

APPENDIX

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NORTHERN JUDICIAL CIRCUIT
Navy-Marine Corps Trial Judiciary

UNITED STATES

v.

IVOR G. LUKE
HM2 (E-5)
U.S. Navy

) GENERAL COURT-MARTIAL
)
)

) DUBAY HEARING
)

) FINDINGS OF FACT
)

) DATE: AUG 11 2008
)

On 24 April 2006, the Court of Appeals for the Armed Forces (CAAF) issued a ruling in the subject case mandating that a post-trial fact-finding hearing be held, pursuant to United States v. DuBay, 17 C.M.A. 147 (1967). CAAF ordered the hearing to receive and examine evidence relating to "Appellant's claim of contamination of his DNA sample and falsification of his [DNA] test results." The hearing was held at the Washington Navy Yard on 2 June and 8 June 2006. This court makes the following findings of fact:

PREDICATE FACTS FROM ORIGINAL TRIAL

1. During Appellant's original trial, the prosecution introduced evidence which tended to show that Appellant's DNA was found on the bra worn by the alleged victim at the time of the alleged indecent assault, and that Appellant's DNA was found on a bed sheet seized from the place of the alleged indecent assault.
2. Specifically, the prosecution introduced evidence of forensic testing of the bra, which showed that saliva was found on the inside portion of the right-hand side cup of the bra, and further that Appellant's DNA was present in the saliva found on the inside cup of the bra.
3. This evidence tended to corroborate the testimony of the alleged victim that Appellant had placed his mouth on her right-hand side breast.
4. The forensic testing was conducted by employees of the U.S. Army Criminal Investigative Laboratory (USACIL) located in Fort Gillem, Georgia.
5. Relevant to this evidence, the forensic testing consisted of serology analysis, which identified the presence of saliva on the bra and the bed sheet, and DNA analysis, which identified the presence of Appellant's DNA in the saliva on the bra and the bed sheet.
6. The serology analysis was conducted by Mr. Phillip Mills, followed by the DNA analysis conducted by Ms. Marilyn Chase.

7. As part of his serology analysis, Mr. Mills identified saliva stains on the bra and the bed sheet, cut sample fragments from them, placed the fragments in test tubes, and forwarded them to Ms. Chase, along with other test tubes containing samples, for DNA analysis.

8. Ms. Chase performed DNA analysis on the samples, using the "PCR" process, and identified the presence of Appellant's DNA on the bra fragment and the bed sheet fragment.

9. At trial, both Mr. Mills and Ms. Chase testified regarding the testing procedures and the results.

10. At trial, Appellant was convicted and the sentence was adjudged on 22 February 1999.

POST-TRIAL FACTS

11. On 17 October 2005, USACIL issued a memorandum describing disciplinary actions that had been taken against Mr. Mills starting in January of 2004. The memorandum described the disciplinary actions and the reasons for them as follows:

a. From January 2004 until September 2004, Mr. Mills had been suspended from performing DNA casework because, in December 2003, he had "cross-contaminated and/or switched samples within and between [several] cases."

b. On 3 May 2005, Mr. Mills was suspended again from performing DNA casework because in April 2005, he made a false data entry and altered documentary evidence with respect to one of his cases.

c. On 13 April 2005, with respect to a different case, Mr. Mills falsely stated that he had examined certain evidence and found negative results when, in fact, he had not examined the evidence at all.

d. On 9 June 2005, Mr. Mills submitted a memorandum in which he again misrepresented work he had performed in yet another case, stating he had examined certain evidence when in fact he had not.

12. On 7 April 2006, CAAF ordered this DuBay hearing to inquire into whether Mr. Mills contaminated or altered the results of the forensic testing in Appellant's case.

FACTS FROM DuBAY HEARING

13. Mr. Mills was suspended from performing DNA casework from January 2004 until September 2004 for a contamination incident that he caused in December 2003 while conducting forensic DNA analysis.

14. When performing DNA analysis, the testing equipment allows the operator to test multiple samples simultaneously. This is referred to as "batch" testing.

15. On the occasion in December of 2003, Mr. Mills conducted DNA analysis on several samples from five different cases. He prepared the samples and tested them as one batch.
16. A "known" sample is one with a confirmed origin, such as when blood is drawn or hair is collected from a person. An "unknown" sample is one for which the origin has not yet been determined.
17. A sample, whether known or unknown, can become contaminated during forensic analysis if it comes into contact with another sample that contains DNA.
18. During the testing process for this batch, Mr. Mills allowed the samples to contaminate one another.
19. Consequently, the profile of a known DNA sample associated with one case also appeared as the profile of an unknown DNA sample in an unrelated case.
20. The exact cause of this error could not be determined. However, it is clear that the samples within the batch were contaminated during Mr. Mills' testing.
21. Although the results of the DNA analysis for this batch were erroneous and unreliable, Mr. Mills did not falsify the results, and he did not intentionally contaminate the samples.
22. Mr. Mills was suspended a second time from performing DNA casework on 3 May 2005, and remained suspended until he resigned in December 2005.
23. The second suspension was imposed because, in April 2005, Mr. Mills did not follow proper testing procedures during DNA analysis, and then subsequently documented his results as though he had.
24. Proper testing procedures called for Mr. Mills to use two control samples, known as reagent blanks, in the particular test he was conducting. Mr. Mills, however, only used one reagent blank. Several days later, Mr. Mills altered his test report so it would appear that he had used two reagent blanks.
25. Mr. Mills did falsify the report, in that he documented a part of the procedure he did not in fact perform.
26. Mr. Mills did not falsify the results, meaning he did not falsely report the presence or absence of DNA in a particular sample. Also, he did not contaminate the samples.
27. Mr. Mills' failure to follow proper procedures and use two reagent blanks on this occasion did not affect the results of the test.
28. Subsequent to Mr. Mills' second suspension, several of his prior cases were reviewed, and several errors were detected. All of the errors were in connection with DNA testing.

29. Mr. Mills demonstrated a pattern of mistakes in conducting DNA analysis, and on at least one occasion, he attempted to cover up his mistake by making a false data entry.

30. No evidence was presented that Mr. Mills ever altered any results to falsely show the presence or absence of DNA in a sample, or that his failure to follow proper procedures was an attempt to improperly influence or alter the outcome of the DNA analysis in any of the cases.

31. It is evident, however, that Mr. Mills had significant problems with the DNA analysis process, which calls into question the forensic reliability of the results of his DNA casework.

32. Mr. Mills' disciplinary and proficiency problems were all related to his performance of DNA analysis. Mr. Mills had never demonstrated a lack of proficiency in any of his other duties.

33. Mr. Mills was proficient in performing serology analysis. He had a full understanding of the standard procedures for conducting serology casework.

34. In Appellant's case, Mr. Mills performed the serology portion, but did not conduct any of the DNA analysis.

35. Mr. Mills understood the standard procedure for conducting serology analysis, and followed it in Appellant's case.

36. It is still possible for contamination to occur, even when standard procedure is followed.

37. In Appellant's case, Mr. Mills received a box which contained evidence collected for the case. Within the box each item of evidence was in a separate container.

38. Mr. Mills removed and visually inspected the items in the order in which they are listed on page 3 of appellate exhibit LXXV. However, he did not do a serological analysis on each item.

39. The first three items he removed from the box, in order, were the panties, the bra, and the bed sheet. Mr. Mills did perform a serological analysis on each of these. On each item, he observed what appeared to be stains from bodily fluids, cut a fragment from each item and placed the fragment in a test tube.

40. The fourth item Mr. Mills removed from the box was the saliva swab taken from the Appellant. Mr. Mills did not do a serological examination of the swab, but only visually inspected it to ensure that it was in the container.

41. After Mr. Mills did the serological analysis, Ms. Chase did the DNA analysis on the samples that Mr. Mills prepared.

42. Appellant's DNA was found on the bra and the bed sheet, but it was not found on the panties.

43. The presence of Appellant's DNA on the bra can be explained in one of three ways: a) Appellant came into contact with the bra sometime prior to it being collected as evidence; b) the

bra became contaminated after it was collected as evidence by coming into contact with Appellant's DNA from another sample; or c) the results were falsified.

44. With respect to Mr. Mills, he did not conduct the DNA analysis, so he did not have the opportunity to falsify the results. Also, he had no motive to falsify the results, such as the desire to cover up a mistake, as in the documented case. Also, no evidence was presented that Ms. Chase or anyone else ever sought to falsify the results.

45. The panties could not have contaminated the bra with Appellant's DNA, because the Appellant's DNA was not present on the panties.

46. Neither the bed sheet nor any other item could have contaminated the bra during the serology portion, because the sample of the bra was cut and sealed in a test tube before the other items were opened.

47. The bra was not contaminated with Appellant's DNA during the serology portion of the forensic analysis, and the results of the DNA analysis were not falsified.

48. The physical evidence in Appellant's case has been destroyed and is thus not available for re-testing.


J.D. BAUER
Military Judge