

H.P. WHITE LABORATORY, INC.

Training and Experience of:

Lester W. Roane

Chief Engineer

STATUS: Full Time

EDUCATION: Bachelor of Science Aeronautical Engineering, Virginia Polytechnic Institute

Master of Public Administration, Harvard University

EXPERIENCE: 1958-1959 - Design Engineer, Chance Vought Aircraft Company. Design and development testing of automated control systems for pilotless aircraft.

1959-1966 - General Engineer, White Sands Missile Range, NM. Development, testing and operation of unguided (ballistic) target missiles and special instrumentation sounding rockets. Interior and exterior ballistic studies, test program design, and test instrumentation development.

1966-1970 - General Engineer, US Army Test and Evaluation Command. Calibration, instrumentation development, test planning, and program management for a variety of systems at more than a dozen widely scattered Army test installations.

1970-1973 - Division Chief, US Army Small Arms Systems Agency. Planning, development, testing and evaluation for a wide variety of point and area-fire small arms and ammunition. Special responsibility for quality assurance and initial production operations involving both manual and automated functions.

1973-1983 - Branch Chief, Social Security Administration. Production planning, industrial engineering, and quality assurance programs for a wide variety of high-volume, critical production operations involving both manual and automated functions.

1983-1985 - Faculty, Cecil Community College. Teaching college-level mathematics, physics, and physical science.

1984-Present - H.P. White Laboratory, Inc., Chief Engineer. Planning, development, supervision and analysis of wide variety of ballistic and related testing involving experimental and in-service guns, ammunition, armor and physical security materials and devices.

Lester W. Roane**CREDITS AND ACHIEVEMENTS:**

Recognized authority in the field of small arms firearms and ammunition - through small caliber cannons.

Recognized authority in the field of ballistic protection-armor plate, transparent armor, body armor, etc.

Accredited as an expert witness for ballistics.

Member International Association of Bomb Technicians and Investigators.

Registered Professional Engineer, Maryland License No. 5130.

Board of Education (1970-1980).

Board of Trustees for community college (1970-1975).

Numerous honorary societies for engineering, scholarship, leadership, and journalism.

SWORN TESTIMONY

1992 Onward

06/26/01

HPWLT Job #	Court	Case Number	Case Name	Deposition	Trial
05438	CC/Greene Co. AK	Unk	Fisher v. Lee Precision	N	01/95
05765	CC/Alexandria VA	Unk	Marten v. Olin	N	05/92
06204	Commonwealth Ct of PA	233 M.D. 1992	Tongue v. Olin	04/96	N
06217	DC Superior	F4061-92	US v. Payne	N	02/93
06266	USDC/Western MT	2-95-CV-168 & -009	Potrick v. CVA & Remington	11/96	N
06382	DC Superior	Unk	US v. Williams	N	09/93
06431	USDC/Eastern PA	94-CV-1262	Goodman v. Soars	N	12/95
06561	Sup Ct/Co. of NY	24995/91	Tomkins v. Bangor Punta	11/94	N
06564	CC/Woodbury Co. IA	107437C	Nepper v. Ponsoness Warren	03 & 04/95	N
06754	CC/Lake Co. OH	Unk	State v. Treesh	N	02/95
06943	CC/Lake Co. OH	95-CR-000364	State v. Harvey	N	11/95
06949	CC/Jackson Co. MT	96-75508 NP	Ward v. Meijers & Olin	05/97	N
07060	Sup Ct/Pima Co. AZ	293641	Bonnot v. Glock	03/96	N
07063	USDC/Eastern LA	CR94-381-"C"	US v. Len Davis, et. al.	N	04/96
07082	Sup Ct/Alameda Co CA	750681-9	Dix v. Baratta, et al	05/98	10/98
07132	USDC/Northern FL	5-96-CV-21-LAC	McClellan v. Interarms, et. al.	02/96	N
07164	USDC/Eastern NY	CV 95-3323 (JBW)	Halberstam v. S.W. Daniel, et al	02/98	03/98
07185	CC/Logan Co. OH	CV95-07-0126	Engle v. Mossberg, et. al.	04/97	N
07199	USDC/Northern NY	98-CV-1431	Lo Sapio v. Remington Arms Co.	04/00	N
07216	Sup Ct/Ulster Co. NY	95-63	State v. Iris Payne	N	12/96
07237	USDC/Austin TX	CV-96-CA-652-JN	Smith v. Olin	03/97	01/98
07240	USDC/Maryland	WMN-95-2652	Sullivan v. Glock	05/97	N
07322	USDC/Northern FL	5-96-CV-21-LAC	McClellan v. Interarms, et. al.	N	02/97
07461	USDC/Western VA	98-0038-D	Compton v. Weatherby, Inc., et al	01/99	N
07634	USDC/Eastern TN	2-97-CV-18	Sebastian v. Nationwide, et al	08/98	N
07917	CC/Baltimore City	198281004	State v. Brandon Barnes	N	06/99
07959	CC/Washington Co OH	99TR223	Donar v. Forshey, et al	01/01	*
08113	CC/Berkley Co. WV	99-C-385	Smoot v. Michael	07/00	08/00 (*)
08241	USDC/Western Wash	99-01450	Kantola v. Mossberg and Federal	12/00	
08248	USDC/Minnesota	00-CV-1139	Loff v. American Arms, et al	01/01	*
08340	CC/P.G. County, MD	CAL 97-17471	Ellsworth v. Laurel Sand, et al	06/01	*
91019	CC/Fairfax Co. VA	114672	Witt v. Harrington, et. al.	03/94	06/94
91026	USDC/Northern IL	90C7127	US v. Maramont	01/93	N
91026-01	USDC/Maine	91-427-PH	Chamberlain v. Maramont	06/93	N

H.P. WHITE LABORATORY, INC.**Civil and Criminal Litigation Support**

January 1, 2001

The following terms and conditions pertain to services offered by the H.P. white Laboratory, Inc. [Laboratory] in preliminary investigation, literature review and research, incident scene reconstruction, preparation for deposition and/or trial, presentation of testimony and any other activities associated with support of civil or criminal litigation.

1. No work is undertaken on a contingency basis.
2. Our Client of record [Client] is responsible for payment. We do not bill third parties. Instructions are accepted only from, and results reported only to, the Client. Any information concerning our work for our Client will be held in confidence and provided to third parties only:
 - With authorization of the Client
 - In response to a valid order from a Federal or Maryland court.
 - In the event that the Client refuses to pay for the work.
3. All work is conducted by, or under the direct supervision and control of, the person who will be available to testify as an expert.
4. We consider ourselves retained and bound to the interests of the Client only upon receipt of a retainer fee of one thousand dollars [\$1,000]. This fee will be credited to the Client's account and will be applied to any charges made by the Laboratory for services rendered. We will provide statements of the account at any time, at the request of the Client. If the account balance falls to zero, we reserve the right to stop all work until additional funds are received. Any funds remaining at the conclusion of the job will be refunded to the Client. We accept valid VISA or MasterCard accounts to charge against in lieu of cash or check.
5. No work is initiated without authorization from the Client.
6. Work conducted at the Laboratory including, but not limited to, firearms/ammunition examination, firearms/ammunition function and safety testing, conventional and/or video still and motion photography, literature review and research, preparation of exhibits, etc, will be billed at our standard commercial labor rate plus the cost of any purchased materials and services. The Laboratory's current labor rate is eighty dollars [\$80] per staff hour. If there are additional charges for the use of some specialized equipment, such charges will be incurred only with prior approval of the Client.

7. If Laboratory personnel are required **away from the Laboratory** for any purpose, services will be billed at the rate of two hundred dollars [\$200] per hour, or one thousand-five hundred dollars [\$1500] per day from the time he/she leaves the Laboratory until return.
8. All travel and subsistence expenses for Laboratory personnel required to be **away from the Laboratory** will be billed at cost, and are in addition to the fees for services cited in Item 7. Laboratory personnel will normally travel by first class air, or with comparable accommodations.
9. Payment in advance may be required for deposition, trial testimony, or other work **away from the Laboratory**. The advance payment should be \$1,500 per staff day for the estimated duration of the off-site stay plus the estimated travel and subsistence expenses. **Personnel will not leave the Laboratory until advance payment has been received, unless specific arrangements have been made for later payment.**
10. If we are retained, it is essential that we be given the names of all involved parties in order to avoid any conflict of interest.
11. The Laboratory holds a Federal firearms License [FFL], and can receive both damaged and functional firearms and ammunition. If it becomes necessary to acquire exemplar firearms, and if the Laboratory makes the purchase, the exemplar[s] will become the permanent property of the Laboratory, and will **not** be turned over to the Client at the conclusion of our work. If the Client makes the purchase and sends the exemplars to the Laboratory, we will hold them as the property of the Client, and return them upon request.
12. Our rates are subject to change on January 1st of each year.



H. P. WHITE LABORATORY, INC.



- RESEARCH
- DEVELOPMENT
- ENGINEERING

LESTER W. ROANE, PE
Chief Engineer

H.P. WHITE LABORATORY, INC.

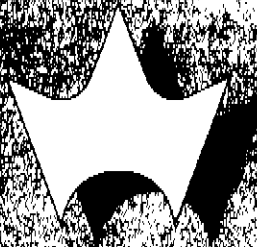
3114 Scarboro Road
Street, Maryland 21154-1822
(410) 838-8650 • FAX No. (410) 838-2802
email: info@hpwhite.com • www.hpwhite.com



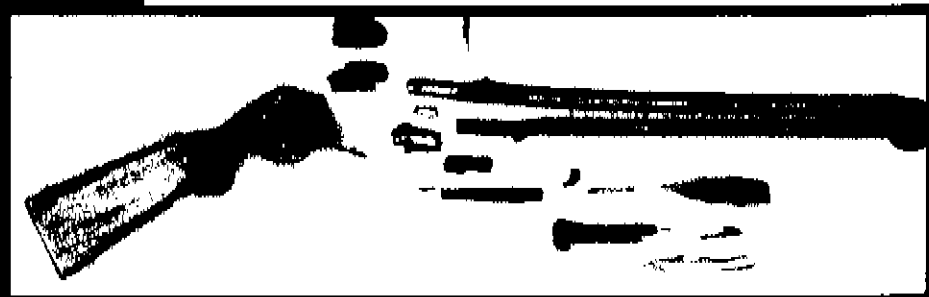
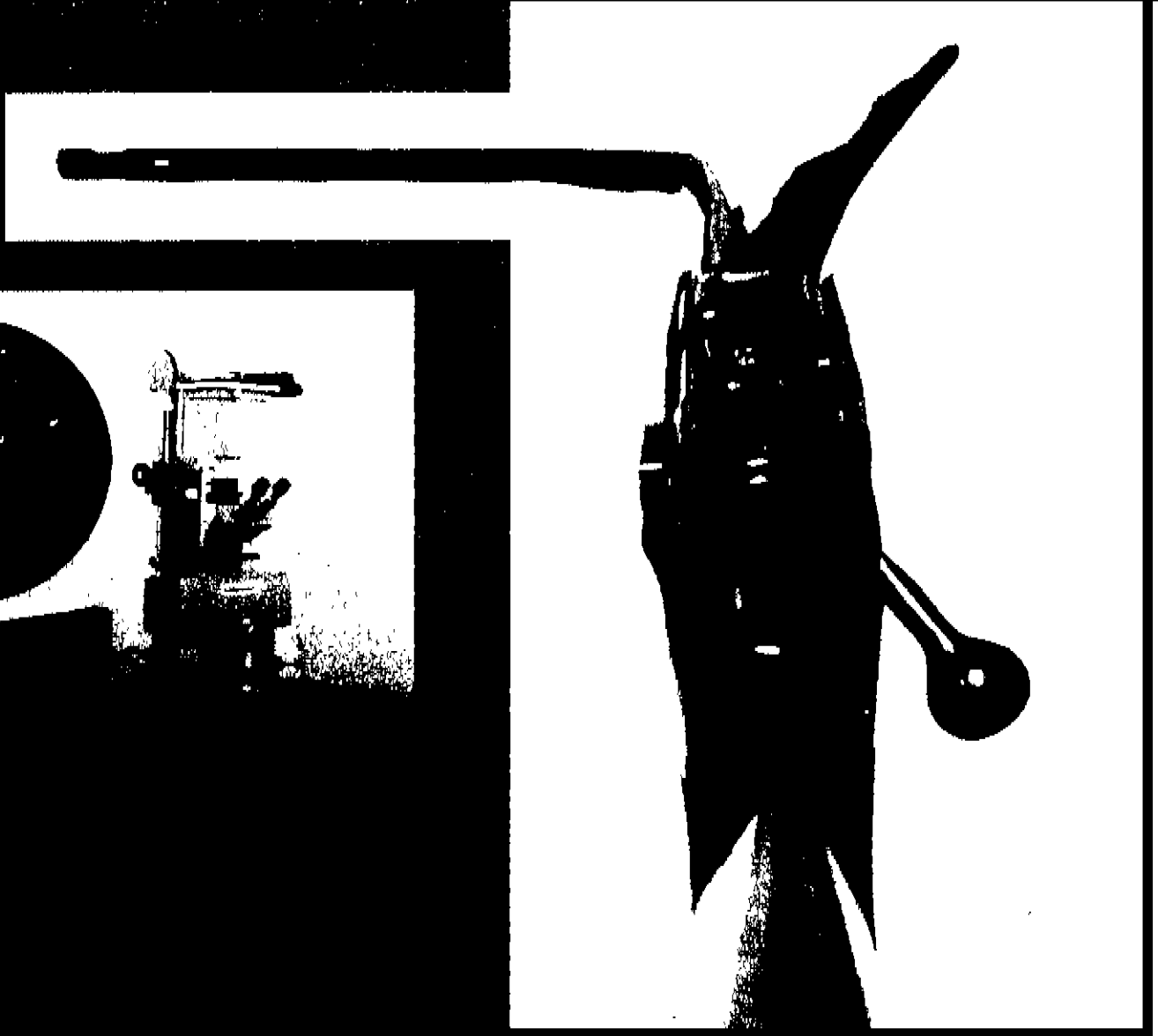
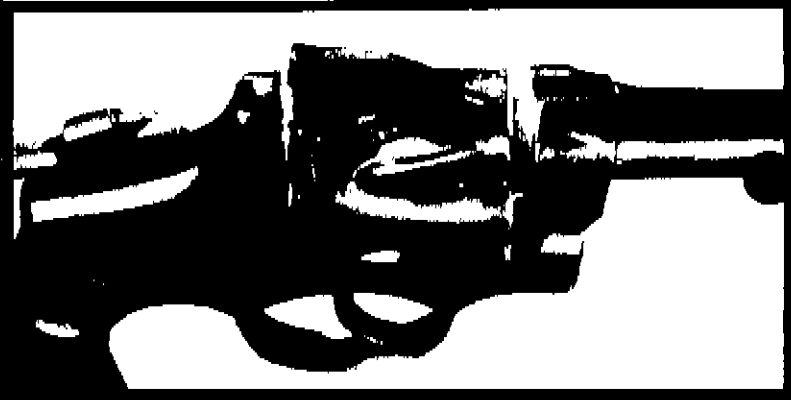
Catastrophic Pressure Test

"One test is worth a
thousand expert opinions."

RIEHLE AXIOM



1. The Government of the United States of America, hereinafter referred to as the "Government," and the Government of the State of New York, hereinafter referred to as the "State," have entered into an agreement, the terms of which are set forth in the attached document, which is hereby incorporated by reference into this document.

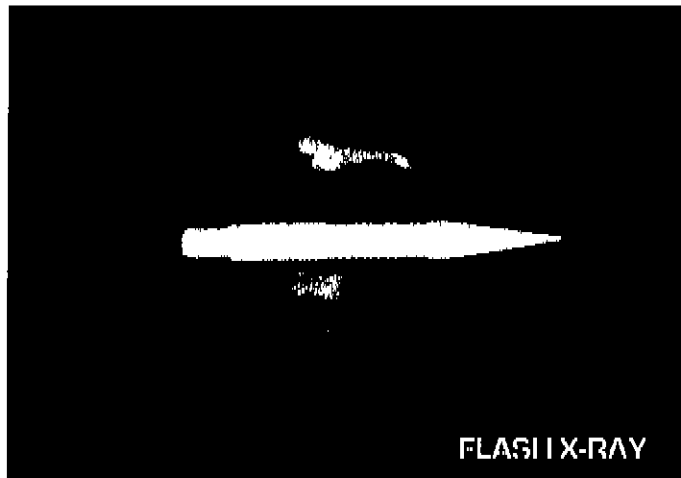
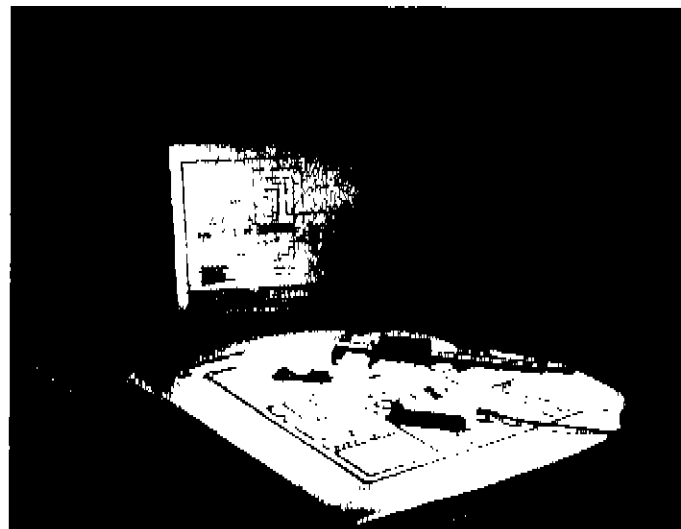
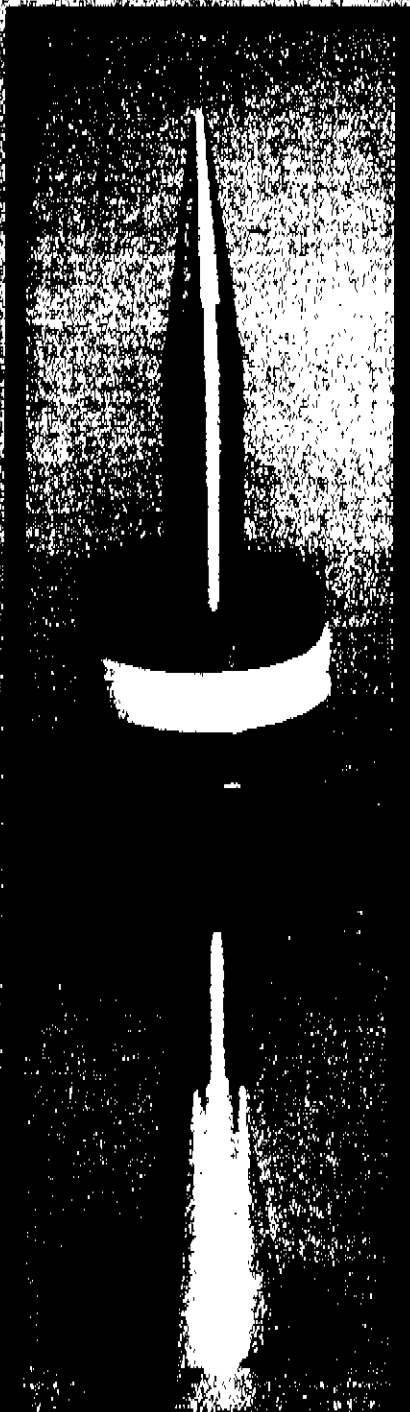


RESEARCH

ENGINEERING

DEVELOPMENT

TESTING

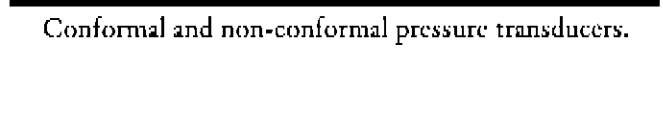


The engineering staff at H.P. White Laboratory supports a wide range of research and development within the ballistic testing environment. Programs such as the 25mm, sabot, long-rod penetrator program are examples of our engineering capabilities in the areas of design, development and first article testing. From initial concept through prototype production and testing, the engineering staff is equipped with the tools for design development and analysis. Using many years of experience in ballistics, assisted by computer modeling and analysis, designs can be assessed for potential performance before tests are conducted. This in-house engineering capability facilitates rapid response and solutions to complex engineering tasks.

7

**SHOTGUN SHELL
IMAGES**

**HIGH
SPEED
GATED VIDEO**



Conformal and non-conformal pressure transducers.

Shot No.	Chronograph 1 Time (x10-6)	Velocity (ft/s)	Chronograph 2 Time (x10-5)	Velocity (ft/s)	Average Velocity	Instrument	Pressure Correction	Corrected
1	1889.0	1184	1891.1	1183	1183	33700		33700
2	1876.7	1183	1878.6	1191	1192	33700		33700
3	1897.8	1178	1899.7	1177	1177	33200		33200

Shot No.	Chronograph 1 Time (x10-6)	Velocity (ft/s)	Chronograph 2 Time (x10-5)	Velocity (ft/s)	Average Velocity	Instrument	Pressure Correction	Corrected
1	1889.0	1184	1891.1	1183	1183	33700		33700
2	1876.7	1183	1878.6	1191	1192	33700		33700
3	1897.8	1178	1899.7	1177	1177	33200		33200

Redundant chronographs ensure accuracy.

Results

	Velocity	Pressure	SAAMI Limits Velocity	Pressure
Maximum	1192	34200	na	na
Minimum	1151	31400	na	na
E.V.	41	2800	na	8500 (MEV)
Sample Average	1171	33720	1210	33000 (MAP)
Std. Dev.	14.80	1088.12	na	na
Std. Error	na	344.09	na	na
Avg. + 3SE	na	33408	na	34100 (MPLM)
Avg. + 5SE	na	34440	na	35700 (MPSM)

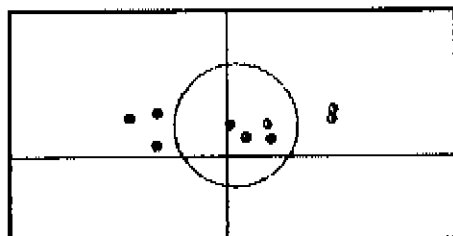
Summarized results are compared with requirements and standards.

TEST

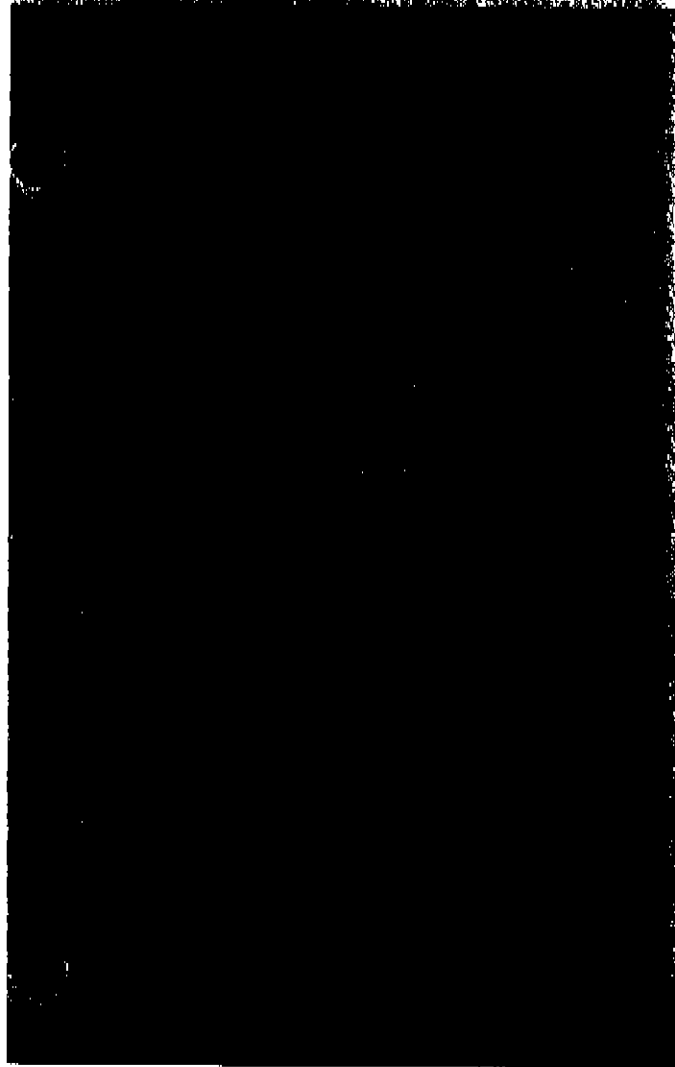
ANALYZE

REPORT

H. F. White Laboratory Inc. DISPERSION DATA SUMMARY			
Job Number:	0000-00	Customer:	Your Company
Test ID:	0000-00	Test Date:	04-21-19XX
Personnel:	John Doe	Filename:	XXX
Weapon:	M242	Ammunition:	25mm TPDS-T
Range:	100 METERS	Scale:	INCHES
Temperature (F):	72	Rel. Humidity (%):	54
Barometric Pressure:	29.1	Wind Conditions:	NA
Description:	Lot Number XXX		
Shot Number	X Coordinate (INCHES)	Y Coordinate (INCHES)	Radial Distance from Center of Impact
1	-8.858	+3.325	5.967
2	-5.328	+0.867	6.142
3	-7.335	+2.890	7.985
4	+0.219	+2.410	0.414
5	+1.408	+1.474	1.172
6	+2.981	+2.475	2.385
7	+3.263	+1.332	2.825
8	+7.917	+3.384	7.390
9	+7.801	+8.835	7.188
Extreme Spread:	13.7520	2.7220	(15 2478 Total)
Mean:	10.4296	+2.3543	4.8039
Standard Deviation:	5.6034	0.9377	5.6833
Mean (mils):	+0.1569	+0.3980	1.1894
Std. Dev. (mils):	1.4238	0.2382	1.4435



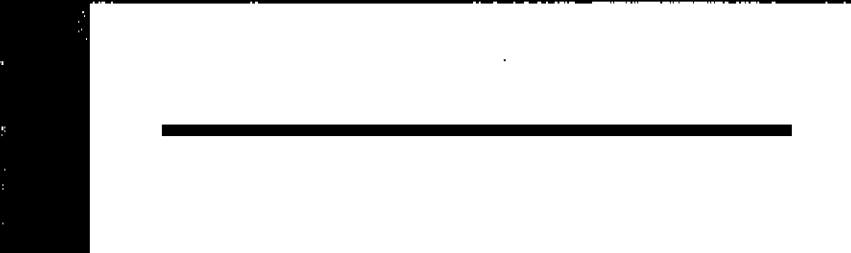
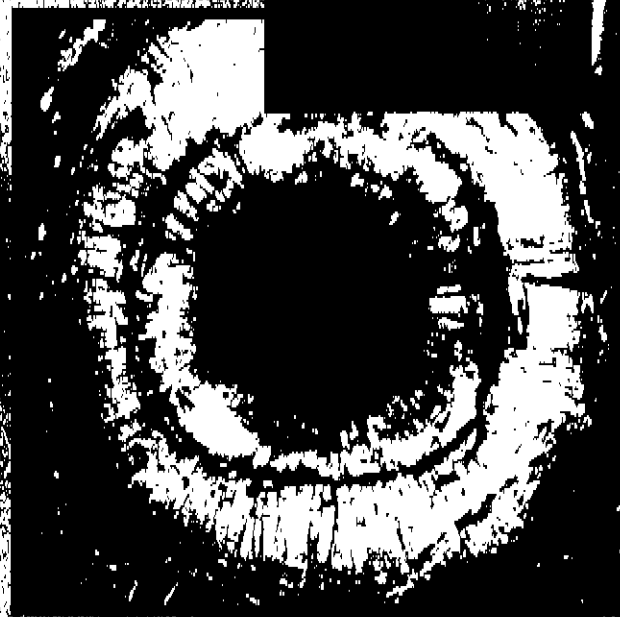
Efficient data analysis is accomplished by using automated systems such as the target digitizer shown here. This computer based system incorporates software developed by the engineering staff to automatically calculate, store and report ballistic test data such as dispersion, yaw and projectile spin.



CAPABILITIES

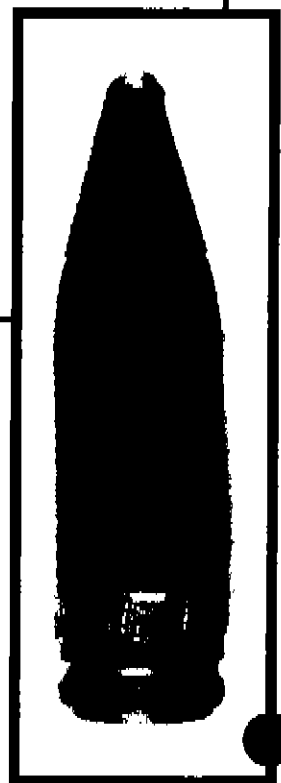
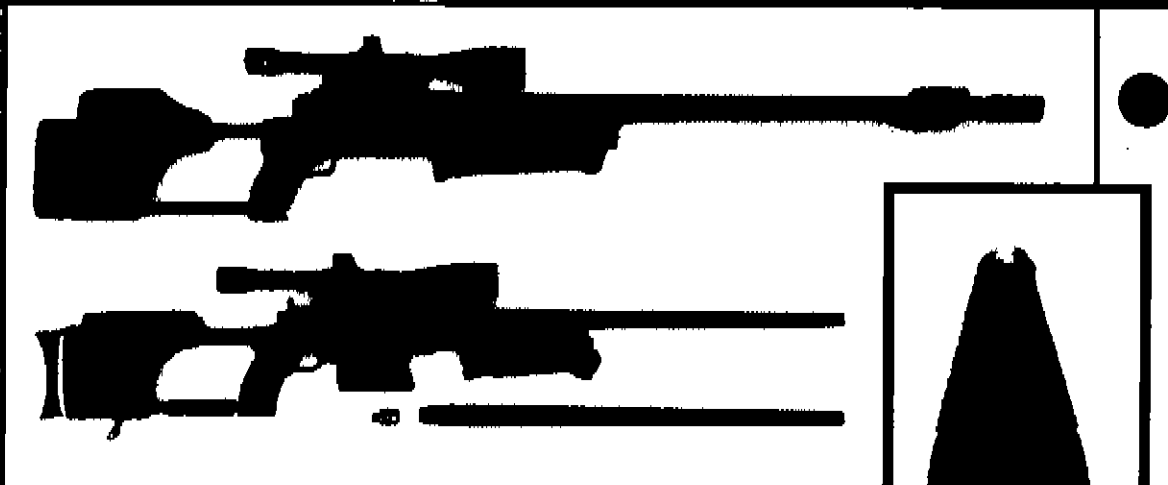
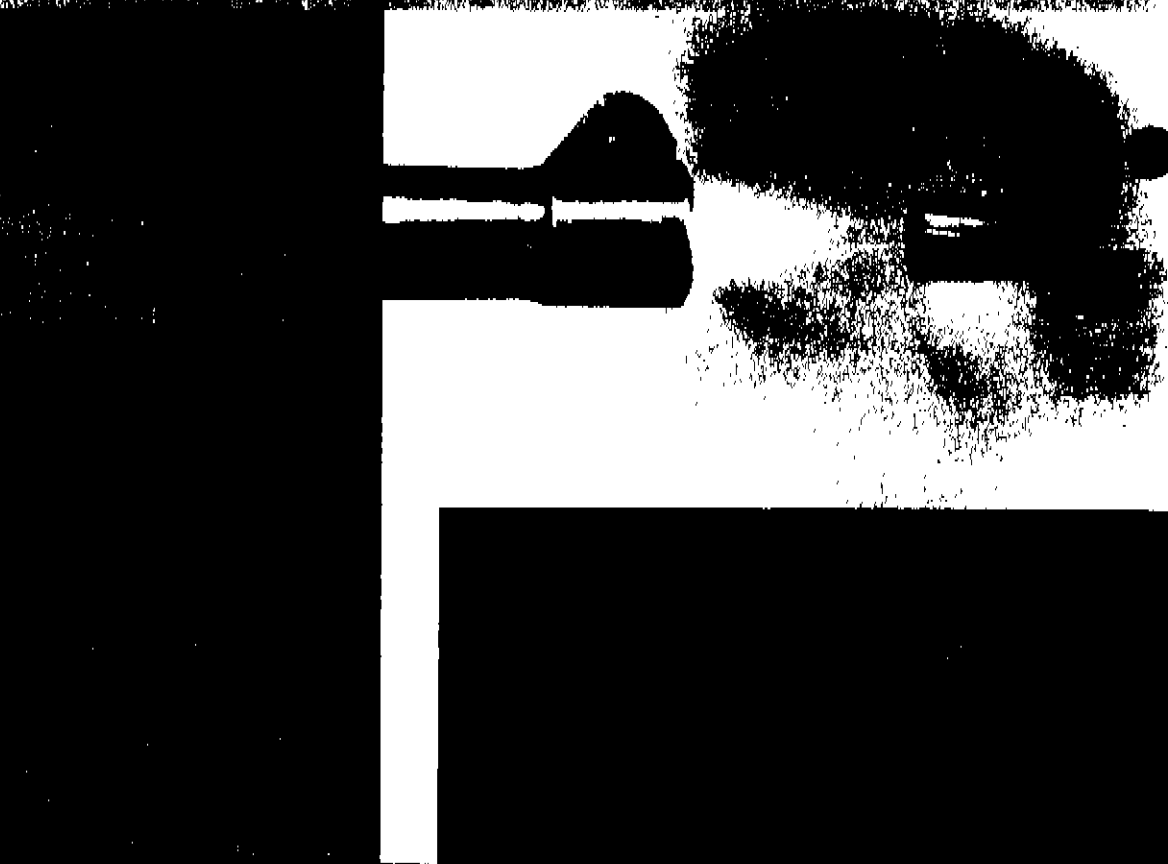
STEEL
ALUMINUM
GLASS

H.P. White Laboratory, Inc. has the capability and expertise to test a wide variety of commercial and military vehicular armors. Armor ranging from space age composites and reactive armors to the more common steel, aluminum and transparent armors are routinely tested to a full range of specifications and standards. Production vehicles and assemblies are also tested to ensure the entire system contains no weaknesses or flaws introduced during the assembly process.



CAPABILITY

Firearms
Nondestructive
Acceptance
SAAMI
Design
SAAMI
Proof
Performance
Reliability
Test
Evaluation
Environmental
Endurance



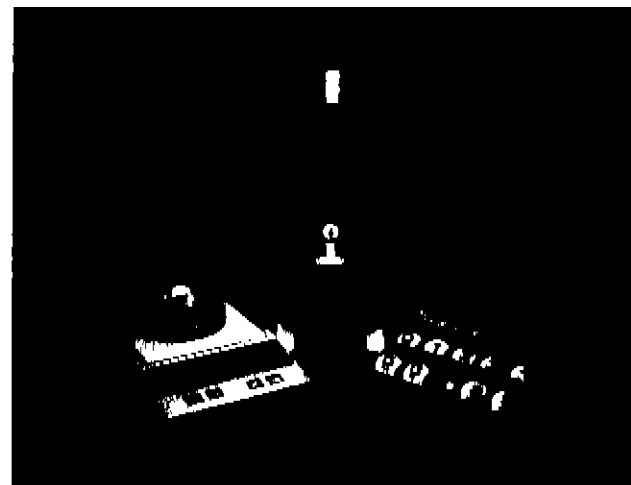
The laboratory has in excess of 150 assorted test barrels for testing of shotgun, handgun, rifle, machinegun, and cannon calibers of ammunition. These test barrels, coupled with our computerized system of data collection and reduction, provide our clients with accurate round-by-round data that eliminates human computation errors. Ammunition development and testing include all forms of small arms ammunition and fused cannon caliber ammunition, including nondestructive recovery of 20mm, 30mm, and 35mm projectiles.

CAPABILITIES

Miscellaneous Testing	Ball Tests
Forced Entry	Drop Testing
Lottery Balls	Industrial Tools
Explosive Testing	Munitions



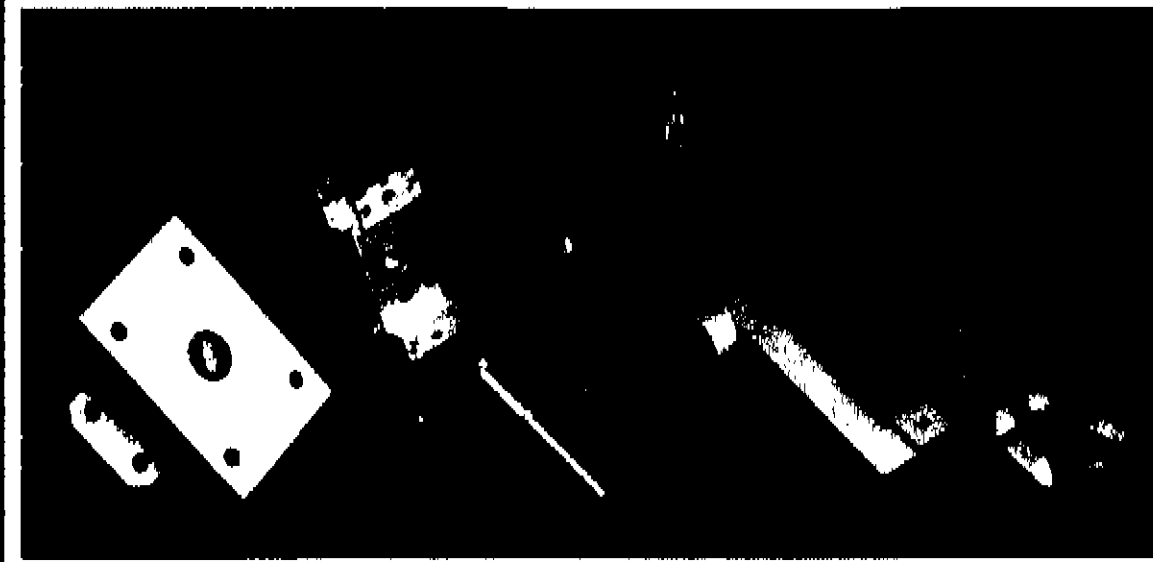
Static tests of low yield explosive devices are regularly conducted at our Maryland facility, while higher yield explosive tests are conducted at our test site in New Mexico. These tests include, but are not necessarily limited to, lethality tests, blast resistance tests and arena fragmentation tests.



With the aid of specialized instrumentation, H.P. White Laboratory, Inc. has, since 1987, been conducting certifications of lottery balls for numerous state lottery agencies.

MACHINERY

An important adjunct to the Laboratory is the machine shop. Fabrication of fixtures, prototypes and redesigned parts, as well as restoration or alteration of components under test, promotes savings of time and expense.



PHOTOGRAPHIC LABORATORY

Using state of the art still, high speed and micro flash techniques, our photographic facility is capable of documenting many aspects of testing. This ability, coupled with our in-house darkroom, minimizes the delay in processing and provides an extra degree of security in handling sensitive or classified subject matter.



AIR GUN TESTING

SPECIAL PROJECTILES

ROCKS	PICKS & AWLS
KNIVES	STEEL BALLS
2X4'S	CUSTOM DESIGNED



2 x 4 impact testing of hurricane resistant glazing. Velocity = 50 ft./sec.



Large air gun used for testing involving projectiles of various configurations. Velocities as low as 25 feet per second can be obtained with a high degree of precision and repeatability.

At the U.S. Naval Weapons Division, Naval Ordnance Laboratory, Inc., developed a non-lethal testing range, where all objects not normally related to ballistic testing can be launched at relatively low velocities. Impact parameters attributed to vandalism and hurricanes can now be replicated using irregular objects such as bricks, rocks, tools and debris specific to the environment. The range can be used to test the structural integrity of buildings and to evaluate the effectiveness of protective measures.



Small air gun for stab testing of vests.

The many fields in which H.P. White Laboratory, Inc. is able to provide assistance is demonstrated by the diversity of our customers:

Ammunition Industry

Aerojet Ordnance
CBC (Companhia, Brasileira de Cartuchos [Brazil])
North Industries Company Ltd. (China)
Federal Cartridge
Glaser Safety Slug, Inc.
Hercules, Inc.
Hornady Manufacturing Co.
Hydra-Shok Corp.
IMR Powder Company
KTW, Inc.
Norma Precision
Nosler Bullet Company
Olin Corporation
PMC Corp.
Remington Arms Company, Inc.
Sierra Bullets
South Korean Explosive Co.
Speer Products Company
Winchester Repeating Arms Company

Firearms Industry

Beretta USA Corp.
Browning Arms Company
Colt Manufacturing Company
Connecticut Valley Arms
Crossman Arms Co.
FN Manufacturing Co.
~~Globe, Inc.~~ REMOVED BY COURT ORDER
Harrington & Richardson, Inc.
Heckler and Koch, Inc.
High Standard Manufacturing Corp.
Holland and Holland (England)
Interarms Ltd.
Ithaca Gun Company, Inc.
Krieghoff International, Inc.
Marlin Firearms Co.
Mossberg, O.P. & Sons, Inc.
National Rifle Association
Remington Arms Company, Inc.
Saco Defense
Savage Arms, Inc.
Smith and Wesson
Sturm, Ruger & Company, Inc.
Thompson Center Arms Co.
Weatherby, Inc.
Winchester Repeating Arms Co.

Government Agencies

Government of Australia
Government of Brazil
Government of Canada
Government of Ireland
Government of Israel

Government of Jamaica
Government of Korea
Government of Mexico
Government of New Zealand
Government of Singapore
Government of Sri Lanka
Government of Taiwan
Government of Turkey
Government of United Kingdom
Government of Yugoslavia
Royal Canadian Mounted Police
Royal Military College of Science
U.S. Air Force
U.S. Army
U.S. Congress
U.S. Customs Service
U.S. Department of Energy
U.S. Department of Immigration
U.S. Department of Interior
U.S. Department of Justice
U.S. Department of State
U.S. Department of Transportation
U.S. Department of Treasury, BATF
U.S. Drug Enforcement Administration
U.S. Federal Aviation Administration
U.S. Federal Bureau of Investigation
U.S. Federal Reserve
U.S. Federal Trade Commission
U.S. Fish and Wildlife Service
U.S. General Services Administration
U.S. Internal Revenue Service
U.S. Marine Corps
U.S. Marshal's Service
U.S. National Institute of Standards & Technology
U.S. Navy
U.S. Postal Service
U.S. Secret Service
Over 40 State Agencies
Over 30 County Agencies
Over 80 Metropolitan Agencies

Miscellaneous

ABC News
Aetna Casualty Co.
Allstate Casualty Co.
American Academy of Forensic Science
Bank of America
CBS News
Exxon Corporation
Forbes Magazine
International Business Machines
International Chamber of Commerce
Liberty Mutual Insurance Co.
National Wildlife Federation
Playboy Magazine
Sports Illustrated
State Farm Fire & Casualty
Travelers Insurance Co.

Personal Armor & Textile Industry

Akzo Nobel

Allied Signal Inc.
American Body Armor & Equipment Co.
Clark-Schweibel Fiber Glass Corp.
E.I. du Pont de Nemours & Co., Inc.
Hexcel Corporation
Oriental Industry Co. Ltd.
Point Blank Body Armor, Inc.
Protective Apparel Corp. of America
Safariland Ballistics, Inc.
Second Chance Body Armor, Inc.
Silver Star Company Ltd.

Physical Security Industry

AGP Plastics, Inc.
GE Plastics, Inc.
Insulgard Corporation
Monsanto Chemical Company
Mosler Safe Company
Norshield Company
Rohm and Haas, Inc.
Sully North America, Inc.

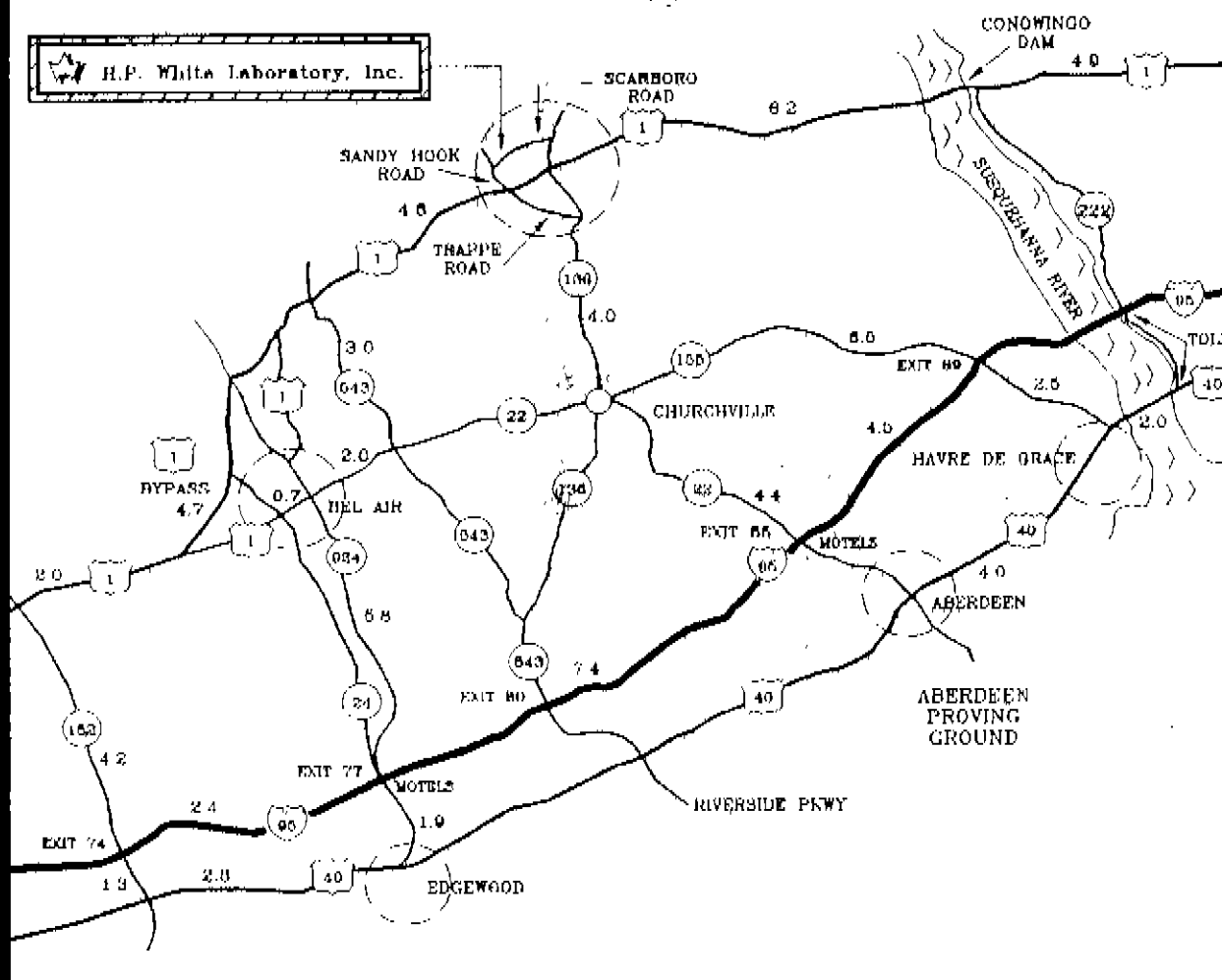
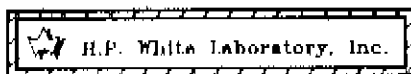
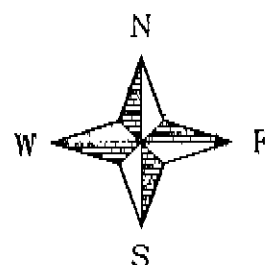
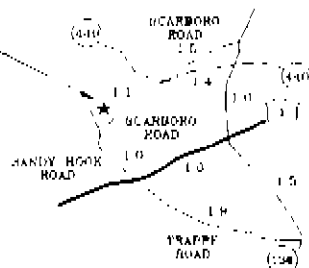
Vehicular Armor Industry

AM General Corporation
Aluminum Company of America (ALCOA)
Bayerische Motoren Werke (BMW)
Bell Helicopter
Bethlehem Steel Corporation
Brinks, Inc.
Cadillac Gage Textron, Inc.
Canadian Heat Treaters, Inc.
Carborundum Company
Caterpillar
Chrysler Corporation
Clifton Steel
Corning Glass Works
Courtaulds Aerospace
FMC Corporation
General Dynamics
General Electric Company
General Motors Corporation
Goodyear Aerospace
Grumman Aerospace
Heflin Steel
Hughes Aircraft Company
John Deere
Kaiser Aluminum
Lukens Steel
McDonnell Douglas Corporation
Martin Marietta Corporation
Mercedes Benz Corporation
O'Gara Companies
Oregon Steel Mills
Pilkington Aerospace
PPG Industries, Inc.
Reynolds Aluminum
Rockwell International
Sikorsky Aircraft
US Steel Corporation

CONSULTANTS TO:

- United States Congress
- United States Department of Justice
- United States Department of the Treasury (BATF)
- National Institute of Justice (NIJ)
- Federal Bureau of Investigation (FBI)
- National Institute of Standards and Technology (NIST)
(formerly National Bureau of Standards)
- American Society for Testing and Materials (ASTM)
- American National Standards Institute/Sporting Arms
and Ammunition Manufacturers' Institute (ANSI/SAAMI)
- Laminated Safety Glass Association (LSGA)
- Personal Protective Armor Association (PPAA)

H.P. White Laboratory, Inc.



H. P. WHITE LABORATORY, INC.

3114 Scarboro Road

Street, Maryland 21154-1822

Telephone: (410) 838-6550 Fax: (410) 838-2802

Web Site: www.hpwhite.com E-Mail: Information@hpwhite.com



Larry Kastner, Bureau Chief
LarryKastner@elpasoco.com

Joseph Breister, Commander
JosephBreister@elpasoco.com

Colorado Bureau of Investigations-Denver
690 Kipling St. Suite 4000
Denver, CO 80215

RE: El Paso County Sheriff's Office case report number 02-357

The El Paso County Sheriff's Office is currently conducting an Assist Outside Agency investigation. Sheriff John Stone of the Jefferson County Sheriff's Office requested the El Paso County Sheriff's Office to re-investigate a portion of the Columbine shooting (Jefferson County Sheriff's Office case report number 99-7625 titled First Degree Murder.) Specifically, our agency is investigating allegations that one of the victims, Daniel Rohrbough, was accidentally shot by a responding police officer.

The following items are being submitted for analysis:

1. Item WHB 1 A Gunshot Residue Kit collected at the autopsy of Daniel Rohrbough.
2. Item WHB 2 A sweater

We request the GSR kit be processed to ascertain if Daniel Rohrbough has any gunshot residue on his hands. We also request the sweater be examined for the presence of any gunshot residue or latent blood. If any latent blood is located, please process for DNA and compare to the DNA profile of Daniel Rohrbough. Mr. Rohrbough's DNA sample should be on file with the original CBI reports.

We request these tests be conducted as soon as possible.

Thank you in advance for your assistance. If you have any questions, please feel free to call me at (719) 520-7246.

Sincerely,

Detective William Burns
El Paso County Sheriff's Office
Homicide/Major Crimes Unit

Law Enforcement Bureau
105 E. Vermijo Suite 300 • Colorado Springs, CO 80903-2280
Telephone: (719) 520-7151 • Fax: (719) 520-7243
www.co.el-paso.co.us/sheriff



COLORADO BUREAU OF INVESTIGATION

OFFICIAL REQUEST FOR LABORATORY EXAMINATION

CBI LAB CASE #

02 008
DOX-0446

PAGE 1 OF 1

SUSPECT _____ RAC/ _____ SEX/ _____ DOB/ _____
(LAST FIRST MIDDLE)

SUSPECT _____ RAC/ _____ SEX/ _____ DOB/ _____

SUSPECT _____ RAC/ _____ SEX/ _____ DOB/ _____

VICTIM Rohrbough, Daniel (Deceased) RAC/ _____ SEX/ _____ DOB/ _____

RUSH CASE?	Yes
REASON	

OFFENSE Assist Outside Agency NCIC OFFENSE CODE 7099

DATE OF OFFENSE April 20, 1999

REQUESTING AGENCY El Paso County Sheriff's Office

CASE# 02-357

REQUESTING AGENCY ORI CO 0210000

SPECIFY: NEW CASE? ☒
ADDITIONAL EVIDENCE? ☐
RESUBMITTED EVIDENCE? ☐

IMPORTANT ALL EVIDENCE LISTED MUST BE LIMITED TO ONE AGENCY CASE NUMBER.

A cover letter or written explanation must accompany this submission form describing the pertinent facts of the case and examinations desired on each item. CBI Lab personnel MUST be notified if this evidence has been previously analyzed elsewhere.

CBI ITEM#	DESCRIPTION	AGENCY ITEM#
1	Gunshot Residue Kit collected from Daniel Rohrbough at autopsy	WHB1
2	Sweater	WHB2

INVESTIGATING William Burns
OFFICER

PHONE # (719) 520-7246

PLEASE PRINT

CHAIN OF CUSTODY: (Pending Inventory by CBI staff)

Date Time	Signature
021502 4:20 PM	<i>William Burns</i>
051502 1:20	<i>W. Burns</i>

UPS/Regd/Cert # _____

5	
6	
7	
RETURNED EVIDENCE MAY INCLUDE PACKETS GENERATED BY CBI.	

FOR CBI USE

CRS	
DNA	
DBS	
GER	
HRF	
CHE	
TRA	
GSP	
CCI	
FIR	
FTP	
FIN	
QUE	

FedEx. USA Airbill

823897283433

1 From: Sender's FedEx Account Number 1055-5547-4

2 To: Recipient's Name HP White Laboratories, Inc.

3 Address: 3114 Scarborough Road

4 City: Scarborough

5 State: MA

6 Zip: 01106

7 Package Description: HP White Laboratories, Inc.

8 Weight: 14.0

9 Dimensions: 8.38 x 6.55

10 Special Handling: None

11 Insurance: None

12 Signature: None

13 Date: 1991-02-19

14 Time: 10:55

15 Carrier: 1055-5547-4

16 Tracking Number: 823897283433

17 Service: Express

18 Priority: None

19 Signature: None

20 Date: 1991-02-19

21 Time: 10:55

22 Carrier: 1055-5547-4

23 Tracking Number: 823897283433

24 Service: Express

25 Priority: None

26 Signature: None

27 Date: 1991-02-19

28 Time: 10:55

29 Carrier: 1055-5547-4

30 Tracking Number: 823897283433

31 Service: Express

32 Priority: None

33 Signature: None

34 Date: 1991-02-19

35 Time: 10:55

36 Carrier: 1055-5547-4

37 Tracking Number: 823897283433

38 Service: Express

39 Priority: None

40 Signature: None

41 Date: 1991-02-19

42 Time: 10:55

43 Carrier: 1055-5547-4

44 Tracking Number: 823897283433

45 Service: Express

46 Priority: None

47 Signature: None

48 Date: 1991-02-19

49 Time: 10:55

50 Carrier: 1055-5547-4

51 Tracking Number: 823897283433

52 Service: Express

53 Priority: None

54 Signature: None

55 Date: 1991-02-19

56 Time: 10:55

57 Carrier: 1055-5547-4

58 Tracking Number: 823897283433

59 Service: Express

60 Priority: None

61 Signature: None

62 Date: 1991-02-19

63 Time: 10:55

64 Carrier: 1055-5547-4

65 Tracking Number: 823897283433

66 Service: Express

67 Priority: None

68 Signature: None

69 Date: 1991-02-19

70 Time: 10:55

71 Carrier: 1055-5547-4

72 Tracking Number: 823897283433

73 Service: Express

74 Priority: None

75 Signature: None

76 Date: 1991-02-19

77 Time: 10:55

78 Carrier: 1055-5547-4

79 Tracking Number: 823897283433

80 Service: Express

81 Priority: None

82 Signature: None

83 Date: 1991-02-19

84 Time: 10:55

85 Carrier: 1055-5547-4

86 Tracking Number: 823897283433

87 Service: Express

88 Priority: None

89 Signature: None

90 Date: 1991-02-19

91 Time: 10:55

92 Carrier: 1055-5547-4

93 Tracking Number: 823897283433

94 Service: Express

95 Priority: None

96 Signature: None

97 Date: 1991-02-19

98 Time: 10:55

99 Carrier: 1055-5547-4

100 Tracking Number: 823897283433

101 Service: Express

102 Priority: None

103 Signature: None

104 Date: 1991-02-19

105 Time: 10:55

106 Carrier: 1055-5547-4

107 Tracking Number: 823897283433

108 Service: Express

109 Priority: None

110 Signature: None

111 Date: 1991-02-19

112 Time: 10:55

113 Carrier: 1055-5547-4

114 Tracking Number: 823897283433

115 Service: Express

116 Priority: None

117 Signature: None

118 Date: 1991-02-19

119 Time: 10:55

120 Carrier: 1055-5547-4

121 Tracking Number: 823897283433

122 Service: Express

123 Priority: None

124 Signature: None

125 Date: 1991-02-19

126 Time: 10:55

127 Carrier: 1055-5547-4

128 Tracking Number: 823897283433

129 Service: Express

130 Priority: None

131 Signature: None

132 Date: 1991-02-19

133 Time: 10:55

134 Carrier: 1055-5547-4

135 Tracking Number: 823897283433

136 Service: Express

137 Priority: None

138 Signature: None

139 Date: 1991-02-19

140 Time: 10:55

141 Carrier: 1055-5547-4

142 Tracking Number: 823897283433

143 Service: Express

144 Priority: None

145 Signature: None

146 Date: 1991-02-19

147 Time: 10:55

148 Carrier: 1055-5547-4

149 Tracking Number: 823897283433

150 Service: Express

151 Priority: None

152 Signature: None

153 Date: 1991-02-19

154 Time: 10:55

155 Carrier: 1055-5547-4

156 Tracking Number: 823897283433

157 Service: Express

158 Priority: None

159 Signature: None

160 Date: 1991-02-19

161 Time: 10:55

162 Carrier: 1055-5547-4

163 Tracking Number: 823897283433

164 Service: Express

165 Priority: None

166 Signature: None

167 Date: 1991-02-19

168 Time: 10:55

169 Carrier: 1055-5547-4

170 Tracking Number: 823897283433

171 Service: Express

172 Priority: None

173 Signature: None

174 Date: 1991-02-19

175 Time: 10:55

176 Carrier: 1055-5547-4

177 Tracking Number: 823897283433

178 Service: Express

179 Priority: None

180 Signature: None

181 Date: 1991-02-19

182 Time: 10:55

183 Carrier: 1055-5547-4

184 Tracking Number: 823897283433

185 Service: Express

186 Priority: None

187 Signature: None

188 Date: 1991-02-19

189 Time: 10:55

190 Carrier: 1055-5547-4

191 Tracking Number: 823897283433

192 Service: Express

193 Priority: None

194 Signature: None

195 Date: 1991-02-19

196 Time: 10:55

197 Carrier: 1055-5547-4

198 Tracking Number: 823897283433

199 Service: Express

200 Priority: None

201 Signature: None

202 Date: 1991-02-19

203 Time: 10:55

204 Carrier: 1055-5547-4

205 Tracking Number: 823897283433

206 Service: Express

207 Priority: None

208 Signature: None

209 Date: 1991-02-19

210 Time: 10:55

211 Carrier: 1055-5547-4

212 Tracking Number: 823897283433

213 Service: Express

214 Priority: None

215 Signature: None

216 Date: 1991-02-19

217 Time: 10:55

218 Carrier: 1055-5547-4

219 Tracking Number: 823897283433

220 Service: Express

221 Priority: None

222 Signature: None

223 Date: 1991-02-19

224 Time: 10:55

225 Carrier: 1055-5547-4

226 Tracking Number: 823897283433

copy •1q

*** THIS IS A CBI LAB REPORT - VERIFY PRINTER ONLINE AND PRINT ***

THE FOLLOWING INFORMATION IS THE RESULT OF LABORATORY ANALYSIS COMPLETED THIS DATE ON EVIDENCE SUBMITTED. THIS REPORT MUST BE PRINTED AND FORWARDED TO CONCERNED PARTIES. A SIGNED COPY OF THIS REPORT RESIDES IN OUR FILES.

ROBERT C. CANTWELL, DIRECTOR
COLORADO BUREAU OF INVESTIGATION

COLORADO BUREAU OF INVESTIGATION

LABORATORY REPORT

LAB CASE NUMBER:D02-0446 SECTION:GUNSHOT RESIDUE OCA:02357

AGENCY NAME: CO0210000 - EL PASO COUNTY SHERIFF - COLORADO SPRINGS

OFFENSE: 7099 - CRIMES AGAINST PERSON-SEE MIS

INVESTIGATED BY: WILLIAM BURNS

SUBMISSION DATE: 021502

* SUSPECT(S):

AKA:

R/S D.O.B:

* VICTIM(S):

MORE PAGES

copy •1q

ROHRBOUGH, DANIEL

W/M

EXAMINED BY/ CAROL M. CROWE, LABORATORY AGENT/CRIMINALIST

DATE COMPLETED/FEBRUARY 21, 2002

(REFERENCE CBI CASE #D99-1333 AND JEFFERSON COUNTY S.O. CASE #99-7625)

ITEM	(JSCO)	DESCRIPTION
====		=====

#1	(8745)	ONE GUNSHOT RESIDUE KIT TAKEN FROM DANIEL ROHRBOUGH
----	--------	---

#2	(2124)	TAN SWEATER
----	--------	-------------

RESULTS:

ANALYSIS OF ITEM #1, TAKEN FROM ROHRBOUGH, DISCLOSED THE PRESENCE OF PARTICLES CHARACTERISTIC OF GUNSHOT RESIDUE. THIS RESULT INDICATES THIS INDIVIDUAL MAY HAVE DISCHARGED A FIREARM, BEEN IN THE VICINITY OF A FIREARM WHEN IT WAS DISCHARGED, OR CAME IN CONTACT WITH AN ITEM WITH GUNSHOT RESIDUE ON IT.

MORE PAGES

ANALYSIS OF ITEM #2, THE TAN SWEATER, DISCLOSED THE PRESENCE OF PARTICLES
CHARACTERISTIC OF GUNSHOT RESIDUE. ELEMENTAL ANALYSIS OF THE SMEAR ON
THE BACK OF THE SWEATER DISCLOSED THE PRESENCE OF PREDOMINANTLY LEAD
PARTICLES AND COPPER PARTICLES.

02 011

ANALYSIS OF THE SMEAR ALSO DISCLOSED THE PRESENCE OF A LEAD/ANTIMONY
PARTICLE. THIS PARTICLE IS CONSISTENT WITH BUT NOT UNIQUE TO GUNSHOT
RESIDUE.

CMC:TC 02/21/02
D02-0446

*** IMPORTANT ***

EXAMINATIONS ARE CONTINUING IN OTHER DISCIPLINES. RESULTS OF THOSE
EXAMINATIONS WILL BE TRANSMITTED UNDER SEPARATE COVER WHEN COMPLETED

RECEIVING TERMINAL:ELP ORI:CO0210000 OPERATOR:11694 DATE/TIME:022702/0829

DA'S TERMINAL:D04B ORI:CO021015A HAS NO OPERATOR - REPORT WILL BE QUEUED
Message sent 2/27/02 9:17

03/04/02 09:44:36 PRINT REQUESTED BY TERMINAL ELP

*** THIS IS A CBI LAB REPORT - VERIFY PRINTER ONLINE AND PRINT ***

THE FOLLOWING INFORMATION IS THE RESULT OF LABORATORY ANALYSIS COMPLETED THIS DATE ON EVIDENCE SUBMITTED. THIS REPORT MUST BE PRINTED AND FORWARDED TO CONCERNED PARTIES. A SIGNED COPY OF THIS REPORT RESIDES IN OUR FILES.

ROBERT C. CANTWELL, DIRECTOR
COLORADO BUREAU OF INVESTIGATION

COLORADO BUREAU OF INVESTIGATION

LABORATORY REPORT

LAB CASE NUMBER:D02-0446 SECTION:SEROLOGY OCA:02357

AGENCY NAME: C00210000 - EL PASO COUNTY SHERIFF - COLORADO SPRINGS

OFFENSE: 7099 - CRIMES AGAINST PERSON-SEE MIS

INVESTIGATED BY: WILLIAM BURNS

SUBMISSION DATE: 021502

* SUSPECT(S): AKA: R/S D.O.B:

* VICTIM(S):
ROHRBOUGH,DANIEL W/M

EXAMINED BY/ JOE R. CLAYTON, JR., LABORATORY AGENT/CRIMINALIST

DATE COMPLETED/FEBRUARY 20, 2002

RE: CBI CASE #D99-1333

RE: JEFFERSON COUNTY S.O. CASE #99-7625

ITEM	DESCRIPTION
=====	=====

#2	SWEATER.
----	----------

RESULTS:

EXAMINATIONS CONDUCTED ON ITEM #2 INDICATED THE PRESENCE OF HUMAN BLOOD.

THE MAJORITY OF THE BLOOD ON THE SWEATER APPEARS TO BE DEPOSITED ON THE INTERIOR OF THE SWEATER.

SEROLOGICAL EXAMINATION IDENTIFIED BIOLOGICAL MATERIAL FOR DNA TESTING. A DNA PACKET HAS BEEN CREATED WHICH CONTAINS THIS BIOLOGICAL MATERIAL. NO FURTHER ANALYSIS WILL BE PERFORMED ON THIS BIOLOGICAL

THE STAIN CARD PREPARED FROM D. ROHRBOUGH'S BLOOD STANDARD WAS
PREVIOUSLY RETURNED TO THE JEFFERSON COUNTY SHERIFF'S OFFICE.

02 013

CONTACT AGENT JOE CLAYTON AT THE CBI LABORATORY IF THERE ARE ANY
QUESTIONS OR PROBLEMS COLLECTING THE CONTROL SAMPLES.

JRC:MJ 022102
D02-0446

*** IMPORTANT ***

EXAMINATIONS ARE CONTINUING IN OTHER DISCIPLINES. RESULTS OF THOSE
EXAMINATIONS WILL BE TRANSMITTED UNDER SEPARATE COVER WHEN COMPLETED

RECEIVING TERMINAL:ELP ORI:C00210000 OPERATOR:26391 DATE/TIME:030402/0943

DA'S TERMINAL:D04B ORI:C0021015A HAS NO OPERATOR - REPORT WILL BE QUEUED

**H.P. WHITE LABORATORY, INC.**

3114 Scarboro Road

Street, Maryland 21154-1822

Telephone: (410) 838-6560

Facsimile: (410) 838-2802

email: info@hpwhite.com

www.hpwhite.com

March 11, 2002

[HPWL 8651-01A]

El Paso County Sheriff's Office
105 E. Vermijo
Suite 300
Colorado springs, Colorado 80903

Attention: Detective William Burns

Dear Detective Burns:

You recently requested microscopic examination of several 9mm fired bullets, cartridge cases and fragments which were had delivered to me on February 28, 2002.

The material was all in sealed evidence bags, which you opened in my presence. For purposes of this report, I will designate the bullets as follows:

- **E1** - A single fired 9mm bullet taken from an evidence bag marked "D991333 E260 022502 WB17 #15", which you identified as having been removed from the body of the deceased.
- **X1** - One [random] of eight fired 9mm bullets taken from an evidence bag marked "99-7625 WB12C", which you identified as having been retrieved from test firing of an evidence Hi-Point Model 995 rifle.
- **X2** - One [random] of eight fired 9mm bullets taken from an evidence bag marked "99-7625 WB12B", which you identified as having been retrieved from test firing of an evidence Intratec TEC-9 rifle.
- **X3** - One [random] of two fired 9mm bullets taken from an evidence bag marked "D991333 T908 E908", which you identified as having been retrieved from test firing of a Heckler & Koch MP5 submachinegun.

All of the bullets were in excellent condition and were suitable for matching.

The bullets were first examined under a variable power Bausch & Lomb stereo microscope. It was immediately obvious that **E1** and **X1** were fired from a barrel having eight lands and grooves. Further, the lands and grooves were of the same width, and could have been fired from the same barrel. **X2** and **X3**, on the other hand, were fired from barrels having six lands and grooves. Further, the lands and grooves were of differing widths, and they had to have been fired from different barrels.

E1 and **X1** were examined together under a Cambridge comparison microscope at 40X magnification. The two bullets were a textbook "match" at all eight land and groove marks.

El Paso County Sheriff's Office
Attention: Detective William Burns
March 11, 2002
[HPWL1 8651-01A]
Page 2

The fragment from an evidence bag marked "2726 Team 8 1739 4/21/99 D99-1333 UB 231 WB 15" was examined under the stereo microscope and found to be a bullet jacket which had been fired from a barrel having eight land and grooves. It could have been fired from the same barrel as E1 and X1. Other fragments from evidence bags marked "2730 Team 8 1746 4/21/99 D99-1333 233A 233B UB WB15B" and "2112 Team 6 JON 1316 4/21/99 D99-1333" were not of evidentiary value.

Attempts to match various cartridge cases were inconclusive.

You were provided with discs containing digital images of the bullets as follows [note that several are duplicates with differences only in lighting and/or magnification]:

- Images 1 – 7 show E1 next to X3 [base-to-base].
- Image 8 shows E1 next to X2 [base-to-base].
- Images 9 – 12 show E1 next to X1 [base-to-base].
- Images 13 – 17 show E1 and X1 under the comparison microscope at 12X.
- Images 18 – 20 show E1 and X1 under the comparison microscope at 20X.

In summary, It is my opinion that:

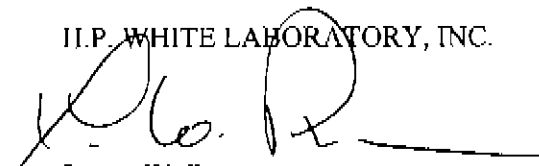
- E1 could not have been fired from either the barrel that fired X2 or the one that fired X3.
- X2 and X3 were fired from different barrels.
- E1 was fired from the same barrel that fired X1.

All of the material was returned to you at the conclusion of testing.

Thank you for the opportunity to conduct these tests. If you should have any questions, please feel free to contact me.

Very truly yours,

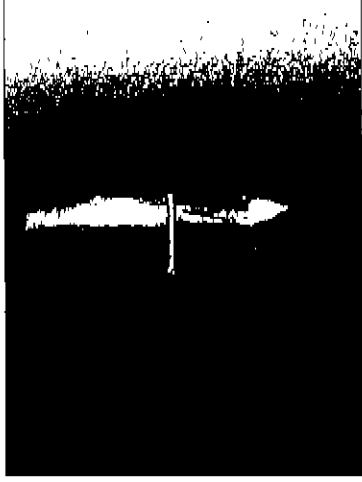
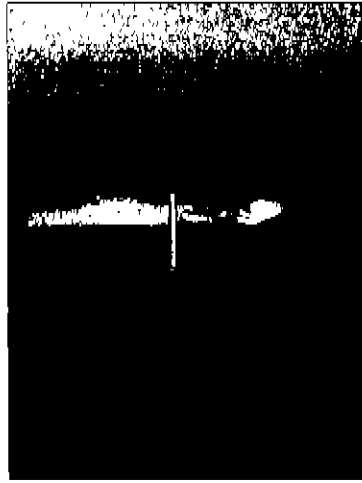
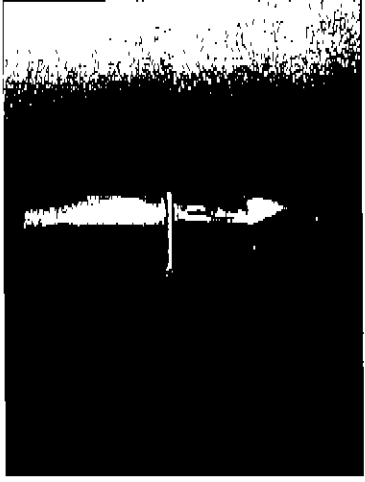
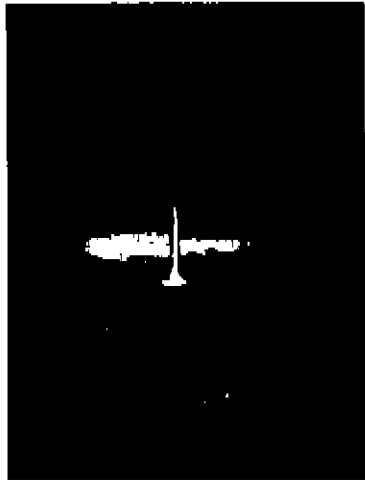
H.P. WHITE LABORATORY, INC.



Lester W. Roane

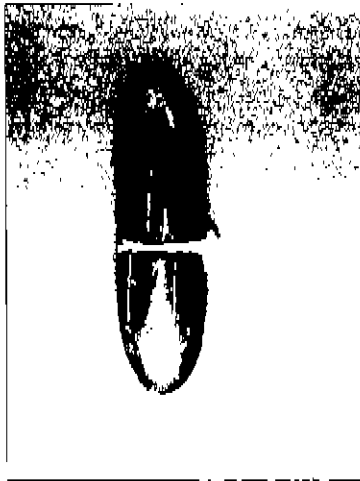
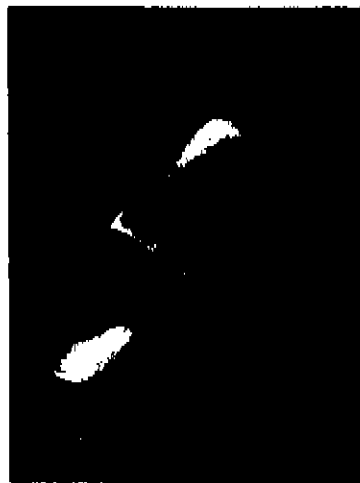
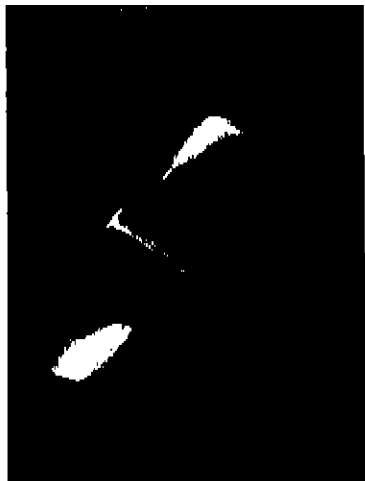
LWR/mw

HPW Jol # 8651-01



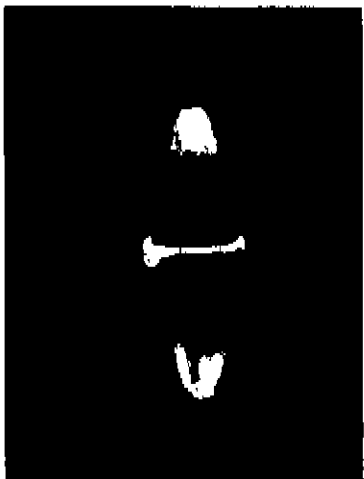
El Paso County Sheriff Dept.

HPW Jot # 8651-01



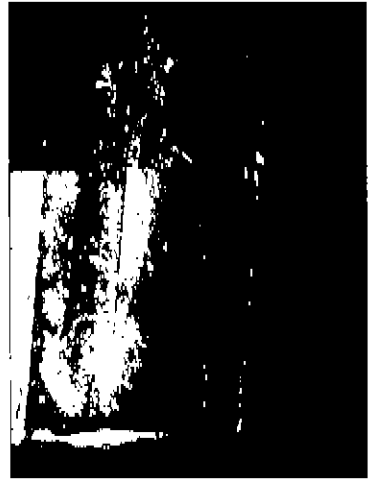
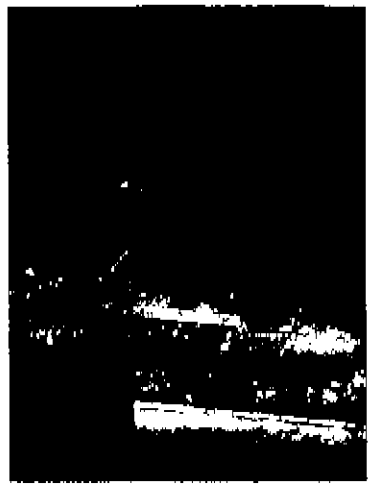
El Paso County Sheriff Dept.

HPW Job # 8651-01



El Paso County Sheriff's Dept

NEW JEL # 865101



El Paso County Sheriff Dept.

HPW Jot # 8651-01



El Paso County Sheriff Dept.

THE FOLLOWING INFORMATION IS THE RESULT OF LABORATORY ANALYSIS COMPLETED THIS DATE ON EVIDENCE SUBMITTED. THIS REPORT MUST BE PRINTED AND FORWARDED TO CONCERNED PARTIES. A SIGNED COPY OF THIS REPORT RESIDES IN OUR FILES.

ROBERT C. CANTWELL, DIRECTOR
COLORADO BUREAU OF INVESTIGATION

COLORADO BUREAU OF INVESTIGATION

LABORATORY REPORT

LAB CASE NUMBER: D02-0446 SECTION: DNA TESTING OCA: 02357

AGENCY NAME: C00210000 - EL PASO COUNTY SHERIFF - COLORADO SPRINGS

OFFENSE: 7099 - CRIMES AGAINST PERSON-SEE M19

INVESTIGATED BY: WILLIAM BURNS

SUBMISSION DATE: 021502

* SUSPECT(S):

AKA:

R/S D.O.B:

* VICTIM(S):

ROHRBOUGH, DANIEL

W/M

EXAMINED BY/ KATHREN M. BROWN DRESSEL, LABORATORY AGENT/CRIMINALIST

DATE COMPLETED/MARCH 27, 2002

ITEMS

=====

DESCRIPTION

=====

2

CUTTING FROM SWEATER

969C (D99-1333)

BLOODSTAIN STANDARD FROM ROHRBOUGH (CBI REPORT DATED 3/27/02)

966C (D99-1333)

BLOODSTAIN STANDARD FROM HARRIS (CBI REPORT DATED 7/08/99)

1001C (D99-1333)

BLOODSTAIN STANDARD FROM KLEBOLD (CBI REPORT DATED 7/08/99)

RESULTS:

DEOXYRIBONUCLEIC ACID (DNA) WAS ANALYZED BY POLYMERASE CHAIN REACTION (PCR) TECHNOLOGY AT THE FOLLOWING LOCI: DQA1, LDLR, GYPA, HBGG, D7S8 AND GC.

THE DNA PROFILE DEVELOPED FROM ITEM #2 DID NOT MATCH THE DNA PROFILE FROM ROHRBOUGH, HARRIS OR KLEBOLD (D99-1333).

THE ITEMS SUBMITTED FOR DNA ANALYSIS AND THE EXTRACTED DNA WILL BE RETURNED TO THE SUBMITTING AGENCY.

KMD:LK 032902

D02-0446

* RECEIPT OF THIS MESSAGE WILL BE RETURNED TO YOUR FACILITY UNLESS YOU ADVISE US OTHERWISE *

RECEIVING TERMINAL:ELP ORI:C00210000 OPERATOR:02438 DATE/TIME:040302/0821

DA'S TERMINAL:D04B ORI:C0021015A HAS NO OPERATOR - REPORT WILL BE QUEUED

02_022