Patrick Harland Ovidence Report I Incentory (note Wolfer did not initial bullets on the nose or ogive as was his practice on noted evid items)

6. In making any examination or test of any exhibit the members of the panel of firearms experts shall not do any act which will impair the integrity of any exhibits.

Dated: 9-23-1975

People's

/s/ ROBERT A. WENKE
JUDGE OF THE SUPERIOR COURT

Prior to any examinations, the evidence was inventoried and assigned Panel Identification Numbers. Each bullet was indexed with a circular depression on the ogive, and an identification mark was placed where it would do the least amount of harm.

The evidence inventory follows:

Pane1

	Exhibit No.	ID No.	Description
	38		Stapled envelope with 2 tags, Case #A233 421 Envelope Marked: #46 Vehicle License No JWS 093 CDW (2 spent.slugs) 6-D 38 Envelope marked Panel ID #1 and la
	NO DW on Pro 38	l · la	Contents: 2 bullets as: llead-uncoated, no ID marking, 2 grooves. liz land impressions, wood imbedded in mushroomed area. l copper colored coated bullet, no ID marking, - l land impression, wood imbedded in mushroomed area.
	47		Stapled envelope, 2 tags. Envelope marked 68-5731 Name: Robert Kennedy Contents: Bullet Date: June 6, 1968 8:40 a.m. Signed: Thomas T. Noguchi Initialed DW
/	NO DW on nose or ague	2	Contents: copper colored coated bullet, hollow point ID mark "DW" (base) "TN" (base)

People's Exhibit No.	Panel ID No.	Description
48		Envelope Tagged, Case # A 233 421 Marked: Evidence Date: 6-5-68 D.H.Q. 68521466 (DR#) Name: Sirhan, Sirhan B. 594 139 (Booking #) Location: 1212 Shatto Charges 187 P.C. Officer: -Sgt. Varhey 10833 DHQ #26 - 1 Vial w/bullet fragments #27 - 1 Vial w/bullet fragments Kennedy
	3	#27 - 1 Vial w/bullet fragments Kennedy Contents: Vial #24 Initialed D.W. bullet fragments Badly mutilated copper coated lead bullet ID mark "DW". Marked 3 on base. 4 metal fragments of no value, approx. 7 bone fragments. Vial #25 Cork marked P-ID-3A Minute fragment.
	3a	Vial #25 Cork marked P-ID-3A Minute fragment.
50		Envelope Tagged, Case # A 233 421 Marked: Evidence Date: 6-6-68 Div: RAMP DR# 68-521466 Name: Sirhan, Sirhan B. Booking # 495139 Location: Kaiser Hospital Charge: 187 P.C. Officer: L.M. Orozco 11072 RAMPS Det. Item #57 2 bullet fragments Schrade
DW peo 50	4	Contents: Vial: Schrade, Paul Dr. Fuchs DW Item #87 2 small lead fragments. Marked P-ID-4 on top Marked 4 on base
51		Envelope Tagged, Case # A 233 421 Marked: Evidence Date: 6-5-68 Civ. Homicide Dr. #68-521466 Name: Sirhan, Sirhan B. Booking #495139 Location: 5925 San Vicente Charge: 187 P.C. Officer: J.D. Dill 6215 Wom: Item #105 1-Expended Bullet Stroll
	5	Contents: 1-copper colored coated bullet, side flattened, initialed on damaged side "DW" (twice), 3 grooved and 2 land impressions.

People's Exhibit No.	Panel ID No.	Description
52		Envelope marked: Evidence Date: 6-5-68 Div. Central DR. #68-521466 Name: Sirhan, Sirhan B. Booking # 495139 Location: 16237 Ventura Blvd. Charge 187 P.C. Officer: Feddema 11044 Div. W. Valley Item #113 - 1-Bullet expended .22 cal/ - Goldstein
	6	Contents: Vial: Bullet from Ira Goldstein Age 19 Dr. M. Finkel Initialed DW P-ID-6 1 copper colored coated bullet, .22 L.R., hollow point marked "DW" on nose, marked 6 on base.
53		Envelope Tagged, Case # A 233 421 Envelope marked: Evidence Date: 6-6-68 Div: RAMP DR# 68-521466 Name: Sirhan, Sirhan B. Booking # 495139 Officer: Brandt 10004 RAMP Item #45
to DW	7	Contents: Gauze containing approx. 5 fragments. Largest fragment copper coated lead, flattened.
54		Tagged Envelope, Case # A 233 421 Envelope marked: Evidence Date: 6-6-68 Div: RAMP DR# 68-521466 Name: Sirhan, Sirhan B. Booking # 495139 Location: Kaiser Hospital Offense: 187 P.C. Officer: L.M. Orozco 11072 RAMP Item #56 1- bullet expended Weisel
	8	Contents: Vial: Weisel, William 6/5/68 Initialed "DW" 1-copper colored coated bullet, .22 L.R. hollow point marked LM on base DW on ogive, 8 on nose.
55		Tagged Envelope, Case # A 233 421 Envelope marked: Los Angeles Police Dept. Crime Lab Test Shot Name: Sirhan, S. B. Date: 6-6-68 Make: I&J Cal22 Type: Rev. No. H 18602 DR # 68-521466 Crime: 187 P.C. H- 18602 - Cadet Model
	A B C	No. H 18602 DR # 68-521466 Crime: 187 P.C. H- 18602 - Cadet Model .22 LR HP Copper coated "DW" on crimped nose .22 LR HP Copper coated "DW" on crimped nose .22 LR HP Copper coated "DW" on crimped nose .22 LR HP Copper coated "DW" on crimped nose.



	People's Exhibit No.	Panel ID No.	Description
	5B (Grand Jury)		Tagged envelope, Case # A 233 421 Envelope marked: Victim: Robert Kennedy Los Angeles Police Dept. Crime Lab Test Shot Name: Doe, John Date 6-5-68 Address: Make: Iver Johnson Cal22 Type: Rev. No. H53725 DR# 68-521466 Crime: 217 P.C. Officer: Melendez Signed: DeWayne A. Wolfer
Vo D on L	W IJSB	D E F G	Contents: .22 LR HP Copper coated, No ID, "D" on nose22 LR HP Copper coated, No ID, "E" on nose22 LR HP Copper coated, No ID, "F" on nose22 LR HP Copper coated, No ID, "G" on nose.
	6		Tagged Envelope, Case # A 233 421 Envelope Marked: Evidence Date: 6-5-68 Div: H.D. DR# 68-521 466 Name: Doe, John Booking # 495 139 Location: Rampart Charge: 217 P.C. Officer: Calkins 7237 Div: HD 1-Revolver Cal22
			Contents: Revolver, Iver Johnson "Cadet", caliber .22 LR. eight shot, blued steel, serial number: H53725, top strap marked: Iver Johnson Cadet Mod. 55-SA Pat. Pend. I. J. A. & C. Wks. Fitchburg, Mass. U.S.A.

A form was designed so that each panel member could record data, based on his personal observation of the evidence. This form, when completed by all examiners, was used as a basis for the first joint report, as authorized by paragraph 1, Court Order #4, which reads:

"The panel of firearems examiners shall file joint reports as to:

- (a) their determination whether or not the condition of any of the exhibits is such that at the present time a reliable firearms identification can be made, and
- (b) their determination of the characteristics specified on pate 8, lines 1 through 8, of the Order for Retesting of Exhibits dated September 18, 1975."

The joint report with a sampling of the individual worksheets follows.

In view of the fact that the question of difference in pitch of rifling has been raised in the <u>SIRHAN</u> case, the panel (1) reports on work accomplished to date; and, (2) suggests recommendations for attempting to resolve this question.

The panel recognizes that the original issue was raised after Balliscan photographs of the Kennedy, Weisel, and test bullet had been studied. It is felt that final judgements should be based on an examination of original evidence, not photographs of the evidence. To this end, two panel members (Berg and Turner) conducted independent and joint measurements on known test shots fired from Sirhan's gun, the Kennedy bullet, and the Weisel bullet. These measurements indicated general or apparent agreement insofar as rifling pitch is concerned. It is pointed out, however, that the panel does not have at its disposal, tested empirical data to support or reject conclusions based on these observations. Furthermore, these measurements, while probably more accurate than measurements made from photographs, were made with a Wild reticule eyepiece which only permits estimates of angles to be an accuracy of 10-20 minutes. The panel attempted to obtain a more precise instrument, Gaertner protractor eyepiece, but could not locate one in the Los Angeles area during the period of its work. Therefore the panel recommends the following additional work:

- 1. Using a protractor eyepiece or equivalent equipment, measure rifling angles on a statistically adequate number of fired .22 cal. bullets from a number of guns having reportedly known differences in angle of rifling inclination. Use manufacturers' specifications for preliminary information. Analyze this data to determine what are "significant" differences.
- 2. Fire an adequate number of bullets, CCI .22 Mini-Mag ammunition, into suitable recovery material, using an Iver Johnson .22 cal. Cadet Model revolver. The purpose of this experiment is to attempt to produce deformation similar to that found on the Kennedy bullet. Repeat angle of inclination measurement and analyze data.
 - 3. From this experiment, it should be possible to make statements about the value of using measurements of angle inclination to discriminate between fired bullets. / / /

last page of the Afte Jaurnal; Vol. 8; Kumber 3.

Special Edition

The Re-Cramination of Firearms Evidence

In the Robert 7. Kennedy assassination

Submitted by: P.V. Harland

Dr. he Morne nyster statements taken in

I article or anything of that sort.

2 Did Mr. Harper ever renter an observa-

3 Ition or an opinion to you regarding his feelings as to the

4 positive or negative comparison of Sirhan exhibits?

A No, I don't recall ever having any

6 | conversation with Bill Harper about the Sirhan thing at all

7 except in a very general sort of way, and, in fact, I don't

recall anything in connection with the Sirhan case and

9 Bill Harper.

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Bill Harper has been a very great influence for good in this whole field. He has uncovered some skulduggery on the part of others — not referring to Wolfer at all — that has been very wholesome, I think, for the whole science of criminalistics. I have a very high regard for him.

Are you aware of the amount of work that Mr. Harper has been doing since the Kirschke case?

A No, I am not. I don't see Bill very often. We talk on the telephone at long intervals, but, I don't know. I know that he's busy; he's a very busy personalways has been.

Q Did he ever express to you or indicate to you that he felt he had been embarrassed in the Kirschke case?

A No. I don't recall anything along that line.

165

Bill Harper

FOR RELEASE: FERRUARY 19, 1975

EXHIBIT A"

"THE CRIMINALISTICS IN THE RPK ASSASSINATION"

-- a brief Statement by William W. Harper

A certain amount of consternation has arisen over the 23 minutes of rifling angle difference between the RFK bullet (Exh. #47) and the Weisel bullet (Exh. #54) -- which I first reported in my Affidavit on this case in December, 1970.

The rifling angle measurements on both these bullets were made in November and December of 1970 by Col. Phil Robertson (USAF ret.) and me. We used 20 X Balliscan photographs of the bullets in question, from which we made measurements of the slant angles of the driven and trailing edges of the land impressions, by means of an engineering protractor.

The mean value of 132 separate readings which we obtained on the RFK bullet (8xh. #47) is 181 minutes; the mean value of 132 separate readings on the Weisel bullet is 158 minutes, thus giving a difference of 23 minutes. Since the rifling angle is a basic class characteristic of a fired bullet, it is my contention that such a difference would rule out the possibility of these bullets having been fired in the same weapon.

In those Los Angeles Police Department Crime Lab reports we have been able to examine, we find no mention that similar measurements of rifling angles were made by DeWayne Wolfer of the LAPD Crime Lab. Since, however, he made a positive identification of the Sirhan gun as having fired both Exh. #47 and Exh. #54, it seems logical to assume that he has guessed that these bullets have identical

rifling angles; or in other words, he is <u>assuming</u> that the difference in the rifling angles is <u>zero</u> or at least substantially zero.

Assuming for the moment that Wolfer's guess is better than cur measurements of the difference between these two rifling angles, a further problem remains: in those cases where two revolvers (same caliber and other class characteristics) may have been involved, criminalistics provides other tools for making further differentiations. In the event there may be a difference in the projectile constituents, i.e. different batch of projectile lead -- spectrographic or Neutron Activation Analysis (NAA) may be utilized.

We recognize, of course, that analyses of this type are far from routine in firearms identification cases. In the average case, where a positive identification has been made, complete with good photomicrographs, analyses of bullet constituents, including trace elements, are rarely made. It appears, however, that Mr. Wolfer (or someone within the investigative-prosecutive team) may have had some considerable misgivings about whether a single weapon had fired all the bullets in the kitchen pantry of the Ambassador Hotel.

It was learned -- for the first time -- in a deposition given by Wolfer in the case of Wolfer vs. Blehr on September 20, 1971(Case #C 8080;see pages 120-26, 148-52, 190-97) that Wolfer had, in fact, made spectrographic analyses of the various bullets and fragments recovered in the RFK assassination. Curiously enough, though, at the time of the Sirhan trial (1969) no testimony by Wolfer or others regarding the making of these tests, nor of the results obtained, was given. However, in his 1971 deposition, Wolfer stated that he had found all the spectrograms showed "identical" analyses. When asked

to produce his spectrogram films, Nolfer insisted that they had either been "lost" or "destroyed." Fortunately, however, it is my information that the bullets and fragments are still in the custody of the courts; so unless this evidence has been severely "bent out of shape" as the Los Angeles authorities would have us believe is the case, spectrographic, or preferably Neutron Activation Analyses, can still be performed. I might also add that it is now a matter of public record -- in sworn testimony -- that Wolfer interfered in an attempt to conduct the NAA tests on the various bullets, at the very time he was offering testimony before the grand jury that indicted Sirhan as RFK's "lone and unassisted assassin."

It will be, indeed, a very dark day in the history of criminalistics if the RFK-Sirhan case is laid to rest shrouded in the clouds of technical uncertainties, of which there are many -- far too many.

Presented before the American Academy of Forensic Sciences conventions in Chicago, Illinois, February 18-21, 1975.

Date: February 6, 1975

WILLIAM W. HARPER 615 Prospect Boulevard Pasadena, California

3. YOU TO THE TOTAL TOTA

I amove in the lab you can take your com-

A Well, I know the mame of the outfit--

The Hycon camera. It's called a Baliscon (PHONETIC). It's a camera that photographs the entire circumference of a billet.

The bullet is placed on a stage. The

thing only weighs -- I've seen them -- They only weigh eight or, ten pounds, are easily portable.

rotating -- The file rotates in synchronization.

An enlargement then can be made showing all of the rifling; and then, via photographs, the test can be compared with the fatals, or the evidence.

Q To you know whether Harper has that kind of equipment?

A Yes.

I know it's available to him.

I don't think he owns it.

Q Did he ever tell you that he used any kind of such equipment on Sirhan Sirhan?

A Yes.

I, I don't know whether it was on Sirhan Sirhan, or, ah, or in connection with the Kirschke.

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Do you think you could--I know in the lab you can take your com-3 parison photographs--Well, I know the name of the outfit --The Hycon camera. It's called a Baliscon (PHONETIC). It's a camera that photographs the entire circumference of a bullet. The bullet is placed on a stage. thing only weighs -- I've seen them -- They only weigh eight 10 or, ten pounds, are (asily portable. 11 12 (ne can photograph test bullets that are 13 rotating -- The file rotates in synchronization. 14 An enlargement then can be made showing all of the rifling; and then, via photographs, the test can 15 16 be compared with the fatals, or the evidence. 17 To you know whether Harper has that kind 18 of equipment? 19 A Yes. 20 I know it's available to him. 21 I don't think he owns it. 22 Q Did he ever tell you that he used any 23 kind of such equipment on Sirhan Sirhan? 24 Yes. 25 I, I don't know whether it was on Sirhan Sirhan, or, ah, or in connection with the Kirschke. 26

with the, ah, ah -- I'm trying to think of the name of it --