

資料文件

二〇〇三年三月五日及七日

立法會保安事務委員會及衛生事務委員會
二〇〇三年三月五日及七日聯席會議

目的

就有關囚犯張志堅在二〇〇一年十一月十九日於小欖精神病治療中心死亡的事件，議員在二〇〇三年一月二十三日舉行的保安事務委員會特別會議上，提出多項問題。本文件旨在就問題作出回應。

與事件有關的閉路電視錄影帶

2. 警方技術服務部的專家曾驗證小欖精神病治療中心的閉路電視錄影帶，並因應該錄影帶的驗證結果作出兩份口供，有關口供現轉載於附件 A。根據驗證結果顯示，該錄影記錄為原來版本，同時錄影的片段亦未有被改動。

3. 自一月二十三日的事務委員會會議後，警方曾設法進一步去重驗有關錄影帶。結果如下－

- 聯絡本地大學研究中心
據香港科技大學區教授表示，目前未有任何科技可以幫助將已翻錄之錄影帶中的舊有影象重新顯影出來。
- 聯絡海外執法機關
警方曾向美國聯邦調查局(FBI)尋求協助，並了解到 FBI 科學驗證中心目前並未有能力提供香港警方所要求之支援。科學驗證中心的人員相信能成功將已翻錄之錄影帶中的舊有影象，重新顯影出來的機會是近乎零。除 FBI 外，香港國際刑警亦已協助將港方的要求轉達至其它地方的執法機構，但目前未有任何確實回覆。

其他搜證方法以供進一步調查

4. 議員提問有否考慮使用其他方法找尋證據以對事件作進一步

了解，例如要求與事件有關之懲教署職員接受催眠來幫助回憶經過情形。首先我們必須指出根據刑事調查的原則，在任何情形下，警方無權強迫疑犯回答問題，而疑犯有權保持緘默。警隊指引是只會使用催眠方法協助自願的證人回憶案情，而絕不會施用此法於疑犯或可能成為疑犯的證人身上。由於囚犯張志堅之死因經由死因裁判法庭作出了存疑裁決，即表明任何曾作供的證人都可能與案有關，因此警方認為事件不適合使用上述的方法。另一方面，警方如要於刑事調查中使用測謊機盤問証人或疑犯，則需要用法例的認可，而本港目前未有相關的法例支持。

加強監察閉路電視系統和處理閉路電視錄影帶的程序以確保證據得以保留

5. 懲教署已詳細制定模擬及數碼閉路電視系統的操作、監察和錄影指引，供所有院所(包括小欖精神病治療中心)執行。為確保執行成效，指引亦包括一個行動卡系統，讓當值人員遵從和參照。

6. 為保留閉路電視系統攝錄的影像作為證據，署方會嚴格遵從適用於模擬及數碼閉路電視系統，保存資料/錄影帶 14 天的規定。如有特別事件發生，事發前最少 48 小時的任何錄像記錄將會被保留，以便作為日後調查時使用。這些記錄會保留六個月，或直至調查完成為止，視乎何者較後而定。此外，新錄影帶亦最多只准重複使用 14 次，以確保重播時影像清晰。

7. 在實行了上述監察閉路電視系統的措施後，處理攝錄影像資料的程序及規則已大為加強。

8. 在整體策略上，懲教署準備將閉路電視監察系統全面數碼化，以數碼系統作為所有懲教院所制定未來計劃中的標準設施。在那些需經常密切監視和照顧的囚犯通常會入住的地方，如醫院病房、隔離囚室、保護室或觀察囚室，都會優先把分區監察系統數碼化，以輔助於控制中心的中央監察系統。現於**附件 B**節錄特別工作小組報告中，有關數碼閉路電視系統的特色和優點，以供參考。

9. 此外，管理新數碼閉路電視系統職員將會接受操作前的全面訓練。懲教署亦會檢討與機電工程署所簽訂的服務水平協議，以進一步加強閉路電視監察系統的系統保養。

巡邏制度的成效

10. 在小欖精神病治療中心，晚上有囚犯入住的病房均由一名病房巡邏主任當值。至於收症病房的觀察組，則另有一名病房巡邏助理從旁協助。

11. 病房巡邏主任的主要工作，是每隔 15 分鐘巡視病房和病房內的囚犯一次，並就發現的任何不正常情況立即報告。有關職員在病房內的巡視頻率，由設於病房內不同地點的記勤時鐘記錄。如有人入住收症病房觀察組內的八間特別房，則更會有閉路電視監察系統輔助監視。

12. 如囚犯出現明顯的抑鬱或情緒問題而須予以特別及持續的監察，院所醫生或精神科醫生會建議將其列於醫療觀察名單。這個特殊制度旨在提醒職員須基於醫療原因而特別留意某些囚犯的狀況。巡邏制度整體的設計，是確保有人入住的病房在夜間時刻都會有職員親身作密切監視。

13. 二零零一年十一月十九日，病房巡邏主任於凌晨一時十五分報到當值。根據記勤時鐘的時間記錄，該巡邏主任有根據要求執行每隔 15 分鐘巡視死者入住的囚室的任務。而擺放在其辦公桌附近的閉路電視監視器亦提供了監視上的輔助。凌晨五時二十五分，他發現死者的睡姿自上次巡邏後沒有絲毫改變，因而拍打囚室的門，並向死者呼叫，但死者沒有任何反應。同時，他亦發現死者沒有呼吸跡象。有見及此，他啟動緊急程序，拿取應急鎖匙開啓囚室的門，並與病房巡邏助理檢查死者。內部警鐘隨即啟動，而控制室職員亦獲得知會。隨後，增援人員亦趕到為死者施行緊急復蘇治療。最後，經召回的當值醫生緊急檢查後，死者由救護車送到屯門醫院。

14. 由於職員透過巡邏制度發現事件，並且已即時啟動緊急程序，可見巡邏制度是有效的。事實上，過去五年，懲教署曾透過這巡邏制度共發現並制止了 95 宗在懲教院所內的企圖自殺事件。

小欖精神病治療中心兩名控制室職員所擔當的角色

15. 控制室夜班職員主要負責操作控制室的閉路電視系統和通訊系統。關於閉路電視系統，共有 120 部監察攝像機連接控制室的閉路電視中央監察系統。至於通訊系統方面，則包括該中心的無

線電、內部通話及電話系統。有關的監督訓令已訂明，控制室職員其中一項主要職責是一旦知悉有突發事件時，他須以閉路電視錄影有關的事件以作記錄。

16. 正如以前交代過，小欖精神病治療中心收症病房的觀察組的 8 個監察攝像機，是連接至兩個不同的系統。其中一個是設於病房內的分區閉路電視系統；而另一個則是設於控制室內的閉路電視中央監察系統(該系統同時連接所有位於小欖精神病治療中心共 120 部監察攝像機)。前者會每隔 4 秒以順序及循環的方式，顯示所接收到該 8 個監察攝像機的影像於病房內的監視器/螢幕上，並自動錄影所顯示的影像。至於後者，所有 120 部監察攝像機的影像均同樣會以順序及循環的方式，顯示於兩個 20”的監視器/螢幕上，並同樣有自動錄影功能。此外，如有突發事件，控制室的職員可以「呼召」任何一部特定的攝像機的影像到螢幕上，以對事件進行連續監察和錄影(詳細資料見夾附於先前提交予保安事務委員會的資料文件(CB(2)947/02-03(01))其中附件 A 的特別工作小組報告中第 6.3-6.12 段)。

17. 根據警方的調查所得，分區閉路電視系統已保存了約 17 小時持續及沒有被改動的錄影帶記錄，而該錄影帶記錄了事發前死者囚室內的活動、發現和急救的經過，以及事件完結後囚室內的一段短時間的情況。另一方面，控制室的閉路電視中央監察系統，則於內部警鐘響起後數分鐘方開始錄影位於死者囚室的攝像機的影像。研訊委員會經調查後，總結認為控制室兩名職員於獲悉有突發事件後，並無留意閉路電視的監視器，以確保有關事件能及時和完全地被錄影。該兩名職員由於沒有遵照監督訓令的指引行事，結果遭紀律處分。

18. 儘管有以上不足，分區閉路電視監察系統在關鍵時刻是正常操作的，在事件發生前後及當時，將螢幕上所顯示死者囚室的影像記錄下來。在觀看過有關的錄影帶後，研訊委員會未有發現任何不尋常的情況。因此，委員會認為兩名控制室的職員，未能在獲悉有突發事件時確保閉路電視中央監察系統能及時和完全地將死者囚室的情況錄像，與張志堅先生的死亡並無直接關係。

對懲教署職員在處理囚犯時提供更嚴格的指引，以確保囚犯的權利得到保障

19. 有關於囚犯的待遇和其權利的《監獄規則》、工作守則及部門

指引皆已齊備，供懲教署職員遵守。懲教署亦透過基本的入職訓練和不斷進行的在職訓練，培訓和加強職員在履行職務時的專業操守，保障囚犯的權利。按照法例規定，院所的監督和其他高級職員，每天經常巡視院所各處，監察屬下人員履行職務。此外，懲教署署長和總部其他高級人員亦經常巡視各院所，確保囚犯的權利得到照顧。

20. 新收的囚犯均獲發給一本資料小冊，詳述其羈留期間的權利。而職員在為囚犯舉辦啓導講座時，以及其他有需要的場合，亦會向他們清楚解釋囚犯的權利。此外，《監獄規則》及其他關於囚犯待遇的工作守則，均已放於院所圖書館，供囚犯隨時參閱。

21. 懲教制度確立了多方面的投訴機制，保障囚犯的權利。囚犯除了在高級人員巡視時有大量機會提出要求或申訴外，亦可透過以下途徑提出投訴：

- 懲教署投訴調查組
- 巡獄太平紳士
- 行政長官/保安局局長
- 申訴專員公署
- 立法會議員

22. 特別對於年輕囚犯，懲教署已額外鼓勵他們的父母/監護人就有關其子女的福利和權利等事宜，與院所的高級人員接觸。

23. 總的來說，懲教署已經有一個良好的制度，以確保囚犯的權利得到保障。懲教署亦會繼續努力，加強有關的制度。

仿行醫院管理局轄下醫院的日常巡房制度

24. 目前，衛生署的駐院醫生每日都會巡房，為囚犯診治生理毛病，而醫院管理局(醫管局)的臨床精神科醫生也會每日前往小欖精神病治療中心，評估新症並為舊有病人覆診。

25. 經仔細考慮後，醫管局認為普通科醫院所採取的日常巡房制度未必適用於小欖精神病治療中心，因為患有精神病的囚犯需要另闢地方接受診治，以便有更多時間與到診的精神科醫生私下討論問題。

精神科醫生、醫生和護理人員的每周會議

26. 目前，前往小欖精神病治療中心出診的精神科醫生，每月都會與護理人員舉行跨科病理個案會議，討論到期接受精神健康覆核審裁處覆查的個案。如有需要，衛生署樂意派出醫生參與討論。

27. 醫管局會視乎有多少病情複雜的囚犯，需要為此進行跨科病理討論，從而考慮會議是否有需要每星期舉行。

小欖精神病治療中心駐院精神科醫生

28. 醫管局現有一隊共六名到診法醫精神科醫生負責為小欖精神病治療中心的所員提供日常的醫療服務，診療時間為星期一至五的正常辦公時間。其中三名法醫精神科醫生亦會於星期六早上辦公時間為所員提供服務。

29. 對於為小欖精神病治療中心提供駐院精神科醫生的建議，特別是涉及的資源問題，醫管局必須考慮到向中心提供醫療和精神科服務的整體情況，全面審慎地研究。

停止施用強力鎮靜劑

30. 處方和選擇用藥須因應每個人的不同需要，由專業醫護人員決定。不過，我們已按照特別工作小組的建議，在用藥和監察制度方面採取更嚴格的程序。

英國皇家精神病醫生學會參觀小欖精神病治療中心暨改善服務事宜

31. 一九九五年十一月十四日，英國皇家精神病醫生學會三名精神科醫生（包括該學會召集人）參觀了小欖精神病治療中心。該學會代表於參觀後作出以下評語：

「非常多謝院方詳細解答我們的提問。院方的保安工作最令我們印象深刻。希望隨著院方聘得更多醫護人員及改善若干環境問題之後，可加強對病人的照顧，應付其精神健康需要。」

32. 二零零零年三月二十一日，該學會再有另外三名精神科醫生到訪小欖精神病治療中心。他們於參觀後作出以下正面評價：

「我們代表英國皇家精神病醫生學會參觀貴院，此為正進行認證工作的一部份。對於貴院為幫助精神病人而做的許多工作，以及進行中的評估工作，我們都十分欣賞。同時亦很感謝貴院工作人員的接待。我們認為貴院具有很高的專業水準。多謝各位。」

33. 自一九九五至九六年度以來，由醫管局派至小欖精神病治療中心的醫生及精神科醫生人手逐步增加，有關數字如下：

<u>年份</u>	<u>人數</u>
<u>一九九五年</u>	精神科顧問醫生一名 高級醫生（精神科）一名 醫生（精神科）二名
<u>一九九六年一月</u>	精神科顧問醫生一名 高級醫生（精神科）二名 醫生（精神科）二名
<u>一九九六年七月</u>	精神科顧問醫生一名 高級醫生（精神科）二名 醫生（精神科）三名
<u>一九九六年十月</u>	精神科顧問醫生二名 高級醫生（精神科）一名 醫生（精神科）三名

34. 改善小欖精神病治療中心的服務，是管方不斷進行的工作。簡言之，小欖精神病治療中心過去數年已推行下列計劃：

- 改善內部的顏色配搭；
- 設置數個大型雀籠作興趣/消閒之用；
- 設置魚池/水族箱作興趣/消閒之用；
- 在日間播放輕音樂；
- 改善病人的小組/個人輔導計劃；
- 改善診症室設施；
- 為精神科醫生及護理人員設立醫學圖書館；
- 改善病人的康復服務，包括邀請非政府機構和宗教團體提供更多服務。

就美國佛羅里達州、加拿大和香港三地向囚犯施用鎮靜劑的程序比較而作出的回應

35. 是否需要徵求囚犯同意：雖然目前並無規定須在向囚犯施用鎮靜劑前，先行取得他們口頭或書面同意，但囚犯一般可按其本人意願，拒絕服用處方藥物。然而，假如情況緊急，專業醫護人員認為有必要施用鎮靜劑，以免囚犯危及他人或傷害自己，則不一定可以事先取得囚犯口頭或書面同意。

36. 醫生在施用鎮靜劑的過程中所擔當的角色：主診醫生向病人解釋其病情和所接受的治療是良好的臨牀常規，醫管局及衛生署會鼓勵醫生在施用鎮靜劑前，向囚犯詳加解釋。

提交文件

37. 現提交上述資料予委員參考。

保安局/衛生福利及食物局

HONG KONG POLICE FORCE
STATEMENT /REPORT

Report No. 2002180301WKBL TSD, Crime Wing Station
Name of informant/witness. [REDACTED] C.C.C. No. 4151-3057-2818
Age. [REDACTED] Sex. [REDACTED]
Address. [REDACTED]
Tel No. [REDACTED] Occupation. Inspector of Police
Nationality and dialect. [REDACTED]
Taken by [REDACTED] in English language
at 1:06 hours on 30 September 2002 at (Place) Technical Services Division.
Interpreter. None

I am willing to make a statement to the Police The statement I am about to make is true to the best of my knowledge and belief and make it knowing that if wilfully state anything which I know to be false or do not believe to be true I may be liable to prosecution for a criminal offence

Signed

Witnessed by

Interpreted by

am an Inspector of Police presently attached to Technical Services Division, Crime Wing Hong Kong Police Force

I was awarded B.Eng (First Class Honours) in Electronic Engineering in 1992 by University of London am an active member of International Association for Identification and Society of Motion Picture and Television Engineers. I am also a member of Institute of Electrical and Electronics Engineers I have experience in electronic designs including power, analogue and digital circuits. I have received audio and video examination training. My forensic case experience includes audio and video tape examinations, recorder examinations, electronic instrument examinations, authenticity examinations, computer and data evidence recovery and analyses. I have accomplished more than 850 forensic cases and handled more than 1200 exhibits. I have been accepted as expert witness in Court of First Instance, District Court and Magistracy

The following are the specifics of the service which I provided between 14:50 hours on 13 May 2002 and 16:20 hours on 30 September 2002.

File/Case Number: CPK RN 01019194

Other Reference: (2617) in TSD.R&D.9007

Service requested: Video Authenticity Examination

Service requested by: [REDACTED]

Specimens received: 13 May 2002

from: [REDACTED]

Q1 One Sony E180 video cassette tape marked in part "SUN" and

Q2 One Panasonic AG-6720A-B video recorder with serial number J1TA00133

Service Provided:

Specimen Q1

An authenticity examination was conducted between video counter 0:00:00:00 (the tape beginning) and video counter 1:03:39:22 of specimen Q1. The range corresponded to 16.97 hours if the specimen was recorded by using 48 hours mode.

The findings are listed below, with reference to 0 Hour 0 Minute 0 Second 0 Frame as the beginning of the specimen tape:

Event 0: At video counter: 0:00:00:00

It was the beginning of the specimen tape. Video image began at the locaton. Control signal was not observed before this event. Record-start signature with double occurrences of control track patterns was identified.

Event 1: At video counter: 0:04:12:09

A single frame with noisy white streaks was located at this event. Normal magnetic pattern was observed.

Event 2: At video counter: 0:05:21:21

A single frame with noisy white streaks was located at this event. Normal magnetic pattern was observed.

Event 3: At video counter: 0:21:23:12

A single frame with noisy white streaks was located at this event. Normal magnetic pattern was observed.

Event 4: At video counter: 0:29:26:03

A single frame with noisy white streaks was located at this event. Normal magnetic pattern was observed.

Event 5: At video counter: 0:31:33:24

A single frame with noisy white streaks was located at this event. Normal magnetic pattern was observed.

Event 6: At video counter: 0:34:35:15

A single frame with noisy white streaks was located at this event. Normal magnetic pattern was observed.

Event 7: At video counter: 0:37:53:1

A single frame with noisy white streaks was located at this event. Normal magnetic pattern was observed.

Event 8: At video counter: 0:40:35:08

A single frame with noisy white streaks was located at this event. Normal magnetic pattern was observed.

Event 9: At video counter: 0:50:34:12

A single frame with noisy white streaks was located at this event. Normal magnetic pattern was observed.

Event 10: At video counter: 1:03:39:22

Blank screen was observed. Missing control signals lasted for 25.15 cm. Record-over stop signature was identified.

Specimen Q2

The specimen was tested for its functionality and its relationship with specimen Q1. It was found that specimen Q2 was in good working condition. The magnetic head signatures and characteristics produced were compatible with the recording on specimen Q1.

Conclusion:

Based on the findings, it is indicated that the video recording in specimen Q1 was an original recording. The relevant video segment from event 0 to event 10 was written over onto the specimen from the beginning of the tape. Before this overwriting, the specimen was not a blank tape. The noisy streaks from event 1 to event 9 can be caused by abnormality with video source signal or the existence of dirt on the specimen tape during recording. Based on the characteristics of the recording, in my opinion, there was no tampering found in the relevant video segment of the specimen

Specimens Q1 and Q2 were released to DSPC [REDACTED] on 30 September 2002 at 16:20 hours.

Comments:

An authenticity examination on video recording is to determine whether an investigative magnetic video tape is an original or a copy, and the characteristics of the recordings, including any alterations to the tape.

The methodology of examination includes the following procedures and analyses


- 1 Documentation of the evidence
- 2 Inspection of the evidence tape to identify damages and proper playback configuration.
- 3 Critical listening and viewing to ensure that all questionable events in the designated areas are recorded.
- 4 Physical inspection to identify splices, tape damage and any physical alterations.
Magnetic development to visually reveal the events recorded on the tape Various magnetic head signatures and artefacts can be located.
- 6 Electronic analysis to determine the signal characteristics of the evidence recording.
Comparison analysis to compare examination findings with those of controlled test results.

Terminology and explanations

- 1 An event is defined as a collection of one or more areas of interest on a tape, which requires detail investigation
- 2 A video counter is a running reference number showing on a video tape player
- 3 A start signature is a collection of recording properties, which is caused by a start recording operation of the recorder.
- 4 A record-over stop signature is a collection of recording properties, which is caused by a stop operation during the progress of overwriting a previous recording

This statement consisting of five page(s) in English language, signed by me, has been read by me. I understand that I can correct, alter, and add anything I wish.

Signed

A handwritten signature in black ink is written over a thick, solid black horizontal bar that redacts the name of the signatory. The signature consists of several loops and a long horizontal stroke.

1640 hours on 2002.9.30

HONG KONG POLICE FORCE
STATEMENT /REPORT

Report No. 2002180301WKBL TSD, Crime Wing Station
Name of informant/witness. [REDACTED] C.C.C. No. 4151-3057-2818
Age. [REDACTED] Sex. [REDACTED]
Address. [REDACTED]
Tel No. [REDACTED] Occupation Inspector of Police
Nationality and dialect. [REDACTED]
Taken by [REDACTED] English language
at 11:06 hours on 13 February 2003 at (Place) Technical Services Division
Interpreter. None

I am willing to make a statement to the Police The statement I am about to make is true to the best of my knowledge and belief and I make it knowing that if I wilfully state anything which I know to be false or do not believe to be true, I may be liable to prosecution for a criminal offence.

Signed

Witnessed by

Interpreted by

I am a Senior Inspector of Police presently attached to Technical Services Division, Crime Wing, Hong Kong Police Force

I was awarded a Bachelor of Engineering (First Class Honours) degree in Electronic Engineering and a Master of Philosophy degree, in year 1992 by University of London and year 2002 by City University of Hong Kong respectively. I am an active member of International Association for Identification and Society of Motion Picture and Television Engineers. I am also a member of Institute of Electrical and Electronics Engineers. I have experience in electronic designs including power, analogue and digital circuits. I have received audio and video examination training. My forensic case experience includes audio and video tape examinations, recorder examinations, electronic instrument examinations authenticity examinations computer and data evidence recovery and analyses I have accomplished more than 850 forensic cases and handled more than 200 exhibits. I have been accepted as expert witness in Court of First Instance, District Court and Magistracy

The following are the specifics of the service which I provided between 12 5 hours on 19 November 2002 and 11:25 hours on 12 February 2003

File/Case Number: CPK RN 01019194

Other Reference: (2869) in TSD.R&D.9007

Service requested: Videotape Examination

Service requested by: [REDACTED]

Specimens received: 19 November 2002

from: DSPC [REDACTED]

Q1 One Sony E180 video cassette tape marked in part "SUN" and

Q2 One Panasonic AG-6720A-B video recorder with serial number J1TA00133

Service Provided:

Further to the request by SIP [REDACTED] on 14 November, 2002, an examination was conducted in order to address the issues that were listed in the request memo.

Findings:

Specimen Q1

After the first segment (from video counter 0:00:00:00 to 1:03:39:22) there was only one other segment of video found in the remaining portion of specimen Q1. This segment lasted for about 40 minutes in 48-hour mode recording. The rest of the tape which was equivalent to about 33 hours, was identified as virgin tape, that is, this portion of tape has never been used for recording.

Specimen Q2

During the test on specimen Q2, the video recorder, it was found that the on-screen date-time clock of Q2 was in good working condition. A test tape was made using specimen Q2 at 48-hour mode. Making reference to the on-screen clock, it was confirmed that the recording speed of specimen Q1 was in agreement with the test tape's. This indicates that specimen Q2 was not malfunctioning by running at a slower speed than normal.

In addition, it was found that at 48-hour mode, the recording speed of specimen Q2 was running at 1.376 mm per second. On the other hand, had it been the case that the

first segment (from video counter 0:00:00:00 to 03:39:22 of specimen Q represented a 24-hour recording, the calculated running speed of the recorder would have been 34 mm per second, which was about 25 percent slower than the measured speed of specimen Q2. Hence, specimen Q1 did not represent a 24-hour recording

Comments:

Providing that specimen Q2 was in normal working condition when Q1 was made, I suggest that the recording would have been started late and/or stopped early so that only about 17 hours of video had been recorded in the first segment.

As have mentioned in my statement dated 2002.09.30, the first segment was written over onto the specimen from the beginning of tape. Since specimen Q1 was a reused videotape, there would be certain number of previous recordings that had been written over. On specimen Q I found that the overwritten previous recording was not retained on the tape

Typically an overwrite operation rearranges the magnetic pattern on the videotape. Therefore, an attempt to recover the overwritten recording would turn into a wasteful

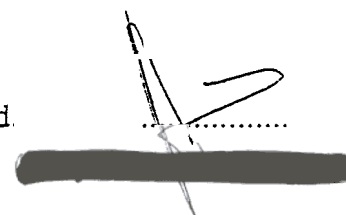
Conclusions:

Specimen Q2 was not malfunctioning by running at slower speed than normal. Specimen Q1 did not represent a 24-hour recording. The last 33 hours of specimen Q was virgin tape. No previous recordings that had been written over was recovered

Specimens Q1 and Q2 were released to DSPC [REDACTED] on 12 February 2003 at 1 25 hours

This statement consisting of three page(s) in English language, signed by me, has been read by me. I understand that I can correct, alter, and add anything I wish.

Signed.



1140 hours on 2003.2.2

節錄於
就二零零一年十一月十九日
小欖精神病治療中心
張志堅 (DAR 21341-01) 死亡事件
成立的特別工作小組報告

數碼閉路電視系統的特別功能和優點

6.19 由於資訊科技的發展，數碼閉路電視系統可達致下列運作效能和保安目的：

- (a) 雖然監視器顯示的影像仍是斷續錄像模式運作，但所有監視攝錄機所拍攝的影像可連續記錄為數碼資料。
- (b) 所有的資料會在內置式數碼錄影機的硬碟儲存 14 日¹¹。當硬碟存量滿溢，最先儲存的資料會自動洗去，由新儲存的資料取代。簡而言之，在任何時候，系統內的數碼資料均保存 14 日，並能隨時取閱。
- (c) 數碼錄影機內通常設有三個備份硬碟，可避免因任何硬碟失靈導致意外喪失資料。(但這項先進技術，即“RAID¹² 5”技術，須在較後期提供，而不會在二零零二/零三年的改善計劃中出現。在過渡期間，署方可為系統提供額外的數碼錄影機，作備份儲存裝置。)
- (d) 通過使用內置的光碟燒錄機和適當授權安排，任何儲存在硬碟內 14 日期限的資料，包括突發事件和特別情況的記錄，都可下載和燒錄在唯讀光碟上。採用合適的軟件，唯讀光碟的真確性可予核實。
- (e) 數碼系統設有保安措施，防止未經授權人員使用或干擾。
- (f) 比對模擬系統只可用紙筆登記操作人員的姓名，數碼系統容許操作人員張身分載錄於閉路電視的影像中，以字幕形式顯示，及記錄在系統中。換句話說，系統記錄的每幅影像均印上操作人員的姓名。因此，數碼閉路電視系統能提供更可靠的方法，記錄系統操作人員的身分。
- (g) 數碼資料列印出來的影像解像度¹³較模擬系統的為高。

¹¹ 就技術而言，數碼錄影機硬碟的數碼資料儲存期視乎多項因素而定，如硬碟容量、某指定組別的攝像機數目、畫面速度（攝像機每秒拍攝的畫面數目）及影像的解像度。

¹² Redundancy Arrays of Independent Drives (RAID)

¹³ 拍攝的照片解像度將是 384 x 288 圖素。