature with the known standards. Did you compare the signature with questioned documents which you already identified?

Mr. CADIGAN. No.

Mr. EISENBERG. Mr. Cadigan, I wonder whether after this deposition would you compare this signature with those questioned signatures of "Alek J. Hidell" which you have now identified?

Mr. CADIGAN. Yes; certainly.

Mr. EISENBERG. Mr. Cadigan, I now hand you Commission Exhibit No. 817, consisting of a portion of an application for a post office box 30061 in New Orleans, POD Form 1093, and ask you whether you have examined that item?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And have you attempted to determine whether that item, Commission Exhibit No. 817, was prepared by Lee Harvey Oswald, whose known writings we have introduced previously?

Mr. CADIGAN. Yes; I have.

Mr. EISENBERG. And what was your conclusion?

Mr. CADIGAN. On Commission Exhibit No. 817 the hand printed names, "A. J. Hidell," and "Marina Oswald," and the signature "L. H. Oswald," were written by Lee Harvey Oswald, based on a comparison with his known standards of writing.

Mr. EISENBERG. Have you prepared a photograph of Commission Exhibit No. 817?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And does that also include a photograph of another item, apparently another part of the application?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Did your identification of the Commission Exhibit No. 817 depend in any way upon your identification of the other part of the item which is shown in your photograph?

Mr. CADIGAN. It did not.

Mr. EISENBERG. I will mark the photograph Cadigan Exhibit No. 22.

(The document referred to was marked Cadigan Exhibit No. 22.)

Mr. EISENBERG. Was this prepared by you or under your supervision?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And it is an accurate photograph?

Mr. CADIGAN. It is.

Mr. EISENBERG. We haven't been going over that with all the other photographs, but is that true of all the photographs we have introduced so far?

Mr. CADIGAN. That is correct.

Mr. EISENBERG. And any other photographs you may introduce during the balance of this deposition?

Mr. CADIGAN. That is true.

Mr. EISENBERG. Mr. Cadigan, by use of that photograph and by use of the photographs of the standards, could you explain some of the points which led you to your conclusion concerning Commission Exhibit No. 817?

Mr. CADIGAN. Yes; here again, it is the presence of the same combination of characteristics in the hand printing and signature on Cadigan Exhibit No. 22 and on Cadigan Exhibits Nos. 4 through 10. For example, the word "Marina" on Cadigan Exhibit No. 22 can be compared with the same word or the same name on Cadigan Exhibit No. 10, the "M" being characterized by a rather long beginning stroke, the center of the letter is high, giving the letter somewhat the appearance of the numeral "3" tipped on its side. The "A" is similar to or made in the same way as previous "A's," with a pointed top, with the beginning

stroke about two-thirds of the way up the staff. The "i", again, is very small in relation to the letters coming before and after it. In the "N" there is a curve at the base of the letter. It is more pronounced on Cadigan Exhibit No. 22 than in the name "Marina" in Cadigan Exhibit No. 10, but in the name "Lillian," on the same exhibit, the same kind of curve is observed.

In "Oswald," again in the signature "L. H. Oswald," I find the same characteristics and combinations of characteristics. In the questioned signature in Cadigan Exhibit No. 22 as in the various known signatures in Cadigan Exhibits Nos. 4 through 10, here I think the ending "ld," the narrow pointed loops used for the "l" and "d" are very small, and with a rather misshapen body or upper stroke.

Again, it is the presence of the same combination of handwriting and hand printing characteristics which led me to the opinion that this exhibit had been prepared by Lee Harvey Oswald.

Mr. EISENBERG. Mr. Cadigan, I now hand you Commission Exhibit No. 813, a vaccination certificate, a purported vaccination certificate, signed by "A. J. Hidell," and I ask you whether you have examined that item?

Mr. CADIGAN. Yes; I have.

Mr. EISENBERG. Now, this bears writing on the outside and the inside. Have you attempted to determine whether that writing is the writing of Lee Harvey Oswald?

Mr. CADIGAN. Yes.

Mr. EISENBERG. What is your conclusion?

Mr. CADIGAN. That the hand printing and the Oswald signature were written by Lee Harvey Oswald, again based on the presence of the same combination of individual handwriting and hand printing characteristics.

Mr. EISENBERG. Have you taken photographs of this exhibit?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Those will be Cadigan Exhibits Nos. 23 and 24.

(The documents referred to were marked Cadigan Exhibits Nos. 23 and 24.)

Mr. CADIGAN. I would point out that these represent only a portion of the original document, since for demonstration purposes the lower printed blank is not included in these exhibits.

Mr. EISENBERG. Now, the document as we see it now exhibits extremely faint writing. Can you explain the reason for that?

Mr. CADIGAN. Yes; this is due to treatment of the card for latent fingerprints by chemical process which bleaches and makes inks run.

Mr. EISENBERG. Was the document treated to restore the original color after it had been treated for fingerprints?

Mr. CADIGAN. No; from looking at this, it has been desilvered, but it has not been completely desilvered since parts of the stains of the chemical treatment remain.

Mr. EISENBERG. When you first saw the document and made your examination, was the document in its original condition, that is, had it been treated yet for fingerprints?

Mr. CADIGAN. I never saw the original.

Mr. EISENBERG. You never saw the original?

Mr. CADIGAN. No; I had a Xerox copy of the original exhibit. I did not see this original exhibit.

Mr. EISENBERG. You said before you had examined this exhibit?

Mr. CADIGAN. To be more exact, I examined a Xerox copy of this exhibit.

Mr. EISENBERG. Do you know who prepared the Xerox copy?

Mr. CADIGAN. It was submitted by our Dallas office.

Mr. EISENBERG. Was this a copy of the front and the back?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And are your photographs of the Xerox or of the original?

Mr. CADIGAN. They are made from the Xerox.

Mr. EISENBERG. Is this the first time you saw the original?

Mr. CADIGAN. I believe it is.

Mr. EISENBERG. Based upon your examination of the original at this point, and a comparison of the photograph of the Xerox copies, would you conclude

that the Xerox copies had been made before the document had been treated for fingerprints?

Mr. CADIGAN. Very definitely.

Mr. EISENBERG. Could you note a few of the points which led you to your conclusion concerning the handwriting appearing on the documents you photographed as Cadigan Exhibits Nos. 23 and 24?

Mr. CADIGAN. Yes; the handwritten signature "Lee H. Oswald" is written in a very distinctive manner. The "L" with its rather long beginning stroke, and its narrow upper, and the lower loop, is almost in the shape of a triangle. The large loop formation at the top of the "O" leading into the letter "s" and the loop at the base of the "s" is almost a carbon copy of the same characteristic appearing on Cadigan Exhibit No. 10, page 2. And again, the narrow "l" and relatively large "d" with a very pronounced ending stroke on the "d" is typical of the manner in which this man writes his signature.

So also in the hand printing, on Cadigan Exhibit No. 10, we see the "LEE" and the "OSWALD," the little hook at the start of the "L" and the reverse curves at the base of both the "L" and the following "EE's." Again, we see the use of the lowercase "l" and the lowercase "d" in the formation of "Oswald," whereas the rest of the letters are capital letters.

Here, again, the presence of the same combination of characteristics led me to the opinion that this writing had been prepared by Lee Harvey Oswald.

Mr. EISENBERG. Does that include the signature "A. J. Hidell"?

Mr. CADIGAN. No; it does not. This signature is distorted, and the standards, the known standards of Lee Harvey Oswald I had available for comparison would not justify any opinion concerning this particular signature.

Mr. EISENBERG. Did you attempt to compare it with the questioned items which you had, theretofore, identified?

Mr. CADIGAN. Yes; without reaching any opinion one way or the other.

Mr. EISENBERG. Would you conclude that it was not written by Lee Harvey Oswald?

Mr. CADIGAN. No; I would not.

Mr. EISENBERG. Does it bear any similarities to Oswald's handwriting at any point?

Mr. CADIGAN. I didn't observe any that I thought were sufficiently significant in characteristics to warrant pointing out. It is a question of judgment as to how you evaluate a given characteristic. I don't see, and do not see now, any characteristic worthy of mention to either say Oswald did or didn't do it.

Mr. EISENBERG. I hand you Commission Exhibit No. 115, consisting of a rubber stamping kit, and ask you whether you have examined that stamping kit.

Mr. CADIGAN. Yes.

Mr. EISENBERG. Did you attempt to determine whether the stamping on the document which you have photographed as Cadigan Exhibit No. 23, was produced by the rubber stamp kit, Exhibit No. 115?

Mr. CADIGAN. Yes.

Mr. EISENBERG. What conclusion did you reach?

Mr. CADIGAN. I couldn't reach any conclusion because the exhibit that I had, and from which Cadigan Exhibit No. 23 was made, is a Xerox copy, and is not adequate for the rubber stamp examination of this kind.

Mr. EISENBERG. Did you see anything which led you to believe that the stamp impression on the document you examined could not have been made by Exhibit No. 115?

Rather than answer that question, could you undertake to perform an examination based upon the original?

Mr. CADIGAN. Yes.

Mr. EISENBERG. At a subsequent time?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And you will supply us with the results of that by letter?

Mr. CADIGAN. Yes.

Mr. EISENBERG. I now hand you Commission Exhibit No. 819, consisting of a photograph of a card, "Fair Play for Cuba Committee, New Orleans Chapter,

L. H. Oswald," with Oswald's signature, or a signature purporting to be Lee H. Oswald's, and the signature "A. J. Hidell"; and Commission Exhibit No. 820, which appears to be similar to the photograph Exhibit No. 819, except that there is no signature apparent in the space where the signature A. J. Hidell appears in Exhibit No. 819, and I ask you whether you have examined these two items.

Mr. CADIGAN. Yes.

Mr. EISENBERG. Is Exhibit No. 819 a photograph of Exhibit No. 820?

Mr. CADIGAN. It is.

Mr. EISENBERG. Exhibit No. 820 is seriously discolored now and does not have the words "A. J. Hidell" apparent. Can you explain how that came about?

Mr. CADIGAN. Yes; the original Commission Exhibit No. 820 had been treated for latent fingerprints, and this is a chemical process which has removed the ink of the signature. However, on examination under strong side lighting and using low-power magnification, portions of the letters "A," "J," and "H," of the signature of the chapter president can be discerned, and are in the same place on the photograph, Commission Exhibit No. 819, as on the original, Commission Exhibit No. 820.

Furthermore, a comparison of the writing and the rubber stamp, especially with reference to the position of these with respect to lines and printing and other fixed points on the card, definitely shows that Commission Exhibit No. 819 is a photograph of Exhibit No. 820, and made before it was treated for latent fingerprints.

Mr. EISENBERG. Now, apart from this, did you take the photograph, Exhibit No. 819?

Mr. CADIGAN. No; the photograph was made in our photographic laboratory.

Mr. EISENBERG. But you did see Exhibit No. 820, before it had been discolored, did you not?

Mr. CADIGAN. I don't recall at this time. It may well be that I did, but I have no independent recollection of it now.

Mr. EISENBERG. So that your testimony that Exhibit No. 819 is a photograph of Exhibit No. 820 is based upon your evaluation of the two items as they exist now rather than upon recollection of Exhibit No. 820 before it was discolored?

Mr. CADIGAN. That is true.

Mr. EISENBERG. Do you know why Exhibit No. 820 was not reprocessed or desilvered?

Mr. CADIGAN. No, this is a latent fingerprint matter.

Mr. EISENBERG. Can you explain why the signature, "Lee H. Oswald" or rather "L. H. Oswald" is apparent, while the signature "A. J. Hidell" is not?

Mr. CADIGAN. Different inks.

Mr. EISENBERG. Some inks are more soluble in the solution used for fingerprint tests than others?

Mr. CADIGAN. Definitely.

Mr. EISENBERG. Other Commission Exhibits, specifically Nos. 788, 801, and 802 also appear to have been treated for fingerprints?

Mr. CADIGAN. That is correct.

Mr. EISENBERG. Exhibit No. 788 has been desilvered?

Mr. CADIGAN. Desilvered, and Exhibits Nos. 801 and 802 are still in their original silvered condition.

Mr. EISENBERG. Did you see these items before they were treated for fingerprints?

Mr. CADIGAN. I know I saw Exhibit No. 788 before it was treated for fingerprints. As to Exhibits Nos. 801 and 802, I don't know at this time.

Mr. EISENBERG. Are the photographs which you produced photographs of the items before they were treated for fingerprints or after?

Mr. CADIGAN. Yes; before they were treated for fingerprints. In other words, it is regular customary practice to photograph an exhibit before it is treated for latents for exactly this reason, that in the course of the treatment there may be some loss of detail, either total or partial.

Mr. EISENBERG. Did you take the photographs?

Mr. CADIGAN. No.

Mr. EISENBERG. Are you referring to the photographs which you produced at an earlier point?

Mr. CADIGAN. The photographs that I have produced here today, the various enlargements, were made from negatives. These negatives, in turn, were made at the time the original exhibits were photographed, and this would be before latent fingerprint treatment.

Mr. EISENBERG. I asked you when I introduced those exhibits whether they had been prepared by you or under your supervision?

Mr. CADIGAN. That is true.

Mr. EISENBERG. You meant, then, that they were prepared under your supervision, or did you mean that they were prepared by you in the sense that you made the enlargement from the negative?

Mr. CADIGAN. No; they were prepared under my supervision. In other words, I maintain all of the negatives in connection with the document aspects of this file in my room, under lock and key, at all times. I pull the negatives that I want enlarged, and I prepare a photograph requisition, take it down to our photographers, tell them what I want, and then later go back and pick up the enlargements, and check them to be sure they are just what I want.

Mr. EISENBERG. What about the negative itself? Can you state of your own knowledge whether the negative itself is of the original?

Mr. CADIGAN. Only, insofar, that I know that on November 23, when the vast bulk of this material came in, that it was photographed. Some of these items I saw before they were photographed, and some afterward. But the exact sequence to select one item out of four or five hundred, I cannot, in all honesty, say I definitely recall seeing this before it was photographed.

Mr. EISENBERG. Can you explain what the procedure is when a document came in involving the assassination?

Mr. CADIGAN. Initially, the first big batch of evidence was brought into the laboratory on November 23 of 1963 and this consisted of many, many items.

Mr. EISENBERG. 1963?

Mr. CADIGAN. November 23, 1963. It was a very large quantity of evidence that was brought in. There were several agent examiners available to evaluate this material. There were supervisory officials, there were representatives from our Internal Security Division, all of whom had an interest in this matter, and it was decided they wanted certain items treated for latent fingerprints. The basic rule is always that before an exhibit is treated for latent fingerprints it is photographed, and that is what was done in this case.

Mr. EISENBERG. What happens to the negative after it is photographed? Were they all given to you?

Mr. CADIGAN. Yes; the negatives that pertain to the document aspects I took over and maintained under my control. Negatives pertaining to firearms evidence or hairs or fibers, they were turned over to Mr. Frazier.

Mr. EISENBERG. So under the regular procedure, as soon as the document came in it would be photographed, before it was treated for latents, and the negative would be turned over to you?

Mr. CADIGAN. Yes.

Mr. EISENBERG. So at least if the procedure had been followed, any negative you had would be a negative of a document before it had been treated for fingerprints, is that correct?

Mr. CADIGAN. That is correct.

Mr. EISENBERG. Now, returning to Commission Exhibits Nos. 820 and 819, did you prepare a photograph which would show the remnants of the signature "A. J. Hidell" on the Commission Exhibit No. 820?

Mr. CADIGAN. No.

Mr. EISENBERG. Is the preparation of such a photograph possible?

Mr. CADIGAN. I doubt it very much, because the indentations are so faint that the enlargement would serve no useful purpose. Actually, the best examination is by low-power magnification under the proper lighting.

Mr. EISENBERG. Did you attempt to determine whether the signature of Lee H. Oswald on this card was written by Lee H. Oswald?

Mr. CADIGAN. Yes.

Mr. EISENBERG. What was your conclusion?

Mr. CADIGAN. That the Lee H. Oswald signature on Commission Exhibit No. 820 was written by Lee H. Oswald.

Mr. EISENBERG. What about the signature "A. J. Hidell"?

Mr. CADIGAN. I was unable to reach a conclusion. First of all, at the time I compared this signature the known standards of Lee Harvey Oswald were inadequate for this particular comparison.

I did, however, note that there were certain differences in this signature that indicate the possibility of someone other than Oswald having prepared it. But in my opinion, the characteristics I observed were not of sufficient weight for a positive opinion in this regard.

Mr. EISENBERG. Could you note those characteristics?

Mr. CADIGAN. Yes; I think the capital letter "A" and the capital letter "H" in "Hidell" are different from the "A's" that Oswald makes, that appear in the enlarged photographs, Cadigan Exhibits Nos. 4 through 10.

Mr. EISENBERG. Anything else?

Mr. CADIGAN. I think the lower case "d," especially in the rounded shape of the body of it and the relatively short height of the staff, so that the staff compared to the body is very short. The "J" is made different or in a different manner than Oswald regularly makes or usually makes his "J's" in the known standards, but again it is a question of judgment as to whether you believe a combination of characteristics is enough to either eliminate or identify. In this instance, in my opinion, these differences point to the possibility of another writer other than Oswald.

Mr. EISENBERG. You indicated before, also, that there was another ink used.

Mr. CADIGAN. That is correct. This, of course, in and of itself, is of no consequence, since the same person can use two different pens, so the color of the ink would not be, in my mind, significant.

Mr. EISENBERG. Does that signature appear to have been written naturally?

Mr. CADIGAN. Yes.

Mr. EISENBERG. At normal speed?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Any evidence of retouching?

Mr. CADIGAN. No.

Mr. EISENBERG. Generally, were the signatures and other handwritings in the questioned documents you have reviewed in this deposition today written naturally?

Mr. CADIGAN. With the exception of the "Hidell" signature on his certificate of vaccination. There is, in my opinion, distortion present there. But, by and large, in fact in almost all of the various handwritings, hand printings, and signatures, there is no evidence of disguise or distortion, in my opinion.

Mr. EISENBERG. What type of evidence indicates disguise or distortion?

Mr. CADIGAN. Distortion and disguise can take many forms. It can be in the form of a change in slant, a deliberate malformation of the individual letters. It can be shown in broken or interrupted strokes. It can be shown in waves or wiggles in the line itself which should not normally be there. It may be occasioned by a person using other than normal hand, a left-handed person writing with his right hand or a right-handed person writing with his left hand. All these introduce elements of distortion or disguise. The extent of it can only be determined by comparing a given writing with known writings, and observing the characteristics present, and on that basis you can then formulate an opinion as to whether or not there is any appreciable amount of distortion or disguise.

Mr. EISENBERG. How would you evaluate the possibility of another person having simulated the handwriting of Lee Harvey Oswald in these questioned documents?

Mr. CADIGAN. I don't think there is any possibility.

Mr. EISENBERG. On what do you base that?

Mr. CADIGAN. I base that on 23 years experience and judgment and the examination of the documents and the various writings involved in this instance.

Mr. EISENBERG. And do I understand that if that had happened, the person would have left evidence behind which you would have detected?

Mr. CADIGAN. In my opinion, yes.

Mr. EISENBERG. And that would be in what form?

Mr. CADIGAN. It would be in many forms. Failure to incorporate into the writings things that should be there, and including in the writings things that are not in Oswald's writing, differences in slant, spacing, proportions of letters, both to other letters and proportions of letters within themselves, the adoption of the various variations that you find in the known writings. When the amount of writing approaches the amount involved here, there is a large, a relatively large volume of questioned writings. The possibilities of successful or undetectable forgery, in my opinion, are nil.

Mr. EISENBERG. Mr. Cadigan, I now hand you Commission Exhibit No. 1, which is a note in the Russian language in cyrillic print, and ask you whether you have examined that item?

Mr. CADIGAN. Yes.

Mr. EISENBERG. I now hand you Commission Exhibit Nos. 55, 56, and 66, consisting of various notes in the cyrillic language, rather in the Russian language in cyrillic print, and ask you whether you have examined those notes?

Mr. CADIGAN. Yes.

Mr. EISENBERG. Who is the purported signer of those notes, Exhibits Nos. 55, 56, and 66?

Mr. CADIGAN. From the translation that I read these are purportedly written by Lee Harvey Oswald.

Mr. EISENBERG. Now, for the record, these have also been identified by Marina as having been written by Lee Harvey Oswald.

And these are signed Alek in some or all cases?

Mr. CADIGAN. Yes; they are signed A-l-e-k, Alek in all three instances.

Mr. EISENBERG. Again, for the record, this is a name which was used for Oswald during his period of staying in the Soviet Union.

Have you attempted to determine whether Commission Exhibit No. 1 was written by the person who wrote Commission Exhibits Nos. 55, 56, and 66?

Mr. CADIGAN. Yes.

Mr. EISENBERG. And what was your conclusion?

Mr. CADIGAN. That Commission Exhibit No. 1 was written by Lee Harvey Oswald.

Mr. EISENBERG. Have you prepared photographs of Commission Exhibits Nos. 55, 56, and 66?

Mr. CADIGAN. Yes; of the letters contained in those exhibits.

Mr. EISENBERG. I will mark those as Cadigan Exhibits Nos. 25, 26, 27, and 28.

(The documents referred to were marked Cadigan Exhibits Nos. 25, 26, 27, and 28.)

Mr. EISENBERG. Have you also taken a photograph of Commission Exhibit No 1?

Mr. CADIGAN. Yes.

Mr. EISENBERG. I will mark that as Cadigan Exhibit No. 29——

Mr. CADIGAN. Front and back.

Mr. EISENBERG. And Cadigan Exhibit No. 30, representing respectively the back and front of Commission Exhibit No. 1.

(The documents referred to were marked Cadigan Exhibits Nos. 29 and 30.)

Mr. EISENBERG. Now, by use of photographs Cadigan Exhibits Nos. 25 through 30, could you explain some of the reasons which led you to your conclusion?

Mr. CADIGAN. Yes; and I would point out that in addition to the four enlargements written in Russian, I also used Cadigan Exhibits or the documents represented by Cadigan Exhibits Nos. 4 through 10, the known standards of Oswald, since there are English letters interspersed with the Russian writing on Commission Exhibit No. 1. Thus, for example, in the second line in Cadigan Exhibit No. 29 appears the word "to" which is directly comparable to the

same word appearing in Cadigan Exhibits Nos. 4 through 10. This is characterized by a long sweeping upstroke, and the recurving downstroke cuts the staff about in half. And the "o" is without any tail, and it is relatively small and set fairly close into the staff. The "t" crossing is rather long and fairly high.

I noted these same characteristics in Cadigan Exhibits Nos. 4 through 10.

Further, there is the wording in English, "Red Cross" appearing about two-thirds of the way down the side of the page beginning with the numeral 6, and here, again, I noted the same characteristics in the English hand printing in Cadigan Exhibits Nos. 4 through 10. Again, the use of the small "e" and the small "d" in conjunction with the capital "R," and then in the word "cross" he has used the capital letters. On the face of the Commission Exhibit No. 1 appear the printed English letters "ERVAY" which are almost directly comparable with the name "Lee Harvey Oswald" in Cadigan Exhibit No. 10. The "E" here is characterized by the little loop at the base of the staff. The "R" has a flat closed loop on the left side of the staff. The "Y" is constructed of two strokes, almost a perfect "V" shape for the body and a tail slanting back away from it.

The letter "p" or what appears to be the letter "p," indicated by the roman numeral 2 and a red arrow, is similar to the English "p," characterized by a long narrow staff without much of a loop. The body of the letter extends above the staff and the base is open. The bottom of the letter is not closed in.

The numeral "1" on the chart Cadigan Exhibit No. 29 points to a Russian character which resembles somewhat the English letter "G," the capital letter "G." This is characterized by a rather large elongated loop along the left side of the upstroke, and the finishing stroke is short and straight.

The numeral "3" in red on Cadigan Exhibit No. 29 points to the Russian word which resembles the English word "tbl." The "t" has a very long beginning upstroke. The crossing of the "t" is high and is at the top of the letter. The "b" is formed with a straight staff on the back side, and there is a well spaced connection to the following letter which resembles the English letter "i."

I further noted that on this same side of the document shown in Cadigan Exhibit No. 29 in the second to the last line from the bottom appears the combination "exa," which is directly comparable with the "exa" in "Texas" appearing on the photograph Cadigan Exhibits Nos. 6, 4, and 9, among others. Again this characteristic way of making the "x" is almost like a "u" or an open "o." There is a little extra stroke that breaks off of the "x" so that instead of looking like "exa" it has the appearance of "eva" with a diagonal stroke through the "v."

The number "6" in red on Cadigan Exhibit No. 29 points to the combination which looks like the English letters "Ha," where the same two letters appear on the photographs, Cadigan Exhibits Nos. 25 and 26, the "H" being made in two roughly parallel straight strokes. The "a" is almost in the form of a circle, and the tail of the "a" runs out horizontally to the line of writing.

On Cadigan Exhibit No. 30, the number "8" in red with an arrow points to the combination of letters which resemble the English letters "tak," and this same combination or the same letters appear on Cadigan Exhibit No. 27. Again, the "t" has a rather long beginning stroke. The crossing is high and long, and I noted that the "k" in both instances is made in a similar manner.

The figure "9" on Cadigan Exhibit No. 30 also points to a different style of "k," or what resembles the English letter "k," in that it is composed of a straight staff and the body or the right portion of the letter is almost the shape of a "v" tilted on its side.

Because of this combination of characteristics, as well as many others, I reached the opinion that Government's Exhibit No. 1 was written by Lee Harvey Oswald.

Mr. EISENBERG. Commission Exhibit No. 1, that is?

Mr. CADIGAN. Yes, of which Cadigan Exhibits Nos. 30 and 29 are photographic enlargements.

Mr. EISENBERG. I have no further questions, Mr. Cadigan. Thank you very much. You have been extremely helpful.