



New Zealand Police

2014

# CREWE HOMICIDE INVESTIGATION REVIEW



**Assessment of Pathology  
Reports**

APPENDIX 7



## **Appendix 7**

**Assessment of Pathology Reports (2013),  
by Dr Ian MORROW, Forensic Pathologist, National  
Forensic Pathology Service, New Zealand**

**and**

**Addendum to 2013 report,  
by Dr Ian MORROW, Forensic Pathologist, National  
Forensic Pathology Service, New Zealand**



## **Appendix 7**

**Assessment of Pathology Reports (2013),  
by Dr Paul MORROW, Forensic Pathologist, National  
Forensic Pathology Service, New Zealand**

DEPT OF FORENSIC PATHOLOGY  
LabPlus, Gate 4, Grafton Rd  
Auckland City Hospital  
PO Box 110031, Auckland

12 July 2013

Andrew J Lovelock  
Detective Superintendent  
New Zealand Police  
Otahuhu  
AUCKLAND 1640

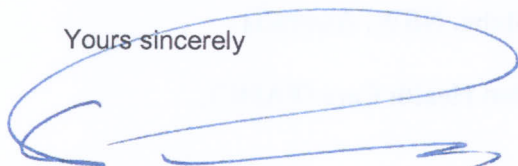
Dear Detective Lovelock

Thank you for the opportunity to review the pathological reports and specimens prepared by the late Dr Frank Cairns in the case of the death of David Harvey and Jeannette Lenore Crewe in 1970. Please find enclosed my report.

I have also attached the schedule of material that I reviewed (provided by Detective Lendrum) and a sheet with my qualifications and work experience.

If I could be of any further assistance to you in this matter, please do not hesitate to contact me.

Yours sincerely



Paul L. Morrow MD  
Forensic Pathologist  
National Forensic Pathology Service

**FORMAL WRITTEN STATEMENT**

My full name is Paul Lowell Morrow MD.

I am a Forensic Pathologist practicing in Auckland New Zealand.

My qualifications and experience are to be found on an attached document with this report.

I have been asked to review the pathological reports and specimens prepared by the late Dr Frank Cairns in the case of the 1970 deaths of David Harvey and Jeannette Lenore Crewe. Material provided includes a summary report prepared by Detective GR Lendrum (dated 26 June 2013), various photographs taken at the scene and autopsies, various documents prepared by Dr Cairns, transcripts of his testimony and pathological specimens including sets of teeth preserved from the autopsies, and a fragment of bone around a gunshot wound removed from the skull of Jeannette Crewe. A complete list of documents and exhibits is provided in the schedule prepared by Detective Lendrum and appended to this report.

The findings of Dr Cairns are in three main areas: the scene of death, and the autopsies of the bodies of Jeannette Lenora and David Harvey Crewe and documented in specific reports, depositions and testimony.

**Autopsy Report of Jeannette Lenora Crew:**

The body was initially viewed by Dr Cairns on 16 August 1970 at the site where it had been recovered from the Waikato River. Autopsy was carried out later that day. In his report, Dr Cairns documents clothing and associated artefacts with the body. The body was decomposed with adipocere (a change due to prolonged submersion in cold water).

Relevant findings include:

- Gunshot wound to the head: Entrance wound on the right side, 1 1/4 inch above and in front of the right ear. The wound was directed from right to left, downwards and forwards, through the brain to an exit from the skull in front of the left ear. A bullet and fragments of bullet were recovered. There were associated skull fractures. Dr. Cairns describes blackening around the edge of the skin of entrance wound and on the skull, suggesting a close range wound. The entrance wound was excised and submitted to laboratory for further testing.





- Other injuries included to the skin over the bridge of the nose (laceration in photograph) with fracture of the bridge of the nose, and a large contusion in the region of the left armpit.
- Postmortem injuries were described on the scalp, face and neck.
- Dr Cairns was present when a dentist examined the teeth, confirming the identification of Jeannette Crewe. No specific dental description is provided, but the teeth were preserved and I have examined them directly. Six lower (mandibular) front teeth (four incisors and two canines) are marked as missing directly on the specimen.


### **Autopsy Report of David Harvey Crewe:**

The autopsy was performed on 16 September 1970. In the report, Dr Cairns documents clothing and artefacts, including a blanket and wire in which the body was wrapped. The body was decomposed with adipocere from prolonged submersion in cold water. Relevant findings include:

- Gunshot wound to the head: Entrance to the back of the head 3 inches above and behind the bottom of the left ear. The wound is directed from left and right, forward and slightly downwards with exit from the skull at the right temporal bone adjacent to the zygomatic arch (cheek bone). Bullet fragments were recovered from the head and brain. A small fragment of bullet or bone had caused an exit wound from the external (apparently right) ear. There were associated skull fractures.
- No other significant injuries or diseases were noted.
- Dr Cairns was present when a dentist examined the teeth, which were preserved in a manner similar to Jeannette Crewe. I have examined the specimen and all teeth are present (with the exception of the third molars that had apparently been extracted antemortem).

### **Scene of Death:**

Dr Cairns first visited the scene of death on 22 June 1970 after the disappearance of the Crewes and before the bodies were recovered. He returned to the scene on 26 June after antemortem specimens from the Crewes had been completed. On 2 July, he examined tissue removed from an armchair at the scene, which he subsequently identified as consistent with brain tissue.



During the visits, Dr Cairns made a number of observations (documented in photos and reports). He particularly noted bloodstains on an armchair and drag marks on the floor of blood consistent with David Harvey Crewe's blood type, and bloodstains on the floor and the hearth of the fireplace consistent Jeannette Crewe's blood type. He noted evidence that a mat or carpet had apparently been removed from in front of the fire. He also noted bloodstains on the steps of the house and watery bloodstains in the kitchen.

#### **Dr Cairns' Conclusions:**

On the 23<sup>rd</sup> of September, Dr Cairns put forth his assessment of the cases in a letter. His conclusions were that the causes of death of both Jeannette and David Crewe were gunshot wounds to the head. He suggests that David had been sitting in an armchair when he was shot, most likely from a line of site from the louvered kitchen window. Jeannette was subsequently knocked to the ground by a blow from a blunt instrument and then shot. He considered the most likely weapon used was a .22 rifle. The blow to Jeannette was consistent with the butt of a rifle. Dr Cairns subsequently admitted that he could not specifically tell whether the blow to Jeannette had occurred before or after the shooting (Royal Commission transcript), but his conclusion was that the injury was antemortem. He concludes that David was dragged from the chair and transferred to a wrapping. Both bodies were eventually wrapped in bed cloths, removed, wired to weights and dropped in the river. There was evidence of attempts to clean up the scene.

#### **Comment:**

Dr Cairns' pathological reports and accompanying photographs from the autopsy clearly indicate the causes of death of Mr. and Mrs. Crewe to be gunshot wounds to head. That of Jeannette appears to be close range (near contact), based on Dr Cairns' description in his report that there was blackening about the wound margin and on the skin and skull. I have difficulty appreciating this in the photographs, and I cannot see it on the skull specimen; however, the specimen has obviously dried and become discoloured. In this regard, it would be useful to know whether additional testing was in fact performed on the specimen excised by Dr Cairns, and what the results of the testing were. Nevertheless, I do not necessarily doubt Dr Cairns' description.

There are also injuries to the nose of Jeannette Crewe, including a laceration over the bridge of the nose and associated nasal fracture. It was Dr Cairns' observation that there was evidence of haemorrhage or bruising about this, although this is difficult to appreciate in the photographic material. He also describes a contusion in the left armpit of Jeannette Crewe.





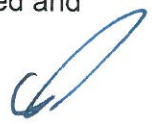
Essentially, I agree with Dr Cairns' pathological findings, and his reconstruction of the events is reasonable, with the caveat that the exact timing of gunshot and blunt force injury in Jeannette's case cannot be unequivocally ascertained from the pathological evidence alone.

In my initial charge, I was asked to address two specific questions: how Jeannette Crewe lost her six lower jaw front teeth, and whether I could comment on how long David Crewe may have remained in his armchair after being fatally shot.

Regarding the teeth, it is my opinion that they were lost due to post-mortem artefact (loosening during decomposition while in the river). Although no specific photograph is taken of the mouth with the lower lip withdrawn to demonstrate the presence or absence of the teeth, in no photograph are they visible. In a number of photographs, given the configuration of the lower lip, they would appear to be absent. Furthermore, autopsy photographs clearly document the presence of the upper front teeth during certain stages of the autopsy and at the scene of recovery of the body, but later two of them have apparently fallen out. Those teeth are present in the specimens. Thus there is photographic evidence that the teeth may have loosened and become detached easily. Furthermore, there is no evidence from the written or photographic material I have reviewed that there was trauma to the mouth to account for loss of the teeth.

Regarding how long David Crewe may have remained in the chair after being shot, I do not believe it is possible to give an accurate assessment based on the forensic pathological evidence. Dr Cairns points out in his testimony that it is likely that the gunshot would have rendered Mr Crewe unconscious but was not necessarily immediately fatal, and that he could have continued to breathe and actively bleed for "some minutes". There are three sources of bleeding: (1) the entrance wound, (2) the exit wound from ear, apparently the source of brain material recovered from the chair, and (3) the mouth and nose, associated with basilar skull fractures well documented at the autopsy. It is most likely, in my opinion that the major source of bleeding would have been from the mouth and nose, although I do not think one can be more specific. Even after death, blood could have continued to drain from the wounds until it coagulated.

In my experience, the length of survival in such gunshot wounds is unpredictable and I do not believe that one can be more specific about survival time than Dr Cairns. In any case, it is possible, indeed probable, that David remained in the chair for some period of time, up to hours, and it is within the realm of possibility that he could have remained in the chair during much of the "clean-up" or during time in which Jeannette Crewe could have been killed and removed.





*I confirm the truth and accuracy of this statement. I make this statement with the knowledge that it is to be used in court proceedings. I am aware that it is an offence to make a statement that is known by me to be false or intended by me to mislead.*

Date: 10 July 2013



Dr Paul L Morrow, MD.  
Forensic Pathologist  
Auckland New Zealand

## **CURRICULUM VITAE**

**PAUL L. MORROW, MD**

Dept of Forensic Pathology  
LabPLUS, Gate 4 Grafton Rd  
Auckland City Hospital  
PO Box 110031, Auckland, NZ  
[REDACTED]

### **Current Position**

Regional Forensic Pathologist, National Forensic Pathology Services, Auckland, NZ  
March, 2010 to present.

### **Recent Professional Experience**

Contract attending pathologist, autopsy service, Fletcher Allen Health Care,  
Burlington, VT, USA, 2008, 2009.  
Locum tenens, National Forensic Pathology Services, Auckland, New Zealand, Feb-  
June, 2009.  
Locum tenens, State of New Hampshire, Office of the Chief Medical Examiner,  
Concord, NH, USA, one-week periods, July, 2008, July  
& August, 2009.  
Locum tenens, State of Rhode Island, Office of the Medical Examiner, Providence,  
RI, USA, 2 weeks, Oct & Nov, 2008.

### **Past Positions**

Forensic Pathologist, Dept of Forensic Medicine, Glebe, NSW, Australia  
August 26, 2005 to Jan 5, 2008.  
Attending pathologist, autopsy service, Fletcher Allen Health Care (FAHC),  
Burlington, VT, USA  
July 1, 2004 to July 1, 2005.  
Chief Medical Examiner, State of Vermont, Burlington, VT, USA  
February 1, 1990 to October 18, 2004 (retired).  
Deputy Chief Medical Examiner, State of Vermont, Burlington, VT, USA  
September 1, 1981 to January 31, 1990.

### **Education**

Haverford College, B.A. (Music), 1971.  
University of Vermont College of Medicine, M.D., 1976.  
National Board Diploma, July 1, 1977, Certificate #156215.  
Vermont Certified Public Manager, June 6, 1991: Two-year course in management  
sponsored by the State of Vermont.

### **Active Medical License**

New Zealand #48109.  
Vermont #42-0006681.

## **Specialty Boards**

Board Certified, American Board of Pathology, in Anatomic and Clinical Pathology: May 30, 1980.

Board Certified, American Board of Pathology, in Forensic Pathology: May 31, 1982.

## **Fellowship**

Assistant Chief Medical Examiner

Office of the Chief Medical Examiner

State of North Carolina

Chapel Hill, North Carolina

One year fellowship in forensic pathology, July 1980 - June 1981.

## **Residency**

Evanston Hospital, McGaw Medical Center of Northwestern University, Evanston, Illinois, July 1978 - June 1980. Two years clinical pathology residency. Chief resident, July 1979 - June 1980.

S.U.N.Y. Upstate Medical Center, Syracuse, New York, July 1976 - June 1978. Two years anatomic pathology residency.

## **Academic Appointments**

Clinical Associate Professor, Pathology, University of Vermont College of Medicine, 1992 to 2005.

Clinical Assistant Professor, Pathology, University of Vermont College of Medicine, 1981 to 1992.

## **Hospital Staff Appointments**

Fletcher Allen Health Care (formerly Medical Center Hospital of Vermont), Department of Pathology and Laboratory Medicine, Burlington, Vermont, Oct 2008 – Jan 2010, 1981 to 2005.

Royal Prince Alfred Hospital, Missenden Road, Camperdown, NSW, Australia, Senior Staff Specialist (Dept. of Forensic Medicine), Sept., 2005- Jan, 2008.

## **Other Professional Experience and Activities**

National Disaster Medical System, DMORT Team, Region I New England. Team Commander, Jan. 1997 to Sept. 2001.

Forensic Pathologist/Medical Examiner, 1995-2005.

Consulting medical director, Vermont Department of Health Laboratory, Mar. 2003 to Sept. 2004.

Consulting pathologist, virology laboratory, Department of Medicine, University of Vermont, Nov. 1982 to Oct. 1983.

Attending pathologist, autopsy service, FAHC (formerly Medical Center Hospital of Vermont) July 2002 to June 2004; Feb. 1982 to Feb. 1983.



### **Professional Societies**

American Academy of Forensic Sciences (Fellow).  
National Association of Medical Examiners (Fellow).  
Royal College of Pathologists of Australasia, affiliate member.

### **Awards, Presentations and Publications:**

Available on request.

**CREWE Review - Schedule of documents and pathological exhibits**

- (i) Scene Photographs
- (ii) Report of Detective Sergeant JEFFRIES dated 29 June 1970 - Officer in Charge of Scene
- (iii) Floor plan of Crewe house.
- (iv) Post Mortem Photographs
- (v) Report Dr F J Cairns dated 7 August 1970
- (vi) Report Dr Cairns dated 9 September - post-mortem examination Jeannette Lenore CREWE.
- (vii) Report Dr Cairns dated 23 September - post-mortem examination David Harvey CREWE
- (viii) Report Dr FJ Cairns dated 23 September 1970
- (ix) Affidavit Dr Cairns dated 21 December 1970 - for coroner relating to post-mortem examination Jeannette Lenore CREWE.
- (x) Affidavit Dr Cairns dated 21 December 1970 - for coroner relating to post-mortem examination David Harvey CREWE
- (xi) Depositions evidence - Dr Francis John CAIRNS
- (xii) Transcript of Evidence - Dr Francis John CAIRNS - First trial
- (xiii) Transcript of evidence - Dr Francis John CAIRNS - Second trial
- (xiv) Transcript of evidence - Dr Francis John Cairns - Royal Commission of Inquiry
- (xv) Set of Teeth - Jeannette Lenore CREWE
- (xvi) Set of Teeth - David Harvey CREWE
- (xvii) Piece of Skull - Jeannette Lenore CREWE



## **Appendix 7**

**Addendum to 2013 report,  
by Dr Paul MORROW, Forensic Pathologist, National  
Forensic Pathology Service, New Zealand**



**FORMAL WRITTEN STATEMENT**

My full name is Paul Lowell Morrow MD.

I am a Forensic Pathologist practicing in Auckland New Zealand.

I have been asked to provide supplementary material to a formal written statement of my review of the deaths of Harvey and Jeannette Crewe dated 10 July 2013.

I have prepared two hand-written diagrams that demonstrate the gunshot wound tracks reconstructed from the autopsy reports of Dr Frank Cairns and photographs.

I have also been asked to provide explanation of the mechanism by which bodies float and why it would be that the bodies of Jeannette and Harvey Crewe came to the surface on the 16<sup>th</sup> of August and 16<sup>th</sup> of September after they had been placed in the river on or about the 17<sup>th</sup> of June.

Many factors are involved in why a dead body may float to the surface after initial submersion, but the essential process is the production of gas in the tissues from the activity of bacteria during the process of decomposition. Factors that can affect this include the temperature of the water, currents, clothing and debris, rocks or submerged objects upon which bodies may become "snagged". The conditions that affect this can be very local so that even within the same stream or body of water, conditions may vary considerably over just a few metres.

In the case of Jeannette and Harvey Crewe's bodies, there is evidence that the bodies had been weighted. Thus, aside from the "normal" decomposition process of gas formation and floatation, factors related to the attachment of the weight would have played a distinct role in how and when the bodies appeared on the surface, and likely prolonging the process.

In summary, it is impossible to speculate as to what exactly all the factors were, but it is not at all surprising that the bodies were discovered some considerable weeks after their disappearance and submersion.



*I confirm the truth and accuracy of this statement. I make this statement with the knowledge that it is to be used in court proceedings. I am aware that it is an offence to make a statement that is known by me to be false or intended by me to mislead.*



Date: 10 February 2014

Dr Paul L Morrow, MD.  
Forensic Pathologist  
Auckland New Zealand

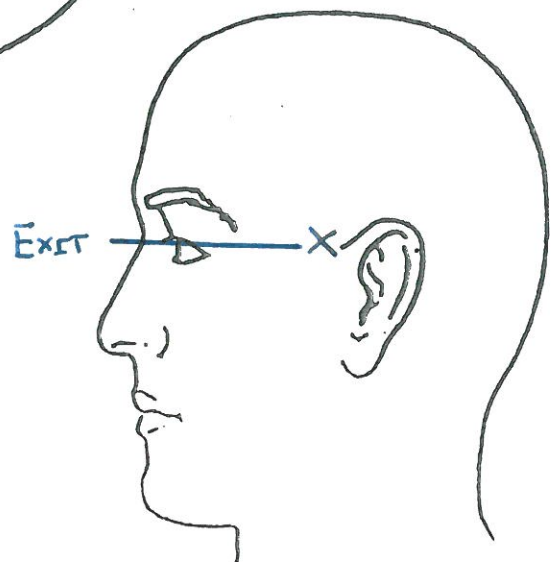
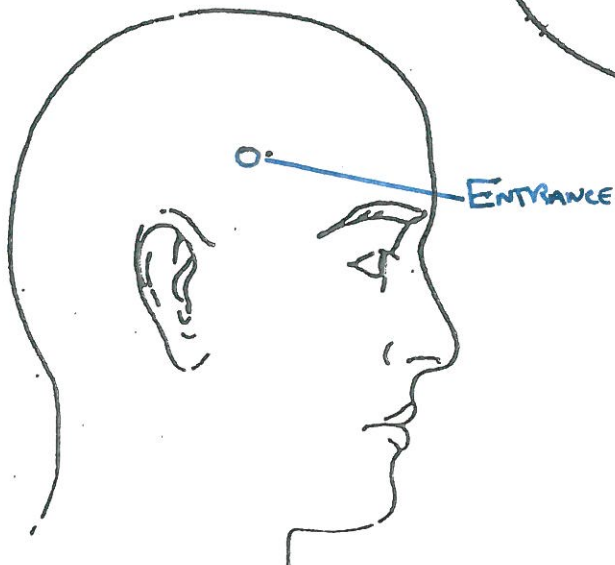
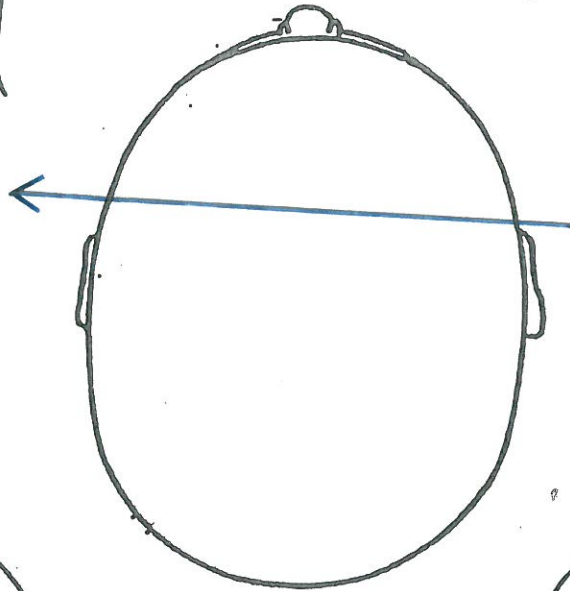
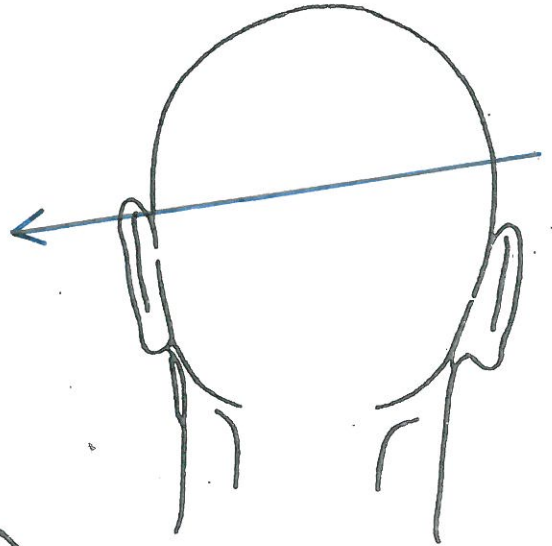
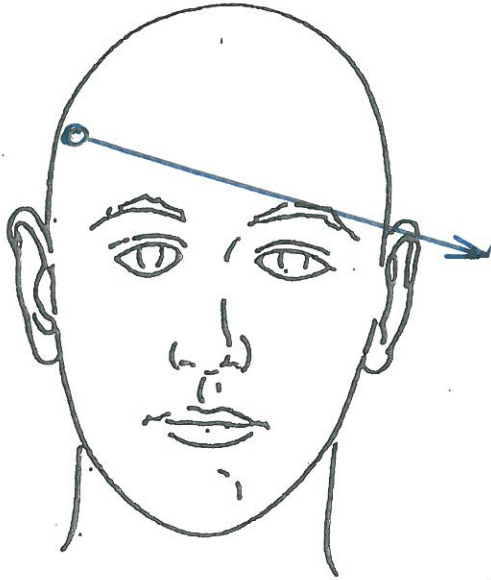
Dec. Name: JEANNETTE LENOIRA CREWE

Date: 10 FEB 2014 (16 Aug 1970)

Autopsy #:

RECONSTRUCTED FROM AUTOPSY REPORT OF DR FRANK  
CAIRNS & PHOTOGRAPHS

PAUL L. MORROW, M.D.





Dec. Name: DAVID HARVEY CREWE

Autopsy #: \_\_\_\_\_

Date: 10 FEB 2010 (18 SEPT. 1970)

RECONSTRUCTED FROM AUTOPSY REPORT OF DR. FRANK  
CAIRNS & PHOTOGRAPHS

  
Paul L. Morrow, M.D.

