

U.S. Department of Justice

Ronald C. Machen Jr. United States Attorney

District of Columbia

Judiciary Center 555 Fourth St., N.W. Washington, D.C. 20530

March 12, 2010

The Honorable Lee F. Satterfield, Chief Judge Superior Court of the District of Columbia 500 Indiana Avenue, N.W., Suite 3500 Washington, D.C. 20001

Dear Chief Judge Satterfield:

On December 18, 2009, the United States Attorney's Office joined the motion of defendant Donald Gates to vacate his felony murder (rape) conviction on the grounds of actual innocence. Judge Fred B. Ugast signed an order granting the motion that day. This action followed the receipt of DNA analyses performed by two laboratories, one chosen by the defense and one chosen by the government, which concluded that Mr. Gates was not the contributor of the semen found in the body of a woman who had been raped and murdered in Rock Creek Park near the towpath in 1982.¹

In the course of that litigation, a 2004 letter to the United States Attorney's Office was discovered that contained a report by an independent scientific reviewer of the hair and fiber analysis conducted in Mr. Gates's case. The independent scientific review stemmed from a report issued in 1997 by the Office of the Inspector General of the Department of Justice that called into question the work of several FBI forensic examiners, *The FBI Laboratory: An Investigation into Laboratory Practices and Alleged Misconduct in Explosives-Related and Other Cases* ["OIG Report"]. One of these examiners, Michael Malone, had testified at Mr. Gates's trial. In conjunction with this report, the Department of Justice established a task force ["DOJ Task Force"] to identify cases in which these examiners had conducted a forensic analysis, to ascertain whether their reports or testimony were material to the plea or verdict in those cases, and to disclose independent scientific reviews to the defense in those cases where the analyses were material. It was a project which was to consume several years.

¹ The DNA was severely degraded and could not have been analyzed completely using earlier methodologies. One of the tests used, Power-Plex 16, was developed only seven years ago; the other, the Mini-STR filer system, came on line only three years ago.

Unfortunately, the 2004 letter concerning the examiner in Mr. Gates's case was not disclosed by the U.S. Attorney's Office to the defense. This matter was referred to the Department of Justice's Office of Professional Responsibility. In addition, on December 18, 2009, the United States Attorney's Office informed Judge Ugast that we had initiated an investigation into whether there were any other cases in the District of Columbia involving examiners who were criticized in the 1997 OIG Report. We advised Judge Ugast that we would notify the defense of any additional cases in the District of Columbia in which such an examiner testified. We also promised to undertake a second review to make sure all such cases had been identified.

As explained more fully below, we have identified a small number of cases in which criticized FBI examiners may have testified. However, more work needs to be done to identify the entire universe of possible cases, some of which date back more than thirty years. We have reviewed twenty cases in which work may have been done by an examiner criticized in the *OIG Report*, and in seventeen of them either the defendant was not an adult, there was no prosecution, there was no forensic evidence or no useful forensic evidence, the results of the examination were not introduced at trial, or the verdict to which the evidence related was vacated. In the remaining three cases, we have concluded that the *OIG Report*, and, in one case, the subsequent review by the FBI contain no information that undermines or was material to the outcome.

As we indicated in our letter to Judge Ugast on December 18, 2009, we will provide to the attorney of record or, at the Court's direction, to the Public Defender Service the records we have with respect to the three cases discussed at greater length below. We are attaching to this letter a summary of the cases by examiner, by original review, and by result (Appendix A) and excerpts from the *OIG Report* (Appendix B). We are filing under seal a legend that identifies the cases by the numbers we have used in this report, case number, judge, prosecutor, defense attorney, dates of plea verdict or sentence, if known, sentence imposed, evidence that was analyzed and status (Appendix C). A redacted copy of Appendix C is also being provided to the Public Defender Service.

THE ORIGINAL REVIEW

As we understand the process, starting in 1997, the DOJ Task Force sent letters to the United States Attorney's Office naming one or more defendants whose cases involved an examiner criticized in the OIG Report. The letters generally enclosed a Case Review Form that was to be filled out and returned. The form asked whether there was a conviction; whether it was by plea or trial; and whether the forensic analysis was material to the plea or verdict. Some letters appear to have included a copy of the original FBI laboratory report; others did not. If the USAO determined that the analysis was not material to the plea or verdict, that ended the matter. If the USAO determined that the analysis was material to the plea or verdict (and, in some cases where it could not find the file), the case was submitted for an independent scientific review. A second letter was then sent to

² The form appears to have changed over the years, but this information was always sought.

the USAO, enclosing a copy of the independent scientific review and a copy of the laboratory report(s) prepared by the original examiner. The letter asked the USAO to evaluate, in light of the OIG Report and any other information the USAO had, whether to disclose the report of the independent scientific reviewer to the defense. Many of the case files in question were quite old – dating back to the 1970s – and could not be located. Likewise, records relating to the review process itself now appear to be incomplete. Nevertheless, we have obtained sufficient information to fairly assess our obligations with respect to the cases discussed in this report.

THE CURRENT REVIEW

The current review by the U.S. Attorney's Office began with two letters written in 2000 that identified twenty D.C. cases, in addition to that of Mr. Gates, on which seven FBI examiners named in the *OIG Report* had worked: Alan Jordan,³ Michael Malone, Roger Martz, Thomas Thurman, Robert Webb, Frederick Whitehurst and David Williams. Initially, we believed these letters identified the universe of cases affected by the 1997 *OIG Report*. As we will explain below, we have learned now that such is not the case. Nonetheless, our review began with an examination of these twenty cases.

We started with files that were kept by the DOJ Task Force and tried to identify the correct defendants and cases. We asked other federal agencies, the Metropolitan Police Department, and the courts to search their records and again searched for USAO case files. We also searched law enforcement data bases. We sought out the prosecutors assigned to these cases, often some twenty or more years past. The search yielded a considerable amount of information in some cases and much less information in others. The summaries below are based on one or more of the following: the letter(s) from MPD to the FBI submitting evidence for analysis; the FBI laboratory's report(s) to MPD; the case review checklist; the case review form; the independent scientific review, if any; criminal history information (or the lack thereof) in a variety of databases; arrest and offense information contained in MPD form 163; pre-sentence reports; reported decisions; transcripts; briefs; memoranda; and the OIG Report.

In sixteen of the twenty cases in this initial review either a suspect was not prosecuted, no relevant forensic comparison was made, the analysis was not completed before the plea, the evidence was not relevant to the charge of conviction, the analysis was not introduced at trial, or the conviction was vacated on other grounds shortly after sentencing. Accordingly, there were no disclosures to be made in these cases. The cases are summarized as follows:

³ Mr. Jordan worked on only one case. The *OIG Report* did "not find any misconduct by Jordan with respect to those matters we investigated and [did] not recommend any action concerning him."

- in seven cases, there were no probative results;⁴
- in three cases of hoax explosive devices, there are no records of prosecution;
- in one case, the analysis (of explosives) was received after the plea was entered;
- in two cases, the evidence was not relevant to the charge of conviction;⁵
- in two cases, the evidence was not introduced at trial; 6 and
- in one case, the conviction was vacated on other grounds long before any issue was raised concerning problems with scientific examinations.⁷

In a seventeenth case, the suspect was fifteen years old and, if he was prosecuted at all for second degree burglary as a juvenile, he would have completed his sentence no later than 1985, when he turned twenty-one.⁸

⁴ In five of these cases, FBI examiner Michael Malone found no hairs, no hairs unlike those of the defendant or victim on their respective items, or no hairs suitable for comparison; in the sixth case there was no mention of hairs at all (inconclusive serology results in a case that was not prosecuted). In the seventh case, there is no FBI report currently in the file. However, appellate briefs by the defense and prosecution make clear that there were either no hairs or no hairs suitable for comparison on the relevant evidence. In one of the cases where no hairs or fibers were found, the defendant later moved for DNA testing, asserting his actual innocence. The DNA on the evidence matched his DNA.

⁵ In one case, the FBI identified cocaine in a case where the defendant pled guilty to embezzlement. In the other case, the FBI identified quinine (a powder that is used to cut drugs) in a case where the defendant was found guilty of bank robbery.

⁶ In one case, there was a determination that duct tape found on the victim matched a roll of duct tape. In the other case, there was a determination that a button found on the scene of a rape was "alike in physical measurements," and "similar in color, texture, type and composition" to the remaining buttons on the victim's coat.

⁷ In this case, the prosecutor obtained information that undermined his confidence in the veracity of the complaining witness. He informed defense counsel and an agreement was reached pursuant to which the rape conviction was vacated and the defendant entered a guilty plea to second degree theft.

⁸ This suspect was caught at the scene of a commercial burglary with a substance on his sleeve that the FBI matched to putty on a broken window.

The remaining three cases are discussed in greater detail below. Of these, one was resolved by a trial, one by a mid-trial plea, and one by a plea. In none of these cases does the 1997 *OIG Report* provide material information that undermines confidence in the outcome of the case. Accordingly, no further disclosures concerning these cases are required. Nonetheless, out of an abundance of caution, we are providing information known to us about these cases to defense counsel and/or to the Public Defender Service. Attached to this report, for the Court's reference, is a summary of all twenty cases.⁹

Defendant # 410

In January 1984, Defendant #4 was charged with armed robbery and related offenses in connection with two separate robberies of cab drivers. In one case, the complaining witness/cab driver identified the defendant from a photo spread and line-up. In the other case, the defendant was arrested on the crime scene after the cab driver took the gun from the defendant and shot him. A button was recovered from the crime scene after the defendant was transported to the hospital and the police later recovered the coat the defendant was wearing at the time of the robbery, which was missing a button.

The button found on the crime scene, identified as "Q-1," and the buttons on the defendant's coat, identified as "Q-3," were examined by two examiners in the FBI Materials Analysis Unit. One examiner reported that "[n]o differences in general appearance or dimensions were observed between the Q1 button (one tan and gray button with thread attached) and buttons remaining on the front of Q3. The thread on Q1 and thread remaining at the missing button site on Q3 are alike in color, composition, construction and diameter." The examiner concluded that "Q1 could be the button missing from Q3." Examiner Robert Webb added that "[n]o differences in chemical composition were detected between the Q1 button and a representative sample of buttons on the Q3 coat." During the trial, the defense and government stipulated that the button and coat were examined by the FBI Laboratory. They further stipulated that the button was similar in size and appearance to the other buttons on the coat recovered from the defendant.

For a number of reasons, the government was under no obligation in this case to disclose information to the defense about the OIG Report's criticism of examiner Webb. As an initial matter, the parties

⁹ We are identifying defendants in this report and in Appendix A by number, not name. In many cases, the suspect was never arrested or prosecuted; and, in other cases, the defendant has finished his sentence. To protect the privacy of those involved, including the victims, we therefore have used numbers as a means of identification, although the Court is being provided with the names of all defendants referenced in the report.

The information for Defendant #4 is taken from the Case Review Form generated in October 2000, the FBI forensic report, and criminal records.

stipulated that the button found on the crime scene was similar in size and appearance to the buttons on the defendant's coat. Moreover, the defense would be hard pressed to argue that the button match was material, since the implication of the matching buttons was that the defendant was present on the crime scene, a fact not in dispute because the defendant was shot and transported from the crime scene to the hospital in an ambulance. Finally, the *OIG Report* concluded that examiner Webb did not intentionally attempt to fabricate results or present biased conclusions. Rather, in a completely unrelated case, the *OIG Report* found that Webb stated "conclusions about the common origin of certain tape, paint, sealant, and glue more strongly than was justified by the results of his examinations and the background data."

Defendant #4 was sentenced to five to fifteen years for armed robbery and two to six years for assault with intent to rob and was released from prison initially in 1989, eight years prior to the issuance of the *OIG Report* in 1997, although his parole has been revoked at least once since then and he is currently pending a parole revocation hearing.

Defendant #1211

In November 1984, a man was found in Prince George's County shot to death in the trunk of his car. An investigation ensued and witnesses were interviewed who reported that the defendant had shot the decedent in the basement of a house that the defendant owned in Southeast Washington, D.C. As part of the investigation, the FBI compared paint chips found on the decedent's clothing to paint on the basement floor of the defendant's house. FBI examiner Webb concluded that the victim's clothing was in physical contact with the floor "or some other painted surface(s) possessing a paint finish with exactly the same physical characteristics and chemical composition as" the paint on the floor. There is evidence that Webb testified at trial to the results of paint analysis linking the victim with the basement floor of the defendant's house.

According to the AUSA who tried the case, the location of the shooting was not contested at trial. Instead, the key issue was whether the killing was premeditated. After the defendant's girlfriend testified at trial, the defendant entered a guilty plea. When the judge asked him what happened, he said:

- A: I shot [the victim]. I got mad, I flew off the handle and I meant to do it.
- Q: Did you shoot him down in the basement?
- A: Yes, your Honor.

In a later hearing on the defendant's motion to withdraw his guilty plea (based, in part, on

The information for Defendant #12 is based on the record on appeal of defendant's motion to withdraw his guilty plea, the pre-sentence report, the PD 163, the FBI report, a conversation with the prosecutor in the case, and criminal records.

in effective assistance of counsel), the defendant again acknowledged that the decedent had been shot in the basement, although this time he claimed that he was not the shooter. The defense attorney testified at the hearing (as a government witness) that "the defense was hemorrhaging after [the girlfriend's] testimony." He explained that the defendant's girlfriend had testified that, on an earlier occasion, the defendant had brought the decedent into their bedroom when she was partially clothed. This made her uncomfortable and when she objected, the defendant told her "I'm waiting for one day . . . to leave the room and ... come back and catch you and [the decedent] in bed together and at that point, I'm going to shoot both of you." This suggested to the defense attorney that the defendant had "harbored ill will and had a motive for following through on the destructive bent that led to [the decedent's] shooting. And it was that point we discussed . . . the implications, visible implications, written on the faces of the jurors which foretold, in my view, the way that the jury was going. The fact that the substance of her testimony supported premeditation on the part of [the defendant]."

As with Defendant #4, there is no suggestion that examiner Webb overstated the significance of the paint evidence in his report. Criticism in the *OIG Report* related to a different case and the report did not question the overall integrity of the examiner. But, more significantly, the defendant in this case pled guilty based primarily on his girlfriend's testimony; the paint chip analysis performed by Webb was not mentioned at all. Since the defendant testified in both the plea proceeding and the motion to withdraw his guilty plea that the victim was killed in his basement, Webb's analysis and testimony were not material to the plea.

At the time of this offense, Defendant #12 was on parole for bank robbery. He was sentenced to fifteen years to life for second degree murder in this case, and to a consecutive twenty months to five years for possession with intent to distribute cocaine. He was paroled in July 2002.

Defendant #19¹²

In early July 1984, police officers saw Defendant # 19 peeping in the apartment windows of a woman who had been the victim of an earlier burglary/rape. Defendant #19 was arrested, and found in his possession were a knife, ski mask and a pair of gloves. Initially, Defendant #19 told the police that he had not raped anyone, but that he had the ski mask to conceal his identity and the gloves to avoid leaving fingerprints. He subsequently recanted this denial and confessed on video to several rapes and burglaries that had occurred in a six-week period from May to July 1984 within a few blocks of each other. In three of these cases, the defendant entered the apartment of a woman who was sleeping, threatened her with a knife or sharp object, and raped her. In one case, the defendant entered the apartment of a woman who was sleeping and threatened her with a knife, but

The information for Defendant #19 is based on DOJ Task Force materials, including the FBI report and an independent scientific review, PD163s in three cases, the pre-sentence report, and criminal records.

Initial Report to Chief Judge Satterfield on cases involving FBI examiners criticized in the 1997 OIG Report

did not complete the rape of her because she became ill. In the fifth case, the victim was in the shower when he entered, threatened her with a knife and raped her.

Defendant #19 entered guilty pleas to one count of rape while armed, two counts of rape, one count of assault with intent to rape, one count of assault, one count of first degree burglary, and two counts of second degree burglary. He told the pre-sentence report writer that he was "searching for something in someone . . . searching for someone to care about me." He also said that "he was very sorry about the offenses."

When Defendant #19 committed these offenses, he was on parole for a 1975 burglary/rape that occurred in the same apartment building as one of the 1984 burglary/rapes. He also had been convicted in 1974 of carrying a pistol without a license, arising from a peeping-tom incident in the next block in which the victim's husband and neighbor caught him and took a gun away from him. He was placed on probation in that case. During this time period, in 1974 and 1975, he lived just a block away from the victims' homes.

During the course of the investigation in these cases, FBI examiner Malone found "dark brown hairs of Negroid origin" on one victim's gown and bedspread which he determined "microscopically match the head hairs" of Defendant #19, and therefore these hairs "could have originated from" Defendant #19. Malone pointed out that hair comparisons do not constitute a basis for positive personal identification. There is no record of any other hair or fiber analyses in this case.

The independent scientific reviewer assigned by the FBI to review Malone's work in this case found that:

- (1) With microscopic hair comparison, one cannot determine from the notes that the examination was conducted in a scientifically acceptable manner.
- (2) The results are not adequately documented in the notes. The notes are not dated and are in pencil instead of ink. Abbreviations are used that are hard to interpret. There is no documentation that hairs were recovered from victim's items. The presence of a Caucasian head hair on the victim's bed sheet is not reported.

The OIG Report had criticized Malone for falsely testifying in another case "that he had himself performed the tensile test" on a purse strap and for testifying "outside his expertise and inaccurately concerning the test results." Hair analysis, however, was within Malone's expertise and, because there was no trial, he did not testify in this case. There is nothing to suggest that Malone's match of Defendant #19's hair to hair taken from one of the victims was incorrect, and the defendant's confession corroborates the match. Notably, Malone's report also properly cautions that hair comparisons do not constitute a basis for positive personal identification.

We do not have information about Defendant #19's decision to enter a guilty plea, but we submit that a hair match in only one of the several cases in which he was charged with burglary and rape was not material to his plea, particularly given the strength of the evidence: five victims, an identical modus operandi in each of the 1984 cases and the 1975 case, the fact that one of the 1984 rapes was in the same building as the 1975 burglary/rape, being caught peeping into one of the rape victim's windows with a knife, a ski mask and gloves in his possession, and the defendant's confession to the police following his arrest. We nonetheless have now turned the material pertaining to this case over to the defense.

Defendant # 19 is currently incarcerated.

REVIEW OF ADDITIONAL CASES

As noted above, the U.S. Attorney's Office has sought to ascertain whether the twenty-one cases (including Mr. Gates's case) identified in the 2000 DOJ Task Force letters constitute the entire universe of District of Columbia cases involving FBI examiners whose integrity was called into question by the *OIG Report*. We have discovered that they are not. Recently, we were provided with a list that contains more than one hundred additional names about which the USAO was notified starting in 1997. We also received DOJ Task Force records on seventy-eight of these cases. A preliminary review of these seventy-eight files indicates that in approximately 80% of them, either the OIG found no misconduct by the examiner or the forensic analysis yielded no probative evidence. We intend to fully research the remainder of the cases to determine whether additional disclosures are required or appropriate.

The DOJ Task Force Records are currently being scanned, a project that will take approximately two months. When that project is finished, the records will be searched again for District of Columbia cases. We believe there may be a few more. We will scrutinize the remainder of these cases closely and report to the Court on these additional cases at a later date. However, given that the volume of work is larger and the difficulty in locating old records is greater than anticipated, we will be unable to complete this work before the March 15, 2010, deadline we had originally set for ourselves.

We want to assure the Court that we are keeping complete records of our work on this review. Importantly, we will be working over the course of the next several months to develop a computerized database so that in the future we will be able to track projects such as this one.

Conclusion

Based on the reviews that were conducted at the time and our current review of the additional twenty cases that were listed in the two DOJ Task Force letters to the United States Attorney's Office in the fall of 2000, we do not believe that the *OIG Report* contains information that undermines or was material to the outcome of any of the cases. As we indicated in our letter to Judge Ugast, we will provide the records to the attorney of record, or at the Court's direction, to the Public Defender

Service, with respect to the three defendants discussed above. As we have noted, for the Court's reference, all of the cases are more fully identified in the attached appendices.

Sincerely,

Patricia A. Riley

Special Counsel to the United States Attorney

Enclosures

cc:

The Honorable Fred B. Ugast

Sandra Levick, Esq.

Public Defender Service

APPENDIX A

SUMMARY OF RESULTS BY EXAMINER

Seven examiners analyzed evidence in these cases. The OIG found no misconduct with respect to one, Alan Jordan. A summary of the forensic analyses of the other six examiners follows:

MICHAEL MALONE -- Hair and Fiber -- 9 cases

Hair matches that of suspect Hair does not match that of suspect Hair not suitable for comparison No hair found on items submitted No hair comparison	2 3 4 ³ 3 1 ⁴
No foreign fibers found on items Fibers preserved for later analysis Fibers not mentioned	4 2 3
Holes in sweater could have been made by knife	1
ROGER MARTZ* – Materials 4 cases	
Gasoline Quinine Smokeless powder/aluminum-potassium Cocaine residue	1 1 1 1
THOMAS THURMAN* – Explosives 1 case	
Hoax bomb (same case as Marz)	1

¹ We are attaching as Appendix B the conclusions of the OIG with respect to these seven examiners.

² Moreover, Jordan worked on only one case in this group. His analysis that the evidence was a Molotov cocktail was received after the defendant entered a plea.

³ In one case, there is no FBI report in the existing records. Hearing transcripts in this case disclose that either no hair or no hair of value for comparison was found on a skull cap found at the scene. The only hair and fiber analyst criticized in the *OIG Report* was Malone.

⁴ This adds up to more than nine cases because there was more than one victim, more than one suspect, and/or more than one site from which hair was taken in some cases.

ROBERT WEBB -- Materials -- 5 cases

Putty match	1
Button match	2
Duct tape match	1
Paint chip match	1
FREDERICK WHITEHURST* Explosives 1 case	
Submitted materials not explosives	1
DAVID WILLIAMS* Explosives 2 cases	
Exploded remains of IED	1
(same case as Whitehurst)	
Hoax bomb	1

^{*}The cases involving materials analyzed by Thurman, Whitehurst, and Williams were not prosecuted. In three of the cases involving Martz, the evidence was not material to the plea; one case was not prosecuted.

SUMMARY OF ORIGINAL TWENTY CASE REVIEWS⁵

The available records indicate that the USAO originally determined that:

Forensic evidence not material to verdict/plea	7
No prosecution	3
No files/could not tell from file	7
No record of USAO response	3

The reasons given in the seven cases where a determination was made that the evidence was not material were:

Lab report received after plea	1
Strong case	26
Evidence not introduced at trial	17
Substance not relevant to charge	
of conviction	28
No disclosure obligation	19

⁵ The DOJ Task Force has a file on each of the 20 defendants. However, these files do not appear to be complete. Some files have many more documents in them than others. It is possible that correspondence, email traffic, notes of telephone conversations or even case review forms were not placed in the files or otherwise not retained. Our ability to analyze the case reviews conducted by the USAO in the early 2000s, then, is necessarily limited.

⁶ In one of these two cases, the analyst found no fibers in the knife blade or handle like the fibers in the stabbing victim's T-shirt and therefore, no association was made. The other is discussed in the text of the report.

⁷ Duct tape found on victim was matched to roll of duct tape.

⁸ In one case, the defendant entered a plea to embezzlement and the substance was analyzed as cocaine; in the other case, the defendant was convicted of bank robbery and the substance was analyzed as quinine.

⁹ Defendant was apprehended with the knife in his possession and blood on his clothes. He explained that he had gotten the knife away from the real perpetrator. There were no hairs or fibers of evidentiary value. The examiner concluded that the holes in the victim's clothing could have been made by the knife, a point not in dispute.

In the seven cases where the file was not found or the reviewer could not tell from the file:

Match	410
No match	3

In the three cases where there is no record of the USAO response:

Suspect was a juvenile	1
No record of prosecution	1
No match	1

¹⁰ In one case, the evidence was not introduced at trial. In another case, the rape conviction was vacated within months of the sentence. The other two cases are discussed in the text of the report.

SUMMARY OF RESULTS AND EFFECT

Defendant	Examiner	Analysis	Results	Effect
1	Martz Jordan	Liquid Containers	Gasoline Molotov cocktail	Not material, received after plea
2	Webb	Putty	Match	Juvenile
3	Webb	Button	Similar	Not introduced at trial
4	Webb	Button	No differences	Stipulation that similar
5	Webb	Duct tape	Match	Not introduced
6	Malone	Hair and fiber	No match	Not relevant to verdict
7	Williams Whitehurst	Remains of IED	IED No explosives	No record of prosecution
8	Williams	Components	Hoax bomb	No record of prosecution
9	Malone	Hair and fiber	No fiber/no hair	Not relevant to verdict
10	Malone	Hair and fiber	No hair match	Not relevant to verdict; later DNA match
11	Malone	Hair and fiber	Match	Conviction vacated on other grounds
12	Webb	Paint chips	Match	Not material to plea
13	Martz	White powder	Quinine	Not relevant to plea
14	Malone	Blood grouping	No comparison	No record of prosecution
15	Malone*	Hair and fiber	No hair	Not relevant to verdict
16	Thurman Martz	Components	Hoax bomb Firecracker	No record of prosecution
17	Malone	Hair and fiber	Not suitable for comparison	Not relevant to verdict
18	Malone	Hair and fiber	No hairs and Not suitable for comparison	Not relevant to verdict
19	Malone	Hair	Match	Not material to plea
20	Martz	Powder	Cocaine	Not relevant to plea

^{*} No FBI Report in file; Malone is only hair and fiber examiner named in the OIG Report..

APPENDIX B

EXCERPTS FROM THE OIG REPORT CONCERNING THE FBI EXAMINERS INVOLVED IN THE TWENTY-ONE CASES

ALAN R. JORDAN

Alan R. Jordan was the EU examiner involved in the investigation of the attempted assassination of former President George Bush in Kuwait in April 1993. Whitehurst suggested that someone may have misinterpreted his analytical results to link the explosives involved in the attempted assassination to other explosives found in devices known to be associated with Iraq. As explained in Part Three, Section D of this Report, we did not find that Jordan or any one else misstated Whitehurst's results comparing the explosives in the Bush device and explosives linked to Iraq that were found in Southeast Asia.

Jordan prepared a report dated June 18, 1993, that incorporated dictation by Whitehurst but did not restate it verbatim. This dictation did not concern the Southeast Asia explosives, and Whitehurst never prepared dictation describing his work on that material. Jordan should have included Whitehurst's dictation verbatim. His changes do not, in our opinion, evidence any effort to misstate Whitehurst's conclusions. Moreover, J. Christopher Ronay as his unit chief allowed Jordan and other EU examiners to prepare reports that did not include Whitehurst's dictation verbatim.

We do not find that Jordan improperly misstated results reached by Whitehurst or otherwise engaged in misconduct in his work on the investigation of the Bush assassination attempt.

Whitehurst also alleged that Jordan may have misstated Whitehurst's findings in the <u>Seijas</u> case which concerned the attempted assassination of Miami attorney Gino Negretti. As noted in Part Three, Section H5, we conclude that Jordan did not misstate Whitehurst's results in this case.

We do not find any misconduct by Jordan with respect to those matters we investigated and we do not recommend any action concerning him.

MICHAEL MALONE

Michael Malone worked as an examiner in the Hairs and Fibers Unit from 1974 until 1994, when he transferred out of the Laboratory. As described in Part Three, Section H12, Malone in 1985 examined a purse that then United States District Judge Alcee Hastings had introduced as an exhibit in his 1983 trial related to an alleged bribery scheme. At his trial, Hastings had testified that he had sought to have the purse repaired because its strap was broken. The purse was later sent to the FBI Laboratory for examination in 1985, when a judicial committee for the Judicial Council of the Eleventh Circuit Court of Appeals was investigating allegations of misconduct by Hastings in connection with the alleged bribery and other matters.

Malone examined the strap microscopically and found indications that it had been deliberately cut. He also asked FBI metallurgist William Tobin to test the strap with a tensile tester, a device that

measures the force required to break an object. Tobin did so and found that the strap broke at 29.5 pounds of force. As part of the judicial committee's investigation, Malone testified before the committee in October 1985 and again in April 1996.

Malone's 1985 testimony was incorrect and misleading in several respects. First, Malone falsely stated that he had actually conducted the test himself. He also opined, inaccurately, that the machine at 29.5 pounds would be pulling much harder than Malone could pull himself. He further testified inaccurately in stating that metal displays a sudden or instantaneous break, which Malone distinguished from the break he observed in the purse strap. Finally, Malone said that the 29.5 pounds figure was almost a meaningless figure other than it's a lot more than an average person could exert. This statement is inaccurate both in diminishing the significance of the tensile test results and asserting that the identified force was a lot more than an average person could exert. These various misstatements, as Tobin himself acknowledged, did not affect the conclusion that the strap had been partially cut.

We also conclude that Malone was incorrect in telling the OIG as part of this investigation that he in 1985 had told John Doar, the chief counsel for the judicial committee, that Tobin had conducted the test. For reasons set forth in Part Three, Section H12, we find that Doar did not know that Malone had not performed the tensile test. Recognizing that we are reviewing events that occurred more than ten years ago, and given the record before us, we cannot conclude that Malone engaged in intentional misconduct by failing in 1985 to tell Doar that Tobin had performed the test or by inaccurately describing to the OIG his conversations with Doar before Malone testified.

Malone falsely testified before the judicial committee that he had himself performed the tensile test and he also testified outside his expertise and inaccurately concerning the test results. The FBI should assess what disciplinary action is now appropriate and should monitor his testimony in future cases to assure that Malone is accurate and testifies to matters within his knowledge and competence.

ROGER MARTZ

Roger Martz became an examiner in the CTU in 1980 and has been the chief of the CTU since July 1989. Based on our investigation, we criticize certain of Martz's actions both as a supervisor and as an examiner in particular cases.

In 1989, Martz as the CTU Chief reported the results of his review of 95 of Rudolph's cases in a manner that misleadingly suggested that Martz had reviewed the technical sufficiency of Rudolph's work and found it adequate and that he also approved Rudolph's work in <u>Psinakis</u>. As noted in Part Three, Section A, Martz conducted his review after former MAU Chief Jerry Butler had found numerous administrative shortcomings in a preliminary review and had recommended an in-depth review because of the serious impact these weaknesses could have on the administration of justice.

Martz reviewed 95 of Rudolph's cases and described his findings in a memorandum which referred to Butler's earlier review. In the memorandum, Martz characterized his review as a technical review, stated that the analyses were sufficient and that no technical errors had been found in the final

reports, and noted that while other techniques could have been employed, it is believed that no changes would be made in the reporting of the reviewed cases. Martz recommended that no further technical reviews be performed of Rudolph's work.

The language in Martz's memorandum was misleading. Martz stated in the memorandum that the analyses were sufficient, yet he admitted to the OIG in this investigation that he had not reviewed whether Rudolph's work was analytically sufficient to support the stated conclusions. Indeed, Martz acknowledged to us that in some case files there was little or no documentation to review. Given the limited review that Martz conducted and the fact that Butler had already identified the need for an in-depth review, Martz could not properly conclude and should not have recommended that no further review be conducted.

Problems with the adequacy of his review are partly attributable to the fact that SAS Chief Kenneth Nimmich did not give Martz written instructions concerning the objective or methodology of the review. Nonetheless, whatever instructions he received, Martz worded his memorandum in a misleading way that obscured serious deficiencies in Rudolph's work. Nimmich erroneously relied on Martz's memorandum in concluding in 1989 that a further review of Rudolph's work was unnecessary. Martz's misleading wording thus contributed to the Laboratory's failure to adequately review and resolve the allegations about Rudolph. As a supervisor, Martz should have recognized the seriousness of the concerns noted in Butler's memorandum and the need for them to be adequately addressed.

In the <u>Trepal</u> case, discussed in Part Three, Section H13, we found that Martz overstated the significance of his analytical results by testifying he had concluded thallium nitrate had been added to three samples of Coca-Cola identified as Q1, Q2, and Q3. Given the tests that Martz actually performed, he could have properly stated in his dictation and testimony that two samples of Coca-Cola, identified as Q1 and Q2, were consistent with thallium nitrate having been added to them. Alternatively, he correctly could have observed that Q1 and Q2 had elevated levels of thallium and nitrate ions as compared to unadulterated Coca-Cola. He did not limit his testimony this way.

Martz's work in the <u>Trepal</u> case was deficient in several respects: (1) his dictation stated that the nitrate ion was identified in samples Q1 through Q3 and those samples were consistent with thallium nitrate having been added to them; this was incorrect insofar as he had not performed tests necessary to reach these conclusions with regard to Q3; (2) Martz did not acknowledge certain data obtained from the tests he performed; (3) he failed to perform additional tests that were appropriate under the circumstances; (4) in testifying, Martz improperly offered a stronger opinion about the identification of thallium nitrate than he had expressed in the dictation reviewed by his supervisor and included in the Laboratory report; (5) Martz did not adequately document his work, his cases notes were incomplete, undated and inaccurate, and the charts were not accurately or clearly labeled; (6) he lacked a sufficient analytical basis to opine that a bottle containing thallium nitrate found in Trepal's garage, identified as Q206, contained no other drug residues; (7) he also gave an unsupported opinion about the purity of the thallium nitrate in Q206; and (8) Martz in his deposition and trial testimony made various inaccurate, incomplete, or unsupported statements.

In the World Trade case, as discussed in Part Three, Section C, Martz as the chief of the CTU

approved Lynn Lasswell's conclusion that mass spectrometry (MS) had identified urea nitrate on certain evidence, when the results in fact merely established the presence of urea and nitrate ions. Martz was reluctant to acknowledge the limitations of the MS data. Initially in his OIG interview, Martz persisted in asserting that the results identified urea nitrate. After being further challenged by the OIG investigative team and reflecting overnight, Martz acknowledged that the MS analysis could not, by itself, identify the substance.

In reporting conclusions of his 1989 review of Rudolph's cases, in his defense of Lasswell's interpretation of the MS results in the World Trade case, and in his work in <u>Trepal</u>, Martz appeared to have a lower threshold of scientific proof than is generally accepted in forensic science and to lack appropriate scientific rigor in his approach to examinations. A forensic scientist, especially one in a supervisory position, should be conservative in forming conclusions and willing to consider possible limitations in the analyses. Martz instead has sometimes formed conclusions without acknowledging legitimate questions about their validity.

Both as an examiner and as a unit chief, Martz appears not to have recognized the importance of protocols in forensic examinations. After the explosives residue program was transferred to the CTU from the MAU in 1994, Martz as CTU chief failed to integrate the protocols that had been previously used by the two units. This meant, as was illustrated in the Shaw case, discussed in Part Three, Section H7, that the analysis of certain evidence could vary depending on the examiner assigned to the case. As noted in Part Three, Section G, in the Oklahoma City case, Martz did not follow the FBI's explosives residue protocol when he failed to examine certain evidence microscopically. Martz told the OIG that a protocol is a guideline and that examiners should have discretion in determining the procedures to apply in a particular case. Based on his conduct and remarks, Martz does not seem to appreciate the importance of following authorized protocols or the need to document the reasons for departing from them.

We find that Martz did not perjure himself or improperly circumvent or violate Laboratory protocols in the VANPAC case, as was alleged by Whitehurst. As noted in Part Three, Section B, Martz should have testified more clearly in that case about his inability to determine if smokeless powder samples came from the same batch. Martz was asked if he had compared smokeless powder from the mail bombs to powder from a gun shop where the defendant allegedly had bought powder before the bombings. Martz ambiguously stated that he had not been able to successfully compare the powders, and only when questioned further on cross-examination did he say that he could not determine from his comparisons if the powders came from the same batch. Martz should have stated clearly that he had compared certain samples, had found differences and similarities, but could not determine from the data if the powders came from the same batch.

As discussed in Part Three, Section F, we also conclude that Martz did not perjure himself, give misleading testimony, or improperly erase digital data in the <u>Simpson</u> case. Martz undermined his credibility by his poor choice of words in stating that he had decided to be more truthful in his testimony and by agreeing with defense counsel that he had destroyed certain data. By his lack of adequate preparation, his deficient record-keeping and note-taking practices, and certain aspects of his demeanor at trial, Martz did not serve the Laboratory well in that case.

Based on our investigation, we conclude that Roger Martz lacks the credibility and judgment that are essential for a unit chief, particularly one who should be substantively evaluating a range of forensic disciplines. We found Martz lacking in credibility because, in matters we have discussed above, he failed to perform adequate analyses to support his conclusions and he did not accurately or persuasively describe his work. We recommend that Martz not hold a supervisory position. The Laboratory should evaluate whether he should continue to serve as an examiner or whether he would better serve the FBI in a position outside the Laboratory. If Martz continues to work as an examiner, we suggest that he be supervised by a scientist qualified to review his work substantively and that he be counseled on the importance of testifying directly, clearly and objectively, on the role of protocols in the Laboratory's forensic work, and on the need for adequate case documentation. Finally, we recommend that another qualified examiner review any analytical work by Martz that is to be used as a basis for future testimony.

J. THOMAS THURMAN

J. Thomas Thurman has worked as an examiner in the Explosives Unit (EU) since 1982, and he became chief of that unit in December 1994.

Whitehurst has alleged that Thurman improperly altered dictation that Whitehurst prepared as an auxiliary examiner. Contrary to the unwritten policy in the Laboratory, Thurman from 1987 through 1992 prepared several reports that failed to incorporate verbatim the dictation Whitehurst prepared as an auxiliary examiner. As described in Part Three, Section H10, Thurman's reports contained certain inaccuracies or ambiguities as a result of the changes he made to the dictation. We also concluded that he should have revised his report in the case concerning an attempted bombing at the William Wirt Middle School after examiner Steven Burmeister questioned certain conclusions.

We do not conclude that Thurman intended to write his reports with a prosecutorial bias, although the effect of his overstating AE conclusions in certain reports was favorable to the prosecution, or that he engaged in willful misconduct in this respect. We also acknowledge that J. Christopher Ronay, the unit chief for the EU from 1987 through October 1994, approved reports by Thurman and other EU examiners that did not incorporate auxiliary examiner dictation verbatim. Thurman should, however, have recognized the potential problems posed by his actions and should have at least obtained the auxiliary examiner's approval before modifying language in the dictation.

After Thurman became unit chief of the EU in 1994, he incorrectly approved certain conclusions that examiner David Williams included in a report in the Oklahoma City case. Specifically, Thurman should not have approved Williams' conclusions that the VOD of the explosive used was 13,000 feet per second; that the explosion was caused by approximately 4,000 pounds of ANFO; that the initiator for the booster was either a detonator from a Primadet Delay system or sensitized detonating cord; that the initiator was a non-electric detonator; and that the time delay was 2 minutes, 15 seconds. For reasons set forth in Part Three, Section G, these conclusions were more specific or definite than could be validly supported. Thurman also should have directed Williams to rewrite the internally inconsistent statement that [t]races of PETN were located on specimen Q18, however could not be

confirmed. Based on Thurman's OIG interview, we find that he did not sufficiently review the substantive validity of the conclusions stated in the report, but instead inappropriately deferred to Williams.

Thurman, as EU Chief, should have taken further steps to address concerns voiced by FBI metallurgist William Tobin that EU examiners were incorrectly describing metal wire in their reports. As noted in Part Three, Section H12, Tobin contends that EU examiners have not followed the industry standard for reporting gauge based on the total cross-sectional area of a multi-strand wire, and instead have reported the gauge of individual strands. Tobin has noted that if the gauge is described this way in reports it may be misunderstood. In light of Tobin's concerns, Thurman should have issued an appropriate directive to EU examiners so they understood the industry practice and reported their findings in a clearly understandable manner.

We conclude that Thurman did not perjure himself, fabricate evidence, improperly testify outside his expertise, or improperly circumvent FBI Laboratory procedures in the VANPAC case as was alleged by Whitehurst. We did find that Thurman inaccurately testified on two minor points: while he correctly stated that there had been no DNA match to the defendant, Thurman erred in saying that DNA analysis is based on an enzyme in saliva; and he incorrectly distinguished high and low explosives by referring to the speed of the explosive shock wave.

Whitehurst also alleged that in the <u>Kikumura</u> case, discussed in Part Three, Section H1, Thurman testified falsely, misled the jury, gave biased or speculative testimony, and violated FBI policies or procedures. We do not find that Thurman testified falsely in this case, which involved a sentencing hearing rather than a jury trial. Nor do we find that his testimony was improperly biased or speculative. Thurman did testify inaccurately or ambiguously on four points: the type of fireball that would result from the bombs; the common use of mercury fulminate in blasting caps; the direction in which the bombs would have released their lead shot contents; and the distinction between high and low explosives. The inaccuracies or ambiguities in Thurman's testimony that we noted in the VANPAC and <u>Kikumura</u> cases represent performance issues of the sort that are best addressed through an effective program of testimony monitoring.

In evaluating Thurman's conduct as a manager, we recognize that he did not become the unit chief of the EU until December 1994. We also note that he apparently has supported the development of protocols, training programs, and other quality assurance measures for the EU. In his interview with the OIG, Thurman seemed sincere in stating his desire to improve his unit and to learn from the experience of other forensic laboratories in the explosives field.

Given our recommendation that the EU be restructured so that its unit chief and examiners have scientific backgrounds, we conclude that when the restructuring is accomplished, Thurman should be reassigned to a component of the FBI outside the Laboratory. In the interim, the Laboratory should assess, given the findings in this Report, whether Thurman should continue to occupy a supervisory position. While Thurman remains unit chief, the SAS Chief should monitor his work, and Thurman should be counseled to substantively review all reports issued by the EU and to enlist the assistance of other qualified examiners if necessary to assure that the conclusions stated by EU examiners have a reasonable scientific basis. Consistent with our general recommendations

concerning peer review and report preparation as discussed in Part Six, any reports that Thurman prepares himself should be reviewed by another qualified examiner.

ROBERT WEBB

Robert Webb worked as an examiner in the Materials Analysis Unit from 1976 through 1991, when he transferred out of the Laboratory. As is discussed in Part Three, Section B, we conclude that, in the VANPAC case, Webb stated conclusions about the common origin of certain tape, paint, sealant, and glue more strongly than was justified by the results of his examinations and the background data. We find that Webb did not attempt to fabricate evidence or to present biased conclusions. As part of this investigation, we did not undertake a general review of Webb's work in cases other than VANPAC. We recommend that another qualified examiner review any analytical work by Webb that is to be used as a basis for future testimony.¹

FREDERIC WHITEHURST

Whitehurst is a complex figure. He is an experienced scientist who has expressed concern about the integrity and validity of the Laboratory's forensic work. He has identified significant problems in some cases and in certain practices by the Laboratory which have been confirmed in our investigation. In addition, however, Whitehurst has accused many of his colleagues of perjury, fabrication of evidence, conspiracy and similar intentional misconduct. Those allegations are not supported by the facts identified in our investigation. In his complaints within the FBI and to the OIG, Whitehurst has often accused others of wrongdoing when he did not know the pertinent facts, he has used hyperbole and incendiary language that blurs the distinction between facts and his own speculation, and he has otherwise displayed a serious lack of judgment.

Whitehurst justifiably raised concerns within the Laboratory about Rudolph's work habits, and Whitehurst's persistence on this issue ultimately resulted in the FBI directing a review of all of Rudolph's cases. Similarly, Whitehurst correctly complained that EU examiners in certain cases have testified outside their expertise or issued opinions that are not scientifically supportable -- the World Trade, Avianca, and Oklahoma City cases being prominent examples. Whitehurst brought the Trepal case to the OIG's attention, and we identified several deficiencies in work done by Roger Martz in that case. We recognize also that Whitehurst's complaints have resulted in both internal reviews within the FBI and this OIG investigation, and thereby may have helped achieve changes that will enhance the objectivity and reliability of the Laboratory's forensic work, particularly in explosives-related cases.

In raising his concerns, however, Whitehurst has also made numerous serious allegations that are not factually supportable. For instance, we did not find facts to support his allegations that examiners J. Thomas Thurman and Roger Martz perjured themselves, fabricated evidence, and improperly

¹ See pages 11-12 for a more detailed explanation.

circumvented Laboratory protocols in the VANPAC case. Nor did we find facts showing perjury by examiners Hahn in the Avianca case, Thurman in the <u>Kikumura</u> case, or Martz in the Simpson case.

Whitehurst himself has demonstrated poor judgment in several matters we reviewed. In the <u>Psinakis</u> case it was improper for him to communicate his concerns to defense experts without first talking with Rudolph himself, the MAU chief, or the prosecutor. Although Whitehurst reported what he had done to his superiors because he thought he may have violated an FBI policy, when he was later disciplined he did not appear to accept that he had done anything wrong.

In the Avianca case, Whitehurst failed adequately to review his own work and otherwise acted unprofessionally. As discussed in Part Three, Section E, Whitehurst in 1990 had examined evidence from the bombing of an Avianca airplane and found residues of PETN and RDX. According to Whitehurst, EU examiner Richard Hahn contacted him in June 1994 on the eve of the first trial and asked Whitehurst if he could rebut claims by an alleged confessor that an ammonium nitrate dynamite was in the bomb. Whitehurst then prepared a memorandum which raised certain questions about his own earlier identification of PETN and RDX and concluded that his findings were consistent with the possible use of an ammonium nitrate explosive. Without talking to Hahn or sending him the memorandum, Whitehurst sent the memorandum directly to the prosecutor.

In his June 1994 memorandum, Whitehurst speculated that an instrumental overload in an LC/Chemiluminescence analysis performed in 1990 might have obscured the presence of nitroglycerine, a component of dynamite. In 1990, Whitehurst should have recognized this potential problem and had the test re-run in light of the overload. Moreover, in 1994 Whitehurst failed adequately to review his case notes. Those notes reflected that a thin layer chromatography (TLC) test was also performed in 1990, and it did not detect nitroglycerine. These results rebut Whitehurst's speculation that nitroglycerine may have been present but was obscured by an overload in the LC/Chemiluminescence analysis. Without adequately reviewing his own test results, Whitehurst concluded that his 1990 analyses might have obscured the presence of nitroglycerine, and he disseminated this incorrect information to the prosecutor.

Whitehurst committed several other errors in connection with his 1994 memorandum: he misstated his June 4, 1994, conversation with Hahn on a material point; he rendered a misleading and overstated opinion that suggested that his data was consistent with a possible defense; he raised questions whether contamination may account for his original findings of RDX and PETN, although there was no affirmative evidence of contamination, the circumstantial evidence was indicative of a lack of contamination, and he made no inquiries inside the Laboratory to determine whether his contamination concerns might have validity; and he released the memorandum outside the Laboratory without consulting with Hahn or at least sending him a copy. All of the errors in the memorandum tended to create problems for Hahn, the FBI, and the prosecution in an ongoing trial.

Whitehurst should have discussed his concerns with Hahn before sending the memorandum to the prosecutor. Had he done so, some of the questions he raised might have been resolved or at least narrowed. We find unconvincing Whitehurst's explanation that he did not tell Hahn about his concerns or send him a copy of the memorandum because Whitehurst believed Hahn would simply ignore him. Whitehurst was asked by Hahn to address a particular issue shortly before a trial began.

Whatever their personal differences, it was inappropriate and unprofessional for Whitehurst to not respond directly to Hahn.

In his work on the investigation of the attempted assassination of former President George Bush, Whitehurst should have described in writing his comparison of explosives used in the Bush device with explosives found earlier in Southeast Asia. If Whitehurst had presented his conclusions in writing, it would have helped avoid his subsequent concerns that his results had been misreported by EU Chief J. Christopher Ronay or others.

Over the last two years, Whitehurst has written more than 200 letters to the OIG expressing his concerns about various aspects of the Laboratory. Many of those concerns seem to reflect an effort to identify any possible grounds to criticize other examiners who in his view are not appropriately qualified for their positions. Whitehurst has faulted others for drawing conclusions based on insufficient evidence. Ironically, he has exhibited that same fault in many of the accusations he has made against others in the Laboratory.

As described in Part Four, we do not find that Whitehurst was subjected to retaliation by the decisions to transfer the explosives residue program from the MAU to the CTU, to have Whitehurst remain in the MAU after the transfer, or to have Whitehurst begin training to become qualified as a paint examiner and then later to work on environmental crimes. Partly as a result of the sweeping accusations Whitehurst has made against others, it has become increasingly difficult for him to work with examiners in the EU and other units of the Laboratory. Moreover, Whitehurst appears to lack the judgment and common sense necessary for a forensic examiner, notwithstanding his own stated commitment to objective and valid scientific analysis.

Based on our investigation, we do not think that Whitehurst can effectively function within the Laboratory. We recommend that the FBI consider what role, if any, he can usefully serve in other components of the FBI. In making its decisions about Whitehurst, the FBI should bear in mind that some of his complaints were valid and that it is important not to discourage employees from appropriately raising concerns about the quality of the Laboratory's work.

DAVID WILLIAMS

David Williams has worked as an examiner in the EU since 1987.

In Part Three, Section C, of this Report, we discuss at length the testimony by Williams in the Salemeh trial related to the World Trade Center bombing. As noted in that section, we conclude that Williams in testifying failed to display the objectivity, competence, and credibility that should be expected of examiners from the FBI Laboratory. Most egregiously, Williams gave a scientifically unsupportable opinion, based on speculation beyond his scientific expertise, in stating that the main charge was urea nitrate. That opinion was improperly based on information linking the defendants to urea nitrate that was not related to any scientific analyses of the bomb scene.

In the <u>Salemeh</u> trial, Williams also testified inaccurately about his role in the Laboratory's manufacturing of urea nitrate and about the use of Arabic formulas associated with the defendants

to manufacture the sample; he testified outside his expertise about the defendants' capacity to make urea nitrate and did so in a way that appears intended to reach the most incriminating result; he gave incomplete testimony about the VOD of urea nitrate; he gave a scientifically unsupportable opinion about the VOD of the main charge in the bombing; and he gave misleading testimony about his attempt to modify dictation authored by Whitehurst.

We also found significant problems with a report Williams prepared in the Oklahoma City bombing case. As explained in Part Three, Section G, we conclude that in his report, Williams repeatedly reached conclusions that incriminated the defendants without a scientific basis and that were not explained in the body of the report. Williams here opined that a particular explosive -- ANFO -- was the main charge by again improperly speculating from information that linked the defendants to that explosive but that was not relevant to his scientific analysis of the evidence. We criticized other conclusions that Williams reached. He concluded that the VOD of the explosive used was 13,000 feet per second; that the explosion was caused by approximately 4,000 pounds of ANFO; that the initiator for the booster was either a detonator from a Primadet Delay system or sensitized detonating cord; that the initiator was a non-electric detonator; and that the time delay was 2 minutes, 15 seconds. These conclusions were more specific or definite than could be reasonably supported by his examination of the evidence.

We also found that Williams erred in the Oklahoma City case by failing to incorporate AE dictation verbatim into a report and instead including an internally inconsistent statement. With regard to sample Q18, Steven Burmeister prepared dictation noting that instrumental analysis was consistent with the presence of . . . PETN and that [t]he presence of PETN . . . could not be confirmed. Williams paraphrased Burmeister's dictation by noting, [t]races of PETN were located on specimen Q18, however could not be confirmed. Williams claims that Burmeister approved this language. In any event, Williams should have recognized the internal inconsistency in the sentence and should not have included it in his report.

With regard to the <u>Ghost Shadow</u> case described in Part Three, Section H8, Whitehurst alleged that Williams improperly presented an expert opinion concerning the main charge of an improvised explosive device. Whitehurst further alleged that Williams gave opinions for which he lacked qualifications or analytical support and that he fabricated evidence. The facts do not support these allegations. Williams completed a Laboratory report on June 14, 1995, that described the results of certain examinations and noted that additional examinations were continuing. A second report dated July 18, 1995, accurately incorporated dictation by examiner Steven Burmeister describing the results of the additional tests. With regard to the June 14, 1995, report, we conclude that Williams did not fabricate evidence or state opinions for which he lacked qualifications or support.

Based on our investigation, we conclude that Williams lacks the objectivity, judgment, and scientific understanding that should be possessed by a Laboratory examiner. We recommend that the FBI reassign him to a position outside of the Laboratory Division. To the extent Williams is called upon to testify in the future concerning reports or other work he did as an examiner, we recommend that a qualified examiner review his proposed testimony and any related reports in advance of trial. We further recommend that a qualified examiner review any testimony after it is given to assure that Agent Williams has limited his testimony to reasonably supportable conclusions.

ROBERT WEBB - FROM THE DISCUSSION OF THE VANPAC CASE

Thurman in fact was testifying based on the analytical work and dictation of MAU examiner Robert Webb. Webb, an experienced examiner in the MAU, examined several items of evidence during the VANPAC investigation. In examining packaging tape, black paint, RTV, and glue found in the devices, Webb followed an unwritten protocol that included microscopic examination, so-called wet chemical analyses, analysis with Fourier Transform Infrared Spectroscopy (FTIR), and Pyrolysis Gas Chromatography (PGC). Based on these techniques, Webb concluded that packaging tape in each device came from the same manufacturer and the same batch or lot, that black paint in each device had physical and chemical characteristics indicating it came from the same manufacturer, that RTV sealant in each device had physical and chemical characteristics indicating it was from the same manufacturer and originated from the same batch or lot, and that glue in three of the devices had physical and chemical characteristics indicating it came from the same manufacturer.

Thurman did not fabricate evidence or otherwise testify improperly about the paint and tape analysis insofar as it was based on Webb's dictation. Webb had described his conclusions about the comparison of samples of paints, adhesives, and tape in auxiliary examiner dictation dated March 19, 1990. Thurman incorporated this dictation verbatim into the FBI Laboratory report dated April 2, 1990. As part of our investigation, Webb reviewed Thurman's testimony about the paint and tape and observed that it was consistent with Webb's dictation.

Whitehurst also has maintained that the conclusion that the black paint came from the same manufacturer is flawed because data do not exist to allow one to say that two samples with a similar chemical composition necessarily came from the same source. A similar criticism could be made concerning the conclusions that the 2-inch wide tape and the RTV sealant came from the same batch or lot. When asked in our investigation about his conclusions, Webb maintained that in his experience, the battery of tests he employed would reveal some differences if paint samples did not come from the same manufacturer or if the tape had been made in different batches or lots.

We find that Webb's conclusions about the tape, paint, RTV, and glue were stated more strongly than was justified by the results of his examinations and the background data. As a general matter, we question the validity of Webb's working proposition that the examinations he performed would have necessarily revealed some differences if the materials had come from different manufacturers (or different batches or lots for the tape and RTV). At the time of the VANPAC case, neither Webb nor the FBI had a data base to confirm that black latex paints, RTV, glue, and tapes like those involved in the samples did in fact differ among manufacturers in terms of their chemical composition and physical characteristics. Moreover, the tests that Webb performed had not been validated by the FBI or, to our knowledge, any other laboratory, with regard to their ability to successfully determine if samples actually came from the same source. In these circumstances, the methods employed by Webb would allow an examiner to conclude that samples could have come from the same source or manufacturer, but not to opine that they necessarily did.

Webb's conclusions about the common origin of the different samples also seem overstated in light of differences in the results from certain analyses he performed. More specifically, the PGC chart

for the black paint from the Jacksonville device contains a peak not observed on the PGC charts for samples from Atlanta and Birmingham; the FTIR chart for a sample of glue from the Atlanta device contains a peak that is absent from the FTIR results for glue from the Jacksonville device; the PGC chart for a clear glue sample from Atlanta has a peak absent from the PGC charts for another sample from Atlanta and a sample from Jacksonville; the FTIR chart for a sample of RTV from the Savannah device has a different pattern than the FTIR charts for samples from Atlanta, Jacksonville and Birmingham; and the PGC chart for a sample of RTV from Birmingham has a peak absent from the PGC charts for samples from Atlanta and Jacksonville.

With regard to the comparison of the 2-inch wide tapes, charts could not be located for analyses done on samples from Atlanta and Jacksonville. The FTIR charts for the tape adhesive from the Birmingham and Savannah devices exhibit several differences. The notes that we reviewed do not explain how Webb reconciled these differences with his ultimate conclusion that tape found in each of the four devices had come from the same batch or lot. When we interviewed Webb about these differences, he said that they may reflect contamination, variations due to sample preparation, the fact that tests were run on different dates, or calibration. Webb acknowledged that certain differences in the test results for the tape and other items he examined are significant enough to require further explanation, but he did not retract the conclusions he reached in 1990 about the common origin of the identified samples.

The differences noted above do not in themselves establish that samples of a particular substance, such as paint or tape, did not have a common origin. Such differences, however, appear to preclude the firm conclusion that the samples came from the same source or manufacturer (or batch or lot). Our questions about the differences in the test results remain unresolved, in part because the case files do not include all the pertinent charts or complete notes explaining the basis for the ultimate conclusions.

We conclude that Webb did not intentionally attempt to fabricate evidence or to present biased conclusions in his work on VANPAC. It appears that Webb's unit chief reviewed and approved his conclusions about the intercomparison of paint, adhesives, and tape. More significantly, Webb also did analytical work and prepared dictation that identified differences between certain samples. For example, he concluded that the white glue found in the Birmingham device did not match samples from the other devices. He also concluded, as was stated in the FBI reports, that certain glues and tape seized from Moody's residence and storage area did not match samples from the explosive devices. Such a match would, of course, have been very incriminating.