

COMPLAINT # 09-01

In the matter of Cameron Todd  
Willingham



Before the Texas Forensic Science  
Commission

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**DRAFT REPORT NOT INTENDED FOR DISTRIBUTION**

**PRELIMINARY MATTERS**

The Texas Forensic Science Commission (FSC) issues this final report in accordance with article 38.01 § 4(b), Texas Code of Criminal Procedure, and FSC Policies and Procedures § 4.0(e). This report is not a comment upon the guilt or innocence of any individual and may not be used in any civil or criminal proceeding as prima facie evidence of the information or findings contained in the report. See Tex. Code Crim. Pro. art. 38.01 § 4(e) and FSC Policies and Procedures § 4(d).

**PROCEDURAL HISTORY**

A jury convicted Willingham of capital murder on August 21, 1992. He was sentenced to die by lethal injection.

Direct appeal. Following a mandatory direct appeal, the Texas Court of Criminal Appeals affirmed the conviction and sentence of Willingham. *Willingham v. State*, 897 S.W.3d 351 (Tex. Crim. App. 1995)(see exhibit \_). A motion for rehearing was denied on April 26, 1995. The

United States Supreme Court denied a petition for writ of certiorari. *Willingham v. Texas*, 516 U.S. 946 (1995).

State post-conviction litigation. Willingham filed a petition for writ of habeas corpus in state court. The Texas Court of Criminal Appeals denied the petition for relief. *Ex parte Willingham*, No. 35, 162 (Tex. Crim. App. 1997)(see exhibit \_). The United States Supreme Court denied a petition for writ of certiorari. *Willingham v. Texas*, 524 U.S. 917 (1998).

Six years later, Willingham filed a subsequent petition for writ of habeas corpus in state court, attaching a statement challenging the fire investigation (see exhibit \_). The State responded, attaching a statement from a Willingham relative that Willingham had confessed to his estranged wife that he set a fire to kill the children (see exhibit \_). The Texas Court of Criminal Appeals denied the petition, finding that the application did not meet the legal requirements for a claim of newly discovered evidence of actual innocence. *Ex parte Willingham*, No. 35,162-02 (Tex. Crim. App. 2004)(see exhibit \_).

Federal post-conviction litigation.

Willingham filed a petition for writ of habeas corpus in federal court. A federal magistrate denied the petition. *Willingham v. Johnson*, No. 3:98-CV-0409-L (N.D. Tex. July 25, 2000)(see exhibit \_). A federal district judge agreed with the denial of relief. *Willingham v. Johnson*, No. 3:98-CV-0409-L (N.D. Tex. Dec. 31, 2001)(unpublished opinion). A federal court of appeals agreed with the district judge. *Willingham v. Cockrell*, No. 02-10133 (5<sup>th</sup> Cir. February 17, 2003)(see exhibit \_). The United States Supreme Court denied a petition for writ of certiorari. *Willingham v. Dretke*, \_\_ U.S. \_\_ (November 3, 2003).

Pardon application. On January 26, 2004, Willingham filed an application for commutation with the Texas Board of Pardons and Paroles (see exhibit \_)(petition for commutation and stay of execution). The Board voted 15-0 to deny the request.

FSC Complaint. In September 2008, the Innocence Project (IP) filed a complaint (see exhibit \_) with the FSC, alleging professional negligence or misconduct in the course of the investigation and trial of Willingham by an investigator employed by the Corsicana Fire Department (CFD) and an investigator employed by the Texas State Fire Marshal's Office (SFMO). In the same complaint, IP alleged similar concerns in the matter of the prosecution of Ernest Willis. Given the similarity in the allegations regarding professional negligence and misconduct, the issues raised in Willis are sufficiently addressed by this report without the need for separate discussion.

The FSC notes that IP does not allege any professional negligence or misconduct regarding the independent laboratory that tested physical evidence from the Willingham crime scene, confirming the presence of a liquid accelerant under the threshold of a door. The FSC has found no basis for challenging that forensic analysis.

The FSC received initial replies to the complaint from CFD and SFMO (see exhibits). The FSC then contracted for the opinion of Craig L. Beyler, Ph.D. Beyler's report is attached (see exhibit \_).

After reviewing and discussing that report, an investigative panel reached a tentative conclusion for resolution of the complaint (see attached investigative panel report). The FSC decided to draft a report based on that tentative conclusion and solicit additional comment from the SFMO, the CFD, independent fire investigation experts John DeHaan (DeHaan) and Thomas Wood (Wood) and the IP (see exhibit \_). Each entity or individual provided written comment (see exhibit \_). The FSC received several unsolicited comments (see exhibit). The FSC also has heard oral public comment in several meetings.

## JURISDICTION

The Texas Legislature provided that the FSC “shall investigate, in a timely manner, any allegation of professional negligence or misconduct that would substantially affect the integrity of the results of a forensic analysis conducted by an accredited laboratory, facility or entity.” Tex. Code Crim. Pro. art. 38.01 § 4(a)(3). During the course of the Willingham case, challenges have been raised by CFD and SFMO as to the jurisdiction of the FSC to examine cases involving the forensic discipline of fire investigation, particularly cases that predate the existence of the FSC or the Texas process for accreditation of laboratories, facilities and entities that test evidence for presentation in criminal courts. In connection with ongoing discussions about the general jurisdiction of the FSC, the FSC has researched and collected several conflicting written opinions (see exhibit \_).

The FSC declines the opportunity to resolve those conflicting opinions in this report. Concern over any immediate need to resolve jurisdictional issues is lessened in that the report may not serve as prima facie evidence in a criminal or civil case and merely serves to encourage improvement of the reliability and integrity of forensic fire science in criminal cases. Furthermore, having previously voted to accept the complaint and conduct an investigation, the FSC recognizes there is now great public interest in the resolution of this case. Ambiguities and conflicts over ongoing jurisdictional issues may be addressed and resolved more clearly in future cases and, of course, may be addressed through future legislative action.

## CASE BACKGROUND

Cameron Todd Willingham was convicted by a jury of capital murder and sentenced to death for causing the deaths of his three young children by setting a fire in his home on December 23,

1991. For a summary of the criminal case, see *Willingham v. State*, 897 S.W.3d 351 (Tex. Crim. App. 1995)(see exhibit \_). A transcript of the trial was obtained by the FSC and made available to commissioners for review.

As part of the criminal investigation conducted before the trial, various individuals photographed, videotaped, collected fire debris, examined the scene and fire debris, requested forensic testing of evidence, interviewed witnesses, including Willingham, and collected statements for the purpose of forming an opinion as to whether the fire was deliberately started by Willingham. A summary of the evidence that was available to the fire investigators and was presented at trial follows.

At the trial on guilt/innocence, an inmate, who was being held in jail with Willingham pending trial, testified Willingham confessed to squirting lighter fluid around the floor and walls of his home (including pouring the lighter fluid in an X pattern in one location), setting a fire and then running out of the house, leaving his children inside. He also testified that Willingham confessed to lighting a piece of paper and burning one of the children on the arm and forehead to make it appear the child was playing with fire. The inmate said that Willingham at first denied setting the fire, but began having trouble sleeping, received medication from the inmate, broke down and eventually confessed to the crime.

Several neighbors testified that Willingham was at home with his children and saw him standing on the porch, yelling about a fire in the house. Despite several neighbors telling Willingham to go inside and get his children, no one saw him going back into the home. They did see Willingham express concern for his car and move it away from the house to avoid fire damage.

Several witnesses testified Willingham showed no signs of smoke inhalation. He was not seen coughing, and a subsequent blood gas test at the hospital showed he had normal levels of carbon monoxide. Willingham also only had minor injuries to one hand and a shoulder and no injuries to his bare feet, despite evidence that the floor in the home had burned. He also made inconsistent statements about going back into the house to look for the children or entering through the back, which was blocked by a refrigerator.

Medical examiners testified that the children, who were all found in the front bedroom, had died of smoke inhalation. One child was found facedown on the bed. The other two children, twins, were found on the floor in the front bedroom, near the door.

Samples of fire debris were collected from the home. One sample, taken from under the threshold of the front door, tested positive for an accelerant. Another sample, taken from a bottle of lighter fluid found in the debris, also tested positive for an accelerant. The other samples all tested negative. One expert testified that all evidence of an accelerant might be lost in a fire.

Additional details from the fire scene are contained in the attached reports of the fire investigators (see exhibits). The records of the testimony of each of the two fire investigators who were called to testify at trial and are the object of the IP complaint are also attached (see exhibits). Both investigators formed an opinion that the fire was not accidental and was deliberately set.<sup>1</sup>

There has been other information developed after the trial, including an alleged recantation by the inmate who testified he heard Willingham confess and an alleged confession by Willingham to his wife before his execution. However that information is not detailed in this

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<sup>1</sup> Willingham's lawyer did not present any contradicting expert testimony. Willingham's own expert, who did not testify, had also reached the conclusion that the fire was deliberately set.

report because the FSC is not addressing any issue of guilt or innocence and need only consider the information available to the fire investigators at the time of their investigation and the trial.

## PROFESSIONAL NEGLIGENCE OR MISCONDUCT

**Definitions.** For the purpose of having a consistent and professional approach to investigations of complaints, the FSC has adopted a specific definition of professional negligence and misconduct. See FSC Policies and Procedures, §1.2(1-2).<sup>2</sup> In resolving this case, the FSC has focused upon the part of the definitions requiring identification and examination of the standard of practice that existed at the time of the forensic analysis. The FSC has then applied the definitions from the standpoint of the person who originally conducted the forensic analysis. This approach must be consistently applied to avoid unfairly accusing a forensic scientist of failing to apply a modern standard of practice that was not available at the time of the original forensic analysis.

**Standard of Practice.** The complaint, the replies by CFD and SFMO, Beyler's report and the written comments of various other experts all clearly agree that the modern standard of practice for fire scene investigation is reflected in NFPA 921, *Guide for Fire and Explosion Investigations*, published by the National Fire Protection Association. However, that standard,

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<sup>2</sup> "Professional Misconduct" means, after considering all of the circumstances from the actor's standpoint, the actor, through a material act or omission, deliberately failed to follow the standard of care generally accepted at the time of the forensic analysis that an ordinary forensic professional or entity would have exercised, and the deliberate act or omission substantially affected the integrity of the results of a forensic analysis. An act or omission was deliberate if the actor was aware of and consciously disregarded an accepted standard of care required for a forensic analysis.

"Professional Negligence" means, after considering all of the circumstances from the actor's standpoint, the actor, through a material act or omission, negligently failed to follow the standard of care generally accepted at the time of the forensic analysis that an ordinary forensic professional or entity would have exercised, and the negligent act or omission substantially affected the integrity of the results of a forensic analysis. An act or omission was negligent if the actor should have been but was not aware of an accepted standard of care required for a forensic analysis.

which was formally published in 1992, did not achieve widespread acceptance in the scientific or investigative community for several years and has gone through several revisions well after the investigation and trial of Willingham. Before the publication of NFPA 921, there was no uniform and clearly written standard of practice for fire investigations that was collected into a single publication or consistently taught by a particular national or Texas organization.<sup>3</sup>

The absence of a clear, single, written and identifiable national or state standard of practice for the time period of the Willingham investigation and trial, along with the substantial passage of time, a limited record and the unavailability of at least one of the original fire investigators, all add to the difficulty of conducting a reliable scientific review of the work of the Willingham fire investigators. Out of consideration for these types of issues, the FSC has adopted several options for expressing a final disposition of a complaint. See FSC Policies and Procedures § 4(c)(1-4). The selection of a particular disposition is highly dependent upon the quality of the information available and the clarity of standard of practice to be applied for a particular forensic analysis.

After considering all of the information available to the FSC, and after viewing that information from the standpoint of the fire investigators for the CFD and the SFMO, the FSC concludes that the fire investigators met the standard of practice that an ordinary fire investigator would have exercised at the time the original Willingham investigation and trial took place. See FSC Policies and Procedure 4.0(c)(2). There simply is insufficient credible or clear documentation of a contrary standard of practice to say otherwise.

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<sup>3</sup> Even Beyler acknowledged in his report that “there was no single document that described the standard of care in fire investigation.” DeHaan indicates “there was no uniform ‘standard of practice’ for state or local fire investigators in Texas or elsewhere in the U.S. at the time of the Willingham case.”



While Beyler did express an opinion that the fire investigators failed to meet the standard of practice as it existed at the time of the Willingham investigation and trial, his report only states that conclusion and fails to provide any detailed documentation or support by comparing any particular contemporary standard of practice adopted and used by Texas fire investigators with the actual investigation conducted by CFD and SFMO. Furthermore, his report focused upon fire science publications and research, not fire investigation manuals or materials. The replies of CFD and SFMO also point out factual inconsistencies in the claims made by Beyler to support a conclusion of negligence or misconduct.

As to explaining the modern standard of practice, Beyler's report is significantly detailed. As to the standard of practice for the time of the Willingham investigation and trial, Beyler loosely refers to some national scientific literature. After being asked to provide a more specific explanation, Beyler references his earlier report without further documentation. Under similar circumstances, the Texas Supreme Court criticized Beyler, saying, "Dr. Beyler may be qualified in fire research, but his testimony in this case lacks objective, evidence-based support for its conclusion." *Wal-Mart v. Merrell*, No. 09-0224 (Tex. 2009)(criticizing Beyler's conclusion that halogen lamp caused fire in absence of any evidence that halogen lamp even existed).

Of course, that does not mean that parts of the standard of practice as they existed during the Willingham investigation and trial are not subject to criticism when compared to a more modern standard of practice. Indeed, the FSC recognizes that the value of various incendiary fire indicators and the manner in which they are identified has changed since the Willingham investigation and trial.

For example, there is now a clear consensus that the use of crazed (breaking) glass as an indicator of very rapid heating no longer has any value in evaluating a fire. Such crazing seems to be the result of rapid cooling by the application of water and not a function of the heat of a fire.

In other respects, the changes to those indicators are less dramatic. Many of the modern indicators were originally considered in the Willingham investigation and trial. Nonetheless, the modern application of those same indicators requires more caution and interpretation than perhaps was applied in 1992. For examples of those differences, see the SFMO reply and DeHaan (see exhibit).

For any forensic analysis, the substantial passage of time is likely to show the continued evolution of a standard of practice. Such progress is to be expected and encouraged. But it is not an appropriate basis for a retrospective finding of negligence or misconduct. The FSC is tasked with examining certain types of forensic analysis for the presence of negligence or misconduct under whatever standard of practice existed at the time of the forensic analysis. The FSC is not tasked with deciding guilt or innocence or evaluating how an entire scientific field or agency has handled an evolving standard of practice involving decades of research and development. In this case, the FSC has the job of deciding whether the fire investigators exhibited significant negligence or misconduct in exercising their professional judgment at the time of Willingham's investigation and trial.

## CONCLUSION AND RECOMMENDATION

The FSC concludes that the fire investigators in this case did not commit professional negligence or misconduct. The fire investigators for CFP and SFMO applied the standard of

practice, as best as it can be reconstructed, for Texas fire investigators as that standard existed at the time of the investigation and trial. Without commenting on any impact the fire investigation had in the Willingham case, the FSC does recognize that the standard of practice has evolved since the Willingham investigation and trial, providing a more specific, clear and scientifically justified guide for fire investigators in their work. Indeed, that standard has continued to evolve, even since its adoption in NFPA 921, resulting in several new editions of the publication. And there is no doubt that the standard of practice for fire investigations will continue to evolve over the next two decades.

Meanwhile, modern fire investigators should apply the standard of practice that is accepted by the fire science and investigator community as most reliable at the time of an investigation and trial. That standard is currently reflected in the guidelines set out in NFPA 921. The FSC strongly recommends the SFMO apply NFPA 921, in the form most currently accepted by the Texas fire investigation community, to all current fire investigations in the State of Texas. The FSC also encourages the SFMO to pursue ongoing research and training to strengthen the use and reliability of forensic science in future fire investigations.