AFFIDAVIT OF DILLARD O. BROWNING

Dillard O. Browning being duly sworn does depose and say:

- 1. I am the same Dillard O. Browning who testified as an expert witness to trace evidence examinations before the United States District Court for the Eastern District of North Carolina, in Raleigh, North Carolina in the 1979 trial of *United States of America v. Jeffrey R. MacDonald.* I also testified on October 23, 1974 in Raleigh before the federal Grand Jury that was investigating the deaths of Colette, Kimberly and Kristen MacDonald.
- 2. In 1951 I received a Bachelor of Science Degree with a double major in chemistry and biology from George Peabody College (subsequently part of Vanderbilt University) in Nashville, Tennessee. Following graduation I was employed as a chemist by Dupont Corporation at its Savannah River Plant for approximately ten years. After leaving Dupont I was employed by Monsanto Corporation in Augusta, Georgia for approximately eighteen months. In the spring of 1964 I applied for a position as a forensic chemist with the U.S. Army's Criminal Investigation Laboratory (USACIL), then

located at Fort Gordon, Georgia. After completing a course in2 biochemistry in Augusta, Georgia, I re-applied for the position and was hired as a forensic chemist. After completing a program of instruction at USACIL, I was assigned general duties as a forensic chemist in the laboratory. From November, 1966 to November 1969, I served as the Chief Chemist at the USACIL in Frankfurt, Germany. Upon completing that tour, I returned to the Chemistry Section of USACIL, Fort Gordon, Georgia, and remained there until January, 1973 when I was offered the Chief Chemist position at the USACIL located in Tokyo, Japan. After completing that tour I returned to USACIL Fort Gordon, Georgia in 1976, where I continued to be employed as a forensic chemist including during the period of the trial of this case.

3. At the time of the MacDonald murders in February 1970, I was employed as a forensic chemist in the Chemistry Section of USACIL, Fort Gordon. I did not go to the crime scene, nor attend the autopsy of the victims at Fort Bragg, North Carolina, and consequently never collected any of the evidence recovered from either the crime scene or at autopsy. All of my work in connection with this case involved the examination of items which

had been collected in the first instance by Army Criminal Investigators (CID). I have no personal knowledge of where evidence was collected at the crime scene. For purposes of my laboratory bench notes and USACIL reports I relied upon the information provided by the CID Agents and USACIL personnel who had actually processed the crime scene and collected the evidentiary items for me to examine. In addition to the information provided by the investigators as to where an item was collected, where possible, I would also collate that information in my bench notes with what I had also learned about the identity of the victim, and where the victim's body was found. For example, if the investigators described something as being recovered in relation to the body found in the master bedroom, and by the time of my examination I had also learned that Colette MacDonald's body was found on the floor of the master bedroom, then I would include that additional information in my bench notes. In the event of a variance between the description of the location where evidence was found, recorded contemporaneously by the investigators who collected the evidence at the scene, and the description in my bench notes, the evidence collector's description controls as to where and when the evidence was collected.

- 4. Upon the return of the USACIL team which had collected or taken custody of the evidence at Fort Bragg, I was assigned responsibility within the Chemistry Section for the examination of all trace evidence, with the exception of the testing of suspected blood stains. In particular I was responsible for the examination of hairs, fibers, wood, paint and wax. I conducted no chemical analysis or serology testing of any suspected blood stains in connection with the MacDonald murders. Any reference in my bench notes to an item being "bloodstained" is based upon my visual observation of stains, in light of my experience as a forensic chemist.
- 5. On or about March 20, 1970 I was furnished with, among other exhibits, a vial further contained in a zip-lock type plastic bag, which had been marked for identification with a piece of masking tape upon which had been written:

Fibers & Debris from Area of Trunk & Legs of Rug under body- Master bed Room WFI-RBS 16 Mar 70 (14)

Also written on the piece of masking tape affixed to the bag is the designation "E-303", "P-C-FP-82-70" (the USACIL case number) and my initials "DOB". See Exhibit 1 (Photo # 33).

6. My bench notes for March 20, 1970, in pertinent part, state:

Exhibit E-303 - Fibers and debris from under the trunk and legs of Colette MacDonald in MBR- Vial contained numerous purple multi strand cotton fibers similar to the purple strand threads used to sew the seams of Exhibit D-210. Also several blue cotton /polyester multi strand fiber identical to the cotton polyester material of Exhibit D-210*- one long green/brown cotton fiber, bloodstained- one human pubic or body hair, no comparison due to lack of knowns-Several pieces of wood identical to the wood of Exhibit A Two pieces of yellow tissue paper with bloodstains

(Emphasis in original) See Exhibit 2 (See Also Def. App One, Tab 7).

By way of explanation, "Exhibit D-210" was the USACIL exhibit number for the blue pajama top reportedly found at the crime scene draped on Colette MacDonald's chest. My use of the asterisk symbol in relation to the cotton/polyester fibers identical to the material of "Exhibit D-210*" was to record that the fibers visually appeared to be bloodstained.

7. As I conducted no further examination of the hair referenced in my notes regarding Exhibit E-303, due to a lack of known hairs for comparison

purposes, I can only attest that it was a human pubic or body hair.

- 8. On March 9, 1970 I was conducting examination of various exhibits in the MacDonald case for hairs and fibers of possible evidentiary significance.
 My notes with respect to what had been designated "Exhibit # 237" state:
 - Fingernail scrapings from Kimberly's Christine's left hand- Vial contains one microscopic piece of multi strand polyester/cotton fiber identical to the pajama top material Bloodstained but washed. See Exhibit 3, (emphasis in original).

The "pajama top" to which I refer was designated Exhibit "D-210".

- 9. When I testified before the Grand Jury on October 23, 1974 concerning my discovery of the fiber in the fingernail scrapings (Exhibit #-237) and my microscopic comparison of that fiber with the polyester/ cotton material of the pajama top (Exhibit D-210), my recollection of those events was fresher than it is today. See Exhibit 4 at pages 36, 54-56.
- 10. There is no question in my mind, however, that what I removed from the bloody fingernail scrapings of Exhibit # 237 was a fiber, and not a hair.

- 11. This fiber was extremely small and required needle tweezers to separate it from the blood. After it was microscopically compared to the material of the pajama top, I did not return the fiber to the pill vial. To the best of my recollection it was consumed in the course of further examinations.
- 12. The residual fingernail scrapings from Exhibit # 237 were turned over to Janice Glisson so that she could attempt to type the blood.
- 13. I have no personal knowledge of the serology testing of the fingernail scrapings from Kristen MacDonald's left hand, nor of any subsequent examinations of the residual contents of the vial in which they had been contained.

Further your affiant sayeth not.

Dillard O. Browning

Signed and sworn to before me this day of Mov., 2009

Notary Public

My commission expires March 14, 2016

Sworn to and Subscribed Before Me,

Signed:_

Notan Public of South Carolina

My Commission Expires: March 14, 2016