



INVESTIGATION REPORT

DECEMBER 2007



OLD GEELONG GAOL

TABLE OF CONTENTS

Location and Background Information	
Site details.....	3
Historical background	3
Previous reports of paranormal activity	4
Historical events possibly connected with reported ghosts	5
Site appraisal	6
Equipment	
Infrared laser thermometers and weather stations	8
EMF detectors	8
Still and video cameras	8
Night vision equipment	8
Infrared illuminators	8
Passive infrared and ultrasonic movement detectors	8
Thermal imaging cameras	8
Infrared surveillance cameras	9
Sound and vibration recorders and analysers	9
Environment monitoring equipment	9
Airborne particle monitors	9
Air quality monitors	9
Radiation monitors	9
X-10 equipment	9
DVR systems and computers	10
Customised equipment	10
Portable power packs	10
Other equipment	10
The Investigation	
Introduction	11
Session 1	12
Session 2	12
Session 3	14
Session 4	15
Session 5	15
Session 6	16
Post investigation events	18
Environment Monitoring Results	
Temperature and humidity	19
Atmospheric pressure	20
Carbon dioxide and carbon dioxide	20
Infrasound	21
Conclusions and Recommendations	
Rating system	22
Recommendations	23
Site classification	23
Acknowledgements	23



Ghost Research International
www.ghostresearchinternational.com

© Copyright all rights reserved. No part of this report may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopying, recording, or otherwise, without the prior written permission of Ghost Research International. Dist No. W010.

LOCATION & BACKGROUND INFORMATION

SITE DETAILS

LOCATION: Old Geelong Gaol
Corner of Myers and Swanston Street Geelong,
Victoria, Australia 3220
38°09'13.95"S 144°21'55.98"E
Elevation: 24 metres

DATE/TIME: 8pm Sat Dec 8th - 4am Sun Dec 9th 2007

CONDITIONS: Moon: Set 7:25pm (8/12) Rise 4.54am (9/12)
Disc Illum: 2.19%
Age: 28.3 days (Waning crescent)

Sun: Set 8.31pm (8/12) Rise 5.53am (9/12)
Solar X-Rays: Normal Geomagnetic Field: Quiet
Temp: Min 11°C Max 24°C



HISTORICAL BACKGROUND

Before the Geelong gaol was opened in April 1853 prisoners were held in the South Geelong Gaol at the corner of Balliang and Yarra Streets or in police watch houses. The South Geelong Gaol held up to 60 prisoners in 4 slab huts where conditions were horrendous.

The Colonial Clerk of Works, Henry Ginn, designed the Geelong gaol which was based on the Pentonville, London model. It was constructed in brick, bluestone (basalt) and volcanic rock in stages between 1849 and 1864 at a cost of £31,595.

TIMELINE

- 1853 A goal for convicts and prisoners. The West wing was opened in April 1853 and by 1860 the gaol held 89 prisoners.
- Nov 6th 1863 The first execution on the gaol gallows was that of James Murphy who was hanged for the murder of Constable Daniel O'Boyle who was attacked at the Warrnambool courthouse.
- Oct 28th 1865 Thomas Menard was hanged at the gaol gallows, becoming the second and last execution carried out inside the gaol. Previous executions were conducted at "Gallows Flat" nearby including those of John Roberts (1854), John Gunn (1854), James Ross (1856) and Owen McQueeney (1858).
- 1865-1871 The East wing was used for the Myers St. Industrial School for Girls. In the height of the gold rush 180 girls aged between 9 and 16 were brought to the gaol after being found living on the streets. In 1871 a Royal Commission into Penal Discipline recommended the immediate closure of the Industrial School for Girls, referring to "the dismal and dispiriting aspect of it's dungeon cells". The East Wing was reclaimed as a prison in 1873



Goal exhibit at the gallows.



Level 1 East Wing in darkness.

- Oct 28th 1877 The Gaol became a hospital gaol
The 1871 Royal Commission into Penal Discipline also recommended that Geelong be used to house “all disabled, decrepit or aged prisoners incapable of working within the prison system”.
- 1893 A morgue was constructed in the southern yard. Although there were minimal executions actually conducted at the gaol, there were many deaths from other causes. It is believed that there were at least three on site burials.
- 1940-1947 Army detention barracks
Around the time of World War II the gaol was used to hold 192 soldiers.
- 1947-1958 The goal returned to service as a hospital gaol receiving 100 prisoners from Pentridge.
- 1958 The morgue was demolished.
- 1958-1991 Training Prison
The goal was used to educate prisoners in various trades including printing, sign writing, painting, tailoring, brick laying and toy making. Capacity of the gaol was 130 and in 1960 there were 119 inmates. The tailoring workshop was originally located upstairs on the second floor, which was previously the hospital and chapel. Later the tailoring shop was housed in the Terrapin building outside in the south west exercise yard.
- 1965 A dining hall was built on the site of the morgue and formed the south wing adjoining the kitchen. Previously inmates ate in a shelter located in the exercise yard.
- Late 1950’s The external shower block was built in the late 1950s. Apparently some of the worst crimes which occurred in the gaol took place there.
- July 1991 The prison was closed and the majority of the prisoners were transferred to Barwon prison. Upon closing Geelong was the oldest inhabited gaol in Victoria. It was also the first to have electric lighting.
- 1995 The dining hall which was on the site of the original morgue was demolished.



The external shower block.

PREVIOUS REPORTS OF PARANORMAL ACTIVITY

Past inmates report hearing female cries at night especially in the east wing, the site of the Industrial School for Girls 1865-1871. Tour guides have reported various occurrences including swirling mists, general weird feelings and people being struck.

The site has been visited by various research teams who have reported strange mists, sounds, electromagnetic field disturbances and orbs. Mediums and other “sensitive” people have been employed by some who report the presence of various spirits in the gaol. The area of the infirmary, cell 45, the gallows and the external shower block are reportedly the sites of most activity.

The teams previous visit in June 2007 recorded “scrapping” sounds near the infirmary, temperature fluctuations of up to 7°C, PIR detector activation, EMF spikes and sudden battery drain in the area of the kitchen.

HISTORICAL EVENTS POSSIBLY CONNECTED WITH REPORTED GHOSTS

Many deaths occurred at the gaol including two known executions. A morgue existed on site for a time in order to cope with those inmates who's life ended whilst they served their sentences.

During it's time as a hospital gaol it housed many sick, frail and aged inmates who spent the remainder of their lives in the gaol.

As with most jails suicides, accidental deaths and murders occurred within it's confines. It is believed that a prisoner was thrown or fell from the top level outside cell 77, hit the cross beam outside cell 43 on level 2 and landed outside cell 6 on level 1. He died four hours later. Wire mesh was added to the open areas between floors at a later date. The bend in the cross beam is still visible today.



Level 2 West showing the bent cross beam (centre) where a falling inmate collided.

It is believed that a few inmates were buried on site as was standard practice for a time when the bodies of the deceased were not claimed. It is believed that such burials were on unconsecrated ground, with the bodies "standing up" and facing inwards to the gaol ... So as never to "see" freedom.



The southern wall of the east block where it is believed the arrow indicates the burial of prisoner.

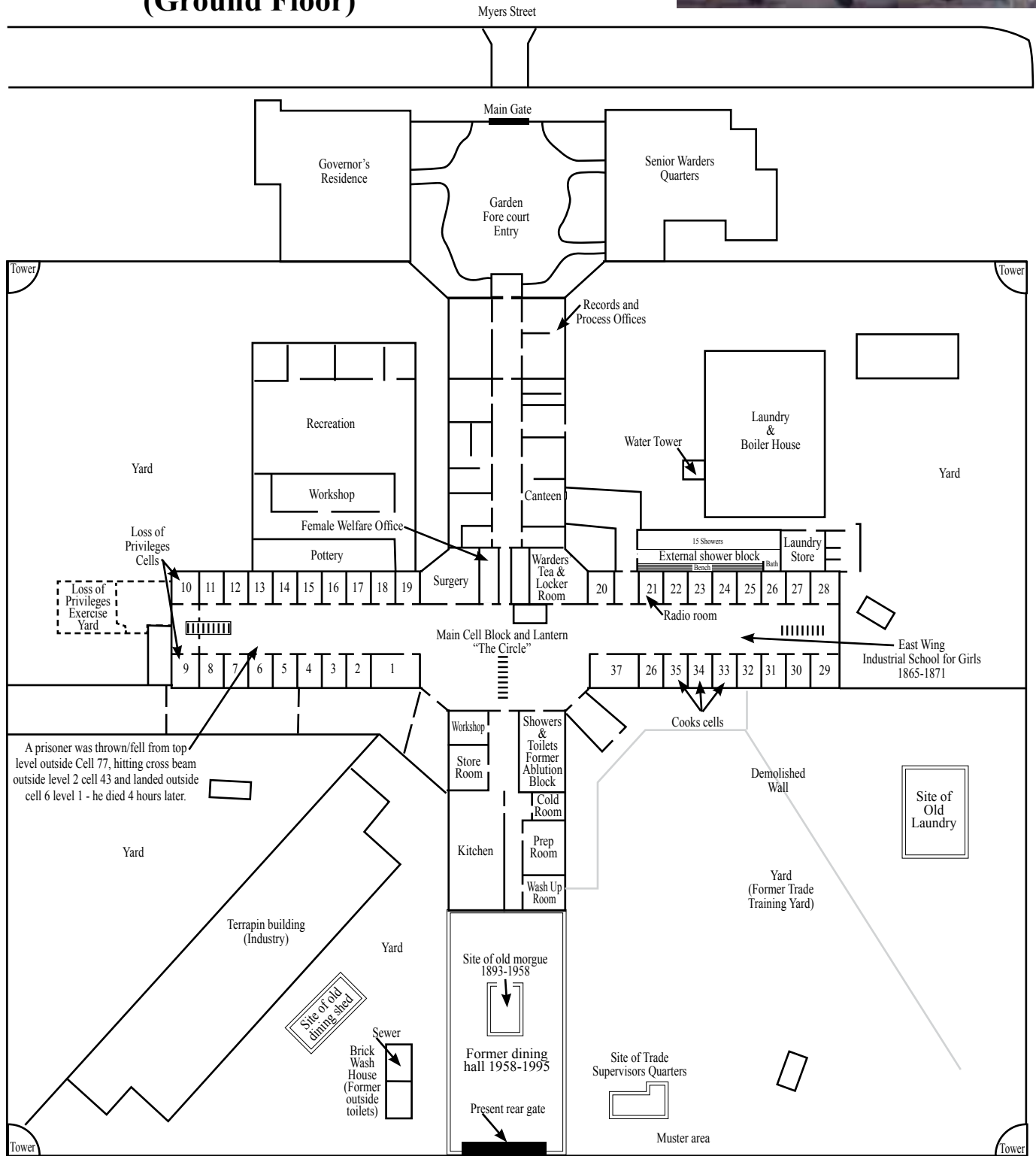
SITE APPRAISAL

The Rotary Club of Geelong now operate the gaol which stands virtually as it did when it ceased operation in 1991. The building is quite formidable with 3 levels and a capacity for 130 inmates.

The east and west blocks were used for prison cells, the north was the administration block and south block contained the kitchen, infirmary, chapel and workshop.



**Old Geelong Gaol - Level 1
(Ground Floor)**



The volunteers of the Geelong Rotary Club have expended considerable effort in creating displays which give the visitor a great insight into what life was like in the gaol. One cell on the lower level of the east wing even portrays the ghostly aspect of the gaol.



Level 1 Cell display with a ghostly atmosphere.

The site definitely presents a “spooky” atmosphere which may promote an expectation of activity. Sounds can be heard from outside the gaol at times so particular care must be taken in identifying the origin of any reported audio events.

Being a large site and used relatively infrequently, considerable movement may dislodge a large amount of dust which could result in photographs of “orbs” being reported. Careful examination should be made to determine whether they are out of focus moisture, dust or insects caught inside the camera’s focal point and illuminated by the camera’s flash. Some believe that true “orbs” are balls of energy of ghostly origin. To be considered as a ball of energy it would be necessary to establish that the object is giving off it’s own light rather than reflecting it and ideally any movement should have independent and possibly intelligent type features. During our investigations possible orbs are noted but without any collaborating data or unusual characteristics displayed they are generally rated as “inconclusive” at best.

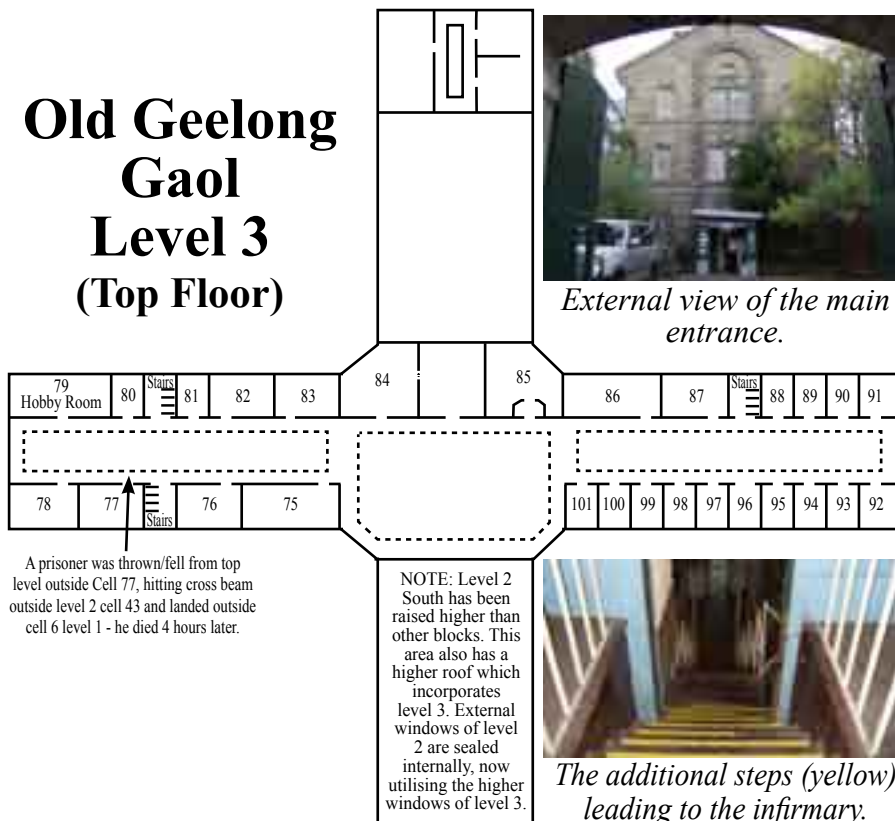
The gaols layout is conducive to establishing and maintaining a controlled environment to enable experiments with trigger items, seances, mediums etc... and considerable room for monitoring equipment.

Old Geelong Gaol Level 2 (Middle Floor)



Level 2 East block

Old Geelong Gaol Level 3 (Top Floor)



External view of the main entrance.



The additional steps (yellow) leading to the infirmary.

EQUIPMENT

The team utilises various pieces of equipment during investigations. For the Geelong investigation we also called on the vast resources of TechRentals, a leading specialist instrument supplier and a division of the TR Corporation. This allowed the team to study the site at a greater level than had been done previously and to evaluate the use of such equipment for further research.

Because of the many theories surrounding paranormal phenomena, readings are taken from a large gamut of instruments in an effort to record anything that could be helpful to determine a cause - natural or otherwise.

Some of the equipment which the team may use on investigations, including that from TechRentals is given below with a brief description of each.



INFRARED LASER THERMOMETERS

Infrared laser thermometers are used to monitor temperature fluctuations. Rather than recording the air temperature, they indicate the surface temperature of objects they are directed at.



EMF DETECTORS

Electro Magnetic Field detectors are used to detect changes in the electromagnetic field which some believe may indicate paranormal activity. Conversely high EMF has been linked to causing people to feel nauseous, experience headaches, sense a presence and even hallucinate.



STILL AND VIDEO CAMERAS



A range of still and video cameras are used including the two items displayed here. The Finepix F30 camera (left) was voted the best low light compact camera in 2006 - capable of shooting at ISO3200 at 6.3 megapixels it can minimise the necessity for a flash. Camcorders with nightshot functions are also used and their abilities may be enhanced with the addition of infrared illuminators like the one at right.



NIGHT VISION EQUIPMENT

Night vision equipment such as monoculars, scopes, binoculars and goggles which incorporate light intensifying tubes and infrared illumination allow the observation of otherwise dark locations.

INFRARED ILLUMINATORS

Assorted infrared illuminators are used to enhance night vision devices such as night scopes, nightshot camcorders and IR surveillance cameras. The spotlight (at right) is a rechargeable 5,000,000 candle power spotlight modified so it can emit either normal or invisible infrared light.



PIR AND ULTRASONIC MOVEMENT DETECTORS

Passive infrared and ultrasonic movement detectors can be used in two ways - assisting to make a controlled location ensuring human interference can be detected or it can indicate movement where there's no reason for it.

THERMAL IMAGING CAMERAS

A range of thermal cameras may be used including the Marconi Argus 2, SAT S160, FLIR Systems E45 and InfraCam. They provide a visual picture of the temperatures present in a location and can identify the presence of animals which may be causing false reports.





INFRARED SURVEILLANCE CAMERAS

These are interfaced into the DVR system, with in built infrared light emitting diodes they send out infrared light to which the cameras are sensitive to, but is invisible to the human eye. Wired and wireless models are used dependent on site conditions.



SOUND AND VIBRATION RECORDERS AND ANALYSERS

A range of audio recording devices are used to capture, monitor and analyse any unusual sounds from a location.

The Svantek 912A Sound Vibration Analyser (left) is used to monitor sub-sonic noise in the frequencies of 0Hz to 20Hz. This covers the region of infrasound, which current scientific studies reveal may contribute to reports of unusual activity.



ENVIRONMENT MONITORING EQUIPMENT

A range of monitoring equipment may be used to accurately record environmental conditions such as temperature, humidity, dewpoint, barometric pressure, rainfall, wind speed, wind direction and altitude.

Data is collected from multiple points and relayed back to the control station where it is charted against time and monitored for any fluctuations. Some people believe there may be fluctuations in temperature and barometric pressure when paranormal activity is experienced.



At right is a HIOKI 3651-20 kit of 8 temperature and humidity loggers which can be used to monitor various points around a site with relative ease. Portable weather stations may also be used to record temperature, humidity and barometric pressure.



AIRBORNE PARTICLE MONITORS

The TSI 8520 DustTrak Airborne Particle Monitor measures the quantity and size of dust particles in the air. This can aid to identification of unusual photographic results. A visible beam laser may also be used to give a quick indication of moisture and dust particles in the air as well as determining angles of light and accurate positioning of cameras.

AIR QUALITY MONITORS

Devices like the TSI Q-Trak plus Indoor Air Quality Monitor (right) record temperature, humidity, carbon dioxide and carbon monoxide levels. Increased levels of such gases are thought to be possible contributors to reports of unusual activity. By monitoring such levels it can assist to verify or rule out their influence in reported events.



RADIATION MONITORS

There are some documented cases where Geiger counters have indicated increased levels of radiation during reported activity.

The SE International 4 Nuclear/X-Ray Monitor (left) which monitors Alpha, Beta, Gamma and X-ray radiation may be used to record such results.

X-10 EQUIPMENT

A range of X-10 equipment may be used to allow control of mains devices such as lights and appliances. The DVR computer also contains software that can also take control or monitor any X-10 enabled devices including PIR detectors. Alternatively this can also be configured to allow control and monitoring from a remote location.

DVR SYSTEMS & COMPUTERS

The central control computer used at investigations is designed to match the needs of a particular site. It often incorporates a Digital Video Recording Surveillance system. Multiple computers are available enabling simultaneous investigations to take place. The DVR systems can record up to 16 cameras continually for well over 24 hours, this is extended considerably if less cameras are used or any camera is placed in motion detection mode.

The computers also provide for transferring data from digital cameras and audio devices on site, controlling X-10 equipment, recording data from environmental sensors and logging reported events into the system. Once set up the system may be monitored or controlled remotely if an internet connection is available. This allows for the control of cameras, X-10 and environment monitoring equipment off site, as well as the broadcasting of all data to a remote location.



Some products such as a thermal imaging camera may be required to be used in a mobile configuration rather than being fixed in a static location. A portable system such as the Archos AV700 Mobile DVR may be used for this purpose or alternatively a wireless transmitter added to relay images and sound to the DVR computer.

CUSTOMISED EQUIPMENT

We do specially construct or modify items to suit our requirements - at left is the remote unit which includes infrared camera, additional 48 LED infrared illuminator, ultra violet and red lights - all controlled via wireless remote. A single connection is all that's required to power the unit. The camera can pan through 300 degrees and the lights switched on or dimmed from the control desk. The ultra violet and red lights are for testing at the edges of the visible spectrum which some believe may provide a greater chance of capturing an image. Seances of old were often held in red lighting for this reason.



PORTABLE POWER PACKS



Whilst it's always preferable to have mains power available when and where required, it doesn't always work that way.

The need for portable power is evident at many investigations and a range of 12 volt packs are often used, as well as 240 volt inverters providing mains power when it is otherwise not available.



OTHER EQUIPMENT

A range of ancillary equipment is often used such as UHF two way radios etc... along with lot's of batteries, cables and coffee as required!



Left: Set up of equipment in "The Circle" at the Old Geelong Gaol

THE INVESTIGATION

The team arrived for the investigation at 8pm on December 8th 2007 with seven members and two guests attending. Also present earlier in the night were Reg Ryan, a photographer for the Geelong Advertiser, Graham Murphy from the TR Corporation and his wife.

Considerable time was spent in setting up all of the monitoring equipment including that provided by TechRentals of Melbourne. In total, the monitoring instruments alone which were taken into the Old Geelong Gaol had a cost price of close to \$70,000. This was a first for the gaol and possibly for paranormal research in Australia.

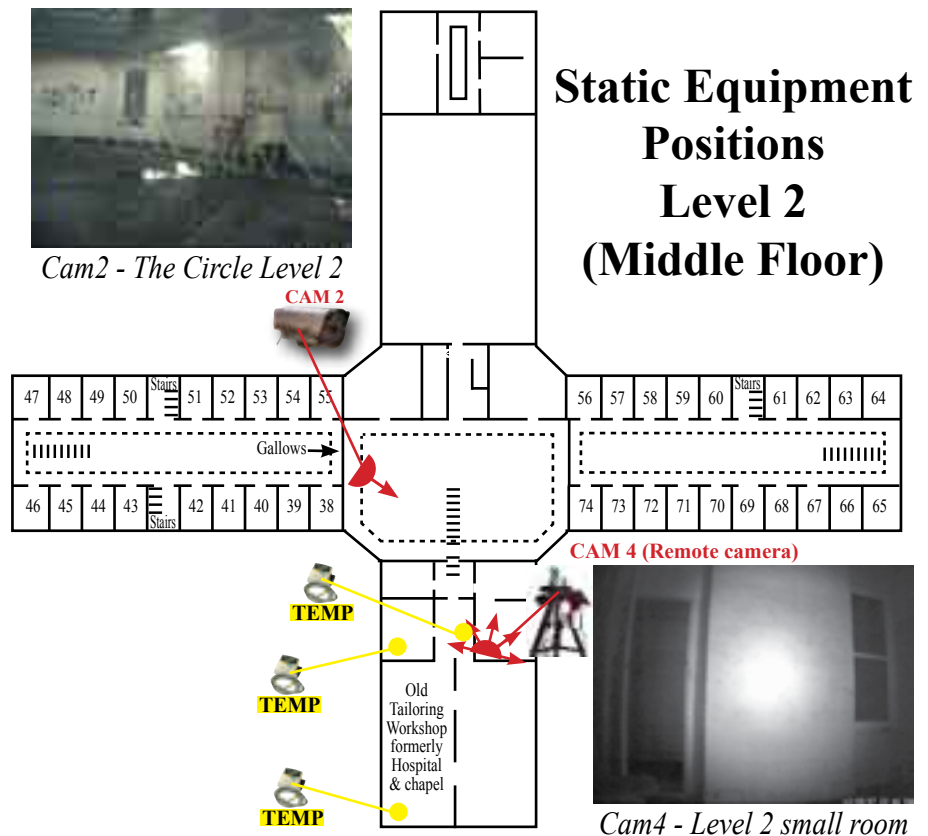
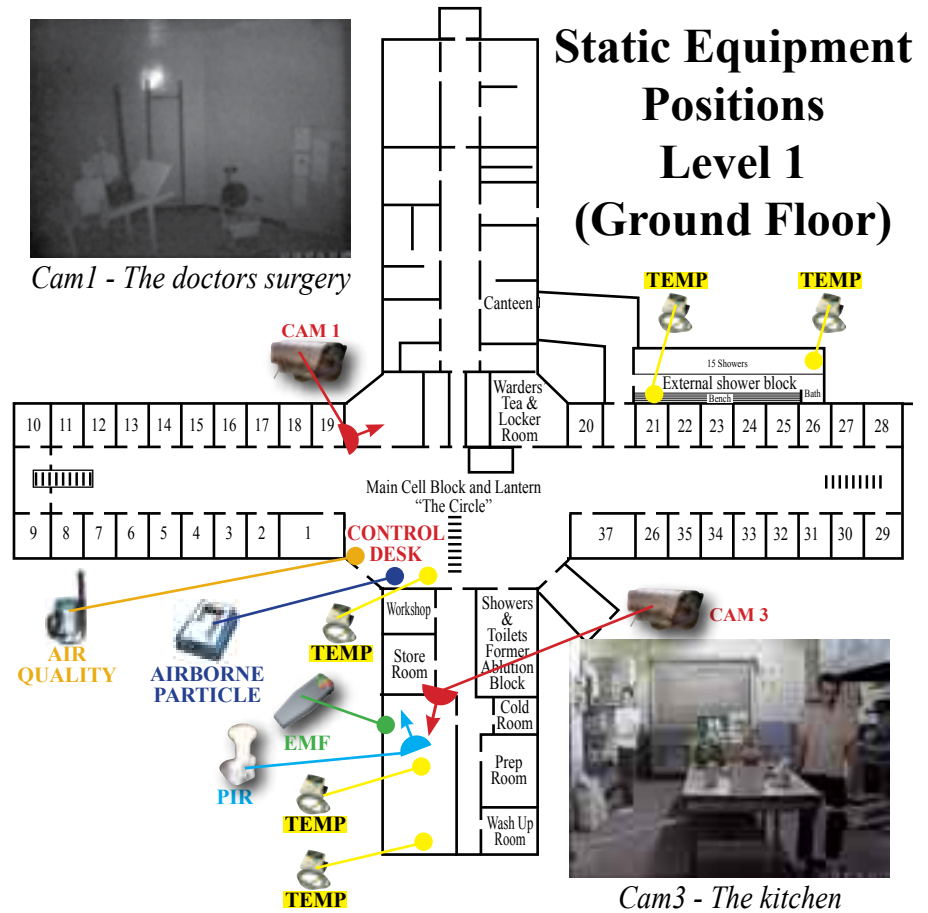
This was also the teams first opportunity to evaluate the usefulness of particular instruments for paranormal research and to try to devise the best operating procedures in order to maximise the data obtained.

It was decided that this visit would concentrate chiefly on areas that displayed activity during our previous investigation in June, giving the sensors every opportunity to record any unusual occurrences. This also gave the team the chance to examine areas which were not available in June.

The control desk was set up on the ground floor in the circle and DVR cameras were placed covering the kitchen, small room of the infirmary, the circle on level 2 and the doctor's surgery.

Following placement of some equipment in static positions the remainder was to be used in vigils during the night. Camcorders, audio recorders, EMF meters, still cameras, passive infrared detectors, thermal camera, along with additional temperature and humidity sensors were used at various points throughout the gaol during the investigation.

The DVR began recording all cameras at 9:22pm.



SESSION 1 - 22.30 - 23.00

Once set up was complete the team divided into four groups for the first vigil, these were positioned in the shower block, in the small infirmary room, the gaol's third level and at the control desk.

22:50 EMF Readings - Courtyard near showers

Readings up to 20milliGauss were reported in the courtyard area outside the external shower block on level 1. There are numerous power cables in this area which run to lighting and power boxes around the location. A hot water service is nearby and the wall to the east also borders the kitchen.

The area was also examined with the thermal imaging camera to make sure the hot water service had been operating which may account for some variations due to it's thermostat switching on an off.

The readings were able to be duplicated and no unusual fluctuations were recorded.

22:58 "Orb" - Level 3 West Wing

An orb type object was recorded in the area around cell 77. This is where an inmate was apparently thrown over the edge hitting the cross beam before falling to the ground. The inmate died four hours later. The bend is visible in the cross beam at the lower centre of the picture. As previously mentioned orbs are noted during our investigations but without further data present they are rated as "inconclusive".



Thermal image from the courtyard area on level 1 near the shower block.



Orb like object photographed on level 3 West

SESSION 2 - 23.00- 24.00

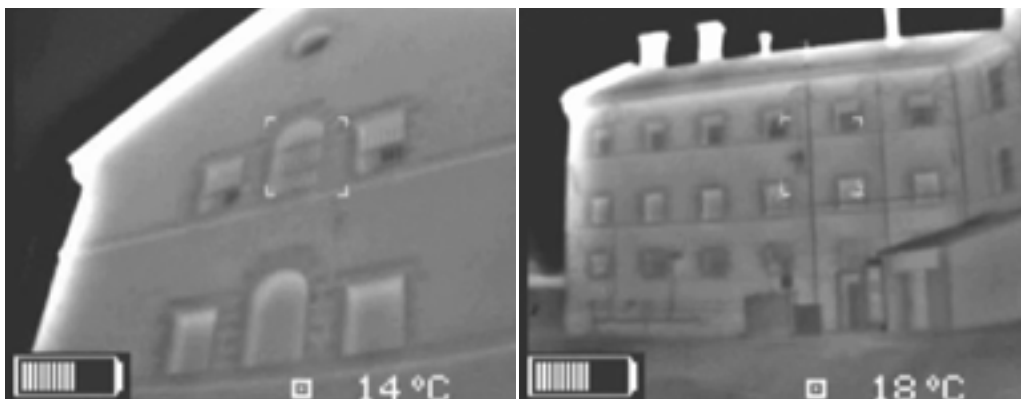
The teams rotated during the second session moving to positions in the kitchen, shower block, at the control desk and conducting a walk around with the thermal camera.

23:02 "Camera malfunction" - Level 3 West Wing

A video camera in use on the third floor unexpectedly shut down. This operator was positioned between cells 79 and 80 and filming the area of cell 45 on level 2.

23:06 "PIR movement detection" - Kitchen

A passive infrared movement detector indicated movement in the kitchen. Post investigation review of the DVR footage showed numerous activations up until 1.03 am which are looked at further in the post investigation events.



Left: Two stills from the thermal imaging camera taken during a walk around of the gaol in session 2

23:33 “Light Anomaly” - Level 2 small room

A “line of light” appeared on the DVR footage in the small infirmary room on level 2. Visible for 10 seconds it appears to move across the screen and then vanishes.

DVR footage shows that nobody was in the area of the infirmary on level 2 or outside the gaol at the time. Nothing unusual appears in a view from DVR cam 2 located at the circle on level 2.

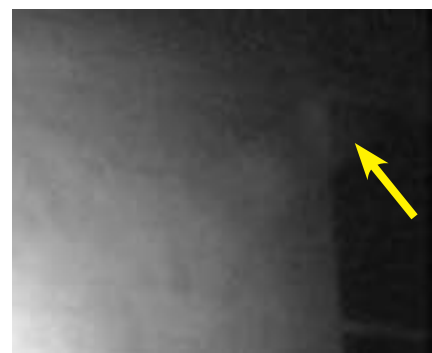
Five DVR frames from the remote camera (4) located in the small room of the infirmary on level 2. The frames are 2 seconds apart and show the movement of a “line of light” around the room.



The small room of the infirmary has been the scene of reported mists and other light anomalies in the past but this is the first time an anomaly with this appearance has been recorded on the DVR footage. While orb like objects are quite common on investigations, this anomaly displays different characteristics being that it is “string like” and moved about the room over a period of 10 seconds before vanishing.

23:54 - 23:56 “Light Anomaly” - Level 2 small room infirmary

Between 11.54 and 11.56pm the anomaly noticed over 20 minutes earlier occurred three times in the small room of the infirmary. Once again there was nobody present in the area.



A close up of the anomaly taken at 11:56pm.

SESSION 3 - 00.00- 01.00

00:01 “Torch malfunction” - Level 1 kitchen

A torch being used by a team member in the kitchen suddenly stopped working, only to work as normal upon leaving the kitchen.

00:01 “Camera malfunction” - Level 1 kitchen

A digital camera being used in the kitchen took a photo without the button being pressed.

00:06:14 “Light Anomaly” - Level 2 small room infirmary

An anomaly similar to those experienced during session 2 were recorded in the infirmary’s small room.

00:06:27 “Light Anomaly” - Level 2 small room infirmary

The “light anomaly” appears again briefly in the infirmary’s small room.

00:10:00 “Unusual Taste” - Shower block

A guest located in the shower block reported a taste similar to that of blood lasting for about 20 seconds.

00:26:02 “Light Anomaly” - Level 2 small room infirmary

20 minutes after the last appearance at 12:06am, the light anomaly being noticed in the small infirmary room appeared once again for about 10 seconds.

00:42 “Camera Malfunction” - Level 1 kitchen

Another team member’s camera took a photo without the button being pressed and then switched off.

00:47 “Coldness” - Level 1 kitchen

A feeling of coldness and goose bumps was reported by members at the northern side of the kitchen. It was in this area a drop of over 7°C was recorded during our June investigation. Unfortunately two temperature sensors at the northern end of the kitchen malfunctioned (see post investigation events) so there are limited readings available. Readings taken manually in this area of the kitchen during session 3 varied between 16°C and 20°C. A logging thermometer at the southern end of the kitchen recorded a variance of only 1.3°C throughout the night. Average temperature there was 18.6°C ranging between 17.9°C and 19.2°C.

00:52 “Feeling of presence” - Level 1 shower block

A team member in the shower block felt as if someone was very near - hearing a few knocks and bangs. The uncomfortable feelings lasted until the end of the session.

00:57:16 “Light Anomaly” - Level 2 small room infirmary

A light anomaly appeared in the small infirmary room. Each of the anomalies reported in this area were picked up post investigation upon DVR review. They all show similar features being a “line of light” often with circular brighter areas and lasting for around 10 seconds. They appeared and moved around various areas of the room, including behind the opened door. This seems to rule out light entering through the doorway, especially since this door leads to another room with a door situated further back. This would require light to bend around at least two corners in order to appear in the positions shown throughout the night. It has been established from DVR footage that there were no people present on level 2 at the time, or light entering via the only entrance door to the infirmary area.

Video of each appearance is shown on the GRI web site.



Light anomaly in the small infirmary room just before midnight.

SESSION 4 - 01.00 - 02.00

During our June investigation it was between 2 and 3 am that various events had been reported in the northern end of the kitchen area. This included sudden temperature fluctuations of up to 7°C, multiple batteries failing, unexplained PIR movement detection and EMF spikes. Earlier during this investigation the team had already reported some of the above to a lesser extent, so it was decided to concentrate on this area from session 4 in order capture any data should it occur to the same intensity as on the June visit.

An additional night vision camera was added, the DVR camera was adjusted and the PIR movement detector was repositioned. Two EMF meters were placed within camera view and an additional PIR movement detector was added at 1.34am.

01:03:56 “Light Anomaly” - Level 2 small room infirmary

A light anomaly was recorded in the doorway of the small infirmary room. This one was much fainter than others noticed on the night but again lasted for about 10 seconds as it moved to the right of screen and then upwards out of view, fading as travelled. What was becoming evident is how different these were to the normal “orb type objects” which appear on footage from most investigations - and at this site previously. Most of these can be easily attributed to dust and insects.



Fainter anomaly in the small infirmary room during session 4.

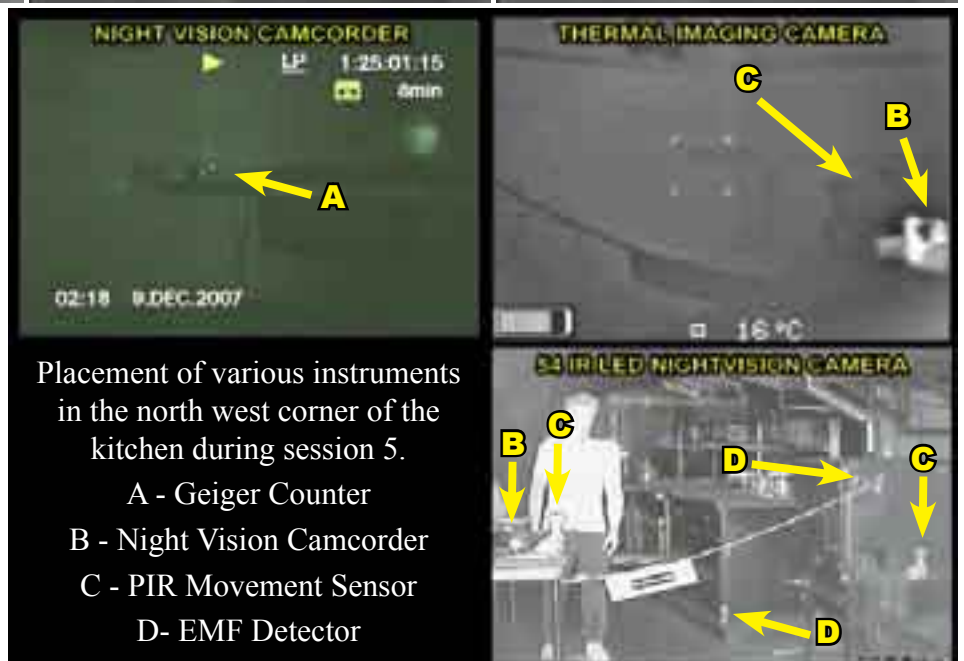
SESSION 5 - 02.00 - 03.00

At the start of session 5, as part of the evaluation of the thermal imaging camera, a test was conducted to determine how long a heat signature would remain visible on an item after the source had moved away. This of course is dependent on the temperature of the surface as well as the heat source itself, but to give some indication a person leaned against a wall and another held a torch against it. The signature of the torch disappeared after a few minutes, however the “body print” was still discernible 9 minutes later.



The thermal imaging camera was then set up in a static position facing the northern western corner of the kitchen and a Geiger counter was located in the corner itself adding to the instruments already in place.

The thermal imaging camera indicated temperature varied between 16°C and 22°C in the north west corner of the kitchen throughout session 5. A temperature logger at the kitchen’s southern side indicated a range of 17.9°C - 19.2°C, only varying by 1.3°C.



Placement of various instruments in the north west corner of the kitchen during session 5.

- A - Geiger Counter
- B - Night Vision Camcorder
- C - PIR Movement Sensor
- D- EMF Detector

02:24 “Bang” - Level 1

Numerous team members heard a loud bang on level 1, similar to a cell door being slammed. An exact cause could not be identified.

02:45 “Séance Experiment” -Level 2 small room infirmary

An experiment was held in the small infirmary room by three members and 2 guests. Such séance like experiments are conducted to evaluate techniques being employed by those interested in the paranormal. Whilst we do not rely on any data obtained without it being confirmed by other means, the experiments are monitored for any increase in activity and to ascertain possible effects on the participants.

02:57:02 “Light Anomaly” - Level 2 small room infirmary

A light anomaly was recorded which appeared string like and travelled upwards from near the chair. Duration was 3 seconds.



Two anomalies almost 2 minutes apart during session 5.

02:58:54 “Light Anomaly” - Level 2 small room infirmary

Another anomaly occurred 112 seconds later in the area of the chair. Duration was 2 seconds.

Neither of these two anomalies were noticed by the team members in the room, there were no temperature or EMF fluctuations recorded.

SESSION 6 - 03.00 - 04.00

The experiment in the small infirmary room continued into session 6, finishing at 3.21 am.

03:00:26 “Chair moved” - Level 2 small room infirmary

A chair next to one of the participants moved suddenly.

It cannot be ascertained whether any pressure was applied to chair. Even leaning slightly on the chair could cause a build up of pressure over time and the force of friction of the chair legs on the floor could cause it to suddenly move at any time ... This of course would not require any deliberate action and would be a surprise to all participants. A review of DVR footage indicates the participant and chair moved simultaneously within a single second. Which suggests the above cause is likely.



DVR still frame showing moment of chair movement during session 5.

03:05 “Video malfunction” - Level 2 infirmary

A camcorder being used in the experiment turned off without apparent cause.

03:11:06 “PIR movement detection” - Kitchen

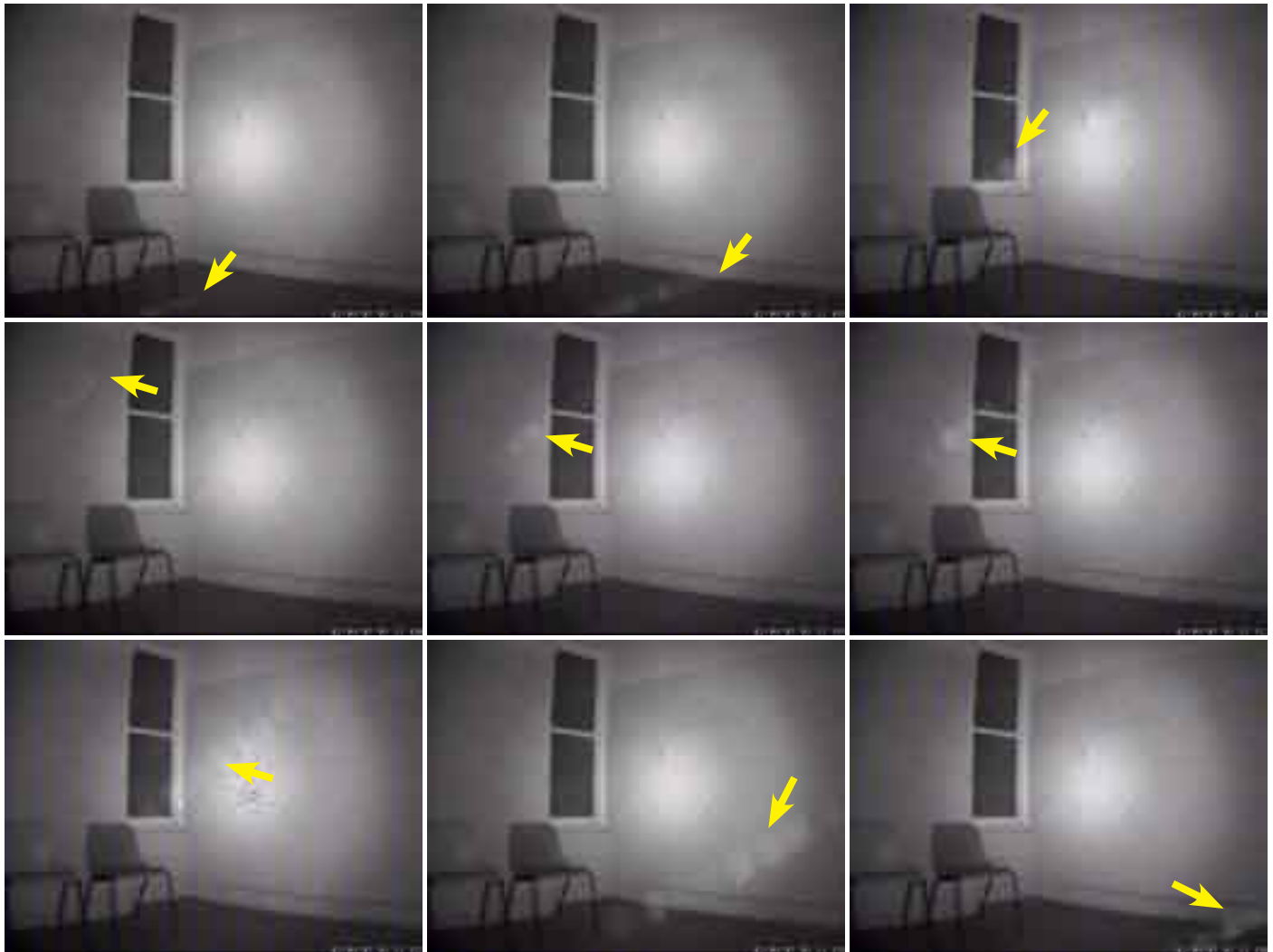
A passive infrared motion detector indicated movement in the kitchen. When comparing frames taken one second before and at the moment of activation from the thermal camera and DVR footage, there does not appear to be any reason for the detection. The thermal image does not show any obvious change in surface temperatures anywhere in the frame. The square cursor indicates the area sampled and averaged to give the reading of 18°C.



DVR and thermal still frames showing second before (left) and moment of PIR activation.

03:21:00 “Light Anomalies” - Level 2 small room infirmary

Team members left the area of the infirmary to continue the experiment in the shower block. Upon their departure light anomalies similar to those experienced earlier began to occur, only brighter.



A series of still frames from DVR footage from the small infirmary room on level 2.

One thing which is evident for all of the anomalies which occurred at varying times in the room is that the angle of the “line of light” all point downwards to the left. They occurred in both infrared and red lighting.

It has already been established that light entering through the doorway would have to bend around two corners and so is very unlikely.

The floor level of the second floor of the gaol’s south wing has been raised above it’s original height, creating a large space between the first and second floors. The entire third floor of this wing is non-existent creating an extra high ceiling for the second level. The first floor ceiling, especially above the kitchen is open to light from below until it reaches the new floor. While occurrences of the light did not coincide with any bright lighting in the kitchen from DVR footage, it is suggested that this be looked into further.

Anomalies exhibiting the features displayed have not appeared on any footage previously obtained with this camera from the gaol or elsewhere. The “lines of light”, when in full view, also appeared to have a definite start and end point rather than continue out of frame to a possible light source. Out of focus moisture, insects and dust as well as torch lights, flashes and reflections taken with this camera appear somewhat different to that observed.



The open “false roof” of the kitchen. The actual raised ceiling (and floor of the 2nd level) is considerably higher.

03:27 “Séance Experiment” - Shower Block

While pack up had commenced in preparation to leave the gaol, some team members and guests continued an experiment in the outside shower block of level 1.

While no worthwhile results were reported from the experiments at either location, they did seem to be accompanied by reports of “unusual events”. In the shower block two team members had nauseous feelings. One in particular reported extreme nausea just after feeling as if her finger was being squeezed about 3 or 4 times in rapid succession. The feeling of nausea lasted about 15 seconds although an increased heart rate continued for some time!



The ventilation opening along the outside wall of the shower block.

Two logging sensors recording temperature and humidity at different points in the shower block showed no unusual variations. Average temperature between the two sensors only varied by 0.8°C. Readings which were taken every minute throughout the night varied between 16°C and 19.9°C. The shower block is exposed to the outside air so it is understandable that it achieved the lowest temperatures as well as the highest humidity levels recorded during the night.

The DVR system was shut down at 3:46:54 and the team left the gaol at 4am Sunday morning. Over 1,300 photographs and around 30 hours of video footage were taken by the team.

There were no unusual EMF fluctuations experienced on the night, with average readings around 3.21mG. Dust levels at the control desk were around 0.019mg/m³.

POST INVESTIGATION EVENTS

“PIR Movement Indication” Kitchen

Post investigation review of DVR footage revealed the passive infrared motion detector located in the kitchen was indicating movement at regular intervals up until it was moved during session 4. The clear majority of activations occurred when there was nobody present in the kitchen area but also occurred when they were present. No cause could be ascertained from other footage, including that from the thermal camera and there were no EMF spikes recorded. The almost precise regularity of indications up until the sensor was moved at 1.03am suggests that heat from a device operating on a timer or thermostat of some description may have caused the detections. Given the sensors original position the various pipes and machinery would have been in range, but whether any of these were functional is unknown. This would need to be studied further on a subsequent visit. Because of this possibility, the detections indicated up until 1.03am have been given a rating of “naturally explanation highly likely”. Subsequent indications which occurred after the sensor was moved may be considered more unusual.



The original positioning of the PIR sensor in the kitchen.

“Malfunction of 2 temperature/humidity sensors” Kitchen

Also post investigation it was noticed that 2 temperature/humidity sensors had malfunctioned. Both were placed in the northern side of the kitchen, the area of the PIR detections. The first was a data logger, one of 8 placed around the gaol and all apart from this one functioned perfectly, including one placed at the southern side of the kitchen. The second was a wireless sensor transmitting to the control desk which had been operating perfectly. It eventually did come back online only to fail again during session 4.

ENVIRONMENT MONITORING RESULTS

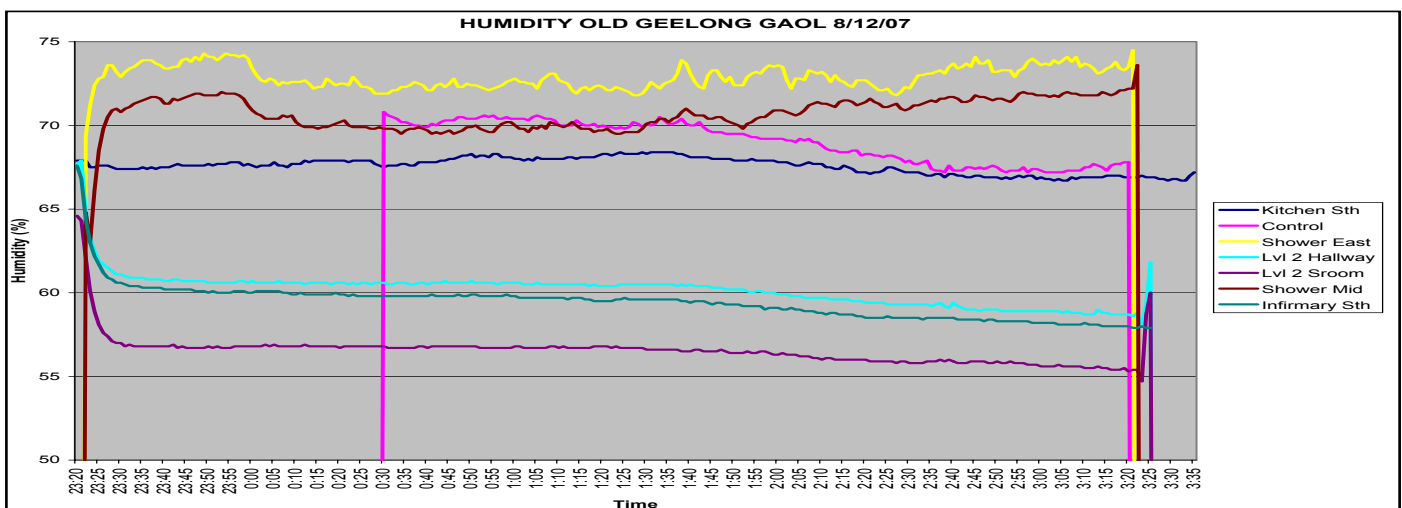
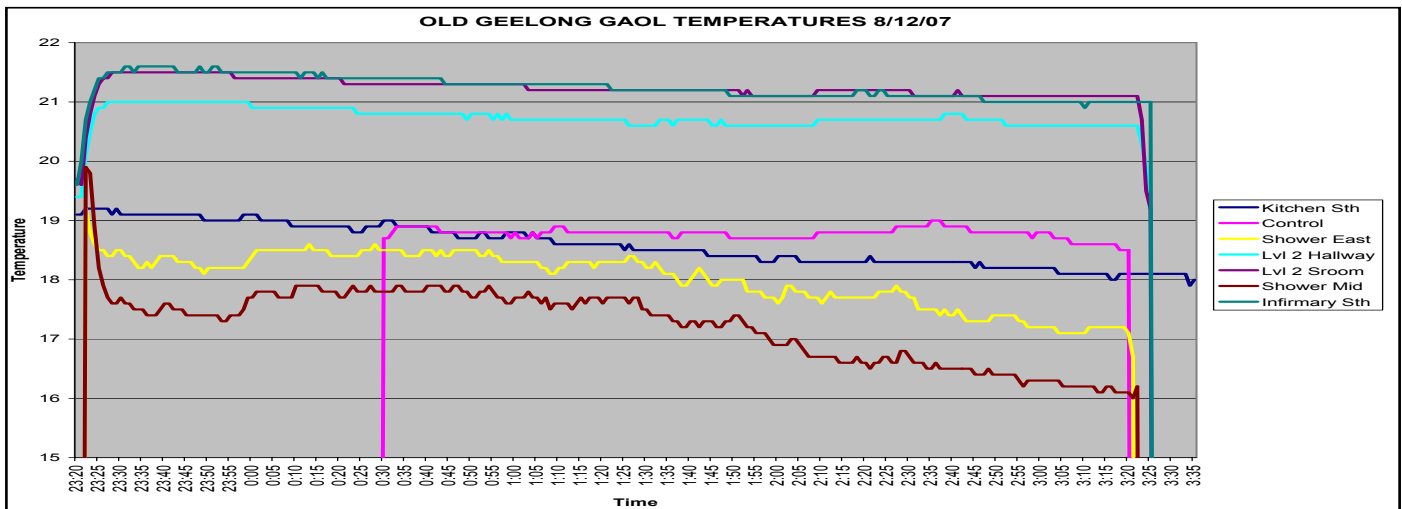
Temperature & Humidity

Temperature and relative humidity was recorded from various points during the investigation. The overall temperature maximum recorded was 21.6°C and minimum 16°C, making a total variance 5.6°C. The average was 19.4°C. Total humidity maximum for all areas was 74.5%, minimum 54.7%, variance 19.8% and average 65.2%. No readings were recorded which were considered abnormal.

In all there were 11 devices placed in static positions to record both humidity and temperature every minute, with additional devices being utilised by team members throughout the gaol. Of the static sensors there were problems with two, one wireless and one independently logging. Unfortunately these were both positioned in the same location - the northern side of the kitchen, an area where fluctuations had been reported during a previous visit. The limited readings which were obtained from these two devices did not indicate any abnormality. All other sensors performed flawlessly, including one at the kitchen's southern side, and it must be left to the reader's interpretation whether this was sheer coincidence or there were other factors at play.

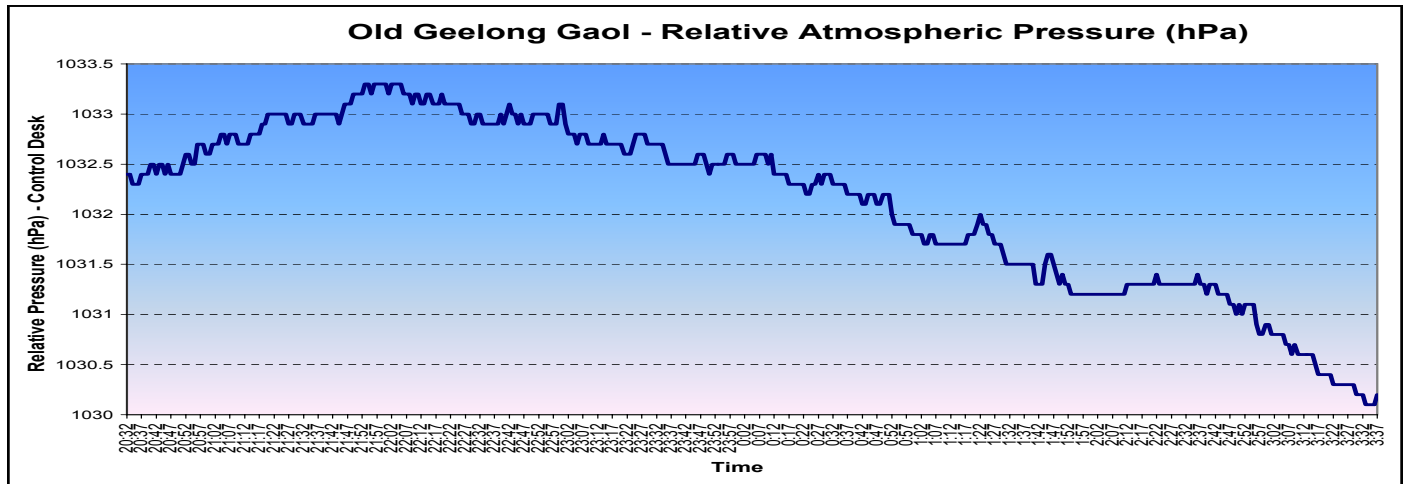
Figures from data loggers located in specific areas provide the following data:

Location	TEMPERATURE (°C)				RELATIVE HUMIDITY (%)			
	Max	Min	Ave	Var	Max	Min	Ave	Var
Kitchen South	19.2	17.9	18.6	1.3	68.4	66.7	67.6	1.7
Control	19	18.5	18.8	.5	70.8	67.2	69	3.6
Shower Block East	19.2	16.7	18	2.5	74.5	69.4	72.9	5.1
Hallway Level 2	21	19.2	20.7	1.8	67.9	58	60.2	9.9
Store room Level 2	21.5	19.2	21.2	2.3	64.6	54.7	56.6	9.9
Shower Block Centre	19.9	16	17.2	3.9	73.6	63	70.7	10.6
Infirmary Level 2	21.6	19.6	21.2	2	67.6	57.9	59.4	9.7



Atmospheric Pressure

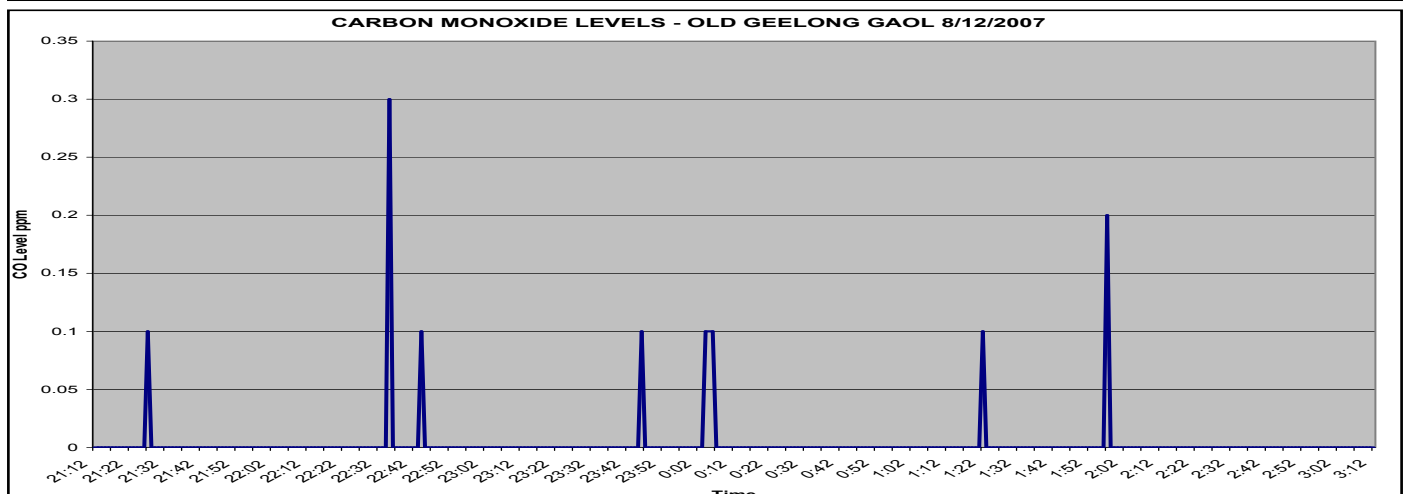
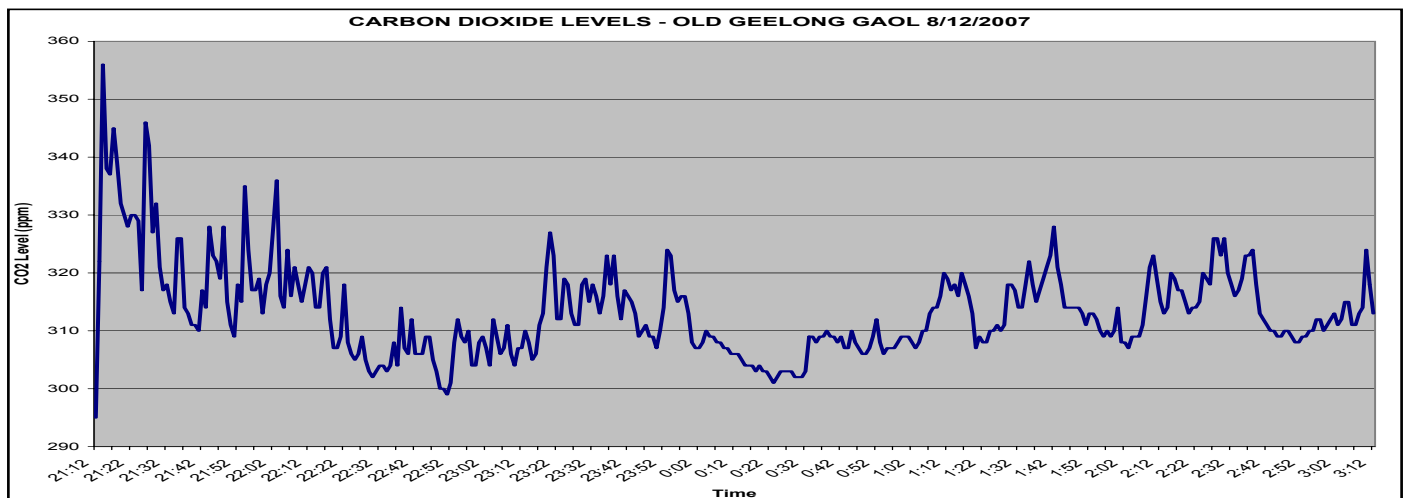
The relative atmospheric pressure varied by 3.2hPa throughout the night. Maximum was 1033.3hPa and minimum 1030.1hPa, average was 1032.1hPa. No sudden substantial changes were recorded.



Carbon Monoxide and Carbon Dioxide Levels

Exposure to high levels of carbon monoxide (CO) can cause various symptoms including headaches, fatigue, depression, emotional disturbances, hallucinations (both visual and auditory) and feelings of dread. Carbon dioxide (CO₂) can cause similar symptoms, although often to a lesser extent and may also include a sour taste and stinging sensations in the nose and throat. Extremely high, prolonged exposure can result in death. Generally accepted normal levels for carbon dioxide are .06% (600ppm) and the effects of carbon monoxide poisoning may start to be noticed around .01% (100ppm).

Levels at the site were considered normal, carbon dioxide averaged 313ppm with a maximum of 356ppm, while the maximum carbon monoxide level recorded was 0.3ppm.



Infrasound

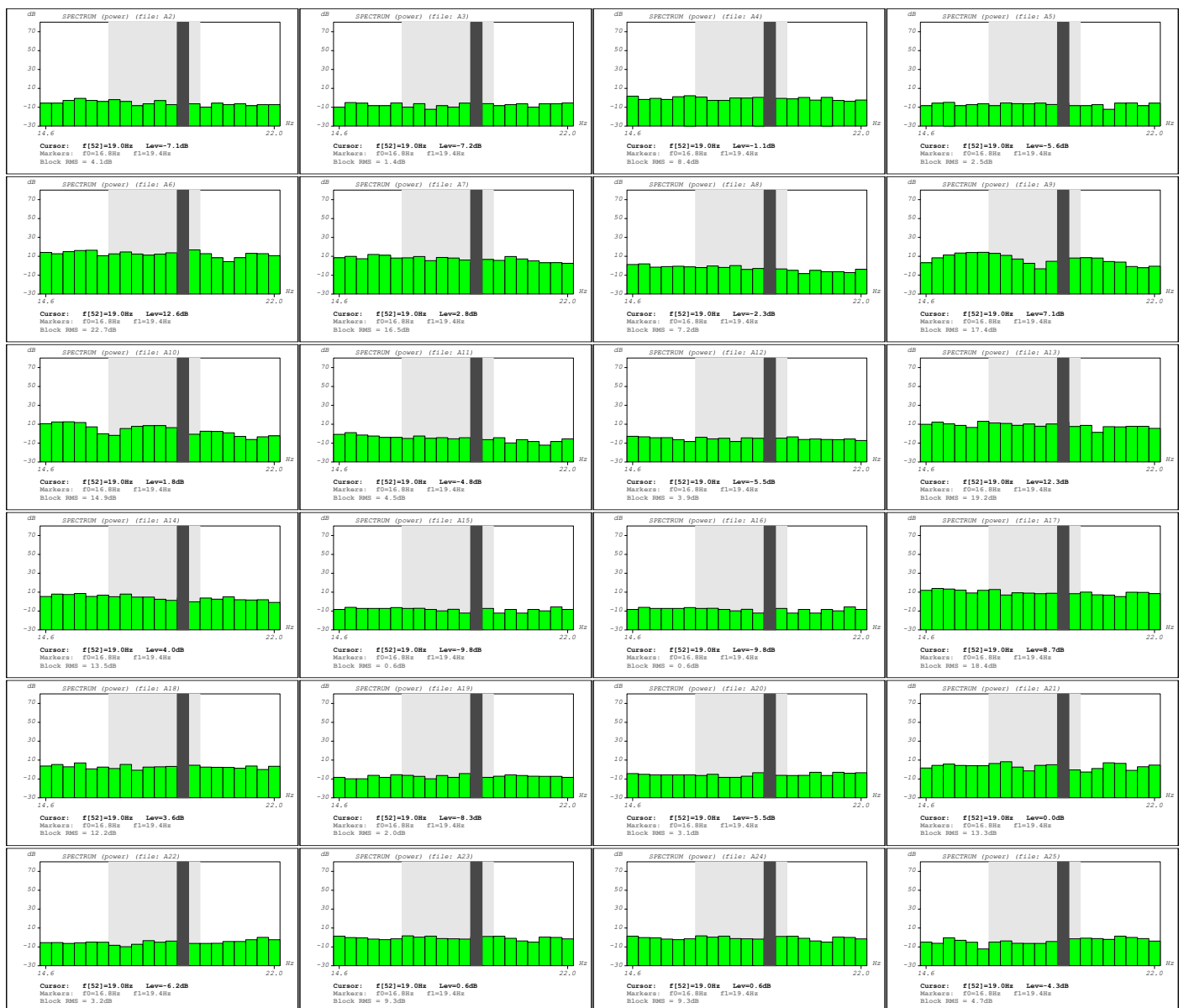
Infrasound refers to low frequency vibrations which are at a frequency too low to be heard by the human ear (around 17 hertz). Exposure to infrasound has been demonstrated to effect recipients with symptoms including fear, sorrow, depression, anxiety, nausea, chest pressure and hallucination. It can cause objects to move and some believe the body's internal organs can be effected. It is suggested that levels above 80 decibels at frequencies between 0.5 to 10Hz may start to effect the vestibular of the inner ear thus causing disorientation. It is known that military forces have examined the effects of infrasound and even looked into its use as a weapon.

The range of infrasound is generally accepted to be between 0-20 hertz with a specific area of interest between 17 and 19 hertz. Tests by NASA have revealed that the human eyeball resonates at around 18Hz, to which infrasound exposure may cause a reaction and lead to hallucinations.

Infrasound occurs quite naturally at some locations and possible causes include storms, earthquakes, waterfalls, volcanoes, ocean waves and wind reacting with structures such as chimneys. The subsonic sound can travel long distances, pass through walls and may be amplified in tunnel like structures.

The level of infrasound experienced during the investigation is considered to be normal and not high enough to have any noticeable impact.

The tables below show samples of the sound spectrum between 14.6 and 22 hertz. The maximum level recorded at 19Hz (position of black bar) was 12.3dB. The highest root mean square (RMS) value achieved in the range 16.8-19.4Hz (shaded region) was 19.2dB.



CONCLUSIONS AND RECOMMENDATIONS

RATING SYSTEM

To assess reported events and/or sites a rating system is adopted that is weighted towards the skeptical viewpoint. There is no assumption made that ghosts exist. This ensures the highest rating is achieved only when all natural explanations have been eliminated. This may cause some events which may be paranormal in origin to be discarded because they *could* be caused by something natural. This viewpoint is preferred because to claim that an event is caused by something not currently widely accepted as fact, demands considerable hard evidence be provided to support the claim.

The classifications used are as follows:

Explained	All characteristics of an event can be fully satisfied by natural explanations which the evidence indicates is the actual cause.
Natural explanation highly likely	A natural explanation cannot be ruled out and remains highly likely.
Inconclusive	No conclusion can be reached due to a lack of data to enable further analysis.
Indication of possible activity	Likely natural causes have been eliminated and there remains characteristics considered unusual but a lack of more supportive data prevents a higher rating.
Evidence of activity	Solid evidence and supportive data exists that documents an event which defies all natural explanations.

It is rare to be in the “right place at the right time” together with the required equipment that allows all of the necessary data to be available. For this reason most events fall within the second, third or fourth classifications. The Old Geelong Gaol investigation was no exception and many reported events were rated as inconclusive.

The gaol was relatively quiet when compared to previous investigations and even the quantity of “orb type objects” reported was lower than expected.

There were however equipment malfunctions (7 reports in all) which seem common to many who investigate the site. Perhaps the most notable of these all occurred in the northern area of the kitchen where it was reported that 2 separate cameras took pictures without the button being depressed and two independent temperature sensors failed.

This was unfortunate as it was in this area of the kitchen that sudden drops of over 7°C had been noticed on our earlier investigation. Our December investigation showed that the temperature varied by 1.3°C at the southern end, while manual readings at the northern end varied by up to 6°C, however there were no sudden variations like those noticed during June. The PIR movement detections experienced in this area during the both investigations demand greater scrutiny as their operation depends on temperature change to occur in order to trigger.

The light anomaly in the small infirmary room which was noticed upon review of the DVR footage has characteristics considered unusual. In the majority of instances the area was completely void of any human presence and the anomalies appear considerably different to likely natural causes previously experienced with this camera. There have been numerous reports of light anomalies in this particular room on other occasions by both the GRI team and other investigative groups. This suggests that something unusual is being observed in the room at times, the exact cause of which is yet to be identified - be it natural or otherwise.

No single event is accompanied by enough data to be considered evidence of activity but it is considered that some obtain “*indications of possible activity*” which require further research.

RECOMMENDATIONS

Despite emphasis being placed on the kitchen as a result of recommendations from the June investigation, it still demands further attention. On a future visit it may prove beneficial to completely isolate this area and view remotely. Having all available temperature loggers, thermal imaging equipment, PIR and ultrasonic movement detectors stationed in the room is recommended. As the area has also experienced equipment malfunction the setting of trigger items may be worthwhile.

It is suggested that the area of the small infirmary room be examined further to determine any possible entry points of external light into the room which could in any way cause the effect observed. This should include the use of the visible beam laser to ascertain origin point and angles.

In many ways the investigation proved a learning experience for all as additional equipment was made available allowing further areas of study to be opened up. The application of this equipment for the type of research GRI performs demands new procedures to be developed to maximise the data obtained. The equipment performed extremely well and should result in considerable improvement in the range, quality and amount of data obtained on each subsequent investigation as new procedures are implemented.

SITE CLASSIFICATION

Over two investigations of the gaol there are some unanswered questions and there still appears to be “*indications of possible activity*” at the location. The site classification for the Old Geelong Gaol therefore remains unchanged from June.

ACKNOWLEDGEMENTS

Each investigation is conducted with the help and support of others who assist in making sure we are given the opportunity to be in the right place, at the right time and suitably equipped to capture any information which may ultimately provide answers, whether they be natural or supernatural in origin.

Many of these have no official stance on the existence or otherwise of ghosts but graciously provide support to the team for conducting research into the phenomenon.

We would like to particularly acknowledge the following who provided such assistance for this investigation.



The Rotary Club of Geelong

The Old Geelong Gaol is managed by Rotary Club of Geelong who granted the team access to the site. It is only through the support of site owners and trustees that we have the opportunity to investigate locations fully.



The assistance of the TechRentals company in providing additional, fully calibrated monitoring equipment is greatly appreciated and the benefit to the quality of research possible was substantial.