

Mr. BATES. No; I do not.

Mr. CHAMPAGNE. Are you referring just to the FBI firing it or the number of times it was actually fired?

Mr. FITHIAN. I was just going in the order I thought it was fired once it was acquired by the FBI and then by the committee panel and by anybody else. I was trying to get at how much actual wear and alteration there has been.

Let me rephrase the question. I am informed by our counsel that the weapon has been fired over 100 times. Is that sufficient wear that it would significantly alter the markings and the identifications?

Mr. CHAMPAGNE. Yes; I think with this type of weapon and the type of bullets involved, that it is. I think that probably the weapon has been fired more than 100 times.

Mr. FITHIAN. Mr. Chairman, I have no other questions of this panel.

Chairman STOKES. The time of the gentleman has expired.

Gentlemen, any witnesses appearing before this committee are entitled, after they have concluded their testimony, to 5 additional minutes in which to explain, amplify, or in any manner expand upon their testimony. On behalf of the committee I at this time extend to you 5 minutes in which any of you may make any comments you so desire.

Mr. LUTZ. I don't believe there is any further expanding on the examinations that we have conducted. I think we feel that they have been as thorough as could have possibly been done. We have been given the opportunity to examine every piece of evidence that we asked for. We didn't have any restrictions. We weren't bound to come up with a particular finding. So I think in that respect we have been very fortunate to conduct an objective examination.

I also would like to express on behalf of the entire panel the thanks to our own employers, the State of Wisconsin, the State of Florida, the State of Iowa, the State of New York, and the Metropolitan Police Department of the District of Columbia for allowing us to participate in this panel. I would like further to extend on behalf of the entire panel our appreciation to the staff of the committee, for the assistance they have given us and especially to thank the committee itself for the privilege and the honor of appearing before it.

Chairman STOKES. We certainly deem ourselves fortunate to have had such a distinguished panel of experts lend their services to this cause. We appreciate all the time that you have expended on behalf of the report that you have brought to the committee and the testimony you have given us here today. We express at this time our very deep appreciation to each of you for the services that you have rendered. Thank you.

The Chair recognizes Professor Blakey.

NARRATION BY G. ROBERT BLAKEY, CHIEF COUNSEL AND STAFF DIRECTOR

Mr. BLAKEY. Thank you, Mr. Chairman. Mr. Chairman, there have been several prior attempts to analyze missiles and fragments recovered from the assassination from the standpoint of their me-

tallic makeup to determine, for one possibility, if they have a common origin.

In November and December 1963 the FBI applied to the evidence samples a technique called emission spectography. It is a process in which the samples are subjected to intense heat and their metallic composition is determined by the color of the gas that is then emitted. Emission spectography, however, is not highly sensitive and the tests were deemed by the FBI inconclusive.

In May 1964 the FBI also performed neutron activation analysis on some of the samples. That is a nuclear method to determine the elements present. An analysis of trace elements found in the sample of similar materials—for example, bullet lead—enables a highly trained scientist to come to a conclusion as to the probability of the samples having a common origin.

Nevertheless, “inconclusive” was also the term used by the FBI to describe its neutron activation analysis. The report it submitted to the Warren Commission stated that the tests would not, quote, “permit positively differentiating among the larger bullet fragments and thus positively determining from which of the larger bullet fragments any given small lead fragment may have come,” unquote.

The Warren Commission did not divulge that the neutron activation analysis had taken place in its final report. Indeed the fact did not become public until the early 1970's.

Hopeful that new tests might succeed where old efforts had failed, the committee engaged as a consultant Dr. Vincent P. Guinn, professor of chemistry at the University of California at Irvine. Dr. Guinn had no relation to the Warren Commission. Dr. Guinn analyzed the assassination evidence samples as well as the bullet allegedly fired at General Walker.

In his experiments, Dr. Guinn used a high resolution lithium-drifted germanium detector, a device that is far more sensitive, and hopefully accurate, than the one used for the FBI test in 1964.

Dr. Guinn received an A.B. and an M.S. degree in chemistry from the University of Southern California in 1939 and 1941 and a Ph. D. in physical chemistry from Harvard University in 1949. Dr. Guinn studied radioisotopes at the Oak Ridge Institute of Nuclear Studies, Oak Ridge, Tenn., in 1952. He is a fellow of the American Nuclear Society, the American Academy of Forensic Scientists, and he is a member of the American Chemical Society.

Dr. Guinn has published numerous scientific articles in the area of activation analysis and forensic chemistry. He has served as an adviser to such agencies as the Atomic Energy Commission and he has made a training film on neutron activation analysis which is in wide use today.

It would be appropriate, Mr. Chairman, at this time to call Dr. Guinn.

Chairman STOKES. The committee calls Dr. Guinn.

Sir, would you please stand and raise your right hand and be sworn.

Do you solemnly swear the testimony you will give before this committee is the truth, the whole truth and nothing but the truth, so help you God?

Dr. GUINN. Yes, I do.