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LABORATORY PROFICIENCY TESTING PROGRAM

REPORT NO. 20 QUESTIONED DOCUMENT EXAMINATION



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REPORT NO. 20 QUESTIONED DOCUMENT EXAMINATION

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Prepared for the Department of Justice, Law Enforcement Assistance Administration, National Institute of Law Enforcement and Criminal Justice, under Grant 76-NI-99-0091.

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The analysis summarized in this report is the twentieth of a series that will be made in conjunction with this proficiency testing research project.

In the course of this testing program participating laboratories will have analyzed and identified different samples of physical evidence similar in nature to the types of evidence normally submitted to them for analysis.

The results for Test Number Twenty are reflected in the charts and graphs which follow.

The citing of any product or method in this report is done solely for reporting purposes and does not constitute an endorsement by the project sponsors.

Comments or suggestions relating to any portion of this report or of the program in general will be appreciated.

May 1977

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BACKGROUND

This laboratory proficiency testing research project, one phase which is summarized in this report, was initiated in the fall of 1974.

This is a research study of <u>how</u> to prepare and distribute specific samples; <u>how</u> to analyze laboratory results; and <u>how</u> to report those results in a meaningful manner. Information is being collected for research and statistical purposes only. Such information will not be revealed or used for any other purpose. Information furnished by any person or agency identifiable to any specific person or laboratory will not be revealed or used for any purposes, other than the research and statistical purposes for which it was obtained.

Participation in the program is voluntary. Accordingly, invitations have been extended to 238 laboratories to share in the research. It is recognized that all laboratories do not perform analyses of all possible types of physical evidence. Thus, in the data summaries included in this report, space opposite some Code Numbers (representing specific laboratories) may be blank, or marked "No Data Returned".

Additional evaluations of individual tests will be published in a separate report.

The Project is under the direct control of the Project Advisory Committee whose members' names are listed on the Title Page. Each is a nationally known criminalistic laboratory authority.

Supporting the Project Advisory Committee in their efforts is the Forensic Sciences Foundation with additional support from the Collaborative Testing Services, Inc., Vienna, Virginia in the area of statistical presentation.

SUMMARY

In this test, each of 144 laboratories were sent questioned document samples which consisted of a threatening letter and envelope, and handwriting from four suspects with three typewriter samples. Participants were asked:

- 1. Did any of the suspects execute the handwriting on the questioned letter?
- 2. Was any of the three typewriters used to prepare the envelope?
- 3. Was any of the three typewriters used to prepare the questioned letter?
- 4. Could any of the three typewriters be excluded as having been used to prepare the questioned letter?
- 5. Please explain any factors or observations which influenced the development of your opinion.
- 6. Does your laboratory maintain a reference file of typewriting standards?

Of the 144^{1} laboratories, 74 responded with data, 19 indicated they do not perform questioned document analysis, and 51 did not respond. This represents a participation rate of $59\%.^{2}$

¹Laboratories were polled regarding their Document Examination capabilities thereby reducing the roster for this Test Sample to 144.

²Participation Rate Calculation:

Number Responses With Data

x 100 = Participation Rate (%)

Total Number of Number of Samples Sent "Do NotDo" Replies

FIGURE 1

LAB CODE

ANNEX A

CHECK HERE AND RETURN IF YOU DO NOT PERFORM QUESTIONED DOCUMENT EXAMINATION.

DATE RECEIVED IN LAB_____ DATE PROCESSED IN LAB_____

DATA SHEET PROFICIENCY TESTING PROGRAM

TEST #20 QUESTIONED DOCUMENT EXAMINATION

TRANSMITTAL LETTER BY EVIDENCE SUBMITTER

The victim in this case has had several arguments with fellow workers. It is suspected that one of these workers sent the enclosed threatening letter and envelope.

Samples are enclosed:

• handwriting of four fellow employees

• typewriting from three typewriters used where all those involved worked

You are asked to determine which (if any) of the suspects prepared the handwriting on the threatening letter as well as which of the typewriters (if any) had been used to prepare the typewriting on the letter and envelope.

<u>NOTE</u>: All materials have been handled by several people. It is <u>not</u> necessary to examine documents for fingerprints or palmprints. In addition, please disregard the fact that the questioned letter, "Q", has not been folded or rolled.

ENCLOSURES: Questioned envelope Questioned letter, marked "Q" Handwriting specimens: 4 standard specimens from each of 4 suspects, marked by B, C, D and E. Typewriting standards, marked 1, 2 and 3 prepared on:

- 1. Royal Upright HHP #5866314
- 2. IBM Selectric #9370467
- 3. IBM Selectric D.C. #122596, SN#26-214-1243



1.	Did a	ny	of	the	suspects	execute	the	handwriting	on	the	questioned
	lette	r?									

	Yes If "yes", which one? B No C
2.	Was any of the three typewriters used to prepare the <u>envelope</u> ?
•	Yes If "yes", which one? 1 No 2 Inconclusive 3
3.	Was any of the three typewriters used to prepare the questioned <u>letter</u> ?
-	Yes If "yes", which one? 1 No 2 Inconclusive 3
4.	Could any of the three typewriters be <u>excluded</u> as having been used to prepare the questioned letter?
	Yes If "yes", indicate No which one(s) Inconclusive
5.	Please explain any factors or observations which influenced the development of your opinion. (Attach additional sheets if necessary.)
6.	Does your laboratory maintain a reference file of typewriting standards?
	Please describe briefly:
7	Additional Commante. (Attach additional chaote)

Questioned Document Sample Characteristics

The questioned document samples are characterized by the manufacturer as follows:

Handwriting

<u>Ideal Answer</u>: Suspect B wrote the questioned writing on the threatening letter (thus eliminating Suspects C, D, E).

<u>Conservative Answer</u>: Variations in suspect's writing precluded definite opinion but some similarities noted. Differences noted with writing of Suspects C, D, E.

All samples were prepared by having Messrs. B, C, D and E write the specimens from a typewritten message. All four people who executed hand-writing in this specimen were selected from the manufacturer's laboratory staff. One individual (writer E) had a reasonably similar handwriting to that of the Q writer (writer B). Writer E was asked to modify his "Y" and "I" to conform to those executed by writer B. This action to make the test slightly more difficult was taken because critiques of the preliminary specimens indicated the test was too simple.

Typewriting

<u>Ideal Answer:</u> Typewriter used to type Std. #1 was used to type the envelope. The typing element or ball, used to type Std. #3 was used to type the Q letter possibly using the same typewriter. Q could not have been typed on the same typewriter used to prepare typewriter Std. #2.

The machine which typed typewriter Std. #2 could not have typed the Q letter because it cannot type 12 spaces to the inch. The typing element characters do not bear the relatively large number of individual, characterizing letterface defects present in the Q letter.

The Courier 12 ball used in Q and typing Std. #3 has the following defects:

	lower	case	"m"	has	center serif missing,	
•	lower	case	"g"	has	defect at approximately 1 o'clock,	
	lower	case	"y"	has	lower left serif shortened,	
•	lower	case	"r"	has	lower right serif shortened,	
•	lower	case	ⁱⁿ t ⁿ	has	the crossing bar shortened from the right.	

Ta	b]	е	2
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Responses of the Referee Laboratories

Question	Referee 1 Response to Question	Referee 2 Response to Question
1.	Yes, B	Yes, B
2.	Yes, 1	Yes, 1
3.	Yes, 3	Yes, 3
4.	Yes, 1, 2	Yes, 1, 2
6.	Yes	Yes

Responses to Question 1

Question 1: Did any of the suspects execute the handwriting on the questioned letter? If yes, which one?

Response	Number of Labs Giving Response
Yes	68 of which 66 identified B, 1 identified B and E, and 1 did not identify any sample
No	0
Inconclusive	6

Table 4

Responses to Question 2

Question 2: Was any of the three typewriters used to prepare the envelope? If yes, which one?

Response		Nu	Number of Labs Giving Response			
Yes		66	(of which all Number 1)	66	identified	
No		0				
Inconclusive		7				
No Envelope Re	eceived	1				



Responses to Question 3

Question 3: Was any of the three typewriters used to prepare the questioned letter? If yes, which one?

Response	Number of Labs Giving Response
Yes	39 of which all 39 identified Number 3
No	9
Inconclusive	26

Table 6

Responses to Question 4

Question 4: Could any of the three typewriters used be excluded as having been used to prepare the questioned letter:

If yes, indicate which one(s).

Response	Number of Labs Giving Response					
Yes	73 of which 71* identified Number 1, 53* identified Number 2, and 9* identified Number 3					
No	0					
Inconclusive No Response	0 1					

*The sum of these is greater than 73 since more than 1 answer was possible. $\frac{1}{\sqrt{8}}$

Responses to Question 6

Question 6: Does your laboratory maintain a reference file of typewriting standards?

Response			Number o Givin	f Laboratories g Response
Yes				43
No				29
No Response	ł			2





Lab <u>Code</u>	Response to Question 1	Response to Question 2	Response to Question 3	Response to Question 4	Response to Question 6
1	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	Yes
64	Possibly, B	Yes, 1	Possibly, 3		No
68	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	Yes
79	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	No
93	Yes, B	Yes, 1	Yes, 3	Yes, 1	Yes
111	Yes, B	Yes, 1	Yes, 3	Yes, 2	No
113	Inconclusive	Inconclusive	Inconclusive	Yes, 1	
144	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	No
154	Yes, B	Yes, 1	Yes, 3	Yes, 1	No
159	Yes, B	Yes, 1	Yes, 3	Yes, 1	Yes
173	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
176	Yes, B	Yes, 1	No	Yes, 1, 2, 3	No
201	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
258	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
282	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
285	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	Yes
294	Inconclusive	Yes, 1	No	Yes, 1, 2, 3	No
302	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
315	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	No
346	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	
353	Yes, B	Yes, 1	Inconclusive	Yes, 2	Yes
367	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
378	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	No
381	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	No
395	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
404	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	Yes
417	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
449	Inconclusive	Inconclusive	Inconclusive	Yes, 1	No
452	Yes, B	Inconclusive	Inconclusive	Yes, 1, 2	Yes
469	Yes, B	Yes, 1	Inconclusive	Yes, 1	No

Summary of Laboratory Responses

Table 8 (Continued)

Lab <u>Code</u>	Response to Question 1	Response to Question 2	Response to Question 3	Response to Question 4	Response to Question 6
470	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
482	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	No
484	Yes, B	Yes, 1	Inconclusive	Yes, 1	Yes
516	Yes, B	Inconclusive	Inconclusive	Yes, 1, 2	Yes
519	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	Yes
522	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	No
526	Inconclusive, B, E	Yes, 1	Yes, 3	Yes, 1, 2	Yes
550	Yes, B	Yes, 1	No	Yes, 1, 2, 3	Yes
556	Yes, B	No Envelope	Yes, 3	Yes, 1	Yes
563	Yes, B	Yes, 1	Yes, 3	Yes, 1	No
566	Yes, B	Yes, 1	No	Yes, 1, 2, 3	Yes
578	Yes, B	Yes, 1	No	Yes, 1, 2, 3	Yes
581	Yes, B	Yes, 1	Yes, 3	Yes, 1	No
583	Yes, B	Yes, 1	Inconclusive	Yes, 1	No
585	Yes, B	Yes, 1	No	Yes, 1, 2, 3	No
604	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
606	Yes, B	Yes, 1	Inconclusive	Yes, 1	Yes
616	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
618	Yes	Yes, 1	Yes, 3	Yes, 1	No
631	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	No
667	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
673	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	Yes
689	Yes, B	Inconclusive	Yes, 3	Yes, 1, 2	No
692	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
695	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
724	Yes, B	Yes, 1	Inconclusive	Yes, 1	Yes
725	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	No
736	Inconclusive	Yes, 1	Inconclusive	Yes, 1, 2	Wes
748	Yes, B	Yes, 1	Inconclusive	Yes, 1, 2	Yes
768	Yes, B	Yes, 1 、	Yes, 3	Yes, 1, 2	No
798	Yes, B	Inconclusive	Inconclusive	Yes, 1, 2	No



Table 8 (Continued)

Lab <u>Code</u>	Response to Question 1	Response to Question 2	Response to Question 3	Response to Question 4	Response to Question 6
801	Yes, B	Yes, 1	Yes, 3	Yes, 1	Yes
812	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
815	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
819	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
831	Yes, B, E	Yes, 1	No	Yes, 1, 3	Yes
874	Yes, B	Inconclusive	Inconclusive	Yes, 1	No
880	Yes, B	Yes, 1	Yes, 3	Yes, 1	Yes
891	Yes, B	Yes, 1	No	Yes, 1, 2	No
923	Yes, B	Yes, 1	No	Yes, 1, 2, 3	No
941	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
959	Yes, B	Yes, 1	Yes, 3	Yes, 1	No
971	Yes, B	Yes, 1	Yes, 3	Yes, 1, 2	Yes
999	Yes, B	Yes, 1	Inconclusive	Yes, 1, 3	No



