

Mr. LAWSON. No; I do not.

Mr. STERN. Do you recall anything else that was said by the eyewitness that Mr. Sorrels had arranged to be brought in for the showup, anything else that he said while he was standing talking to you or Mr. Sorrels or while Oswald and others were on the——

Mr. LAWSON. No; I don't

Mr. STERN. Then shortly after this showup, or shortly after this interview in the showup room, you left for Washington, I take it?

Mr. LAWSON. Yes; there had been quite a bit of discussion during the evening as to what evidence they had up to this time, the rifle, clothing, et cetera, would be brought to Washington to the FBI lab to be worked on, or whether the police would keep it in their custody for a little while longer for their investigation, and there was quite a bit of discussion by various people all evening long.

And when it was finally decided it would be released by the Dallas police, the rifle and other evidence to return to Washington, Inspector Kelley told me to return on the special plane that was flying the evidence and the accompanying FBI agent back to Washington.

Mr. DULLES. Was the evidence turned over to you or the FBI?

Mr. LAWSON. To the FBI, sir. I just returned on the plane.

Mr. STERN. Was there at one point a reluctance on the part of the Dallas police to release the evidence?

Mr. LAWSON. Yes, sir. They felt, from what I overheard, they felt they might be able to get an identification of the rifle from one of the local gunshops. There were various leads that they wanted to follow out on that rifle that evening and the next day. I believe there was some talk that they couldn't locate some of the gunshop owners, and some of the other things they wanted to do. So they wished to keep this rifle for a day or so and then release it.

Mr. STERN. I am told this has been covered with other witnesses, so there is no need to pursue it. I have nothing further.

Representative FORD. How long was this interview where Oswald was present?

Mr. LAWSON. The press interview, sir?

Representative FORD. How long was he before the press?

Mr. LAWSON. I would say 5 minutes at the most.

Representative FORD. I have no other questions.

Mr. DULLES. I have no other questions.

Representative FORD. Is that all, Mr. Stern?

Mr. STERN. Yes, sir.

Representative FORD. Thank you very much, Mr. Lawson, you have been very helpful.

Mr. DULLES. We appreciate it very much.

(Whereupon, at 5:35 p.m., the President's Commission recessed.)

*Thursday, April 30, 1964*

### TESTIMONY OF ALWYN COLE

The President's Commission met at 9:25 a.m. on April 30, 1964, at 200 Maryland Avenue NE., Washington, D.C.

Present were Chief Justice Earl Warren, Chairman; Senator John Sherman Cooper, Representative Gerald R. Ford, and John J. McCloy, members.

Also present were J. Lee Rankin, general counsel; and Melvin Aron Eisenberg, assistant counsel.

The CHAIRMAN. The Commission will be in order.

The purpose, Mr. Cole, of today's hearing is to take the testimony of Mr. James C. Cadigan and yourself. Mr. Cadigan is a questioned documents expert

of the Federal Bureau of Investigation, and as we all know, you are a questioned documents expert of the Department of the Treasury. We desire your testimony for technical assistance to the Commission in connection with the papers used in this hearing concerning the assassination.

Mr. COLE. I understand.

The CHAIRMAN. Would you raise your right hand and be sworn, please?

Do you solemnly swear the testimony you are about to give before this Commission shall be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. COLE. I do.

The CHAIRMAN. Mr. Eisenberg, you may conduct the examination.

Mr. EISENBERG. Mr. Cole, could you state your full name, please?

Mr. COLE. That is Alwyn Cole.

The CHAIRMAN. I am obliged to spend the morning with the Court. We are hearing arguments today and when I leave, in a short time, Congressman Ford will preside at the meeting and conduct it.

Mr. EISENBERG. What is your position, Mr. Cole?

Mr. COLE. I am employed as examiner of questioned documents with the U.S. Treasury Department.

Mr. EISENBERG. Can you state your specific duties in this position?

Mr. COLE. I am required to examine any document in which the Treasury Department is interested when a question arises about the genuineness of the document or the identity of any of its parts. A good deal of this work includes the identification of handwriting.

Mr. EISENBERG. From what sources is work referred to your laboratory, Mr. Cole?

Mr. COLE. From the several divisions of the Office of the Treasury of the United States, and from the various Bureaus of the Treasury Department, including the enforcement agencies: Secret Service, narcotics, customs, internal revenue service.

Mr. EISENBERG. Mr. Cole, can you tell us how you prepared yourself to carry on this work of questioned documents examination?

Mr. COLE. I served an apprenticeship of 6 years under Mr. Burt Farrar from 1929 to 1935. Mr. Farrar at that time was the document examiner for the Treasury Department, and at the time of my association with him he had had over 40 years of experience in the work.

Under Mr. Farrar's tutelage I studied the leading textbooks on the subject of questioned documents, which includes handwriting identification, and I received from him cases for practice examination of progressively increasing difficulty, made these examinations, prepared reports for his review, and also during this period I had assignments to other Government laboratories, those of the Bureau of Engraving and Printing and the Government Printing Office, and I had close association with other technical workers in the government service.

I succeeded Mr. Farrar in 1935, and I have had daily practical contact with questioned problems from 1929 to the present date.

Mr. EISENBERG. Mr. Cole, are you a member of any associations of persons engaged in questioned documents examination?

Mr. COLE. Yes, sir; I am.

Mr. EISENBERG. Could you state those positions?

Mr. COLE. I am a member of the American Society of Questioned Document Examiners, of the International Association for Identification, and of the American Academy of Forensic Science.

Mr. EISENBERG. Do you give instructions to others in this work, Mr. Cole?

Mr. COLE. I do. I am an instructor at the Treasury Department Law Enforcement Officer Training School.

Mr. EISENBERG. Have you had occasion to testify in Federal or other courts?

Mr. COLE. Yes, sir; I have, many times.

Mr. EISENBERG. Mr. Chairman, I ask that this witness be permitted to give expert testimony on the subject of questioned documents.

The CHAIRMAN. The witness is qualified.

Mr. EISENBERG. Mr. Cole, I now show you a photograph of an envelope and a purchase order. The envelope is addressed to Klein's, in Chicago, from one

"A. Hidell," and the purchase order, which is included in the photograph, is an order also addressed to Klein's from "A. Hidell." and I ask you whether you have examined this photograph.

Mr. COLE. I have.

Mr. EISENBERG. Mr. Chairman, may I have this admitted into evidence as Commission Exhibit 773?

The CHAIRMAN. It may be admitted.

(Commission Exhibit No. 773 was marked and received in evidence.)

Mr. EISENBERG. For the record, this photograph was produced from a roll of microfilm in the possession of Klein's, a Chicago firm which sells weapons of various types, and which sold the assassination weapon.

Now, Mr. Cole, I am going to hand you a group of documents which I will identify for the record.

The first is an application form to Cosmos Shipping Co., Inc., signed Lee H. Oswald, and containing handprinting and cursive writing. Have you examined that document, Mr. Cole?

Mr. COLE. Yes, sir.

Mr. EISENBERG. May I have this admitted as Commission Exhibit 774, Mr. Chairman?

The CHAIRMAN. It may be admitted.

(Commission Exhibit No. 774 was marked and received in evidence.)

The CHAIRMAN. I wonder if it might not be better to put the tab on the document itself because someone in handling it might take it out of the envelope.

(Discussion off the record.)

Mr. EISENBERG. The second document is a letter addressed to the American Embassy, entitled "Affidavit of Support," and signed Lee H. Oswald.

Mr. COLE. I have examined this document.

Mr. EISENBERG. I would like that admitted as 775, Mr. Chairman.

The CHAIRMAN. It may be admitted.

(Commission Exhibit No. 775 was marked and received in evidence.)

Mr. EISENBERG. The third is a group of checks made payable to the order of Lee H. Oswald, and the company listed on the top of the check is Jaggars-Chiles-Stovall, Inc. These checks are endorsed on the back "Lee H. Oswald," and I ask you whether you have examined these documents?

Mr. COLE. I have examined these documents.

Mr. EISENBERG. Mr. Chairman, may these be admitted as 776?

The CHAIRMAN. They may be admitted.

(Commission Exhibit 776 was marked and received in evidence.)

Mr. EISENBERG. Here I would like to mark the envelope.

The fourth item is a library card for the New Orleans Parish, or the Orleans Parish, and the signature is Lee H. Oswald.

Mr. COLE. I have examined this document.

Mr. EISENBERG. May I have this admitted as 777?

The CHAIRMAN. It may be admitted.

(Commission Exhibit No. 777 was marked and received in evidence.)

Mr. EISENBERG. The next item consists of photographs of two letters to the Department of State, both concerning payments on loans, repayments of loans, and both signed "Lee H. Oswald," and I ask whether you have examined these documents?

Mr. COLE. I have examined these photographs.

Mr. EISENBERG. May these be admitted as 778?

The CHAIRMAN. They may be admitted.

(Commission Exhibit No. 778 was marked and received in evidence.)

Mr. EISENBERG. Next are two pages of writing on lined and holed paper entitled "The Communist Party of the United States Has Betrayed Itself!" and numbered "1" and "2," with some discoloration. Mr. Cole, have you examined those?

Mr. COLE. I have examined these. The discoloration mentioned was on the documents when I first saw them.

Mr. EISENBERG. Mr. Chairman, may these be admitted as 779?

The CHAIRMAN. Admitted.

(Commission Exhibit No. 779 was marked and received in evidence.)

Mr. EISENBERG. Next is a file entitled "Oswald, Lee Harvey, USMC"—which stands for Marine Corps—serial number or file number 1653230, and then another number appears, 8812, and this has various writing, certain of which are signed by Lee H. Oswald, together with letters to Lee H. Oswald, and I ask you if you have examined this file, Mr. Cole?

Mr. COLE. Yes; I have.

Mr. EISENBERG. May this be admitted as 780, Mr. Chairman?

The CHAIRMAN. It may be admitted.

(Commission Exhibit No. 780 was marked and received in evidence.)

Mr. EISENBERG. Next is a passport application signed "Lee H. Oswald," dated in the upper right "Passport Issued June 25, 1963," and there are other dates which appear—principally June 24, 1963—in other portions of the application. Mr. Cole, have you examined that?

Mr. COLE. I have examined this document.

Mr. EISENBERG. May I have this admitted as 781, Mr. Chairman?

The CHAIRMAN. It may be admitted.

(Commission Exhibit No. 781 was marked, and received into evidence.)

Mr. EISENBERG. Next is a letter entitled "Dear Sirs: This is in regard to my wife's file" and so forth, addressed apparently to the Immigration and Naturalization Offices in San Antonio, Tex., signed "Lee H. Oswald," together with another such letter addressed to the same—addressed to Dallas, Tex., the Office of Immigration and Naturalization, Dallas, Tex., signed "Lee H. Oswald," and a third letter to Room 1402, Rio Grande Building, 251 North Field Street.

These letters, all signed "Lee H. Oswald", and all having to do with aspects of immigration and naturalization, are entitled or numbered on the backs respectively 00645, dated July 5, 00146, dated—that is July 5, 1962, in the first—00146, dated July—

Mr. COLE. I believe it is 6.

Mr. EISENBERG. July 6, 1962, and 010156, dated July 10, 1962. Have you examined these three documents?

Mr. COLE. I have.

Mr. EISENBERG. May these be admitted as 782A, 782B, and 782C, Mr. Chairman?

The CHAIRMAN. They may be admitted under those numbers.

Mr. EISENBERG. And finally, an item consisting of two subitems, one a short note signed "Lee H. Oswald" and beginning, "Please enroll me as an associate member at \$2.00," relating to the ACLU, and the second item being an application to the American Civil Liberties Union national office, "Please enroll me as a new member of the ACLU," name printed "Lee H. Oswald," and I ask you whether you have examined these two items.

Mr. COLE. I have.

Mr. EISENBERG. May these be admitted under the common caption 783?

The CHAIRMAN. They may be admitted.

(Commission Exhibits Nos. 782A, 782B, 782C, and 783 were marked and received in evidence.)

Mr. EISENBERG. Now, Mr. Cole, have you compared the documents 774-783, all signed "Lee H. Oswald," with the document 773, the photograph of a purchase order to Klein's Sporting Goods, for purposes of determining whether the author of the documents 774-783 also authored the document 773?

Mr. COLE. Yes, sir; I have.

Mr. EISENBERG. What is your conclusion?

Mr. COLE. It is my conclusion that the author of the standard writing bearing the exhibit numbers which you just related—

Mr. EISENBERG. 774-783?

Mr. COLE. 774-783, is the author of the handwriting on Commission Exhibit 773.

Mr. EISENBERG. Now, you referred to the term "standard writing," Mr. Cole. Can you explain that term?

Mr. COLE. I used these as the standard writing, as a basis for comparison.

Mr. EISENBERG. "These" referring to 774-783?

Mr. COLE. Yes.

Mr. EISENBERG. Those standards would be what you would refer to, therefore, what might also be referred to as "known" items?

Mr. COLE. Yes, sir.

Mr. EISENBERG. And the Document 773 is the "questioned" item?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Now for the record, in the future I will refer collectively to 774-783 as the standards.

The CHAIRMAN. They were all written by the same person?

Mr. COLE. Yes, Your Honor.

Mr. EISENBERG. Mr. Cole, were these the only standards or potential standards from which you had to draw, or were a larger group of potential standards furnished to you?

Mr. COLE. I saw a larger group of papers of potential standards.

Mr. EISENBERG. Can you state the circumstances under which this larger group was given to you?

Mr. COLE. I came to your office and reviewed a very large group of papers, and I pointed out what I would regard as a cross section or representative sample from that larger group of papers.

Mr. EISENBERG. And can you explain the basis on which you took the actual standards 774-783, that is, on which you selected those documents from the larger possible group of documents which might have served as standards?

Mr. COLE. Well, two bases: One, that the writing is fairly clear and legible; most of these documents are not stained or mutilated in any way; all the writing can be seen clearly. And, two, I think that this group of papers gives a complete, reasonably complete record of the writing habits of the author.

Mr. EISENBERG. Mr. Cole, continuing on these standards for a moment, have you examined other questioned documents besides Commission 773 at my request?

Mr. COLE. I have.

Mr. EISENBERG. Do the standards which you selected, that is, items 774 through 783, in your opinion provide a sufficient basis for comparison of the other questioned documents which you also examined?

Mr. COLE. They do provide a satisfactory basis for comparison.

Mr. EISENBERG. Are they sufficiently close in time, both to 773 and to the other questioned documents which you have examined?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Does handwriting change over the course of time, Mr. Cole?

Mr. COLE. Handwriting does change over the course of time, but usually fairly large periods are involved, 5 or 10 years or such.

Mr. EISENBERG. Is there any variation in the writing instruments which were used to produce the various standards?

Mr. COLE. Yes; I think a variety of instruments were used.

Mr. EISENBERG. Does this affect your ability to use the standards as against the questioned documents or as against those questioned documents produced with other writing instruments?

Mr. COLE. It does not adversely affect my ability to make a comparison.

Mr. EISENBERG. That is, you are able to compare a document produced by a ballpoint pen with a document produced by a fountain pen and vice versa?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Do the standards show both cursive writing and handprinting?

Mr. COLE. Yes.

Mr. EISENBERG. Can you explain meaning of the term "cursive writing"?

Mr. COLE. Cursive means connected writing, as the term is used, with a running connected hand, whereas handprinting refers to the separate writing of letters without the connection of letters and usually involves a somewhat different style for the formation of letters, that is Roman capital letters or the lower case letters.

Mr. EISENBERG. Cursive writing then is the type of writing which we normally use, which connects—in which the letters are connected, the type which is taught in schools?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Mr. Cole, some of the standards which are in the group 774 to 783 are photographs rather than originals.

Mr. COLE. That is correct.

Mr. EISENBERG. Does a photograph in your opinion provide a sufficient stand-

ard on which to base a conclusion as to a questioned document?

Mr. COLE. Well, I believe these particular photographs are satisfactory for that purpose.

Mr. EISENBERG. Would you draw a conclusion as to the origin of a questioned document if your only standard was a photograph?

Mr. COLE. If the photographs were comparable to the photographs we have in this case; yes.

Mr. EISENBERG. Mr. Cole, you examined the standards in their entirety, did you?

Mr. COLE. I did.

Mr. EISENBERG. And you have stated in answer to an earlier question they were all prepared by the same person, as I understood it?

Mr. COLE. Yes, sir.

Representative FORD. What is unique about these photographs that gives you this certainty or—

Mr. COLE. Well, I did not mean to indicate they are of a specially good quality, but I had in mind the possible existence of other photographs which would be much poorer and would not provide a satisfactory basis. I think that on these photographs I can see everything that is necessary to see to appreciate writing habit.

Mr. EISENBERG. Now, when you say the standards were all written by one person, that is with the exception of initials put on by law enforcement officers and the like?

Mr. COLE. That is correct.

Mr. EISENBERG. Now, Mr. Cole, returning to 773, the questioned document, can you tell the Commission how you formed the conclusion that it was prepared by the author of the standards, that is, what steps you followed in your examination and comparison, what things you considered, what instruments or equipment you used, and so forth?

Mr. COLE. I made first a careful study of the writing on Commission Exhibit 773 without reference to the standard writing, in an effort to determine whether or not this writing contained what I would regard as a basis for identification, contained a record of writing habit, and as that—as a result of that part of my examination, I concluded that this is a natural handwriting. By that I mean that it was made at a fair speed, that it doesn't show any evidence of an unnatural movement, poor line quality, tremor, waver, retouching, or the like. I regard it as being made in a fluent and fairly rapid manner which would record the normal writing habits of the person who made it.

I then made a separate examination of the standards, of all of the standard writings, to determine whether that record gave a record of writing habit which could be used for identification purposes, and I concluded that it, too, was a natural handwriting and gave a good record of writing habit.

I then brought the standard writings together with the questioned writing for a detailed and orderly comparison, considering details of letter forms, proportion, pen pressure, letter connections, and other details of handwriting habit, and as a part of my examination I made photographs of the standard writings and brought certain parts of them together on a chart for greater convenience in comparing the standards with the questioned writing.

The CHAIRMAN. Gentlemen, I think it will be necessary for me to leave now, Congressman Ford, you will preside, will you, please? I appreciate it.

(Discussion off the record.)

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

Representative FORD. Proceed.

Mr. EISENBERG. Mr. Cole, you mentioned that the writing in both the questioned document, 773, and the standard seem to be produced at a natural speed.

Mr. COLE. Yes.

Mr. EISENBERG. How do you determine that any document is produced at a natural speed?

Mr. COLE. Because that conforms to a large number of other specimens that I have examined over a period of years which I knew to be normal writing. Specifically, it agrees with respect to the quality of the line, which is reasonably good in this handwriting and which I would expect to be quite poor in an

unnatural specimen, one that had been made at an abnormally reduced writing speed.

Mr. EISENBERG. Can you expand further on what you mean by "quality of the line"?

Mr. COLE. Well, quality of line is—refers to the sharpness of the edges of lines, to the absence of tremor, waver, patching, retouching, and similar defects.

Mr. EISENBERG. Mr. Cole, could you explain the basis on which you were able to make an identification of a questioned writing as being authored by the person who wrote a standard writing?

Mr. COLE. This is based upon the principle that every handwriting is distinctive, that since the mental and physical equipment for producing handwriting is different in every individual, each person produces his own distinctive writing habits. Of course, everyone learns to write in the beginning by an endeavor to repeat ideal letter forms, but practically no one is able to reproduce these forms exactly. Even though a person might have some initial success during the active period of instruction, he soon departs from these and develops his own habits. It may be said that habit in handwriting is that which makes handwriting possible. Habit is that which makes handwriting efficient. If it were not for the development of habit, one would be obliged to draw or sketch.

Some habit would be included even in those efforts. But the production of handwriting rapidly and fluently always involves a recording of personal writing habit. This has been confirmed by observation of a very large number of specimens over a long period of time, and it has further been demonstrated by, on my part, having a formal responsibility for rendering decisions about the identification of handwriting based upon an agreement of handwriting habit in situations where there would be a rigorous testing of the correctness of these decisions by field investigators, for example, of the law-enforcement agencies, and a demonstration that these results were confirmed by other evidence.

This is the basis for identification of handwriting.

Mr. EISENBERG. As I understand it, you mean you would make a preliminary identification of a suspect on the basis of handwriting and it has been your experience that field investigation confirms that determination with additional evidence?

Mr. COLE. This is not what I would call "a preliminary identification." This would be a formal presentation and formal report to other persons who are interested in the problem, and the investigation would be continued from that point.

Mr. EISENBERG. Mr. Cole, is handprinting as well as cursive writing unique to every individual?

Mr. COLE. Well, I would say much of it is. Not all of it. Handprinting doesn't always give the same amount of information about writing habit as does cursive writing.

Mr. EISENBERG. Are you always able to identify the author of a writing if you have a questioned document and a standard document?

Mr. COLE. No, sir; not always.

Mr. EISENBERG. And can you expand on that?

Mr. COLE. Well, some handwriting doesn't include enough distinctive features, or in some cases there may not be enough of it to give a complete enough record of handwriting habits to be certain that you have a basis for identification.

Mr. EISENBERG. Do you need a sufficient basis in both the questioned and the standard?

Mr. COLE. Yes.

Mr. EISENBERG. Do the standards that you have selected provide a sufficient basis for making identification?

Mr. COLE. They do.

Mr. EISENBERG. Without going into every questioned document separately, do the questioned documents which you have reviewed at my request each individually provide a sufficient basis for comparison?

Mr. COLE. Yes, sir.

Representative FORD. Is there a difference of opinion in your profession as to how much or how little you need for this purpose?

Mr. COLE. Yes; I think it would vary from one worker to another, depending upon his experience in the work.

It sometimes happens that a person with limited experience may go to either one extreme or to the other. He may sometimes be rather reckless. Other times he may be extremely cautious.

Representative FORD. But the decision you have made in this case would be what other experts, in your opinion, would agree to?

Mr. COLE. I would say others with whom I am familiar, with whom I have worked and talked to, corresponded with over the years.

Mr. EISENBERG. Mr. Cole, can you characterize the skill of the author of the standards and Exhibit 773?

Mr. COLE. I would say it is an average skill.

Mr. EISENBERG. Are some of the standards prepared more skillfully than others?

Mr. COLE. Yes.

Mr. EISENBERG. Can you account for that at all?

Mr. COLE. I think there is a natural range of the use of skill in handwriting, possibly depending upon the purpose or the physical surroundings for producing handwriting or the writing instruments. When the conditions for producing handwriting are the best, and one's purpose is a perfectly free expression of his handwriting habit, then he may produce a better handwriting than when conditions are poor, such as an awkward writing position or poor writing tools.

Mr. EISENBERG. Mr. Cole, you mentioned earlier that you had prepared some photographs or charts——

Mr. COLE. Yes.

Mr. EISENBERG. Showing the standards or portions thereof?

Mr. COLE. Yes.

Mr. EISENBERG. Could you produce those charts?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Now, Mr. Cole, you have produced here three large charts, each entitled "Standard Writing" and bearing the designations "A," "B," and "C" in the upper left-hand corners. Can you tell us precisely what is reflected on these charts A, B, and C?

Mr. COLE. These charts show excerpts from the standard writings, sometimes showing a portion of a line, other times showing a single word or a block of writing from the standard exhibits.

Mr. EISENBERG. Were these charts, which are in the form of photographic reproductions, prepared by you or under your supervision, Mr. Cole?

Mr. COLE. They were.

Mr. EISENBERG. Are they true and accurate reproductions of the portions of the standard writings they purport to reproduce?

Mr. COLE. They are.

Mr. EISENBERG. Mr. Chairman, may these be admitted as 784A, B, and C? Representative FORD. They may be admitted.

(Commission Exhibits Nos. 784A, B, and C were marked and received in evidence.)

Mr. EISENBERG. Mr. Cole, have you prepared a photograph of Exhibit 773?

Mr. COLE. I have.

Mr. EISENBERG. Will you produce that photograph, please? Was that photograph 773 made by you or under your supervision?

Mr. COLE. Yes, sir.

Mr. EISENBERG. And is it a true and accurate reproduction of 773?

Mr. COLE. Yes, it is.

Mr. EISENBERG. May this be admitted as 785, Mr. Chairman?

Representative FORD. It may be.

(Commission Exhibit No. 785 was marked and received in evidence.)

Mr. EISENBERG. Now, the quality of 785, the reproduction, seems to be somewhat brighter or whiter than 773. Can you explain that? The contrast seems sharper.

Mr. COLE. Yes, that was purposely done in an effort to improve the legibility



of the handwriting shown on 773. It simply involves the technique of developing the negative and making the print. It doesn't add to or take anything away from 773.

Representative FORD. It doesn't change the quality of the handwriting?

Mr. COLE. No, sir.

Mr. EISENBERG. Mr. Cole, could you please explain by reference to 785 and 784A, and B, and C, why you concluded that the author of the standards reproduced in part on 784A, B, and C was also the author of 785?

Mr. COLE. There is an agreement in details of the formation of letters which I think are distinctive to this writer.

In other words, it involves unusual departures from the conventional or copybook method of forming letters. One example is the capital letter "A" on 785 in the name "A. Hidell." The stroke on the left side of that capital is first a down stroke, which is almost exactly retracted by an upstroke.

In other words, this is more than necessary to give the bare outline of the letter, and this extra stroke is a characteristic of the standard writing, and it may be observed in a number of places on the charts A, B, and C. One place where it may be observed is on chart "C," item 8 in the capital "A" in "Orleans." We have a downstroke on the left side of the letter which is almost exactly retracted by the upstroke.

Mr. EISENBERG. This downstroke starts just above the left side of the bar across the "A," is that the downstroke you are referring to?

Mr. COLE. Yes, that is correct.

Representative FORD. Would that also be true in chart C, item 4, in the "A" in "Harvey"?

Mr. COLE. Yes. As a matter of fact, virtually every "A," capital "A" produced in the standard writing has that feature. There are some few that lack it, but it occurs often enough to show that it is a habit of this writer, and it corresponds with the "A" shown on 785.

Now, not all features of this writing are regarded as being useful for identification. Some of the more simplified forms naturally have less individuality. That would be true of the capital letter "H" in "Hidell." While I don't see any significant difference, neither does the letter have any identifying feature.

When we pass over to the letter "i" though, in "Hidell," we see a feature which is distinctive, and that is the emphasis on the first stroke of the letter, the elongation of the approach stroke. Here again is something which the writer does as a matter of habit, it is not an essential feature for producing a legible "i." And we also have the circumstance that most small letter "i's" show an increase in forehand slant. Both of these features, the emphasis of an approach stroke and the increase in forehand slant, are found in the standard writing.

Representative FORD. Would you explain in lay terms what you mean by "an increase in forehand slant"?

Mr. COLE. A slant to the right.

One place where that may be observed in the letter "i" is on chart A, item 8, in the word "it." Another place where rather an exaggerated effect of the elongation of the approach stroke may be observed is on chart A, item 3, in the "t" of the "the." Of course, this requires a similar movement as that used in producing the letter "i," and this elongation of the approach stroke agrees with the effect found on 785.

Mr. EISENBERG. Mr. Cole, in chart A, item 8, the word "in" appears. Do you see the same elongated approach stroke in that word?

Mr. COLE. It is not elongated, but it is made somewhat with extra pressure. We also have an instance of extra pressure on "i"—there is a very small bulb of ink which indicates an extra pressure on the beginning stroke. I might point that out as being a feature of the approach stroke shown in the letter "t" on chart A, item 3.

Mr. EISENBERG. Proceed.

Mr. COLE. Now, I won't mention each and every letter in this writing. When I pass over a letter, the meaning is that at that particular point I don't find anything distinctive with respect to writing habit, although at the same time I do not find any significant difference.

I now move to the combination of "l," the double "l's" in "Hidell" in 785. Here we observe that the second "l" is somewhat larger than the first, and we find from time to time in the standard writing where there are a pair of "l's" that the second is larger than the first, one example is chart A, item 5, the word "filled."

In the capital letter "B" of the word "Box" on 785, still in the upper left corner, we observe that the upper lobe of the "B," that is, the closed circular form near the top of the letter, is somewhat smaller than the lower lobe. These proportions I observed in the standard writing, one item is found on chart A, item 9, "B" of "Board."

In the capital "D" of "Dallas" on 785, the relationship of the capital loop, I mean the looped form at the top of that capital letter, is similar to that relationship which we found in "D's" of the standard writing, one item being on chart B, item 2, in the abbreviation "Dept.," and in that same item 2 the capital "D" of "D.C." along the bottom line.

Mr. EISENBERG. Mr. Cole, on chart A-6 there is another initial "D." Would you say that bears the same conformation?

Mr. COLE. Yes; it is similar, although the loop is not complete. The aspect of the cap loop, I would say, would be the same if the loop had been completed. It is not as complete there as it is in other examples.

In the word "Dallas," the terminal "s," still referring to 785, is modified from the conventional or copybook method of making that letter by being flattened out, forced far over on its side. In other words, it has an extreme forehand slant rather than standing up in a more vertical position which we would find in a copybook. The same is true of the terminal "s" in the word "Texas" in that area. Now this, too, is a habit found in the standard writings, one good example being chart B at the end of item 3, the "s" of the word "this."

In the word "Texas" a very distinctive method of forming the letter "x" is observed. Now, this involves first the production, passing directly from the letter "e," first the production of a point or cusp, and then an underhand movement similar to that which would be required for the letter "u," then with the pencil on the paper another point or cusp is produced. The word is finished with the letters "as," and then the cross bar is made in such a manner that it runs along the side of the second cusp. In other words, the basic part of the "x" form, that is, the part which is connected to the other writings, is somewhat in the shape of a shallow "u." May I demonstrate that on a pad here?

Mr. EISENBERG. Please, Mr. Cole.

Mr. COLE. I have just drawn here an "x" diagraming the form observed on 785 which shows its production of a shallow "u" shape, with the cross bar striking across the second point of that "u" shaped form. This, I say, is highly distinctive, and it is found in the standard writing in several places.

Mr. EISENBERG. Pardon me. Mr. Chairman, may I introduce that diagram as 786?

Representative FORD. It may be admitted.

(Commission Exhibit No. 786 was marked and received in evidence.)

Mr. COLE. This distinctive formation of the "x" is observed on chart B, item 4, in the word "Texas," also in the same chart B, item 13, in the word "Texas," and also item 12 on the same chart.

Mr. EISENBERG. Mr. Cole, did you say there was no pen lift after finishing the second cusp, until the letters "as" are added?

Mr. COLE. That is correct.

Mr. EISENBERG. So that the "x" is not crossed, so to speak, until the entire word is completed?

Mr. COLE. That is correct.

Mr. EISENBERG. How distinctive would you regard this form as being?

Mr. COLE. Well, I regard it as highly unusual and carrying a good deal of weight for identification purposes, because it is a wide departure from the copybook method or conventional method of making the letter, and it involves the addition of a part rather than an omission which might come from carelessness.

Still considering Exhibit 785 and inspecting the word "Air" of "Air mail," just under the stamp, I find a correspondence in the letter forms with the standard writing. Chart B, item 5, where the same word is reproduced, "Air."

One distinctive feature there is the simplified method of making the shoulder of the letter "r." Where the copybook or conventional form would show first a point at the top of the "r" and then the production of a rounded shoulder, this omits the point form and develops immediately into a rapidly sloping or curving down stroke.

Mr. EISENBERG. Will you illustrate the copybook form on your chart paper, Mr. Cole?

Mr. COLE. The conventional or copybook form of this "r" would be approximately in this manner: Cusp at the top, broad shoulder on the right side.

Mr. EISENBERG. May I have that admitted as 787. Mr. Chairman, the copybook form of the "r"?

Representative FORD. It may be admitted.

(Commission Exhibit No. 787 was marked and received in evidence.)

Mr. COLE. The letter "m" in "mail" in 785, with respect to the unusually broad spread of the arches of that letter, corresponds with the letter "m" on chart B, item 6, top line, in the word "me," where we have a similar spreading of the width of the arches of the "m."

The capital "K" in the word "Klein's" on 785 compares favorably with "K's" in the standard writing, chart A, items 13 and 14.

Again, this word "Klein's" demonstrates a habit on 785 of a somewhat greater forehand slant for the letter "i," that is, as contrasted with the slant observed for the letter "e," and it also shows this tendency to flatten out or run the letter "s" along the writing lines, rather than giving it a more vertical position, and this has already been observed in the standard writing. The entire word "Dept," that is, the abbreviation "Dept," on 785, compares favorably with that word as shown on chart B, item 2, that is the same abbreviation, "Dept."

I will mention specifically two details of the letter "p." One is that it lacks an upper extension, which is a part shown in most copybook forms. In other words, there is no part of the staff—which, of course, is connected to the lower extension—which extends above the body of that letter, and that is true both as between the questioned "p" on 785 and that shown on chart B, item 2, in the abbreviation of "Dept." Another feature is the failure to bring the body in to a point where it touches the staff, and this is a frequent feature in the "p's" in the standard writing. Now, on chart B, not only in the abbreviation of the word "Dept." in item 2, but moving down to consideration of item 3 and the word "receipt," we observe a similar effect in the letter "p."

In the letter "t," a distinctive feature is the abruptness of ending that letter just before it reaches the writing line, which would differ from other letters, which touch the writing line, and many of which have a rising terminal stroke. In the questioned writing on 785 in "t" of "Dept," and also in the "t" in the abbreviation of "street" in the line below, we have just such a thing in the letter "t" which is shown from time to time in the standard writing—one example being chart A, item 13 in the abbreviation of "street." We have the same effect on chart A, item 8, in the word "it."

In the word "Washington" on 785, one distinctive feature is the curved staff of the letter "g." In other words, there is a continuous curve from the apex of the "g" down to the bottom of the lower extension, and this method of treating a "g" is repeated in the standard writing, one example being chart A, item 2, in the word "obligations."

Mr. EISENBERG. Would that also be true in chart B, item 10, in the word "Washington"?

Mr. COLE. Yes, sir; a very good example of it.

Mr. EISENBERG. Mr. Cole, that item B-10 is spelled differently from the standard, from the questioned document, rather. Does that—what is your opinion as to that variation in spelling?

Mr. COLE. There are a number of misspellings in the standard writings, and sometimes in the standard you will find words repeated in a correct spelling and at other times with an incorrect spelling. In other words, there is a variation in that respect. I think it comes partly from carelessness, not essentially from lack of knowledge of how to spell the word.

Representative FORD. These variations would be in the same letter or the same document?

Mr. COLE. Yes; sometimes.

Mr. EISENBERG. Actually there is an example of that in B-2, where Washington is spelled incorrectly?

Mr. COLE. That is correct. Now, in the combination of letters "cago" just below the word "Washington" on 785, we also have a repetition of this curved right side of the letter "g" found also in the standard writing, and another feature worth noticing there is the closing of the letter "o" rather far back on the upper left side of the letter. This is distinctive because many writers are reluctant to make leftward strokes, since the normal movement of handwriting is from left to right, and this I would say represents a writing habit in the questioned writing which is also repeated in the standard in a number of places. Chart B, in the abbreviation "no," of item 10, that is, the second segment of item 10, and also in the zero, item 11, you see a similar method of closing that circular form far back on the left side of the letter.

Representative FORD. That would appear also in B-13 in the word "to"?

Mr. COLE. Yes, sir.

Representative FORD. Is there a difference in B-15 "you"?

Mr. COLE. Yes, sir; there is, but we are dealing with a terminal form in the questioned writing. In other words, the opportunities for expressing this particular habit is present in terminal forms and not medial forms, the forms inside a word.

Mr. EISENBERG. Do you find generally or often that a writer's terminal forms or beginning forms will differ from the forms inside of the—the letters inside of the word?

Mr. COLE. Yes; in that it gives a different opportunity for expression of writing habit.

Mr. EISENBERG. So is this an unusual—is this unusual, then that the terminal form should be different?

Mr. COLE. No; not at all.

I invite attention to the exaggerated length of the comma following the figure "6" on 785. This is repeated in the standard writing on chart B, item 2, the comma following the word "chief." Also on chart B the commas in items 1 and 9, following the word "Dallas." The double "l's" of the abbreviation "Ill" on 785, again show the habit of making the second "l" somewhat larger than the first, which was previously pointed out as corresponding to the standard writing on chart A, item 5 in the word "filled."

The form of the capital letter "I" of "Ill" on 785 compares favorably with that form as shown on chart B, items 3 and 4 where we have the personal pronoun "I." Now, moving now to the writing which is a part of the order form bearing the name "Klein's" on this same Exhibit 785, I will draw attention to the method of making the dollar sign before the amount "19.95." In the copybook or conventional method of making this particular sign the "S" shape is usually fairly prominent. In other words, the crossbars are usually subordinated to the "S" shape. Here we observe a very heavy pressure and exaggerated length and wide spacing of those crossbars, which almost obliterate the "S" shaped part of the dollar sign. This is shown in the standard writing chart B, item 6, second line, the dollar sign preceding "\$2."

On this order form the figure "5" of the amount "\$19.95" shows an exaggerated length of the final stroke of the "5," I mean the approximately horizontal stroke across the top of the letter. That same habit was previously observed in the "5" of the combination "2915" at the upper left of 785. Now, this method of—excuse me, let me mention one more example of that letter "5" on 785. On the order form, the figure "5" of the post office box number "2915" shows the same feature. Moving now to the standard writing, we find that treatment of the letter "5," of the figure "5," on chart C, item 7, in the combination of figures "6225." It is also shown on chart B, item 1, in the combination of figures "2915," and again in the same position, item 9 of chart B.

In the name "A. Hidell," I observe that we have a capital "H" and we have capital forms of the "l's" but the remainder of the name uses lower case letters, "ide" as lower case letters.

Mr. EISENBERG. This is in the order blank again?

Mr. COLE. Yes, sir.

This habit of using a combination of capital and small letters is a habit in the standard writing. One example would be chart C, item 6, where various words show a similar mixture. For example, in the name "Oswald" we have capital forms for "O," "S," "W," and "A," but a lower case letter for the "l" and "d." Dropping down to the word "Mercedes," we have capital forms for "M," "R," "C," and "S," but in that same word the letters "e" and "d" have lower case forms. And this mixture of capitals and small letters, as I say is found frequently in the standard writing.

Mr. EISENBERG. Well, is a mixture like that infrequent—apart from the particular letters which you use as small or large letters?

Mr. COLE. Well, I would say it is a part of this man's handwriting habit to make such mixtures. Another person who might mix capital and lower case forms might perhaps select different letters for that purpose. In other words, I think in this writing we find that very frequently as to the letter "i" and the letter "e."

Mr. EISENBERG. Is the fact of mixture itself significant?

Mr. COLE. Yes; it is a part of his writing habit.

Mr. EISENBERG. How highly individualistic is the fact of mixture to this person's writing?

Mr. COLE. I regard it as having a fair weight. I wouldn't classify it with the very considerable weight we give to that distorted form of the "x" but I think it is just one more point for consideration with all of the other similarities.

A similar mixture is found in the word "Texas." Again referring to the order form of 785, we have all capital letters except the letter "e," and then moving over to the standard writing, see the word "Texas" on chart C, item 1, the use of capital letters except as to the "e" form.

Representative FORD. The same would be true, I gather, on C-7 in the use of "e" in the word "Texas"?

Mr. COLE. Yes, sir. This combination of agreement in the details of forms of letters, proportions, and other features between the writing on Commission Exhibit 785 and various parts of the standard writing constitute the basis for my opinion that the writings are in the hand of the same person.

Mr. EISENBERG. Mr. Cole, in many cases you have either pointed to, or it can be noted, that there are differences or variations within the writing of the standards or in the writing of the questioned documents. Is this unusual?

Mr. COLE. No; as a matter of fact, it is usual to find variations in handwriting, and, of course, that is demonstrated by the various standard writing that we have here, where you find the same combination of letters they are not identical with a photographic sameness, but they have a range of variation. I would say that no part of the questioned writing that we have considered on 785 would go outside of that normal range of variation which is true in the standards.

Mr. EISENBERG. Did you find any differences between 785—or 773, of which 785 is a reproduction—and the standards?

Mr. COLE. I don't find anything that I would regard as a significant difference, but, of course, there are points where there is not a perfect identity. For example, in the combination of letters "Ill," an abbreviation for Illinois, while we don't have that same abbreviation in the standards, we have got the full name written out on chart B, item 5, and item 14. We have a smooth curved connection between the "l" and the following "l" in those particular parts of the standard, but there is an angular connection on 785 between the same letters. That is a difference or variation, but I don't regard it as necessarily being a significant one. It could be merely an accidental feature, a momentary hesitation on 785 before proceeding into the making of the "l."

Mr. EISENBERG. Why don't you conclude on the basis of that difference that the questioned document was written by a different author than the standard documents?

Mr. COLE. Because it is not nearly enough to raise such a question. There would be required for an opinion that this was made by some other person, a similar body of differences corresponding to the similarities that I have talked about. In other words, if in fact this was in the handwriting of some other person, I would expect to be able to make about the same demonstration with respect to differences as I have already made with regard to similarity.

Mr. EISENBERG. Would you need to find as many differences as similarities in order to say there was a different author involved in the questioned and standard?

Mr. COLE. No; depending upon the character of the differences. A fairly small number would prevent a conclusion of identity or show the hand of some other person, if they were really distinctive differences.

Mr. EISENBERG. Mr. Cole, did you find any evidence in 773 that the author attempted to disguise his handwriting?

Mr. COLE. Were you referring to 785?

Mr. EISENBERG. 785 is a reproduction of 773. You can use 785 to answer the question, yes.

Mr. COLE. There is one faint suggestion of that possibility. It doesn't permit a conclusion that that was the purpose. But I refer to the use of a lower case "t" in the word "texas" in the return address in the upper left corner. Since this writer demonstrates a good knowledge about the formation of capital letters, it is possible that the choice to make a lower case "t" was a deliberate one, and it could have been at that particular point for the purpose of disguise. But I say if that was his purpose, it certainly was not maintained, and would be a very faint effort toward disguise.

Mr. EISENBERG. Mr. Cole, do you consider it unusual for a person to use an alias without attempting to disguise his handwriting?

Mr. COLE. No; I would not.

Mr. EISENBERG. Have you had any experience along those lines?

Mr. COLE. Yes; I have observed a number of aliases where there is no particular effort to disguise.

Mr. EISENBERG. In your capacity as questioned document examiner of the Treasury Department, do you receive for examination checks, the endorsements on which have been forged?

Mr. COLE. Yes.

Mr. EISENBERG. And on any occasion does the endorsement, the forged endorsement, does the forged endorsement indicate that no effort, no attempt has been made to disguise the endorsements?

Mr. COLE. That is a rather frequent condition, that the spurious endorsement is made without an attempt to conceal or disguise writing habit or to imitate the writing of any other person.

Mr. EISENBERG. Mr. Cole, do you know on the basis of your experience whether individuals ever resort to handprinting as an attempt at disguise?

Mr. COLE. Yes; it is a rather frequent method of disguise.

Mr. EISENBERG. Now, you testified earlier that handprinting can be identified as to author?

Mr. COLE. Yes.

Mr. EISENBERG. Is this common knowledge, that is to say—

Mr. COLE. It is common knowledge among document examiners. I don't think it is common knowledge among others.

Mr. EISENBERG. Might a layman attempt to disguise his handwriting simply by resorting to undisguised handprinting?

Mr. COLE. Yes; he might.

Mr. EISENBERG. What are the usual evidences of disguise, by the way, Mr. Cole?

Mr. COLE. Well, in cursive handwriting the usual evidences of disguise involve some unnaturalness, such as a reduction of writing speed, and other distortions such as writing very large, with an exaggerated freedom, where parts of letters of various words are run together; such as an exaggerated length of lower extensions and upward extensions which tends to intermingle forms and make it difficult to see the details of them; or writing very small, in almost microscopic size where, again, the width of a pen stroke itself tends to conceal details of handwriting; alterations of slant, such as a person who normally writes a forehand slant or slanting to the right, changing to a vertical or a backhand slant. Most efforts at disguise are not well planned. They usually involve a determination to alter the writing along one particular line such as writing very large, very small, or a change in the slant. Other features are the simplification of letter forms. For example, a person attempting to conceal a writing habit may feel that his

writing habit is revealed mostly by capital letters so you might have him using printed forms for capitals, but cursive forms for most other letters.

Representative FORD. Can you tell the difference between a right-handed and a left-handed person by either cursive or capital letters?

Mr. COLE. No, sir; not definitely. Left-handed writers tend to write more vertically, and for that particular left-hand writer who holds his hand above the writing line, this gives a reversal of the pressure on what would ordinarily be regarded as upstrokes and downstrokes, and when you see that reversal this is an indication of left-hand writing. But it is only when you have that special circumstance that you get that signal about it.

Representative FORD. Is there anything in any of the writings that you have analyzed of Lee Harvey Oswald of an indication that he was left-handed?

Mr. COLE. Well, I wouldn't say that I could make a determination of whether he was left-handed or right-handed.

Mr. EISENBERG. Mr. Cole, in your expert work do you draw a distinction between a spurious and a forged document?

Mr. COLE. Well, I think of the word "forgery" as having that legal connotation of malice or intent. The production of a false writing with an intention to deceive or defraud somebody else. Spurious writing means a false writing.

Mr. EISENBERG. That is, a writing produced by one hand calculated to look as if it had been produced by another?

Mr. COLE. Well, not necessarily, that situation that you just discussed would involve simulation of the person's, another person's writing. But the word "spurious" could refer to a false writing, the writing of the name of one person by another who had no particular right to do it. But, of course, if the element of an intent to defraud is not there, I suppose in a legal sense it is not forgery.

Mr. EISENBERG. Now, what are the elements which you look for to see whether a person, A, has attempted to reproduce the handwriting of another person, B, with intent to deceive or otherwise?

Mr. COLE. Two categories of differences. One, defects of line quality, by which is meant tremor, waver, patching, retouching, and noncontinuous lines, pen lifts in awkward and unusual places. And the other class of differences is details of the forms of letters, by which I mean that when the person attempting to simulate another writing concentrates upon the reproduction of one detail, he is likely not to see other details. He may, for example, be able to imitate the gross form of a letter but he may get proportions wrong or letter connections wrong.

Mr. EISENBERG. What is the probability that person A could imitate the handwriting of person B without leaving a telltale trace in one of these two categories?

Mr. COLE. I think it is only a very remote possibility. But I would add to that the need for having a fairly extensive specimen of writing. Of course the possibility of a successful simulation is better with smaller specimens of writing.

Mr. EISENBERG. Now, did you find any evidence in either category that a person had attempted to simulate the writing of the author of the standards in this case in producing either 773 or any of the other questioned documents which you examined?

Mr. COLE. No; I did not find such indications.

Mr. EISENBERG. And you feel, did you say, there would be only a remote probability that in the absence of such indication such a simulation could exist?

Mr. COLE. Yes, sir.

Mr. EISENBERG. When you say remote, could you put this in terms of figures?

Mr. COLE. I would say there is no reasonable possibility of it, and I will put it this way: That from my study of these documents, there is no particular element or elements of the handwriting that I can point to and say this could be evidence of simulation.

Mr. EISENBERG. You mentioned before that you need to have a sufficient amount of writing to make that type of determination. Do you feel that the questioned documents provided a sufficient amount of writing for that?

Mr. COLE. They do.

Mr. EISENBERG. Is that individually or collectively?

Mr. COLE. Individually.

Representative FORD. All of the illustrations on 784 A, B, and C are taken from Commission exhibits——

Mr. EISENBERG. 774-783.

Representative FORD. Collectively?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Carrying that question forward, on what basis did you select excerpts from 774 to 783 to reproduce 784 A, B, and C?

Mr. COLE. The chief effort was to collect together in a fairly small space items that were appropriate for comparison through repetition of the same material, and in doing that there was kept in mind the general purpose of giving a good representative cross section of all of the writing habit illustrated in the standard writings.

Mr. EISENBERG. Well, that anticipates my next question, which is, whether this is a representative cross section or was selected in order to reproduce those particular characteristics you find in the questioned documents.

Mr. COLE. I think it is a representative cross section, and I say a part of the effort was to bring here some letters and combinations for convenience of comparison. It was in no way an effort to substitute these charts for the originals.

Mr. EISENBERG. Your actual examination was made on the basis of the originals or the charts, Mr. Cole?

Mr. COLE. Yes; all of the—the chief examination was made upon the basis of the originals and all parts of the originals, not limited to the parts shown in the charts.

Mr. EISENBERG. These charts are only for demonstrative purposes, making your testimony easier to follow, is that correct?

Mr. COLE. Yes, sir.

Mr. EISENBERG. You discussed briefly, Mr. Cole, or perhaps more than briefly, the use of a photograph as a standard. Now, in the case of 773, a photograph is used as a questioned document, or rather a questioned document consists of a photograph. Are the comments you made on the use of a photograph as a standard applicable to the use of a photograph as a questioned document, that is, can you make a determination on the handwriting in a photograph?

Mr. COLE. With these photographs I think a satisfactory determination can be made. I would not necessarily include all photographs.

Mr. EISENBERG. Yes?

Mr. COLE. Because there is a widely varying quality in photographs.

Mr. EISENBERG. When you say these photographs, do you include the other photographs included among the questioned documents you have examined at my request?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Mr. Cole, I now hand you an item consisting of a U.S. postal money order in the amount of \$21.45, payable to Klein's Sporting Goods, from "A. Hidell, P.O. Box 2915, Dallas, Texas." For the record I will state that this money order was included with the purchase order in Exhibit 773 which has just been identified, and was intended and used as payment for the weapon shipped in response to the purchase order, 773. I ask you, Mr. Cole, whether you have examined this money order for the purpose of determining whether it was prepared by the author of the standards?

Mr. COLE. Yes, sir.

Mr. EISENBERG. What was your conclusion, Mr. Cole?

Mr. COLE. It is my conclusion that the handwriting on this money order is in the hand of the person who executed the standard writing.

Mr. EISENBERG. Mr. Chairman, may I have this money order admitted as 788?

Representative FORD. It may be admitted.

(The document was marked as Commission Exhibit No. 788, and was received in evidence.)

Mr. EISENBERG. Have you prepared a photograph of that Exhibit 788, the money order?

Mr. COLE. Yes; I have.

Mr. EISENBERG. And you have produced that photograph for me just now, Mr. Cole?



Mr. COLE. Yes.

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

Mr. COLE. Yes, sir.

Mr. EISENBERG. Is it an accurate photograph of 788?

Mr. COLE. It is.

Mr. EISENBERG. May this be admitted as 789, Mr. Chairman?

Representative FORD. It may be admitted.

(The document referred to was marked Commission Exhibit No. 789, and received in evidence.)

Mr. EISENBERG. Mr. Cole, before you discuss your conclusion, the handwriting on 788 seems to have a slight blur in some parts. Could you explain that in any way?

Mr. COLE. Yes; it is my view that this document has been in contact with moisture which affected the ink of the handwriting. Such contact might have been through an effort to develop fingerprints.

Mr. EISENBERG. Was it or is it discolored at this point at all, do you think?

Mr. COLE. There are only two small areas of discoloration on this document, one of them being along the upper edge just above the figure "9," and the other along the right edge just opposite the figure "5." This indicates to me that at one time this document was more deeply stained but has been cleared up by some chemical bleach.

Mr. EISENBERG. Was it in the same condition when you examined it as it is now?

Mr. COLE. It was.

Mr. EISENBERG. Mr. Cole, would you explain by use of charts 784 A, B, and C, and the photograph 789, why you conclude 788 was prepared by the author of the standards in this case?

Mr. COLE. On the photograph, 789, I invite attention to the capital "K" of "Klein's," which compares favorably in form to the "K's" of exhibit—of chart A, items 13 and 14, with the exception of a larger circle at the center of that "K" on the right side of 789, which is not reproduced in the standards, but it is my belief that this writer might well produce such a circular form when a letter is somewhat larger and more freely made.

Mr. EISENBERG. On what do you base that belief, Mr. Cole?

Mr. COLE. That that would be a normal result of greater freedom and a larger writing, it would produce a circular form rather than an angle.

Mr. EISENBERG. Is this based upon your experience with questioned documents and making analyses?

Mr. COLE. Yes, sir; now, in that—

Mr. EISENBERG. Excuse me 1 second. Just to elaborate on that. Do I take it that your experience is such that you have found you can predict forms of letters based upon the samples you have before you, predict forms which may be used in other samples by the same author?

Mr. COLE. Well, within certain narrow limits. That is, having information about the range of variation in the body of standard writing, it is reasonable to make a small allowance for the production of forms not actually illustrated there, as long as they are consistent with the forms that are actually available for examination. In other words, I would regard it as a consistent thing in this writing to occasionally produce a circle at the center portion of a letter "K"; it does not, in my opinion, represent a difference of writing habit.

Now, in that same word we observe a habit heretofore mentioned of increasing the amount of forehand slant in the letter "i"—that is in "Klein's" of the photograph 789—which has previously been observed in the standard writing. Several examples have been pointed out. For the present, I will mention the one on chart A, item 1 in the word "obligations," the second letter "i" there shows an increased forehand slant. The same is true of the "i" of the word "firm" on the same line.

The combination of letters in the word "sporting," that is, the combination "port," are illustrated in the standard writing, chart A, item 2 in the word "support," item 3 in the word "port," in item 4 in the word "transportation," and here we find very close agreement in all details of those letter forms. With respect to the letter "p," the absence of an under extension, that is, the

absence of any part rising above the arched part of the letter on the writing line, and the circumstance that the body of the letter or arch, as it is shown here on the photograph 789, is not brought all the way into the staff, it is made almost as a pure arch form with no movement in here towards the staff, which is the same movement we have here on chart A, item 3 in the word "port," repeated also on item 4, and in the two "p's" of item 2. Now, there is a distinctive method of making the connection between the letters "o" and "r," by drawing a very straight line, horizontal line almost exactly paralleling the base of the word across from the letter "o" to the "r" on the photograph 789, and this movement is also repeated on chart A, items 3 and 4, in the combination letters "or," also in item 2 in the same combination of letters.

This writing demonstrates the habit in the figure "5" of a considerable exaggeration of the final stroke of the letter, or the cap stroke, a horizontal stroke at the top of the letter observed on the photograph 789, and shown in several places in the standard writing, some of which have already been mentioned, one being on chart C, item 7, and on chart B, items 1 and 9, the figure "5."

Also in this writing, we find that highly distinctive "x" form in the word "Texas," involving the production of a shallow U-shaped form with the crossbar passing across the second point of that U-shaped form for the word "Texas." This is the basis for my conclusion that the questioned writing on the money order is in the hand of the author of the standard writing.

Mr. EISENBERG. Mr. Cole, I now hand you Commission Exhibit 135, which, for the record, consists of the purchase order to Seaport Traders from "A. Hidell" for the revolver which was used in the murder of Officer Tippit.

Mr. Cole, have you examined Commission Exhibit 135 to determine whether it was produced by the author of the standards in this case?

Mr. COLE. I have.

Mr. EISENBERG. What is your conclusion?

Mr. COLE. It is my conclusion that this handwriting is in the hand of the person who produced the standard writing.

Mr. EISENBERG. Have you taken a photograph of 135?

Mr. COLE. Yes, sir; I have.

Mr. EISENBERG. Would you produce that, please?

Was this photograph prepared by you or under your supervision?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Is it an accurate reproduction of 135?

Mr. COLE. It is.

Mr. EISENBERG. Mr. Chairman, may I have that admitted as 790?

Representative FORD. It may be admitted.

(The document referred to was marked Commission Exhibit No. 790, and received in evidence.)

Mr. EISENBERG. Mr. Cole, could you explain your reasons for your conclusion by reference to the charts 784 A, B, and C, and to the photograph, 790?

Mr. COLE. On the photograph 790 I invite attention to the first line of hand-printing, which has a long horizontal line drawn through it. Toward the ends of that line there is an amount which appears to read "\$1.35," and I draw attention to the form of the dollar sign, which sign has already been mentioned in other writing, and here we find that same feature of subordinating the S part of the dollar sign to the crossbars, the crossbars being, or the verticals being made in such a way as to practically obliterate the S-shaped part. There, again, that is a feature of writing habit of the author of the writing on 790 which corresponds with the habit in the standard writing shown on chart B, item 6, second line, in the amount "\$2.00."

Next, I draw your attention, in the approximate area as that just discussed on 790 there, to the amount "29.95." Now, with respect to the form of the figure "2" we observe a rounded cap or top to the letter and a rather prominent loop to the base, and it is observed that the leftward extension of the cap of the letter is considerably short of the amount of leftward motion across the base. This corresponds to the form and placement of parts as shown in the standard writing chart B, item 1, in the combination "2915."

In that same amount, on the photograph 790, again we observe the exaggerated

length of the cap of the figure "5" which corresponds to the standard writing, chart B, item 1, the figure "5" there.

The dollar sign which was previously described is repeated in the amount "\$10.00" on the left side of the photograph 790, and I believe that the treatment of the verticals there is the same, that is, an unusually heavy pressure, but it appears that the pen was not delivering a normal quantity of ink at that point. Nevertheless, there is this same effect of almost obliterating the S-shaped part of the dollar sign.

Now, moving on down to the bottom part of the photograph 790, and considering first the form of the "B" in the word "Box" on the address line, here again we observe that tendency of a fairly small upper lobe relative to the size of the lower lobe of the "B," and this is repeated in the standard writing, one place being chart B, item 1, in the "B" of "Box."

The word "DALLAS" on the photograph 790 shows capital "L's" which have a compound curve across the base; that is, instead of a simplified form of letter, where there would be a simple straight line across the base, we have first a rising stroke and then a stroke that curves downward towards the writing line. This compound curve across the base of "L's" is repeated in the standard writing, chart B, items 1 and 9, in the same word "DALLAS."

Again, on the photograph 790, the second letter "A" in "DALLAS" illustrates a habit previously mentioned of using a downstroke to begin the left side of the "A," which stroke is almost exactly traced, and this too is repeated in the standard, chart B, item 1, the second "A" of "DALLAS." Opposite the printed word "State" on photograph 790, the word "Texas" again shows this mixture of capital forms and lower-case forms, specifically the use of a lower case "e" in combination with capital letters, which is true in the standard writing, chart B, items 1 and 9, in the word "Texas."

This constitutes my reasons for believing that the questioned writing shown in the photograph 790 is in the hand of the author of the standard writing.

Mr. EISENBERG. Mr. Cole, there seems to be a very varying amount of blackness or color in the ink on Commission Exhibit 135, which is shown up in your photograph. Do you have any explanation for that?

Mr. COLE. I think the pen was not functioning properly, that very heavy pressure was used on the document to bring the ink down from the pen, and we can see that the writer is reacting to this, for example, in the word "Box" on the address line, where you have only a moderate quantity of ink and then as you move along to the figures "2915" you observe that heavier pressure is used. In other words, it is my view that the writer observed that the pen was tending to fail, and that he increased pressure in order to persuade more ink to come down from the pen.

Mr. EISENBERG. There also seems to be a doubling of lines in some parts, such as the "J" in "A. J. Hidell," and the upper area also of "A. J. Hidell."

Mr. COLE. Yes; that could very well be for the same reasons, because if you move to the upper part of this exhibit there are other places where the pen almost failed. You have strokes that have a shallow center with ink only on the outside borders of strokes.

Mr. EISENBERG. Mr. Cole, can you make out the writing which is printed in and then crossed out in this exhibit?

Mr. COLE. Well, a part of it.

Just below the printed word "Snubbie" there appears to be a line of writing which says, "1 AMMO," if that is "A-M-M-O"—the second "M" is somewhat indistinct. And then there is parenthesis, BOX of 25, close parenthesis, dollar mark, 1.35. Then just below that there is a line of writing, the first word of which I cannot make out, that is, I cannot make any intelligible word of it, but the second word appears to be "holster." In other words, the word "holster" would lie just above the words "total price" and then there follows some figures which appear to be "1.95."

Representative FORD. Is it your judgment on this exhibit that at the point where the applicant is required to give his age that it is "23" or "28"?

Mr. COLE. I would read that as "28."

Mr. EISENBERG. Can you make out the date which is next to that age, Mr. Cole?

Mr. COLE. Well, I read the first part of the date as 1/27, and I am unable to read the last figure, which is through a part of the very heavy dotted line.

Mr. EISENBERG. Do there seem to be one or two figures?

Mr. COLE. It looks like a single figure there following a diagonal.

(Discussion off the record.)

Representative FORD. Back on the record.

Mr. EISENBERG. Mr. Cole, I now hand you an item consisting of part of an application for a post office box, dated "box opened October 9, 1962," and also dated in the lower right "October 9, 1962," with the signature "Lee H. Oswald" and I ask you whether you have examined that item?

Mr. COLE. Yes, sir; I have.

Mr. EISENBERG. May I have that admitted as 791, Mr. Chairman?

Representative FORD. It may be admitted.

(Commission Exhibit No. 791 was marked and received in evidence.)

Mr. EISENBERG. Have you compared it with the standards in this case, Mr. Cole?

Mr. COLE. I have.

Mr. EISENBERG. What is your conclusion?

Mr. COLE. It is my conclusion that the handprinted name "Lee H. Oswald," the address "3519 Fairmore Ave.," and the signature "Lee H. Oswald" on this document are in the hand of the person who executed the standard writing.

Mr. EISENBERG. Have you prepared a photograph of 791?

Mr. COLE. Yes, sir; I have.

Mr. EISENBERG. Can you produce that?

Thank you. Is this photograph which you have handed me an accurate reproduction prepared by you or under your supervision?

Mr. COLE. Yes, sir; it is.

Mr. EISENBERG. May I have this admitted as 792?

Representative FORD. It may be admitted.

(Commission Exhibit No. 792 was marked and received in evidence.)

Representative FORD. Continue.

Mr. EISENBERG. Before we go any further, what is your conclusion concerning the words "Dallas, Texas" appearing after "Fairmore Ave."?

Mr. COLE. It is my conclusion that that wording is not in the writing of the author of the standard writing.

Mr. EISENBERG. And that in "2915"?

Mr. COLE. That is not in the handwriting of the author of the standards.

Mr. EISENBERG. Do you have any idea who inserted that?

Mr. COLE. No, sir; I don't but I think in the handling of this kind of material it happens from time to time that a postal clerk may complete a document.

Mr. EISENBERG. Now, with reference to 792 and 784 A, B, and C, could you explain the reasons for concluding that 791 is in the handwriting of the author of the standards as to those portions which you have designated as being in the handwriting of the author of the standards?

Mr. COLE. In the printed name at the upper left of the photograph 792 the capital "L" of "Lee" shows a compound curve across the base, which has previously been mentioned as a handwriting habit found in the standards, one example being on chart B, item 9, another example on chart C, item 4.

The name "Oswald" shows the use of capital forms except for the letters "ld." This particular use of a mixture of capitals and lower-case forms is found on chart C, item 1, at the top line where the final forms "l" and "d" are lower case forms.

I will mention also the particular writing movement used for constructing the letter "d," referring to the photograph 792. There is first a moderately long downstroke, and then without lifting the pen there is a rising movement which at the same time moves towards the left to complete the body of the letter. This method of construction is also observed in the standards, chart C, item 1, top line, in the "d" of "Oswald." Since there is a slightly more open effect at the base in this standard "d," the method of construction can be seen clearly, but it was made in the same way in the photograph, as shown by the photograph 792.

In the word "Fairmore," it is observed that on the photograph 792 there is a

tendency to reduce the size of the small letter "i" and, of course, this is again an example of the use of the lower case form in combination with the capitals. The size relationship and the particular mixture of this form with capitals is shown in the standard writing chart C, item 5, in the word "deportations" and in the word "diet," also in item 9 in the word "curtailment."

The word "Fairmore" also shows the use of a lower case "e" in combination with capital letters, which has been observed frequently in several parts of the standard writing, one example not mentioned heretofore is item 3 of chart C in the word "discharge."

The signature "Lee H. Oswald" along the lower line shown by the photograph 792 compares favorably in all details with the signatures in the name of "Lee H. Oswald" in several standard charts, being on chart A, item 15; on chart B, again item 15; also on chart B, item No. 1; and on chart C, item 6, the next to the last line. Now, one distinctive feature of this signature is the writing movement employed in the combination of letters capital "O" and the "s" following, where the "s" form is rather blurred or corrupted. It does not give a complete capital "s" form, but instead the upper part of the "s" is represented only by a line which is approximately horizontal, sinking downwards to the base of the "s," and then a looped form at the base.

Mr. EISENBERG. You said a capital "s" form; did you mean that?

Mr. COLE. No; I meant that it is not a complete "s" form. It is somewhat slurred or blurred with respect to a true "s" form. This particular method of slurring the form is clearly illustrated on chart B, item 1, in the name "Oswald" and is also shown on chart B, item 15, in the name "Oswald."

(At this point Senator Cooper entered the hearing room.)

Mr. COLE [continuing]. In the signature shown by the photograph 792, in the capital "L," we observe with regard to the base loop, this would be the lower half of the letter, we see a vertical aspect of that base loop. Now, in a more conventional or, say, a copybook form of a letter "L" you would find the base loop with a horizontal aspect, that is, stretched out along the writing line. Here we find a vertical aspect of that part, which is reproduced in the standard writing on chart A, item 15.

That last reference was to the base loop of the capital "L" of the signature "Lee H. Oswald" as shown by the photograph 792 as compared with chart A, item 15.

Now on the photograph 792, we observe that between the two upright strokes of the letter "H" there is a very thin diagonal line of joining. This is repeated in the standard writing, chart B, item 1, top line. Now, again in this "H" as shown on 792 we see this more or less vertical aspect of the treatment of a looped formation near the base of the right side of the letter "H," that is, instead of moving fully to the left to give a normal cross bar, there is only a base loop there which, I say, is made in a vertical direction. This is repeated in the standard writing, chart A, item 15, in the middle initial "H."

The "w" of "Oswald" shown by the photograph 792 is characterized by a rather full rounding across the base of the letter, and this degree of roundness is shown in the standard writing, chart B, item 15. There is a horizontal stroke which constitutes the letter connection between "w" and "a" shown by the photograph 792, and this method of making a connection is repeated in the standards, chart B, item 15.

Mr. EISENBERG. You say "w" and "a"?

Mr. COLE. "w" and "a".

The size relationship between the letter "l" and the letter "d" as shown by the photograph 792 is the same as that found on chart A, item 15. The relationship of the body of the "d"—by which I mean that part which would ordinarily rest on the writing line, and in a conventional form would be more or less circular—and the upper extension is also similar as between the photograph 792 and chart A, item 15. In other words, there is practically no roundness of the body. Again, we have got an emphasis of the more or less vertical strokes for what should be a rounded portion for the body.

This constitutes my reasons for believing that the questioned writing as shown by the photograph 792 is in the hand of the person who executed the standard writing.

Mr. EISENBERG. Any further questions on this application?

Representative FORD. No questions.

Mr. EISENBERG. Mr. Cole, I now hand you an item consisting of a change-of-address card addressed to the "Postmaster, Dallas, Texas," dated May 12, 1963, relating to Post Office Box 2915 in Dallas, Tex.; setting forth a new address at Magazine Street, New Orleans, and signed "Lee H. Oswald," and I ask you if you have examined that change-of-address card?

Mr. COLE. Yes, I have.

Mr. EISENBERG. May this be admitted as 793, Mr. Chairman?

Representative FORD. It may be admitted.

(Commission Exhibit No. 793 was marked and received in evidence.)

Mr. EISENBERG. Have you compared that change-of-address card, 793, with the standards in this case?

Mr. COLE. Yes, sir; I have.

Mr. EISENBERG. What is your conclusion?

Mr. COLE. It is my conclusion that the author of the writing on Exhibit 793 is the same person who executed the standard writings.

Mr. EISENBERG. Did you prepare a photograph of 793?

Mr. COLE. I did.

Mr. EISENBERG. Can you produce that?

Is this an accurate photograph, an accurate reproduction, of 793, prepared by you or under your supervision?

Mr. COLE. Yes, it is.

Mr. EISENBERG. Mr. Chairman, may this be admitted as 794?

Representative FORD. It may be admitted.

(Commission Exhibit No. 794 was marked and received in evidence.)

Mr. EISENBERG. By reference to the photograph 794 and reference to your charts 784 A, B, and C, could you discuss the reasons which led you to your conclusion concerning this change-of-address card?

Mr. COLE. Handwriting habits shown by this exhibit, and I am looking now at the photograph 794, have been mentioned heretofore. If it is agreeable, I will simply review these in a body before proceeding to the standard writing.

Mr. EISENBERG. Mr. Chairman, is that agreeable?

Representative FORD. You may proceed.

Mr. COLE. On line 1, shown by the photograph 794, the use of a lower case "l" and "d" in combination with capital letters, the compound curve across the base of the "L" in "Lee," the exaggerated length of the comma between the two names; below, in the word "BOX," the somewhat larger upper lobe of the capital "B"—excuse me, the somewhat smaller upper lobe of the capital "B" as contrasted with the larger lobe of that letter; in the "O" of "BOX" the connection or the closing of the "O" fairly high on the left side instead of towards the center or the right side, the same habit being also illustrated in the "O" in the combination "P.O."; the form of the "2" with the rather prominent base loop; the exaggerated length of the cap of the figure "5"; in the word "Dallas," the compound curve across the base of the "L"s; the circumstance that the "A" begins with a down stroke which is almost exactly retraced; the circumstance that the word "Texas" includes a lower case "e"; the use of the small letter "i" in combination with capital letters in the word "Magazine"; and similar features to those just described in the word "New Orleans."

Now, all of these things on the charts Exhibit A, B, and C—

Mr. EISENBERG. I don't think you need to point to them in detail, since you have already pointed to those items.

Mr. COLE. Yes.

I also find a substantial agreement in details of the signature, "Lee H. Oswald," as shown by the photograph 794, and signatures shown in the standard writing, with particular regard to the signature of chart C, item 6, next to the last line.

This constitutes my reasons for believing that the writing on Commission Exhibit 793 is in the hand of the person who made the standard writing.

Mr. EISENBERG. Mr. Cole, there seems to be a double line in several of these letters on the reverse side of this change-of-address card, such as the "D" in "DALLAS," the "e" in "Texas" and so forth. Can you give any explanation for that?

Mr. COLE. Well, I think the double line is more evident in the address "4907 Magazine Street, New Orleans, La."

Mr. EISENBERG. Yes?

Mr. COLE. And a possible reason is that the writer was dissatisfied with the width of the line as shown on the two lines above. While I regard it as having a fair legibility, the only explanation I can see is that for this particular document the writer wanted a heavier writing and, of course, one way to get it is to go over it again.

A thing of this kind can also be related to a writer's knowledge of the functioning of a certain pen.

If he knows that the pen he is using usually gives a heavier line, and for a particular writing he sees a thinner line, he may then make some modification in his handling of the pen and get the kind of line he wants.

Mr. EISENBERG. Is this similar to the retouching you mentioned earlier as being an evidence of forgery?

Mr. COLE. I would say no, since it is done in such an apparently spontaneous and confident manner. There is not the slightest evidence that any effort was made to conceal the presence of this retracing. I think I should say that generally the person producing a false or spurious writing does retouching in order to correct some imperfection of a letter, that is, he criticizes his work as he goes along and if he encounters a part which he thinks is incorrect with respect to form, he may then retouch it in order to correct it. It would be very unusual in any false or spurious writing to see any extensive retracing.

Mr. EISENBERG. Any further questions on this card?

Representative FORD. No further questions.

Mr. EISENBERG. Mr. Cole, I now hand you an item which appears to be a selective service system notice of classification with the name "Alek James Hidell" printed and the same signature, and a photograph which appears to be the photograph of Lee Harvey Oswald—and I state for the record that this item was obtained from the wallet of Lee Harvey Oswald following his apprehension after the assassination and the murder of Officer Tippit—and I ask you whether you have examined that item?

Mr. COLE. I have.

Mr. EISENBERG. May that be admitted as 795, Mr. Chairman?

Representative FORD. It may be admitted.

(Commission Exhibit No. 795 was marked and received in evidence.)

Mr. EISENBERG. When did you first examine that item, Mr. Cole?

Mr. COLE. May I refer to a note?

Mr. EISENBERG. Yes, certainly.

Mr. COLE. I first saw that item on December 6, 1963.

Mr. EISENBERG. Did you make an examination at that time?

Mr. COLE. I did.

Mr. EISENBERG. At whose request was that?

Mr. COLE. At the request of the Chief, U.S. Secret Service.

Mr. EISENBERG. What was your conclusion at that time?

Mr. COLE. It was my conclusion that that is not an original document but that it is in fact a photographic reproduction of some original document.

Mr. EISENBERG. Did you draw any conclusions as to how the reproduction might have been prepared?

Mr. COLE. Yes; it was my conclusion that a photograph was made of some original document, and that the resulting film negative was retouched for the purpose of blocking out certain parts, and by that I mean that the person processing a negative in this way would take an opaque compound and where you had clear areas of the negative, the negative, of course, showing clear areas where there was black on the original, that he would cover up this clear area of the negative so that in a resulting print nothing would come through. This would be a way of eliminating information which was actually on the original document.

Mr. EISENBERG. Such as the name of the person to whom the document had been issued?

Mr. COLE. Yes.

Mr. EISENBERG. Draft board and so forth?

Mr. COLE. Yes; then a print would be made of that retouched negative, and this, I believe, is such a print.

Mr. EISENBERG. There is information on this item consisting of the name "Alek James Hidell," a selective service number, and so forth. Could you draw any conclusion as to how this information had been put into the item if the card was prepared in this way?

Senator COOPER. What information, do you mean the name?

Mr. EISENBERG. Yes; the name "Alek James Hidell," the selective service number, the date of mailing, the signature of the member or clerk of local board, color of eyes, and so forth, all of the information appearing in print or color on the card.

Mr. COLE. That information was typed directly onto the photographic print which is Exhibit—

Mr. EISENBERG. That is 795?

Mr. COLE. 795.

Mr. EISENBERG. Does this item consist of one or two photographic prints, Mr. Cole?

Mr. COLE. There are two photographic prints, one for the front and one for the back, and they are pasted together.

Mr. EISENBERG. Is it on ordinary photographic paper?

Mr. COLE. Yes.

Mr. EISENBERG. Is there evidence that more than one typewriter had been used in inserting the signature—

Mr. COLE. Yes.

Mr. EISENBERG. Excuse me, the name, and some of the other information which I have referred to?

Mr. COLE. Yes, at least two typewriters were used. This may be seen clearly by the record of the selective service number, which includes a fairly light typewriting and then a heavier typewriting.

Mr. EISENBERG. Have you produced a photograph of Exhibit 795 or have you taken a photograph rather?

Mr. COLE. Yes, I have.

Mr. EISENBERG. Would you produce that?

Mr. COLE. Yes, sir.

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

Mr. COLE. Yes, sir.

Mr. EISENBERG. Is it a true and accurate reproduction of 795?

Mr. COLE. It is.

Mr. EISENBERG. May this be admitted as 796?

Representative FORD. It may be admitted.

(Commission Exhibit No. 796 was marked and received in evidence.)

Mr. EISENBERG. This is the front of 795, is it, Mr. Cole?

Mr. COLE. Yes.

Mr. EISENBERG. Have you also taken a photograph of the rear, the reverse side?

Mr. COLE. Yes, sir; I have.

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

Mr. COLE. Yes, sir.

Mr. EISENBERG. Is it a true and accurate photograph?

Mr. COLE. Yes, sir.

Mr. EISENBERG. May this be admitted as Exhibit 797?

Representative FORD. It may be admitted.

(Commission Exhibit No. 797 was marked and received in evidence.)

Mr. EISENBERG. Do you have extra copies of that?

Mr. COLE. I am sorry; I do not.

Mr. EISENBERG. Could you hold these photographs so that the Commission can see them, and illustrate your point concerning the use of more than one typewriter?

Mr. COLE. The selective service number shows typewriting which has a fairly light deposit of ink from the ribbon. It also shows typewriting with a some-



what heavier deposit. Now, there is a clear difference in the design of the figure "4" which shows that two different typewriters were used.

Mr. EISENBERG. Can you think of any reason why that might have been done, why two different typewriters were used?

Mr. COLE. Well, here again the typewriter shown by the typewriter impression has a rather poor legibility and it is my theory that a person producing typing of such limited legibility might well move the job over to another typewriter having a more heavily inked ribbon. I might say also that it is quite difficult to type on this glossy photographic paper. The ink won't come down from the ribbon nearly as well on such a surface as it does on ordinary bond paper.

Mr. EISENBERG. Now, you have also reproduced the back, the reverse side, of 795 in your photograph 797. Is the typewriting on the back, illustrated in 797, that contained in the light-impression typewriter shown on the front, or the heavy-impression typewriter?

Mr. COLE. The lighter impression.

Mr. EISENBERG. You can tell that how, Mr. Cole?

Mr. COLE. Well, it is illustrated, first of all, by the extremely small deposit of ink, and second by the circumstance that we can see the same design of figure "4" in a part of the address between this frame, which is the design of the figure "4" of the lighter typewriting on the face of the document.

Senator COOPER. Could I ask you, is it correct that the typewriter which you say was used, which gave a light impression, the "4" is closed at the apex?

Mr. COLE. That is correct.

Senator COOPER. And the heavier typewriter which was used which produced the "4," the "4" is open at the apex?

Mr. COLE. Yes.

Mr. EISENBERG. Carrying that question forward, the reverse side shows the "4" closed at the apex, does it not?

Mr. COLE. Yes, sir.

Mr. EISENBERG. There seems to be some erasure under the name "Alek James Hidell" which is typewritten in the front side, as well as a faint letter or two. Did you draw any conclusions as to that material?

Mr. COLE. Well, in this area there is also in addition to typewriting already mentioned, there is evidence of a rather sharp indentation of typewritten material, which could result from the blow of a typewriter key against this paper without the interposition of any ribbon at all. Most typewriters have an adjustment called "stencil" whereby you can prevent the ribbon from coming up in front of the type bar, and there is a complete line of indentations along there which reads "Alek James Hidell," and one very interesting feature is that just to the left of the indented name "Alek" there is a capital letter "O."

I don't say at that particular point there was any completion of a name following the letter "O" but we do have this clear indentation of the letter "O."

Mr. EISENBERG. Have you prepared a photograph which brings out those details a little more clearly than in the original, 795?

Mr. COLE. Yes, sir; I have. This photograph was made by a very low angle of illumination, a raking light across the document which shows up the indentations.

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

Mr. COLE. Yes, sir.

Mr. EISENBERG. It is a true and accurate reproduction of 795?

Mr. COLE. It is.

Mr. EISENBERG. May this be admitted as 798?

Representative FORD. It may be admitted.

(Commission Exhibit 798 was marked and received in evidence.)

Senator COOPER. Could I ask a question? You referred to an indentation representing the letter "O." Could you point that out and indicate the exhibit upon which you identified the letter "O"?

Mr. COLE. Here. I point to an area approximately two typewriter spaces on the left of the visible letter "A" of "Alek."

Senator COOPER. On Commission Exhibit 795?

Mr. COLE. Yes; correct.

Senator COOPER. Were you able to determine whether that indentation representing "O" was made by a typewriter or does it represent a letter which was still visible from the original card of selective service classification?

Mr. COLE. That is a typewritten letter "O," sir. I think that nothing is visible on that line from the original.

Mr. EISENBERG. Referring to your photograph, 798, there seems to be—the word "James" seems to be printed more than once, as does the name "Hidell," in stencil. Is that your observation, Mr. Cole, also?

Mr. COLE. Yes; that is true.

Mr. EISENBERG. Is there any other material that was printed in stencil, on the stencil setting, of the typewriter?

Mr. COLE. Yes; there is a writing of the serial number which is also in stencil form.

Mr. EISENBERG. Anything else? We are referring now just to the front of the card.

Mr. COLE. Yes. The date of mailing also shows an indentation.

Mr. EISENBERG. Can you think of any reason why the use of the typewriter on stencil may have been done?

Mr. COLE. I can mention reasons that I have observed on other documents which might apply to this one, and that would be an effort on the part of the operator of the machine to find a correct place for beginning typewriting, but I am obliged to say that on those other examples I have never seen such extensive stenciled writing. I would say that a single letter should give a person a pretty good idea of the position for beginning writing, and it should not be necessary to write out this material in full.

Now another theory for applying indentations to this type of material might be, say, previous experience with trying to write on a glossy surface, and knowing that you don't get enough ink from a ribbon on such a surface and possibly an intention to apply a rather sharp indentation and later fill that in with pigment. I am a little doubtful if it would be successful but one might attempt to try it, because various kinds of printing are made in that way, first by producing an indent, and then working a pigment down into the indentation. I would say on this particular document, I don't see there was any evidence that the preparer of the document went through with any such plan.

Representative FORD. For the record, I do have to leave to attend the House session, and Senator Cooper, will you preside as chairman?

Senator COOPER. Yes; I will be glad to do so.

(At this point Representative Ford departed the hearing room.)

Mr. EISENBERG. Referring to your photograph 798 again, the word "James" in "Alek James Hidell" seems to have been printed twice, as you stated before, and the second time it seems to have started—at least twice—and the second time it seems to start after the first "James" has stopped. Is that your observation?

Mr. COLE. Yes.

Mr. EISENBERG. Referring back to your theories or the possible theories you mentioned as explanations of the printing by stencil, would the placement of the two "James" on the upper line indicate whether or not either of those theories might be applicable?

Mr. COLE. Well, of course, the repetition of these names is somewhat opposed to the theory that a person might prefer to ink it in later. But, of course, it is possible that he could not see it very well, and that he might think he could make a selection of either one or the other for inking in.

Mr. EISENBERG. Does the word "James" appear to have been stenciled more than twice?

Mr. COLE. Well, there is some overlapping or superimposition of indentations in the first record of the indented name "James." It could have been as many as three times in the stencil operation.

Mr. EISENBERG. Now, Mr. Cole, have you produced a photograph of the reverse side of the selective-service card—

Mr. COLE. I have.

Mr. EISENBERG. That is, 795?

Mr. COLE. I have.

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

Mr. COLE. Yes, sir.

Mr. EISENBERG. And is it a true and accurate photograph of 795?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Mr. Chairman, may this be admitted as 799?

Senator COOPER. It will be admitted.

(The document referred to, previously marked as Commission Exhibit 799, was received in evidence.)

Mr. EISENBERG. This is an additional photograph of the reverse side of 795?

Mr. COLE. That is correct. The one last mentioned was also made with a very low angle of illumination raking the light across the document.

Mr. EISENBERG. The "one last mentioned" being 797 or 798?

Mr. COLE. 799 was made with the low-angle illumination to bring out the indentation.

Mr. EISENBERG. That is as opposed to 797, which is the reverse side of the photograph introduced as 795?

Mr. COLE. Yes.

Mr. EISENBERG. And that had a normal illumination?

Mr. COLE. Yes; correct.

Mr. EISENBERG. By use of this 799 photograph, could you read to us what was stenciled, insofar as possible?

Mr. COLE. Opposite "Color of Eyes" there is discernible the indented type-written letters "CT." This is just to the left of the visible letters "GR." Then opposite the "Color of Hair" there is an indentation of the word in capital letters "BROWN." Just above the visible "9" for the inch figures of height, there is a second indented "9." Opposite the word "weight" there is a small letter "i" as an indentation.

Mr. EISENBERG. Is "i" the lower case of the figure in the typewriter which produces "1" in upper case?

Mr. COLE. No; it is the lower case "l" which is used for the "1" on most typewriters. In the frame above the wording "Local Board Stamp" there is visible typewriting and indentations but I think this is probably all one typewriting act, the ink coming down from the ribbon only in a rather irregular fashion. Just outside the frame on the right side there is an indentation of the abbreviation "ST."

Mr. EISENBERG. Mr. Cole, did you have occasion to examine these cards at a subsequent time—this card, I am sorry, the Selective Service notice of classification, or spurious Selective Service classification, 795?

Mr. COLE. Yes, sir; I did.

Mr. EISENBERG. At that time did you examine the negatives which I now hand to you?

Mr. COLE. I did.

Mr. EISENBERG. For the record, these are a set of negatives which were found at one of the premises inhabited by Lee Harvey Oswald. Mr. Chairman, may I have them admitted as 800? I would like these negatives which Mr. Cole examined and which were found in one of the residences of Lee Harvey Oswald to be received as 800.

Senator COOPER. It is so ordered.

(The negatives referred to were marked as Commission Exhibit 800 and received in evidence.)

Mr. EISENBERG. Did you also examine this card which I now hand you, which for the record is a Selective Service System notice of classification in the name of Lee Harvey Oswald, found in the wallet of Lee Harvey Oswald following his apprehension after the assassination and the murder of Officer Tippit?

Mr. COLE. I did examine this card.

Mr. EISENBERG. Mr. Chairman, may this card, which is Oswald's actual Selective Service System notice of classification, be admitted as 801?

Senator COOPER. So ordered.

(The document referred to was marked as Commission Exhibit 801, and was received in evidence.)

Mr. EISENBERG. Now what did your examination of the negatives and the

card show, in relation to your earlier examination, conducted simply of the Exhibit 795?

Mr. COLE. May I say something off the record.

(Discussion off the record.)

Senator COOPER. Back on the record.

Would you please state on the record your reasons for making your prior answer to the question of counsel?

Mr. COLE. I have some question whether this is actually the card which I had previously examined, although I am sure I did examine a Selective Service card, and it will take just a moment of close examination of this one to determine that, and I would suggest that if there are any other Selective Service cards available belonging to this group or grouped with this card that I should see them at the same time.

Senator COOPER. Your statement is then that you just desired to examine—

Mr. COLE. Yes, sir.

Senator COOPER. This card and any other Selective Service card that may be available?

Mr. COLE. Yes, sir.

Senator COOPER. I suggest that the Commission recess for a sufficient time to permit the witness to examine the Selective Service card.

Mr. EISENBERG. Before that recess, let me introduce another card relating to the Selective Service System, which is the registration certificate of Lee Harvey Oswald. Did you examine—did you examine this registration certificate, Mr. Cole? And perhaps you can now, Mr. Reporter, note a recess while he examines both the registration certificate and the Selective Service System notice of classification.

Senator COOPER. So ordered.

(Short recess.)

Mr. COLE. Yes, sir; I did examine this registration certificate.

Mr. EISENBERG. Did you examine the Selective Service System notice of classification?

Mr. COLE. Yes, sir; I did. I did examine the notice of classification.

Mr. EISENBERG. That is 801. May I have the registration certificate admitted as 802?

Senator COOPER. Let it be admitted.

(The document referred to was marked Commission Exhibit 802, and was received in evidence.)

Mr. EISENBERG. This was also found in the wallet of Oswald following his apprehension. Now, on the basis of your examination of these cards and the negatives, did you find yourself reinforced in your earlier conclusion, Mr. Cole?

Mr. COLE. I did. This confirmed my earlier conclusion which was formed at a time I had only the photographic prints. Exhibit—

Mr. EISENBERG. No. 795, together with photographs thereof, is that what you are referring to now?

Mr. COLE. That is correct; yes.

Mr. EISENBERG. Can you discuss the negatives, Exhibit 800, that you referred to in your examination?

Mr. COLE. Yes; there are two negatives which are of Selective Service System notice of classification. Both of these negatives show extensive retouching, sometimes called opaquing, for the purpose of preventing certain material which appeared on an original from printing on a photographic print. The two negatives are apparently related to a single original. One of them has a somewhat greater amount of retouching than the other. It is my view that the second negative, that is, the one showing the smallest amount of retouching, was probably made from a photographic print of the first one. In other words, the retouching operation has involved two steps which resulted in the production of two separate negatives. A possible reason for the second step was that on the negative showing the most extensive retouching there is still some material remaining from the original document, namely the lower extensions of two letters "f" which pass through certain wording at the right side of the document, reading "local board," and another word reading "violation." Now on

the second negative of the pair a successful operation in touching out those particular parts was accomplished.

Mr. EISENBERG. Do you believe that the second negative was prepared from the first, or they were prepared separately from the Selective Service card itself?

Mr. COLE. I believe that the second negative was prepared from a photographic print of the first one.

Mr. EISENBERG. Mr. Chairman, for ease of discussion, I would like to take out the "first negative" from Exhibit 800 and give it a separate number, 803, if I may. Is that all right, Mr. Chairman?

Senator COOPER. Yes.

(The negative referred to was marked Commission Exhibit No. 803, and was received in evidence.)

Mr. COLE. The negative I hand you now is the one I referred to as the first negative, and the one having the most extensive retouching or opaquing.

Mr. EISENBERG. That is the one with the portion of the signature appearing over the word "violation"?

Mr. COLE. That is right. A portion which has not been retouched out of the negative.

Mr. EISENBERG. And does that same portion appear in the original of Oswald's card, 801?

Mr. COLE. It does.

Senator COOPER. Is that a part of the record?

Mr. EISENBERG. Yes, sir. Now, there is a good deal of red material on the reverse side of this "first negative." That is the opaquing material, is it?

Mr. COLE. Correct.

Mr. EISENBERG. I would like to make the "second negative" referred to 804, Mr. Chairman.

Senator COOPER. Very well. You want that made a part of the record?

Mr. EISENBERG. Yes, sir.

Senator COOPER. Let it be made a part of the record.

(The negative referred to, marked Commission Exhibit 804, was received in evidence.)

Mr. EISENBERG. We are extracting that from 800 for ease of discussion.

Now, Mr. Cole, I call your attention to the fact that the words appearing on the face of the original 801, the printed material beginning "The law requires you, subject to heavy penalty for violation, to carry this notice in addition to your Registration Certificate," and going on for two full paragraphs of small or ordinary Roman lower and upper case, and ending in solid caps "FOR ADVICE, SEE YOUR GOVERNMENT APPEAL AGENT," this language in the original spreads across the bottom of the card from left to right, starting slightly to the right of the dotted line running up and down the card and marked "registrant must sign here," and extending quite close to the right margin.

Does it appear in the same fashion, approximately, on the "first negative," which is Exhibit 803?

Mr. COLE. Yes; but, of course, this negative includes a section along the left side which is not shown on the original.

Mr. EISENBERG. Which is actually a blank section, is that correct?

Mr. COLE. Correct.

Mr. EISENBERG. Is the negative slightly enlarged, apart from that blank section?

Mr. COLE. I think it is the same size.

Mr. EISENBERG. I call your attention to the "second negative," which is Exhibit 804, and this same language, "The law requires you," and so forth, until "FOR ADVICE, SEE YOUR GOVERNMENT APPEAL AGENT" appears in a much smaller compass, that is to say it starts substantially to the right of the margin or the signature line and is separated from the signature line by another dotted line.

Mr. COLE. That is correct.

Mr. EISENBERG. And does that correspond to the forged card, 795?

Mr. COLE. It does.

Mr. EISENBERG. Has that created a space on the forged card which does not exist on the original?

Mr. COLE. That is correct.

Mr. EISENBERG. And is that the space into which the photograph has been inserted on the forged card?

Mr. COLE. Yes, sir.

Mr. EISENBERG. I call your attention to a small strip of negative which appears to bear this language, and I ask you whether you believe that this negative might have been used in the preparation of the forged card?

Mr. COLE. Yes, sir; I believe this negative was used for producing the forged card which is a photographic print.

Mr. EISENBERG. Mr. Chairman, may that be made 805?

Senator COOPER. Let 805 be made a part of the record.

(The negative referred to was marked and received in evidence as Commission Exhibit No. 805.)

Mr. EISENBERG. In your opinion, can you account for the reduction in size of that printing, "The law requires you" and so forth?

Mr. COLE. Well, it would seem that it had to be reduced in size to accomplish the obvious purpose on the card, Exhibit 795, of providing extra space for a photograph.

Mr. EISENBERG. How would that be done?

Mr. COLE. This can be done photographically. When a photographic camera is set up to take a picture of a document you have a considerable range for making either enlargements or reductions on the negative.

Mr. EISENBERG. Is this whole process one which requires a great deal of skill, and when I say "whole process" I refer to the re-creation of a new card by use of opaquing material and the reduction in size of a portion of the text on the original card?

Mr. COLE. No; I wouldn't say that it requires a great skill. I would say an elementary knowledge of photography, especially the photographic techniques used in a printing plant, would be enough for such a purpose.

Senator COOPER. On that point, would it require study to learn to make, to exercise these techniques, either from a textbook or information from someone else or by observation of the practice?

Mr. COLE. I think observation and association with other people, or being in a place where such techniques were going along in the normal operation of a photographic laboratory or printing plant, would be enough. A person wouldn't have to consult a text. As a matter of fact, similar things are done for normal printing operations.

Senator COOPER. That is the question I wanted to ask. Would this type of technique in an average shop or plant be normal?

Mr. COLE. Oh, yes.

Senator COOPER. Would it require much practice on the part of an individual before such technique could be successfully accomplished?

Mr. COLE. No; I would say a moderate amount of practice.

Senator COOPER. How much, would you say? How many times would a person have to, if it is possible to say, practice this kind of a technique before he could do it reasonably well?

Mr. COLE. On a trial-and-error basis, I would say that a half dozen attempts on a trial and error basis of going through such an operation, perhaps making an error, finding how to correct it, doing it again, achieving more success, would certainly be enough.

Senator COOPER. You would say then, assuming that Lee Oswald made these changes, that he would have had to practice them several times before he could have successfully made the changes which were indicated by the exhibits that have been introduced?

Mr. COLE. Well, sir; I would say he would not necessarily have to practice on this particular document, but if he had some practice, he or any other person, had had some practice in normal operation, similar operations in a printing plant, then he could accomplish this result.

Senator COOPER. Would these changes have required the assistance at the time of another person——

Mr. COLE. I think not.

Senator COOPER. Or could they be accomplished by one person?

Mr. COLE. One person could easily do it.

Senator COOPER. Thank you.

Mr. EISENBERG. Now on these questions which Senator Cooper has been asking, I ask you to refer back to Exhibit 800, consisting of a group of other negatives not related to the selective-service card, and ask you whether those negatives bear any evidence of opaquing and similar techniques as were used in the creation of Exhibit 795?

Mr. COLE. They do. All of them show evidence of opaquing, that is, touching out certain information, letting other information come through.

Mr. EISENBERG. Do you think this might have constituted sufficient practice to produce the 795 result?

Mr. COLE. Yes; I think so.

Senator COOPER. Would it have been necessary for a person making these changes to have had for his use any kind of special equipment, or what kind of equipment would be required to make these changes?

Mr. COLE. Well, sir; in a printing plant there are usually what they call light tables, a table with a transparent surface with a light under it, which are used for making up, for assembling various materials to be included in a single plate. But that wouldn't be essential. A person could take a negative ready for retouching right to the window there, place it against the window and touch out material in that manner.

Senator COOPER. My question really goes to this point: Would it have been necessary for a person who made these changes to have done the work in a shop or printing plant or could it be done outside of a printing shop?

Mr. COLE. It would not have to be done in a printing shop. It could be done easily in this room or any ordinary living accommodations.

Senator COOPER. That is all.

Mr. EISENBERG. Would you need, Mr. Cole, in your belief, the type of equipment you are likely to find in a printing plant, or could this be done with home equipment?

Mr. COLE. I would say it could be done with home equipment, but I think it is unlikely with respect to the actual preparation of the negative that one would get a successful result from home equipment. I believe that for the preparation of the negative, that is, apart from the retouching operation, that one would need a very accurate camera such as are found in photographic laboratories and printing plants.

Mr. EISENBERG. Could the opaquing have been done off the printing premises?

Mr. COLE. Yes; the opaquing could be done almost anywhere, in any ordinary living accommodation, needing only a source of light to pass through the negative, the liquid opaquing material, and a small brush.

Mr. EISENBERG. Mr. Cole, if you were going to prepare a forged Selective Service System notice of classification, and if you did not have access to blanks of the Selective Service System itself, how would you go about preparing such a forgery?

Mr. COLE. I would use a method similar to that already described here with one modification; namely, that in preparing the original negative, I would make an enlargement directly on the negative, then go through the opaquing operation, and in making the final print I would reduce it back to original size. That would produce a somewhat better quality of print, and it gives somewhat more freedom in the opaquing operation, that is, in working with a larger negative there is not as much danger of running the opaque into some material that you want to save, and we see on these negatives there are a few places where the person doing the opaquing has actually permitted this material to run into a part that should be saved on the original.

Mr. EISENBERG. Would you use the same type of photographic paper?

Mr. COLE. I would not. I would use a dull-surfaced paper which would look more like an original document.

Mr. EISENBERG. When you said that the person who produced the negatives

let his opaque run into areas which he wanted to save, what areas are you referring to, what type of areas?

Mr. COLE. Well, areas where there is needed a sharp outline of a box which is to receive some printed information, and this, of course, is a very thin line, and it is very difficult to control this liquid on the negative. There are some places where it has run into the line and apparently it was necessary to make some strengthening or correction of that line later.

Mr. EISENBERG. Did you see evidence of correction of the line?

Mr. COLE. Yes; on Commission Exhibit 795 the boxes for selective service number apparently have been strengthened somewhat.

Mr. EISENBERG. Now referring to Commission Exhibit 801, which is the actual card, do the numbers overlap or extend to the borders of the margin at all?

Mr. COLE. There is one figure in particular which runs right along the line of the box. This is the first box on the left, and the figures are "41" and the "1" lies directly over the line on the right side of the box.

Mr. EISENBERG. And does the "4" in "41" and the "3" in "39" overlap the boxes?

Mr. COLE. They do.

Mr. EISENBERG. Would that practically necessitate a correction of the boxes?

Mr. COLE. Yes; it would, in order to repair the line.

Mr. EISENBERG. Mr. Cole, I hand you an item entitled "Certificate of Service Armed Forces of the United States," reading "This is to certify that Alek James Hidell" and so forth, and "Period of Active Duty"—on the reverse side now—"October 1, 1958" to a date which is blurred, and I ask you whether you have examined this item?

Mr. COLE. I have.

Mr. EISENBERG. Mr. Chairman, may this be admitted as 806?

Senator COOPER. Let the exhibit be admitted.

(The document referred to was marked as Commission Exhibit No. 806, and received in evidence.)

Mr. EISENBERG. When did you first examine this item, Mr. Cole?

Mr. COLE. That was also examined in December of 1963, December 6, 1963.

Mr. EISENBERG. Together with the selective service system notice of classification?

Mr. COLE. Yes, sir.

Mr. EISENBERG. And did you have any negatives at that time, or the original?

Mr. COLE. I did not.

Mr. EISENBERG. What was your conclusion at that time, based solely upon the examination of 806?

Mr. COLE. It was my conclusion that 806 is actually a photographic print from a photographic negative. It is not an original document.

Mr. EISENBERG. And on what did you base this conclusion?

Mr. COLE. My familiarity with the appearance of photographic paper primarily.

Mr. EISENBERG. Did you prepare photographs at that time, Mr. Cole?

Mr. COLE. I did.

Mr. EISENBERG. Could you produce those? These photographs are of the front and reverse, respectively, of Commission Exhibit 806?

Mr. COLE. Yes, sir.

Mr. EISENBERG. And these were prepared by you or under your supervision?

Mr. COLE. Yes, sir.

Mr. EISENBERG. And they are accurate photographs of 806?

Mr. COLE. They are.

Mr. EISENBERG. Mr. Chairman, may I have these admitted as 807 and 808, respectively.

Senator COOPER. The exhibits will be admitted to the record.

(The photographs referred to were marked as Commission Exhibits Nos. 807 and 808, respectively, and were received in evidence.)

Mr. EISENBERG. 807 will be the front and 808 will be the reverse. Mr. Cole, could you attempt to decipher the typewriting on the reverse side as shown in the photograph 808?

Mr. COLE. The typewriting reads "October 13 1958," and on the second line



there is some confusion of the typewriting, in other words, there is more than one typing operation on the line reading "To." One of these typing operations reads "October 12, 1961." One of the other typing operations on the line for "To," as determined by a previous examination under the microscope, shows an indent of "23 October 1959."

Mr. EISENBERG. Do you believe that was—yes, go ahead.

Mr. COLE. Also on the line reading "From" there is an indentation of another typewriter operation which reads "24 October 1957."

Mr. EISENBERG. Do you believe those indentations were caused by a typewriter set at stencil?

Mr. COLE. Yes; without the interposition of a ribbon between the type bar and the paper.

Mr. EISENBERG. Did you take photographs with side light, as you had in the case of the selective service card, to attempt to bring out these stencil marks?

Mr. COLE. I did.

Mr. EISENBERG. Could you produce those photographs? You are handing me a photograph of the front side of the certificate of service, and is this a photograph which you took?

Mr. COLE. It is.

Mr. EISENBERG. An accurate reproduction of the Exhibit 806?

Mr. COLE. Yes, sir.

Mr. EISENBERG. May I have this admitted as 809, Mr. Chairman?

Senator COOPER. Let this exhibit be made a part of the record.

(The photograph referred to previously marked as Commission Exhibit No. 809, was received in evidence.)

Mr. EISENBERG. You have also given me a photograph of the reverse side of 806?

Mr. COLE. Yes, sir.

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

Mr. COLE. Yes.

Mr. EISENBERG. And is it an accurate photograph of the reverse of 806?

Mr. COLE. It is.

Mr. EISENBERG. May the photograph of the reverse be admitted as Exhibit 810?

Senator COOPER. Exhibit 810 will be admitted as part of the record.

Mr. EISENBERG. Could you show us what you found in the way of indentations caused by stencils, by referring to these Exhibits 809 and 810?

Mr. COLE. 809 shows the face of the exhibit and in addition to the clearly visible typewriting of the name "Alek James Hidell," there is a repetition of this name somewhat below the visible typewriting in the form of typewritten indentations.

Mr. EISENBERG. Is this similar to the typewritten indentations found in the selective service card, 795?

Mr. COLE. Yes; they are.

Mr. EISENBERG. Do you believe that the name "Alek James Hidell" was stenciled once or more than once?

Mr. COLE. More than once, at least twice, I would say.

Mr. EISENBERG. What is the relative position of the two stenciling operations?

Mr. COLE. They were somewhat below, about one-half to three-quarters of the height of a typewritten character below, the visible typewriting.

Mr. EISENBERG. What is the relationship to each other?

Mr. COLE. They are offset about one-quarter to one-half the height of a typewritten character.

Mr. EISENBERG. From each other?

Mr. COLE. That is right, vertically.

Mr. EISENBERG. Is it accurate to say then that there is a progression upward as comparing the typewritten name and the two stenciled operations, or at least that the three are set in step, so that each one is below the next impression?

Mr. COLE. That is correct, with the visible typewriting having the better position relative to the reproduction of the printed matter.

Mr. EISENBERG. Can you think of the reason why this might have been, why this operation might have been performed in this manner, Mr. Cole?

Mr. COLE. Yes. It could easily result from some difficulty of finding the correct place for typewriting the name on the card. The lowermost indentation would

have been an incorrect position since it was run into a part of the reproduction of the printed matter.

Mr. EISENBERG. Now, I refer back to 798, which is a highlight photograph of the selective service card, and ask you whether the stenciled material in 798 appears above the line on which the typewritten material—first name, middle name, and last name—should appear?

Mr. COLE. Yes; somewhat above.

Mr. EISENBERG. In light of that, do you think it is possible that the individual who prepared this card used the stencil to determine at what point the type-writing would be placed so that it was in the correct position in relationship to the line above which it belonged?

Mr. COLE. That is a definite possibility and, of course, he might also have been concerned about the position for the reproduced printed matter—"First name," "Middle name," "Last name."

Mr. EISENBERG. Bringing your attention back once more to 795, the Selective Service System card, was the reverse side of that card prepared in your opinion from Commission 802, which is the reverse side of the registration certificate? I also call your attention to 801 for comparison, that is, the original of the selective service card.

Mr. COLE. Yes, sir. The reverse of the photographic identification card, Commission Exhibit 795, could be a photographic reproduction of the reverse of Commission Exhibit 802, with the performance of certain opaquing operations.

Mr. EISENBERG. Looking at the reverse side of the two cards, 802 and 801, does the reverse side of the card 801 have any information for identifying characteristics of the individual bearing the card?

Mr. COLE. It does not.

Mr. EISENBERG. And what about the reverse side of 802?

Mr. COLE. The reverse side of 802 provides space for a personal description, color of eyes, color of hair, complexion, height, and weight.

Mr. EISENBERG. Did you find among the negatives in 800 a negative which might have been used or was used to prepare the reverse side of the selective service card, 795, the spurious card?

Mr. COLE. Yes; I did.

Mr. EISENBERG. Mr. Chairman, may I have this negative classified separately as 811 for purpose of ready identification?

Senator COOPER. Let it be so classified, and admitted as part of the record.

(The document referred to, was marked as Commission Exhibit No. 811 and received in evidence.)

Mr. EISENBERG. Did you find a negative which might have been used for the preparation of the certificate of service, that is 806?

Mr. COLE. Yes; I did, for both face and back.

Mr. EISENBERG. Were these negatives in your opinion used as the negatives for that purpose?

Mr. COLE. Yes, sir. In my opinion, these are the very negatives that were used for producing the photographic print representing a certificate of service.

Mr. EISENBERG. May these be subclassified as or separately classified as 812, Mr. Chairman, and introduced as 812?

Senator COOPER. Let the document be designated as 812 and admitted as part of the record.

(The item referred to, was marked as Commission Exhibit No. 812 and received in evidence.)

Mr. EISENBERG. Did you reach the same conclusion, by the way, as to the negative 811, that is, that it was definitely the negative used to produce the reverse side of 795?

Mr. COLE. I did. This is the very negative to produce the reverse side of 795.

Mr. EISENBERG. Returning to 795, there are two signatures which appear in 795 in ink, is that correct?

Mr. COLE. Yes, sir.

Mr. EISENBERG. That is, the signature over the caption "Member or clerk of local board," and the signature over the caption "Registrant must sign here"?

Mr. COLE. Yes, sir.

Mr. EISENBERG. The second signature reads "Alek J. Hidell"?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Could you read the first signature?

Mr. COLE. The first signature appears to be the name "Goodhoffer," but that is partly an estimate. In other words, it is not possible to read this in a clear manner. That is a possible spelling of the name but not necessarily the only spelling.

(At this point, there was a short recess, and Mr. McCloy entered the hearing room.)

Senator COOPER. I am now called to the Senate. Mr. John McCloy will act as Chairman.

(At this point Senator Cooper departed the hearing room and there was a further recess.)

Mr. EISENBERG. How does that compare with the signature on the original card, Exhibit 801?

Mr. COLE. It is not the same name and, of course, not in the same handwriting.

Mr. EISENBERG. Now, did you compare the two signatures on Exhibit 795 with the standards in this case to determine whether the signatures have been written by the person who produced the standards?

Mr. COLE. I did compare the signatures on 795 with the standard writing.

Mr. EISENBERG. What was your conclusion, Mr. Cole?

Mr. COLE. With respect to the signature above "Member or clerk of local board," I have not formed any conclusion about authorship. With regard to the writing "Alek J. Hidell," it is my opinion that the author of the standard writing is the author of that name.

Mr. EISENBERG. And referring to the charts of the standards which you prepared, and referring to the photograph of 795, could you explain the reasons for this conclusion?

Mr. COLE. Would you want any copy of this?

Mr. EISENBERG. Yes; if you have a copy.

Mr. COLE. The capital letter "A" of the name "Alek" on 795 is reproduced in the standard writing on chart B, item 6, in the general conformation of the several lower case "a's" in that area. I refer to it as a capital "A" because it begins the name, but actually with respect to size and formation it is closely similar to the lower case "a's" of item 6. Now the similarity is largely in the method that the staff is made, the way it pulls away from the oval body of the letter with only a moderate rate of retracing along the right side. That detail, as I say, is found both in the "A" on 795, and in the several "a's" of item 6. There are three in a row there, each beginning a line of writing.

The letter "k" of the name "Alek" compares favorably with the "k's" of the standard writing, chart A, items 13 and 14. With regard to the middle initial "J," there is not a cursive "J"—that is, as distinguished from a printed "J"—shown on the charts of standard writing. But the movement required for producing a "J" is similar to that required for producing the capital letter "I," and we observe a similarity as to movement with respect to the "J" of 795 as compared with the "I" of chart B, item 3.

One characteristic of the capital letter "H" of "Hidell" on 795 is the method of making that formation which stands for the crossbar. Now this is the closed part along the lower half of the right side of the letter, which would represent the crossbar of the letter. This is the general movement used in a number of the signatures of Lee H. Oswald. One good example is that on chart B, item 15, the middle initial "H". Another feature of that "H" is the connection to the following letter by an approximately horizontal stroke passing from the finish of the crossbar of the "H" across to the "i," and we observe a similar method of connection, although not with the same letter, on chart A, items 10 and 11, where the "o" is connected by a straight line, almost horizontal projection of the crossbar, from the "H" to the "o".

The letter "i" again shows a feature, which has previously been mentioned in the standard writing, of an increase of forehand slant, that is a slant to the right with respect to that letter as compared to other letters. This feature is shown in a number of places in the standard writing, one good example being on chart B, item 10, the second "i"—which is there because of a misspelling of the word "Washington" that is spelled, the last few letters, "tion"—and

there we observe that rather extreme increase of the forehand slant of the letter "i".

The letter "d" of "Hidell" compares favorably with the "d's" of the standard writing on chart A, item 5, in the word "discharge," and on the same chart, item 6 in the word "regards."

The final "l's" show a perceptible increase of pressure on the downstrokes, which is also found in the standard writing, chart B, item 6, top line, the word "enroll." This shows a somewhat more extreme increase in pressure on downstroke, but I regard it basically as the same habit. This particular part also shows a very abrupt terminal stroke for the letter "l" as between 795 and compared with the final or last stroke of the "l" on chart B in the last stroke in the word "enrolled."

These constitute my reasons for believing that the author of the standard writing is the author of the signature "Alek J. Hidell" on Exhibit 795.

Mr. EISENBERG. Now concerning the other signature, Mr. Cole, are you unable to or—can you state why you are unable to arrive at a conclusion?

Mr. COLE. Well, partly because of the limited writing we have for comparison. The last part of the name is practically illegible, and the letters are so confused that I believe they do not accurately record writing habit. I would regard it as being a rather unnatural writing. Now there is fair legibility in the letters of the first name, and they do have a moderate rate or amount of similarity to the standard writing, but since it is only a few letters, I think there is not a basis for a conclusion.

Mr. EISENBERG. Is the signature inconsistent with the writing of the standards?

Mr. COLE. No; I wouldn't say there was any—there is certainly no basis for eliminating the author of the standards as being the author of that signature.

Mr. EISENBERG. Does there appear to be any attempt at disguise in this signature?

Mr. COLE. Well, I wouldn't regard it. If there is such an attempt, it is not, it seems to me, not a matter of deliberation or trying hard at it, but only a matter of being extremely careless in the last part of that signature.

Mr. EISENBERG. Is illegibility sometimes used as a method of disguise?

Mr. COLE. Yes, sir; it is.

Mr. McCLOY. May I ask some questions about this?

Mr. COLE. Yes.

Mr. McCLOY. If that word is "Good," that first word on the Exhibit 796, is it—

Mr. EISENBERG. 795, and the photograph is 796.

Mr. McCLOY. 795. If that letter "G" is compared with the capital letter "G" on the standard chart B-5, "Glenview," would you say there is any similarity between the two?

Mr. COLE. Yes; there is, with respect to the size of the upper loop which is on the left side of the letter, and the approximate horizontal motion in passing from that loop over to the right side of the letter.

Mr. McCLOY. We have it again in 14 of that same chart?

Mr. COLE. Yes, sir.

Mr. McCLOY. The "J" which seems to follow the word "Good," however, does not seem to comport with the "J" on the signature "Alek J. Hidell," does it?

Mr. COLE. No; but, of course, you are getting there to the area where the rather serious corruption or illegibility of forms begins. I think one could say that from the fair legibility of the first name, and the very poor legibility of the last name, that this is a deliberate effort. In other words, you have got a demonstration of the ability of the writer to produce a legible writing and, therefore, to devolve into this very illegible effort could be intentional.

Mr. McCLOY. I noticed when you compared the "J" in "Alek J. Hidell" with the standard "I," such as the one on chart B-3, there was a definite similarity, but I notice on chart A, No. 7, there is an "I," a capital "I" presumably, which apparently doesn't have the same conformation as the "J" in the Commission Exhibit 795. Would you agree with that?

Mr. COLE. Yes; that is true, but I think in studying these forms we ought to consider all available "I's," and there would be some others, such as the one on

B-4 and one in B-6. It shows a fair range of variation, especially with regard to finishing the lower part of that letter. Now, I would judge the one on B-3 to be definitely a part of his writing habit, because it gives the impression of having been made with a considerable amount of freedom. Generally, a larger form is made more freely, more naturally, than a smaller form.

Mr. McCLOY. I see.

Mr. COLE. And you see you have got sort of a cramped effect across the base of the "I" in A-7.

Mr. McCLOY. What I am getting at is, you don't suggest that all these "I's" and all these "J's" exactly conform, but you are talking in terms of similarities that turn up in certain of them that you believe are significant?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Mr. Cole, I now hand you an item consisting of a yellowish card entitled "International Certificates of Vaccination as approved by The World Health Organization," and so forth, PHS Form 731, and reading in part, "This is to certify that Lee Oswald, whose signature follows" and with the signature, "Lee H. Oswald," date of birth and so forth, "has on the date indicated been vaccinated or revaccinated against smallpox," with a date appearing in a rubber-stamp printing, what appears to be rubber-stamp printing, "June 8, 1963," and a rubber-stamp signature of "Dr. A. J. Hideel, P.O. Box 30016, New Orleans, La.," with some type of stamp on the right side next to the name, and a signature "A. J. Hidell" over the name; and I ask you whether you have examined this item?

Mr. COLE. I have.

Mr. EISENBERG. Mr. Chairman, may this be admitted as Commission Exhibit 813?

Mr. McCLOY. It may be admitted.

(The document referred to was marked as Commission Exhibit No. 813, and received in evidence.)

Mr. EISENBERG. Now, I also will show you Commission Exhibit 115, which consists of a Warrior rubber stamping kit which has already been introduced in evidence in connection with testimony of Marina Oswald, and which was found at one of Oswald's residences, and ask you whether you have examined this Commission Exhibit 115?

Mr. COLE. Yes, sir; I have.

Mr. EISENBERG. Did you attempt to determine whether the signatures "Lee H. Oswald" and "A. J. Hideel" on Commission Exhibit 813 were prepared by the author of the standards?

Mr. COLE. Yes, sir; I did.

Mr. EISENBERG. What was your conclusion?

Mr. COLE. It is my conclusion that the author of the standard writing is the author of the writing you just described.

Mr. EISENBERG. Did you attempt to determine whether the apparent rubber-stamp printing had been produced by use of the Warrior kit, Exhibit 115?

Mr. COLE. I did.

Mr. EISENBERG. What was your conclusion?

Mr. COLE. It is my conclusion that the kit could have been used for producing the rubber-stamp printing on—Exhibit 813 is it?

Mr. EISENBERG. Yes.

Did you prepare a photograph of 813, Mr. Cole?

Mr. COLE. Yes; I did.

Mr. EISENBERG. Will you produce that photograph? You have produced two photographs, one of which shows the outside or exterior portion of 813, and the other one shows the interior portion?

Mr. COLE. Correct; yes.

Mr. EISENBERG. Did you take each of these photographs?

Mr. COLE. I did.

Mr. EISENBERG. And are they accurate reproductions of the Exhibit 813?

Mr. COLE. They are.

Mr. EISENBERG. Approximately what enlargements are these, by the way?

Mr. COLE. About 1½ diameters.

Mr. EISENBERG. These are what size photographs?

Mr. COLE. Eight by ten.

Mr. EISENBERG. Mr. Chairman, may these two photographs be admitted as 814 and 815?

Mr. McCLOY. They may be.

(The photographs referred to were marked as Commission Exhibits Nos. 814 and 815, and received in evidence.)

Mr. EISENBERG. 814 will be exterior part of 813, and 815 will be the interior.

Now, the exterior portion of 813 also shows some handprinting "Lee H. Oswald" which came out in this photograph—in 814—a little clearer. Did you identify that handwriting, Mr. Cole—

Mr. COLE. I did.

Mr. EISENBERG. As being—what was your conclusion?

Mr. COLE. It is my conclusion that that handprinting is in the hand of the person who made the standard specimens.

Mr. EISENBERG. Now by reference to those photographs, 814 and 815, and by reference to your charts of the standards, could you explain the reasons for your conclusion on the handwriting and handprinting?

Mr. COLE. With respect to the signature, "Lee H. Oswald," as shown by the photograph 815, this compares favorably with other sample signatures that I have examined, some of which are shown on the charts, namely chart A, item 15; chart B, item 15; and chart C, item 6, second line from the bottom. There is, I think, a closer comparison with certain other standard signatures of "Lee H. Oswald" which I have examined, as appearing on the reverse of certain checks.

Mr. EISENBERG. And those are in evidence, are they, as one of the standards, Mr. Cole?

Mr. COLE. Yes, sir.

Mr. EISENBERG. That was described in the record when you introduced it?

Mr. COLE. Yes; the signatures as endorsements on these several checks show what might be described as an exaggerated freedom and carelessness in the execution of this signature.

Mr. EISENBERG. Excuse me, was that 776, that exhibit consisting of the checks?

Mr. COLE. Yes, sir; the signatures and endorsements of the checks in Exhibit 776 show some variation with respect to the care and formation of letters. There are a few endorsements in that group which show a greatly exaggerated freedom or a carelessness in execution. These signatures appear on, especially on, check numbers 2408 and 2506 of this exhibit, and they compare quite favorably in detail with the signature shown by the photograph, Commission Exhibit 815.

Now with regard to the writing of the name "A. J. Hideel" we observed in the combination of letters "Hi" that that letter is joined by means of a projection of a crossbar into the letter "i"; that in the letter "e," which is separated from the preceding "d," there is a very high placement of the loop, that is, instead of beginning at the writing line, the loop of the letter begins about halfway up on the staff, and this is a form that is very familiar in the standard writing, particularly in the handprinted forms. For example, on chart C, item 3, the final "e" in the word "discharge" shows a similar effect. Also on chart C, item 6, the second line, in the name "Mercedes" we have got two "e's" that show a similar effect.

The final "l" shows this perceptible increase of pressure on the downstroke, and a very abrupt terminal stroke also, which had been previously mentioned as being a characteristic of chart B, item 6, in the word "enroll."

Now with regard to the handprinting as shown by Commission photograph Exhibit 814, and considering particularly the name "Oswald," we have a detailed agreement in every feature of letter forms there, and I will direct attention especially to the use of the lowercase "l" and "d" as associated with the capital or uppercase forms of the other four letters of the name, and I will also mention the method of forming the "d," considering first one of the standards where it can be seen more clearly. On chart C, item 6, the first line, final "d" of "Oswald" shows first a fairly long downstroke, then a stroke rising from the end of that downstroke moving upwards and to the left to form the body of the letter, and this method of formation is also used in the "d" of "Oswald" as shown by the photograph Exhibit 814.

On the next line below there is faintly visible the name "Orleans" and I will direct attention to the base of the "l," which shows a rather deep compound

curve. That is, here again, instead of having a simple horizontal line to represent the base of that printed letter, there is a fairly deep curve which is found in the standard writing in several places, one example being chart C, item 4.

This word also illustrates the tendency to mix lowercase forms with capitals in the case of the use of the lowercase "e" in "Orleans," and that, of course, is repeated many places in the standard writing, a good place being chart C, item 6, the word "Mercedes." These are the reasons for my belief that the author of the standard writing is the author of the handwriting on—

Mr. EISENBERG. 813?

Mr. COLE. 813.

Mr. EISENBERG. Now, the handwriting and handprinting on 813 is all extremely dim. Do you have any explanation for that?

Mr. COLE. There is evidence that this document has been treated with chemicals, probably for the purpose of developing for fingerprints. Such chemicals are ordinarily included in solvents which dissolve ink, and some bleach out ink. I think that is the reason for the poor legibility of this ink writing. At one time, I think, it probably had a pretty good legibility.

Mr. EISENBERG. Was this the condition of the item when you examined it?

Mr. COLE. Yes; it was.

Mr. EISENBERG. Now, you stated that the apparent rubber-stamp printing could have been produced by the Warrior rubber kit, 115. First let me ask you, is this actually rubber-stamp printing?

Mr. COLE. Yes; I believe it is.

Mr. EISENBERG. That is, the printing on the vaccination certificate. When you say it could have been produced by the print in Exhibit 115, could you elaborate as to your findings on that point?

Mr. COLE. Yes; in considering that question, I made an impression from the stamp, from the type setup in a stamp which is a part of this kit at the present time. Now the typing as set up reads "L. H. Oswald, 4907 Magazine St., New Orleans, La.," and, of course, that text repeats some of the letters, a good many of the letters, which are in the rubber-stamp impression "Doctor A. J. Hideel, P.O. Box 30016, New Orleans, La.," and I made a careful comparison of these letters as taken from the stamped impression with what is shown on 813, and I found that they agree perfectly as to measurements of the type faces, and they agree as to the design of letters. Therefore, I would say that the rubber-stamp type faces from this particular kit could have been used to produce that rubber-stamp impression on 813.

Mr. EISENBERG. Could you produce the two cards which you used to record the impression of the 115 rubber-stamp kit?

Mr. COLE. Yes, sir; the second card is an impression from the date stamp which is a part of this kit, and that too agrees along the same lines with respect to measurements of the letters and the designs of the letters.

Mr. EISENBERG. Mr. Chairman, may these two cards be admitted as Commission Exhibit 816?

Mr. McCLOY. They may be admitted.

(The cards referred to were marked as Commission Exhibit No. 816 and received in evidence.)

Mr. EISENBERG. Are there microscopic characteristics on rubber-stamp printing sufficient to make positive identifications?

Mr. COLE. I don't regard any to be present in this particular stamp. But while the type faces could not be regarded as perfect, I don't know of any way to determine whether the imperfections belong only to this kit or whether they would be true of all Warrior rubber-stamp kits.

Mr. EISENBERG. Did you notice any imperfections?

Mr. COLE. Well, I did not actually catalog any imperfections, but in looking at the type I had the general impression that it is not a perfect impression, certainly not as perfect as you would get from metal type in a regular printing operation.

Mr. EISENBERG. Now, you stamped an impression other than the one contained on the card 813. Could you explain the reasons for that?

Mr. COLE. I stamped the material which was already set up in type. Since it repeated a good deal of the material, enough for examination, I did not want

on my own volition to tear down the stamps that were in this in order to set up other type.

Mr. EISENBERG. Did you examine the stamp impression appearing on the right-hand side of the interior of the Document 813?

Mr. COLE. I did.

Mr. EISENBERG. Did you come to any conclusion as to that stamp?

Mr. COLE. Yes; this stamp includes wording which reads in reverse, and there is a double stamping of the wording, and the text is "BRUSH IN CAN," the three words, "BRUSH IN CAN." The word "BRUSH" extends in approximately a semicircle across the upper part of the stamp and the words "IN CAN" in a semicircle across the lower part.

Mr. EISENBERG. Can you think of any explanation of why those words should appear?

Mr. COLE. Yes; a possible explanation is that the object used to make the stamped impression was the top of some container of a solvent or cleaning fluid with raised lettering, and that the top of this can was pressed against a stamped pad, and then pressed against this document.

Mr. EISENBERG. What would the object be?

Mr. COLE. Well, I think it is very common to see rubber-stamped impressions on documents of this particular character. They are so commonplace, I think that it is probably a habit or custom among most people not to read them. They may be regarded as giving a document an official appearance. That may be the purpose of getting some sort of stamp onto the document.

Mr. EISENBERG. Why do the letters appear in reverse, Mr. Cole?

Mr. COLE. Well, they would naturally appear in reverse. If they read correctly in raised letters as the top of some container, if it was intended that they be read correctly there, then they would naturally be in reverse from the stamped impression. Of course, you will observe that in this Warrior stamping kit the material set up in the rubber stamp there is in reverse, which produces correct reading and writing from an impression. There is one more feature of this particular stamp I think ought to be mentioned.

Mr. EISENBERG. Yes, please.

Mr. COLE. There is toward the center of that stamp a rectangle of a deposit of ink in a certain pattern, sort of a spotty mottled pattern of ink, and this corresponds to the pattern of the blank parts of the date stamp.

Mr. EISENBERG. Which date stamp is that?

Mr. COLE. The Warrior stamping kit includes a dating stamp, and on the adjustable bands there are certain blank areas. Now, the pattern on those blank areas is similar to the pattern which we have in this rectangle of the stamp just discussed.

Mr. McCLOY. May I ask, this Post Office Box 30016, is that——

Mr. EISENBERG. Yes; that corresponds——

Mr. McCLOY. Does it correspond to the one he used in New Orleans?

Mr. EISENBERG. I am about to introduce an exhibit which shows Post Office Box 30061, that is, the last two figures reversed, and I imagine his spelling accounts for that.

Mr. Cole, I now show you an item consisting of a part of an application for Post Office Box 30061 in New Orleans, dated June 11, 1963, with a postmark, signed "L. H. Oswald," and in the part of the box captioned "Names of persons entitled to receive mail through box" and so forth, the words are written "A. J. Hidell, Marina Oswald," and I ask you whether you have examined that item?

Mr. COLE. I have.

Mr. EISENBERG. May I have this item admitted, Mr. Chairman, as 817?

Mr. McCLOY. Let it be admitted.

(The item referred to was marked Commission Exhibit No. 817, and received in evidence.)

Mr. EISENBERG. Did you compare this with the standards to determine who wrote the writing on that exhibit, or more accurately, whether the printing and writing was produced by the same person who produced the printing and writing on the standards?



Mr. COLE. I did.  
Mr. EISENBERG. What was your conclusion?  
Mr. COLE. It is my conclusion that the author of the standard writing is the author of the writing on Commission Exhibit 817.  
Mr. EISENBERG. Did you take a photograph of Commission 817?  
Mr. COLE. I did.  
Mr. EISENBERG. This was taken by you or under your supervision?  
Mr. COLE. Yes, sir.  
Mr. EISENBERG. And it is a true and accurate reproduction of 817?  
Mr. COLE. It is.  
Mr. EISENBERG. This is an 8 by 10 photograph. Mr. Chairman, may this be admitted as 818?

Mr. McCLOY. It may be admitted.

(Commission Exhibit No. 818 was marked and received in evidence.)

Mr. EISENBERG. By reference to this photograph and by reference to your charts of standards, Mr. Cole, can you explain to us how you came to this conclusion?

Mr. COLE. Yes, sir; with respect to the handprinting of the name "A. J. Hidell," I direct attention to the formation of the letter "d" in the same manner as that previously described in the standard writing, chart C, item 6, first line—a close correspondence as to the construction, writing movement, in forming those letters.

The letter "e" compares favorably not only as to form but the circumstance that here again the lowercase letter is mixed in with capital letters. Of course, that applies to the three letters "ide" associated with the other capital letter of that name, and that is a habit shown in many places in the standard writing.

The "L's" have the compound curve across the base, which has previously been observed in the standard writing.

In the name "Marina," the form of the capital letter "M" compares closely with the capital letter "M" shown on chart C, item 6, second line, the name "Mercedes."

That same name shows the form of letter "A" with the retraced stroke on the left side which exists in many places in the standard writing.

The name "Oswald" again shows this mixture of uppercase and lowercase letters, namely the circumstance that the "l" and "d" are lower-case forms, whereas the previous, the other four letters are upper case.

The signature "L. H. Oswald," agrees with other signatures that I have examined, some of which are shown on the charts, chart A, item 15, chart B, item 15, and chart C, item 6, next to the last line, a close correspondence in all details, except that there is some confusion or overriding in the second letter of the last name in the area of the "s," which may be only an accidental imperfection in that particular area. Otherwise, there is a fairly clear showing of all the letters, and they agree with the standards.

Mr. EISENBERG. Does that "s" that you refer to appear to be two "s's," one printed and one written?

Mr. COLE. Yes; it could be that. They are somewhat intertwined there, and we have got this name just following an instance of making handprinting, so that could be an explanation of it.

Mr. EISENBERG. Next, I show you a photograph of a card reading "Fair Play for Cuba Committee, New Orleans Chapter, L. H. Oswald," signature, "L. H. Oswald," dated June 15, 1963, signed "Chapter President—A. J. Hidell," and I ask you whether you have examined that photograph?

Mr. COLE. I have.

Mr. EISENBERG. May this be admitted as 819, Mr. Chairman?

Mr. McCLOY. It may be admitted.

(Commission Exhibit No. 819 was marked and received in evidence.)

Mr. EISENBERG. For the record, this is a photograph of a card that was found in Oswald's wallet at the time of his apprehension.

I now show you a card, a paper card, which appears to be the same as Exhibit 819, except that there is no visible marking where the words "Chapter"—where the signature "Chapter President—A. J. Hidell" is written on Exhibit 819,

and the card is seriously discolored with a dark brown discoloration, and I ask you whether you have examined this card I now hand you?

Mr. COLE. I have.

Mr. EISENBERG. May I have that admitted as 820, Mr. Chairman?

Mr. MCCLOY. It may be admitted.

(Commission Exhibit No. 820 was marked and received in evidence.)

Mr. EISENBERG. In your opinion, is 819 a photograph of the card, 820?

Mr. COLE. Yes; it is.

Mr. EISENBERG. Can you account in any way for the discoloration of the card 820?

Mr. COLE. The discoloration is characteristic of that which has previously been observed as resulting from treating a document with a solution of silver nitrate. Such treatment is sometimes done in the hope of developing latent fingerprints, and this treatment could be, and probably is, the explanation for the elimination of a line of writing on the line for signature above the title "Chapter President."

Mr. EISENBERG. Were you able to make out whether any writing had appeared in the space which is now blank on Exhibit 820, making provision for the—

Mr. COLE. Yes; it is—

Mr. EISENBERG. Excuse me, making provision for the chapter president's signature?

Mr. COLE. Yes; there is barely enough showing to indicate that there was a line of writing there at one time.

Mr. EISENBERG. Could you tell whether it was the same as the signature "A. J. Hidell"?

Mr. COLE. It conforms generally to the signature "A. J. Hidell," that is, the form shown by the photograph, Exhibit 819.

Mr. EISENBERG. Have you taken a photograph of 819?

Mr. COLE. Yes, sir; I am sorry, sir; I do not have that photograph with me.

Mr. EISENBERG. All right.

Do you want to take a look at this, Mr. McCloy?

Did you compare the signatures "Lee Oswald" and "A. J. Hidell" on 819 to determine whether they had been written by the author of the standards?

Mr. COLE. Yes, sir; may I look at that photograph? Yes, sir; I did.

Mr. EISENBERG. What was your conclusion as to the signature of Lee H. Oswald?

Mr. COLE. It is my opinion that the author of the standard writing is the author of the signature "Lee H. Oswald" on Exhibit 819.

Mr. EISENBERG. What was your conclusion as to the signature "A. J. Hidell"?

Mr. COLE. I find no basis in the standard writing for identification of the author of such standard writing as the author of the name "A. J. Hidell" as shown by 819.

Mr. EISENBERG. Do you think that the author of the standard writing might have produced that signature in a disguised hand?

Mr. COLE. I think that is highly improbable, because this does not appear to be a disguised hand. It looks like a fairly natural handwriting.

Mr. EISENBERG. And that is based upon the items which you enumerated earlier which indicated the presence of a natural handwriting, such as speed and so forth?

Mr. COLE. Yes.

Mr. EISENBERG. Do you think that, apart from the naturalness of the writing, the signature "A. J. Hidell" was within Oswald's abilities as a penman?

Mr. COLE. It appears to be somewhat beyond his ability. I would say taking into account his general level of writing skill as shown by the standards, I would say this represents a somewhat higher writing skill.

Mr. EISENBERG. Off the record.

(Discussion off the record.)

Mr. EISENBERG. On the record.

Mr. COLE. I now hand you a yellow sheet of paper, which has already been introduced into evidence as Commission Exhibit No. 110, and for the record I will state that this consists of an interlinear translation from Russian into

English. The Russian script on this document has been identified as being that of George Bouhe, an acquaintance of the Oswald's, and the English script as being that of Marina Oswald. Marina herself identified this as her handwriting, and she stated that Bouhe was teaching her English by writing out the Russian and having her translate into English. As far as I know this is the only standard we have of Marina's handwriting in the Latin alphabet. Mr. Cole, I ask you whether you have examined Commission Exhibit 110?

Mr. COLE. I have.

Mr. EISENBERG. Have you attempted to compare the signature "A. J. Hidell" on Commission Exhibit 819 with the Latin or English printing, or writing rather, in Exhibit 110, to determine whether they were both written by the same person?

Mr. COLE. I have.

Mr. EISENBERG. And what is your conclusion?

Mr. COLE. My conclusion is that the author of the writing in the Latin alphabet on Exhibit 110 is a possible author of the name "A. J. Hidell" on 819, but I do not offer that as a definite conclusion. I say "possible author" because I observed a similarity in the particular parts where close comparison is possible, namely, with respect to the lowercase letter "d," of which one example is found in the word "day" on the left side of the lower one-third of Exhibit 110. The similarity consists in the degree of roundness of the body of the letter, and the fairly short and thin loop or the upper extension of the letter "d," plus a similarity with respect to the terminal stroke of that letter, the circumstance that it is not joined continuously with the letter following.

Another similarity is observed in the double "l's" of the word "especially," which is on the last line at the right side of 110, and here we have a similarity with respect to the proportion of the height of those letters relative to other small letters.

There is no opportunity for making a more extensive comparison between the name "A. J. Hidell" on 819 with this standard writing. And on that basis I would say only that the author of the standard could be regarded as a possible author of the questioned signature.

Mr. EISENBERG. Mr. Cole, would the production of Cyrillic writing, that is writing in the Russian language, be useful to you in evaluating the signature on 819?

Mr. COLE. I believe not.

Mr. EISENBERG. Can you explain that?

Mr. COLE. Well, ordinarily a person who—I might say this, that the construction in writing one alphabet and the other would be completely different—that one would develop habits along different lines. It could not be expected that there would be a close translation of habits from one alphabet into another.

Mr. EISENBERG. Is enough writing present in 819 so that you believe you could make a definite identification if you had a sufficient standard on which to base your comparison?

Mr. COLE. Yes; I think so.

Mr. EISENBERG. If we obtained a greater standard, that is, a more voluminous standard, of the handwriting of Marina Oswald or other persons, would you undertake to make the examination and to submit your result, either in the form of testimony or by written communication to us, Mr. Cole?

Mr. COLE. Yes; I would be quite willing to.

Mr. EISENBERG. Mr. Chairman, may we state on the record that the Commission is requesting Mr. Cole to do this, if we can obtain a better standard, and that we will attempt to obtain such a standard?

Mr. McCLOY. Very well.

Mr. EISENBERG. Mr. Cole, referring to 110 again for a moment, can you characterize the degree of skill with which the writing is produced, that is the English or Latin alphabet present on 110?

Mr. COLE. I would say it is an average degree of skill, fairly good based upon the perfection of letter forms, regularity of proportions, speed of writing—I would say fairly good.

Mr. EISENBERG. Would it require much practice in the use of the Latin alphabet to attain the degree of skill evidenced in 110?

Mr. COLE. Well, it would certainly take some practice. It is not the writing of a novice in forming these particular letters.

Mr. EISENBERG. Can you expand a little on what you mean by "some practice"? A week's practice, or a month's practice, or a year's practice?

Mr. COLE. Of course, this depends on how intensive the practice is, but I would certainly say more than a week's practice.

Mr. McCLOY. Mr. Cole, have you examined the Russian script, have you attempted to make anything out of such Russian script as we have of Marina Oswald, have you seen standard forms?

Mr. COLE. No, sir; I have not.

Mr. McCLOY. Might it not be helpful to look at some of that to see whether there is anything you can make out of that that would help you in the—

Mr. COLE. I am inclined to doubt it, but I would be quite willing to take a look at it.

Mr. McCLOY. I can understand your reasons for doubting it but there may be something that we have here—we have here, have we not?

Mr. EISENBERG. Yes, we do.

Mr. McCLOY. A very substantial number, quantities of Marina's writing in Russian, and it may be that there is something you can glean from that if you would look at it perhaps before you go.

Mr. EISENBERG. I will make arrangements for Mr. Cole to see that writing, Mr. Chairman.

Any further question on this Fair Play for Cuba Committee card?

Mr. McCLOY. No, I don't think so.

Mr. EISENBERG. Finally then, Mr. Cole, I show you an item consisting of a letter on a yellow piece of stationery, apparently torn from a legal-size pad, addressed to Leslie Welding Co. from "Lee H. Oswald"—signed "Lee H. Oswald"—and with an address handprinted, and reading "Dear Sir, this is to explain that I have moved permanently to Dallas, Texas, where I have found other employment," and so forth, and I ask you whether you have examined that item?

Mr. COLE. I have.

Mr. EISENBERG. May that be admitted as 826, Mr. Chairman?

Mr. McCLOY. It may be admitted.

(The item referred to was marked 826, and received into evidence.)

Mr. EISENBERG. Did you attempt to compare this item with the standards to determine whether it had been produced by the author of the standards?

Mr. COLE. I did.

Mr. EISENBERG. What was your conclusion?

Mr. COLE. It is my conclusion that the author of the standard writing is the author of the writing shown by Exhibit 826.

Mr. EISENBERG. Can you briefly give us some of the reasons for that conclusion?

Mr. COLE. Yes; there is an agreement in a great many details between this letter, 826, some of which I think are more significant than others.

One of the really highly significant points is the formation of the letter "x" in the word "Texas," which has already been mentioned in connection with other exhibits. Now, this word appears on 826, on the second—

Mr. EISENBERG. Excuse me. That exhibit should be, have been, 820A. Let's refer to it from now on as 820A.

(The item referred to was renumbered.)

Mr. COLE. The exhibit just mentioned is understood to be 820A, and the word "Texas" appears on the second line of the body of the letter. The method of forming this "x" is first to construct a U-like form, that is, a form having two cusps with a shallow curve connecting the two, and then to make the crossbar in such a manner that it comes very close to the second cusp. This is a very unusual variation of the letter "x," and it appears in the standard writing—also in the word "Texas"—in several places, chart B, items 4, 12, and 13.

The writing shows the tendency to exaggerate certain approach strokes or initial strokes of letters. In the body of Exhibit 821 this is evident in the letter "i" of "is," which is the second word of the first line, and moving along

that same first line we have the same effect for the first stroke of the "t" of "to" and the "t" of "that." Then moving down to the second paragraph, third word, the same effect is shown, and this is illustrated in the standard writing in two places, one good example being chart A, item 1, the word "to," the same chart, item 3, the word "the."

The construction of the small letter "p" has been mentioned heretofore, has been characterized by an absence of an upper extension, that is, no extension that passes above the height of the body of the letter, and the body of the letter is made in the form of an arch, rather than a circle closed against the staff. This is shown in the words "presently" and "employ," which are in the last line of writing of this exhibit, and this is repeated in the standard writing as shown by chart A, item 2, the word "support," item 3, the word "port" and the word "transportation."

There is a very close agreement in all details of the signature of Lee H. Oswald on this letter with the several examples of the signatures shown on these charts, chart A, item 15, chart B, item 15, and chart C, item 6, second to the last line.

The word "Texas," including this highly significant "x," is repeated as the last word on this letter.

These constitute some of my reasons for believing that Exhibit 820A is in the handwriting of the author of the standard writing.

Mr. EISENBERG. Now, to recapitulate then, all the standards which you have examined and which were put in evidence, and all of the questioned documents which you have examined and which were put in evidence, are in the handwriting of the same person, with the exceptions you have noted, such as "A. J. Hidell" on the penultimate exhibit, the FPCC card?

Mr. COLE. Yes, sir.

Mr. EISENBERG. Mr. Cole, did you have any information concerning any identifications or nonidentifications of handwriting made by any other Federal agency in this matter?

Mr. COLE. No, sir.

Mr. EISENBERG. Did you have any other information whatsoever concerning identification or nonidentification by anyone in this matter?

Mr. COLE. No, sir.

Mr. EISENBERG. Do you at this point have any such information?

Mr. COLE. No, sir.

Mr. EISENBERG. That completes my examination, Mr. McCloy.

Mr. McCLOY. Off the record.

(Discussion off the record.)

Mr. McCLOY. Commission Exhibit 776 is a series of checks which have been endorsed by Oswald, some in lead pencil and some in ink. Some of those endorsements seem to be, rather the handwriting seems to be, very irregular, loose, malformed, certain other ones very clear and quite regular, and in comparison with other standards of Oswald's I find some difficulty in conforming the signatures on certain of these endorsements to those standards. I wonder if you would look at these and tell me whether you have any comments in regard to the comments I have made about this—about these checks? The first two or three there seem to exemplify what I am talking about.

Mr. COLE. In my opinion the endorsements on these checks show a moderately wide range of writing habit, and they also show variations which may be due to an attitude about the act of writing, and I am thinking especially of the more distorted signatures, such as that appearing on No. 2408; and by attitude I mean that a person might find the act of writing very inconvenient or distasteful or might actually be experiencing some strong emotion at the particular time.

Mr. McCLOY. Could it be, might I interrupt, could it be that he was writing while he was in movement here, while he was in an automobile or some jolting vehicle?

Mr. COLE. Well, that can affect handwriting, of course, but I believe it is unlikely, because the first letter of his name is well formed. The first letter of "Lee" on this endorsement of 2408 shows as much skill and control as any of the better signatures.

Mr. McCLOY. You think maybe something irritated him in between?

Mr. COLE. That is a possibility. I think most people find the act of writing, especially writing a signature, a pleasant thing to do. I think that is one reason why people develop a somewhat higher skill.

Mr. McCloy. It depends on whether it is an endorsement of a check or a drawing of the check.

Mr. COLE. That could make a difference.

Mr. McCLOY. Well, thank you very much.

Mr. COLE. Yes, sir.

(Whereupon, at 2:30 p.m., the President's Commission recessed.)

*Tuesday, May 5, 1964*

**TESTIMONY OF JOHN W. FAIN, JOHN LESTER QUIGLEY, AND  
JAMES PATRICK HOSTY, JR.**

The President's Commission met at 9:25 a.m. on May 5, 1964, at 200 Maryland Avenue NE., Washington, D.C.

Present were Chief Justice Earl Warren, Chairman; Senator John Sherman Cooper, Representative Gerald R. Ford, John J. McCloy, and Allen W. Dulles, members.

Also present were J. Lee Rankin, general counsel; David W. Belin, assistant counsel; Wesley J. Liebeler, assistant counsel; Norman Redlich, assistant counsel; Samuel A. Stern, assistant counsel; Howard P. Willens, assistant counsel; Charles Murray, observer; and Leon Jaworski, special counsel to the attorney general of Texas.

**TESTIMONY OF JOHN W. FAIN**

The CHAIRMAN. Mr. Fain, the purpose of today's hearing is to take the testimony of members of the Federal Bureau of Investigation, including yourself, who interviewed Lee Harvey Oswald or other important witnesses, before and after the assassination, and concerning the assassination of President Kennedy, both before and after.

We will also take the testimony today of Mr. Belmont, one of your superiors. Would you please rise, Mr. Fain, and raise your right hand and be sworn. You solemnly swear the testimony you are about to give before this Commission will be the truth, the whole truth, and nothing but the truth, so help you God?

Mr. FAIN. I do, sir.

The CHAIRMAN. Will you be seated, please.

Mr. Stern will conduct the examination. Mr. Stern.

Mr. STERN. Yes, sir.

Mr. Fain, would you state your full name for the record, please.

Mr. FAIN. John Wythe Fain.

Mr. STERN. And your address?

Mr. FAIN. 12711 Pebblebrook, Houston 24, Tex.

Mr. STERN. What is your education, Mr. Fain, at the college level?

Mr. FAIN. After graduation from Weatherford High School in 1926, I entered Weatherford Junior College at Weatherford, Tex., which I finished in 2 years in 1928. After teaching school for about 4 years, I entered the University of Texas, in the summer of 1933. I finished my prelaw work, and in 1936, the spring of that year, I received my LL.B. degree in law from the University of Texas.

Mr. STERN. Are you a member of the bar, Mr. Fain?

Mr. FAIN. I am a member of the Texas State Bar.

Mr. STERN. Can you summarize briefly your employment experience after receiving your law degree and before joining the Federal Bureau of Investigation?