TABLE OF CONTENTS

Location and Background Information

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site details</td>
<td>3</td>
</tr>
<tr>
<td>Geological details</td>
<td>3</td>
</tr>
<tr>
<td>Meteorological &amp; astronomical conditions</td>
<td>3</td>
</tr>
<tr>
<td>Historical background</td>
<td>4</td>
</tr>
<tr>
<td>Historical time line</td>
<td>6</td>
</tr>
<tr>
<td>Previous reports of paranormal activity</td>
<td>8</td>
</tr>
<tr>
<td>Historical events possibly connected with reported ghosts</td>
<td>8</td>
</tr>
<tr>
<td>Site appraisal</td>
<td>9</td>
</tr>
</tbody>
</table>

Equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrared laser thermometers and weather stations</td>
<td>10</td>
</tr>
<tr>
<td>EMF detectors</td>
<td>10</td>
</tr>
<tr>
<td>Still and video cameras</td>
<td>10</td>
</tr>
<tr>
<td>Night vision equipment</td>
<td>10</td>
</tr>
<tr>
<td>Infrared illuminators</td>
<td>10</td>
</tr>
<tr>
<td>Passive infrared and ultrasonic movement detectors</td>
<td>10</td>
</tr>
<tr>
<td>Thermal imaging cameras</td>
<td>10</td>
</tr>
<tr>
<td>Infrared surveillance cameras</td>
<td>11</td>
</tr>
<tr>
<td>Sound and vibration recorders and analysers</td>
<td>11</td>
</tr>
<tr>
<td>Environment monitoring equipment</td>
<td>11</td>
</tr>
<tr>
<td>Airborne particle monitors</td>
<td>11</td>
</tr>
<tr>
<td>Air quality monitors</td>
<td>11</td>
</tr>
<tr>
<td>Radiation monitors</td>
<td>11</td>
</tr>
<tr>
<td>X-10 equipment</td>
<td>12</td>
</tr>
<tr>
<td>DVR systems and computers</td>
<td>12</td>
</tr>
<tr>
<td>Customised equipment</td>
<td>12</td>
</tr>
<tr>
<td>Portable power packs</td>
<td>12</td>
</tr>
<tr>
<td>Other equipment</td>
<td>12</td>
</tr>
</tbody>
</table>

The Investigation

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>13</td>
</tr>
<tr>
<td>Session 1</td>
<td>15</td>
</tr>
<tr>
<td>Session 2</td>
<td>15</td>
</tr>
<tr>
<td>Session 3</td>
<td>16</td>
</tr>
</tbody>
</table>

Environment Monitoring Results

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature and humidity</td>
<td>20</td>
</tr>
<tr>
<td>Atmospheric pressure</td>
<td>22</td>
</tr>
<tr>
<td>Electro magnetic fields</td>
<td>22</td>
</tr>
<tr>
<td>Carbon dioxide and carbon dioxide</td>
<td>22</td>
</tr>
<tr>
<td>Infrasound</td>
<td>22</td>
</tr>
<tr>
<td>Satellite environment</td>
<td>22</td>
</tr>
</tbody>
</table>

Conclusions and Recommendations

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rating system</td>
<td>23</td>
</tr>
<tr>
<td>Recommendations</td>
<td>23</td>
</tr>
<tr>
<td>Site classification</td>
<td>23</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>24</td>
</tr>
</tbody>
</table>

© Copyright all rights reserved 2008. 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 prior written permission. This research report documents the investigation carried out on the site identified and whilst every effort is made to ensure the accuracy of data within, no responsibility can be taken for any loss or damage resulting from the reliance on such data.

© Ghost Research International

Blackwood Hotel 2008
LOCATION & BACKGROUND INFORMATION

SITE DETAILS

LOCATION: The Blackwood Hotel
Martin Street, Blackwood,
Victoria, Australia 3458
37°28'13.18"S 144°18'26.66"E
Elevation: 560 metres

DATE/TIME: 7pm Tues May 20th - 2am Wed May 21st 2008

Blackwood is situated 89km from Melbourne.
Local Government Area: Shire of Moorabool
State District: Melton
Federal Division: Ballarat
Parish: Blackwood

The property’s recorded address is 1 Golden Point Road, and the crown allotment is 1 Section C - as outlined in the historical time line.

GEOLOGICAL DETAILS

Structural Zone: Bendigo
Unit Name: Bendigonian
Classification: Sedimentary (Marine)

Lithological Description: Marine: sandstone, siltstone, shale, chert, Bendigonian. Sandstone, slate: moderately to well sorted, variably rounded quartz with minor feldspar and lithic grains in quartz silt or clay matrix; minor quartz granule conglomerate; thin to very thick bedded; black fossiliferous shales; slightly weathered to partly kaolinised giving white, ochre and red tones, deep marine turbidites and hemipelagic sedimentary rocks.

Geophysical Description: Sandstone, slate: non-weakly magnetic, normally magnetised (up to 10nT), 30nT where contact metamorphosed and 70nT adjacent to graben where intruded by magnetic dykes; moderate-high k, low-moderate th, U and total radioelements; moderate gravity response (-150mms-2).

Mineral Region: Blackwood Trentham Goldfield - gold production (primary/alluvial) 8200kg.

There are no records of the existence of any mine operating on the site, but it is situated over or close to known underground workings. There may be unrecorded mine openings connecting with those workings.

Source: Department of Primary Industries

METEOROLOGICAL & ASTRONOMICAL CONDITIONS

Lunar
Rise 4:57pm (20/5) Set 8.21am (21/5)
Disc Illum: 99.81%
Age: 14.9 days (Full)
Distance: 406322km

Solar:
Set 5.14pm (20/5) Rise 7.19am (21/5)
Solar X-Rays: Normal  Geomagnetic Field: Quiet

Climate:
Average Mean temperatures for May 13.2°C Min 4.6°C
Average Mean rain for May 82.9mm Days 18.6
HISTORICAL BACKGROUND

The area of Blackwood was part of the Cotumnimnip pastoral run which was renamed Glen Pedder by the owner Mr. Thomas Hamilton. Because of the difficulty in travelling this rugged and mountainous area of the Great Dividing Range, it remained unsettled by both the aborigines and colonists.

There were reports of gold in the area as early as 1854 but it wasn’t until Edward Hill discovered gold and spread the news widely in 1855 that the Blackwood rush began. By the years end over 13,000 miners flocked to the area mainly concentrating on alluvial gold around the Lederderg River.

The main fields were Golden Point, Red Hill and Simmons Reef which all formed their own communities of tents. Later buildings sprung up and coach services arrived from Melbourne daily.

Larger mining companies formed to work the deeper leads and continued well after the alluvial gold dwindled. Various establishments were set up to cater for the needs of the miners and the area boasted over a dozen hotels, one which was the The Family Hotel (today known as the Blackwood Hotel).

The hotel was built by Bridget Cruise in 1868 with the support of many locals. Bridget Cruise was a remarkable woman and certainly had her share of hardship. Having lost three children at a young age before losing her husband, Bridget was left with four children to raise and the Victoria Hotel to run, which burnt down several months later. The children’s tombstone is amongst the earliest in the local cemetery and is situated next to her husbands. She continued and under financial hardship built the Family Hotel which opened with a ball to celebrate the occasion on September 4th 1868.

The hotel was sold in 1877 to Joshua Vines and John McPhee who employed John Kennedy Cann as the publican, the eldest son of John and Ann Cann. Being an experienced coachman, he had previously operated the mail coach service and the “Royal Mail Hotel” at Golden point. Joshua Vines and John McPhee were also Geelong coach service owners. The Family Hotel became a booking office for Cobb and Co coaches with a coach shed and stables at the rear.

John Kennedy Cann was successful in both the operation of the hotel and in establishing the coach service. He purchased the Family Hotel in 1889 which by that time was already known locally as “Cann’s Family Hotel”.

Miners Ted and Joseph Hill, descendants of Edward Hill. c1890
Courtesy of the Blackwood District Historical Society.

Early Blackwood showing the hotel on the right, a stop for Cobb & Co coaches.
Courtesy of the Blackwood Hotel.

The hotel (bottom right) from the south east.
Courtesy of the Blackwood District Historical Society.

The grave of Joseph Peter, Mary Ann and Catherine Cruise, children of Bridget and Joseph.

The grave of Bridget Cruise’s husband Joseph.
When John Kennedy Cann died in 1895 his wife Rebecca held the licence until 1907 when her son John William (Bill) Cann became licensee. The hotel was then sold to Fitzgerald’s Brewing Company in 1916. Rebecca died in Richmond on October 18th 1916 and is buried in the Blackwood Cemetery. William was listed as the hotel’s licensee in 1927 until Cyril Jones purchased the hotel. This ended the Cann’s family connection with the hotel which had lasted 50 years.

Cyril Jones, who also owned the Border Inn at Bacchus Marsh, renamed the hotel “The Blackwood Hotel”. Cyril Jones sold the hotel to George and Margaret Stockdale in 1977, after owning the hotel for some 50 years.

The Stockdales renovated extensively before selling in 1995 to Ken and Anne Cooke who in turn sold to the current owners Peter and Lynne in 2005.

Today Blackwood has a population listing of around 235, a far cry from the once bustling 13,000 which lived through the days of the Blackwood gold rush. The gold may be long gone but a treasure certainly remains in the historical significance of the area and in the nature of the locals, many of whom are descendants of the original settlers.

The Blackwood District Historical Society maintains a museum with memorabilia of Blackwood region and is well worth visit.

Specific mention should be made of the following people who have kindly contributed information and photographs for inclusion in our research:

Peter and Lynne, current owners of the Blackwood Hotel.

Margot F. Hitchcock from the Blackwood District Historical Society. Coauthor of “Aspects of Early Blackwood” and author of the soon to be released “The History of Blackwood”.

Frances Dillon “The Cann Family of Blackwood” http://www.blackwoodvictoria.com/
HISTORICAL TIME LINE

1851  Gold discovered in Ballarat.
1854c There were early reports of gold in the Blackwood area.
1855  Edward Hill discovered gold at Golden Point. The population rapidly grew as three main reefs were explored - Golden Point, Red Hill and Simmons Reef.
1855 September Over 13,000 miners were present on the Blackwood field. The largest nugget unearthed weighed 29lbs and was found at Dead Horse Gully. One of the mining villages, Golden Point, was surveyed and laid out as Blackwood.
1856  John and Ann Cann arrived at the Blackwood gold fields. John operated the “Staff of Life Bakery” on Kangaroo Flat, Blackwood.
1857  The area of Blackwood contained various churches, schools, brothels and shops. At least 12 hotels were nearby catering to the miner’s needs and a daily coach service to Melbourne was operated by Cobb and Co. Chinese miners started arriving in the area and numbered around 500 by 1861.
1859 Oct 20  Mary Grimes purchased the land on which the Blackwood Hotel now stands for £6.10. It was Allotment 1 Section C, the first block released on the Blackwood goldfield. It became known as “Grimes Corner” and was on the corner of Martin Street and Golden Point Road, Red Hill.
1859  John Cann was listed as the proprietor of the “Kangaroo Inn” at Mount Blackwood.
1862  John Cann was listed as the owner of the “Southern Cross Hotel”.
1863  The All Saints Church of England was constructed in Blackwood.
1864  Joseph Cruise purchased the “Victoria Hotel” in Red Hill.
1867 Apr  Joseph Cruise died and his wife Bridget became hotelkeeper of the “Victoria Hotel”.
1867 Nov 22  Bridget Cruise purchased “Grimes Corner”.
1867 Dec 10  The Victoria Hotel in Red Hill was burnt to the ground.
1868 Mar  Bridget Cruise commenced building the Blackwood Hotel which it is believed was called the “Family Hotel”. The contractor was Mr Ross and painter was Mr Henry Greig.
1868 Sep 4  Mrs Cruise’s Family Hotel opened and was commemorated with an opening ball.
1870’s  Bridget Cruise married Edmond Buckley.
1877 Jul 9  Joshua Vines and John McPhee purchased the hotel for £478.14.1 and employed John Kennedy Cann as the publican, the eldest son of John and Ann Cann.
1879  The 1870’s saw a decline in the number of mining companies operating in the Blackwood area and many miners were forced to move on to other locations.
1880  The Lerderderg River flooded, destroying many bridges and damaging mining equipment.
1883  John Cann Senior died on 18-4-1883. Eldest son, John Kennedy Cann was an expert coachman and blacksmith; he operated a mail coach service as well as running the Royal Mail Hotel in Golden Point before taking over the running of the Family Hotel at Blackwood in 1877.

“Grimes Corner” showing the hotel on the right. Courtesy Margot Hitchcock.
1889 May 14  John Kennedy Cann purchased the hotel in Blackwood after having been listed as hotelkeeper since 1877. Even before his acquisition the hotel was known as “Cann’s Family Hotel”. The family continued to run the hotel as well as the coach house and stables at the back of the hotel. In later years John Kennedy, due to poor health did not drive the coaches very often. His sons Harry Perry and Edwin both took over driving the mail coaches. It was during this time that Captain Moonlight, the notorious outlaw held up the Blackwood stagecoach. Edwin who was driving the coach at the time had his gold watch stolen, as well as the mail bag.

1895 Feb  John Kennedy Cann died, aged 51, and his wife Rebecca continued to run the hotel.

1890’s (late)  The Verandah was added to the hotel.

1907  John William (Bill) Cann, son of John Kennedy and Rebecca Cann took over as licensee.

1916 Mar 31  The hotel was sold by Rebecca Cann to Fitzgerald’s Brewing and Malt Company (which later became the Castlemaine Brewing Company). John William Cann continued as licensee.

c1915-16  William Stanley Buxton appeared as licensee, as did Mary Gertrude Mooney on 10/2/1916.

1920 Aug 30  William Cann appeared again as licensee.

1926 Feb 18  The Castlemaine Brewery was taken over by Carlton and United Breweries who inherited the hotel.

1927 Nov  The hotel was purchased from Carlton and United Breweries by Cyril Colton Jones, owner of the Border Inn at Bacchus Marsh, who renamed the hotel the “Blackwood Hotel”. The first licensee was Ernest Richard Morgan, brother-in-law of Cyril Jones, on November 21st.

1941 May 5  William Stanislaus McCarthy took over as licensee.

1945 May 21  Cyril Colton Jones took over as licensee.

1945 Oct 15  Ernest George Burkett took over as licensee.

1948  Laura Dalton burned to death in the hotel’s kitchen.

1949 Mar 21  Michael Meehan took over as licensee.

1952 Apr 9  Allan Watts took over as licensee.

1953 Jul 30  Donald Ernest Hillis took over as licensee.

1955 Nov 2  Aubrey Harold Carter took over as licensee.

1957 Apr 4  Enid Daisy Weglowski took over as licensee.

1961 Mar 16  Margaret Johnson took over as licensee.

1964 Jul 20  Arthur William Dillon took over as licensee.

1966 Jul 11  Robert Turner took over as licensee.

1970 Dec 22  Herbert Francis George Undy took over as licensee. During this time the hotel was listed to include 9 bedrooms (7 for guests), a sleep out and dining area for 32.

1972 Nov 15  James Thomas and Margaret Cuthbert took over as licensee.

1974 Jun 26  Bryan Thomas Gallow took over as licensee.

1977  Cyril Colton Jones sold the hotel to George and Margaret Stockdale who ran the hotel with their children Sandra and Ron. The interior was extensively renovated. They were licensees until 1987.

1995  Ken and Anne Cooke purchased the hotel.

2005  Current owners, Peter and Lynne took over the hotel.
PREVIOUS REPORTS OF PARANORMAL ACTIVITY

The hotel is believed to harbour at least three ghosts.

The first is a lady in the kitchen where the smell of burning wax is reported. Apparently a hotel worker spotted a lady with red hair and white dress shortly after closing one evening. Legend suggests this may be Laura Dalton who apparently burnt to death in the kitchen area in the 1940’s. Story has it that she was dragged, still alight to the street outside where further attempts were made to extinguish the flames.

Frederick Hill, a previous caretaker, is believed to still frequent room 3. He was most likely employed by Cobb & Co. and stayed in a detached bungalow near the stables area. Apparently at around 2am he would conduct his rounds ensuring all was correct. An unexplained “soft light” has been reported in room 3.

The figure of a miner has apparently been witnessed sitting on tinder box near the main dining area.

A guest staying in room 3 reported someone walking very heavily around at 3am, to which no explanation could be found. He subsequently moved to another room the following night.

A few years ago a car alarm in a vehicle outside would activate during the night only to switch off prematurely before the owner could reset it.

Reports from the site include sudden temperature fluctuations, lights turning on and off without apparent cause and feelings of a presence. Sudden flashes and perceptions of movement have also been noticed.

HISTORICAL EVENTS POSSIBLY CONNECTED WITH REPORTED GHOSTS

Being a town born from the Victorian gold rush, the miners and their families lived in overcrowded, inhospitable conditions which resulted in many deaths. Life was very tough and death from crime was also common. Of the few which struck it rich, there were many more which battled to survive.

Like many towns which existed during the gold rush, the resources to cope with the needs of the heavily expanded populations were often non-existent. Being among the coolest available areas, hotel cellars were often used as morgues to house bodies until the authorities could attend. During outbreaks of epidemics such as diptheria, any available building may have been used as a temporary hospital. Blackwood was no exception and it is believed the hotel was used as both a makeshift morgue and infirmary at times.

In 1978 the hotel underwent renovations and the basement area was changed considerably. It is rumored that autopsies were performed in the area where room 3 now stands. During outbreaks of diptheria the eastern side of the basement area is believed to have been used as an infirmary and it is even suggested that on site burials may have occurred, but this has not been confirmed.

We were able to talk to Allan, a local who recalled memories of Laura Dalton when he was a young boy. He stated that Laura had long red hair and was buried in the Blackwood cemetery in a currently unmarked grave. The cause of the fire was a shellite iron which exploded and after the flames were extinguished she was brought back inside the hotel where she died shortly after.

A search of historical records found that a Laura Elizabeth Dalton died at Ballarat aged 25 in 1948. An inquest held on April 15th 1948 found the cause of death as cardiac failure. If this is the Laura Dalton who was burnt at the hotel she may have been transported to Ballarat before her death or the death may have simply been registered in Ballarat. Early records quite often contain such slight inaccuracies.
SITE APPRAISAL

The Blackwood Hotel certainly reflects its passage through history. The many alterations carried out through the years include restructures and additions utilising various materials in common use at the time. A postcard from the hotel states that it is “the oldest weatherboard hotel with a continuous licence”.

The basement area is open with long wooden beams supporting the floor above. Sound can travel easily throughout the hotel whether it be voices, creaking floorboards, plumbing or the like. Sound from the refrigeration unit in the basement area could be heard in most areas of the hotel. Likewise noise from the dining area could be distinguished in Room 3 and the basement area. It is therefore possible that the buildings age and construction may be a contributing factor in any unusual auditory reports.

Electricity was apparently connected to the hotel in the 1960’s and the basement area has a multitude of cables running throughout to power various items of equipment related to the hotels operation. Some wiring may be of an earlier time when shielding was less efficient than that in common use today. Increased EMF levels around wire junctions and electrical equipment would be expected.

Areas of the basement have an earthen floor and dust is prevalent which may contribute to reports of orb type objects appearing in photographs taken in the basement area.

It appears the most extensive renovations were carried out in the late 1970’s when George and Margaret Stockdale were the owners, however the building maintains its historic country charm and the homely atmosphere is certainly added to by the hospitality of the current owners and locals.

A view today of the area once known as “Grimes corner”
The team utilises various pieces of equipment during investigations. We also often call on the vast resources of TechRentals, a leading specialist instrument supplier and a division of the TR Corporation.

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 is shown below, together 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 have 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 nightscopes, 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 ensure any human interference can be detected or it can indicate movement where there’s no apparent 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 analyze 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, dew point, 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 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

X-10 equipment may be used to allow control of mains devices such as lights and appliances. The DVR computer contains software that can also take control or monitor any X-10 devices including PIR detectors. Alternatively this can 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 at a static location. A portable system such as the Archos AV500 or AV700 Mobile DVR may be used for this purpose or 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 a wireless infrared camera, 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!
THE INVESTIGATION

The team arrived for the investigation at 7pm on May 14th 2008 with five members and two prospective members attending.

Equipment was placed to monitor areas of highest reported activity. Cameras were placed in the kitchen, both dining areas, the cellar and in Room 3.

Temperature/humidity loggers were placed similarly with three located in Room 3 where sudden drops in temperature had been reported.

Passive infrared and ultrasonic motion detectors were located in various areas, in view of a DVR camera, some with the addition of an EMF meter also being visible.

By 8.30pm set up was complete and the mandatory photographs of the DVR screen taken by all cameras. This effectively allows synchronisation of all such devices to the DVR time which is calibrated to an atomic time server.

The time stamp on the resulting picture indicates the device time while the image itself shows the DVR time. Noting the difference between the two allows each subsequent picture to be accurately adjusted to DVR time.

Each piece of time-based equipment used (for example digital cameras and temperature loggers) is therefore synchronised and should an unusual event occur, data from all sources can be drawn upon to assist.

Following placement of static equipment the remainder was to be used in vigils during the night. Camcorders, audio recorders, EMF meters, still cameras and the thermal imaging camera were used at various points throughout the evening.

The DVR began recording at 8:05pm.
As expected some orb type objects were already showing up on camera 4 in the basement area, with others also appearing in the kitchen and room 3.

Orbs are anomalies that show up often in still photos and video recordings. Most can be attributed to an out of focus insect, moisture or dust particle inside the focal point of the camera and illuminated by the camera flash or infrared lighting. This area between the lens and focal point is known as the “orb zone”.

Some believe that “true orbs” are balls of energy of ghostly origin, possibly the form taken when a spirit is moving around or about to manifest. If this is true it would be necessary to show that the object is radiating it’s own energy and displays independent and intelligent type movement.

The design of most modern digital cameras puts the flash very close to the lens opening. This arrangement actually promotes the formation of orbs as the out of focus object is also in the best position to obtain maximum illumination from the flash.

An orb which travels behind another object which is in good focus seems to show that it is more distant and so cannot be in the orb zone. Care must be taken to ensure that the orb is actually behind the object and not just rendered invisible by the object being of similar brightness or tonal quality.

When the same orb is captured simultaneously from multiple cameras the likelihood of it being in the orb zone is virtually non existent. This is difficult to achieve as all cameras need to fire simultaneously. One method is to have a main camera set to use the flash as normal with one or more others set to suppress the flash and do a longer exposure. If it can be timed correctly the shutters of the other cameras will be open when the main camera’s flash provides the illumination for all images. This effectively freezes the same moment on all cameras. If the same “orb” appears on all images then an out of focus insect, dust or moisture particle could be ruled out. It could be argued that a “true orb” would not require a flash at all if it was radiating it’s own light.

During our investigations possible orbs are noted but without any collaborating data or unusual features displayed they are generally labelled “inconclusive” at best.

The first two images on this page display orb type objects which displayed a doughnut type appearance before the first vigil commenced. Both are rated “inconclusive”. The final one being an example of a likely dust orb, rated “natural explanation highly likely”.

“Orb type object” from the DVR camera in the basement which moved slowly infront of the pole and gas bottle.

“Orb type object” in room 3.

“Orb type object” in the kitchen area.
SESSION 1 - 21.00 - 22.00

Once set up was complete the team divided into four groups for the first vigil, these were positioned in the Keg Room, Room 3, Basement storage area and the control desk. The area of the dining room was left vacant under the surveillance of two DVR cameras.

21:40 “Temperature Drop” - Room 3
A feeling of sudden coldness was reported in Room 3.

Post investigation review of the temperature settings did not record any sudden change in temperature at this time. The highest recorded variation across all sensors located in Room 3 was 1.6°C. Maximum was 14°C, minimum 12.4°C and the average was 13.1°C.

Room 3 was however the coldest area of the hotel. A later sweep with the thermal imaging camera also confirmed that there was no great variation of temperature in areas around the room. Having a toilet and shower in the southern section of the room there is some venting to the outside air, where it may be possible for a cold breeze to enter.

Biorhythm monitors which measure skin temperatures suggest that certain thoughts or emotions can cause slight fluctuations in body surface temperature. These fluctuations may be perceived as sudden general feeling of coldness. The term “gives me the chills” is probably based on this same principle.

~21:40 “Higher reading than baseline EMF” - Room 3
An EMF reading of 4.6mG was reported in room 3 which varied from base readings that ranged between 0.01 - 0.60mG. The reading was constant in the south east corner of the toilet/shower area where the ceiling and wall meet.

Later examination of the area behind the walls of room 3 in the basement revealed a reading of 8.8mG from power cables. The position of these cables coincided with the area where high readings were experienced in room 3.

SESSION 2 - 22.30 - 23.30

The team rotated vigil positions for the second session, again leaving the dining room vacant.

In between sessions a new piece of equipment was placed in the dining area for evaluation. Consisting of a modified alarm system, it enables movement detection by emitting ultrasonic pulses and measuring the reflection. Any change in this reflection is indicated as movement.

Sensitivity is adjustable allowing the unit to cover large or small areas. It is envisaged that a camera and passive infrared detection will be added to the unit at a later stage. This will allow video monitoring of an area incorporating indications of any movement detection by two independent methods, three if the motion detection processing is activated on the video feed to the DVR.

A sweep of all areas with the thermal imaging camera was also planned for session 2.

22:58 “Ultrasonic movement detection” - Dining area
Movement was indicated by the ultrasonic motion detector in the area of bar, adjoining the dining area. A nearby passive infrared detector did not trigger and nothing unusual was recorded on the DVR footage.

This was the first of a few detections during session 2 and sensitivity was adjusted to try and isolate possible causes. There were many glasses hanging at the bar and it was possible that any vibration could cause enough movement to register. As there was no collaborating data and the unit was still in testing, the indications were rated as “inconclusive”.

Glasses at the bar area
22:55 “Voice recorder power drop” - Basement area
It was noted that battery power to a voice recorder in the basement dropped from to 1/4 power from full charge. It returned to 3/4 charge upon conclusion of the session.

23:40:28 “Light anomaly” - Dining area
Session 3 ended at 11.30pm and during the short break a photo was taken in the dining area showing a dark, shadow like anomaly. This was not evident in another taken 13 seconds later.

The camera was in infrared mode and therefore captured the area as illuminated by the IR LEDs of DVR Camera 2. EXIF data contained in the calibration photo from this camera allowed synchronisation to the DVR computer time - 11:40:28pm.

A review of DVR footage from two cameras covering the area revealed that this was the moment DVR Cam 2 was being adjusted to try and gain a clearer video signal.

The person in front of the DVR camera was moving at the time and was out of shot by the time the second image was taken 13 seconds later. Although rated as “explained” this is an example of how the pieces can fit together if enough data is collected during an investigation. It is only through the diligent reporting of all possible events and the examination of a large range of data, that we can hope to debunk or add credence to any claim of paranormal activity.
SESSION 3 - 00.00- 01.00

The team rotated vigil positions for the third and final session, taking positions in room 3, the keg room and dining area. The full moon was almost directly overhead Blackwood at this time and we hoped that the influence some believe it has on paranormal occurrences would bring about increased activity.

00:11 “Anomaly” - Dining area left of fireplace
A photograph showed a anomaly near the tinderbox where local legend suggests an apparition had been seen. This anomaly was apparent in a few, but not all of the photographs taken in the area and was only noticed during post investigation review.

DVR footage and audio recordings taken in the region revealed nothing unusual. The area around the tinderbox was monitored for passive infrared movement detection, disturbances in the electromagnetic field and temperature/humidity fluctuations. None were observed.

It seems possible that the wood grain finish of the wall panelling together with some reflective qualities could lead to some pareidolia, if illuminated and observed from specific angles. Pareidolia refers to the psychological phenomena where obscure and random stimulus is perceived as something more familiar. Seeing animal shapes in clouds is an example of this and the phenomenon can be visual or audible. With no collaborating data available the image has been rated “natural explanation highly likely”.

00:12 “Orb type object” - Keg Room
A picture taken in the keg room of the basement area showed a classic example of an orb type object which are frequently discussed by those interested in the paranormal.

As stated previously these are noted on our investigations but without any collaborating data or unusual features displayed it cannot be assumed that they are paranormal in origin.

The clear majority of these can be attributed to, or the characteristics duplicated by, out of focus minute particles which are inside the “orb zone” and illuminated by the camera flash. The “orb zone” is the area just in front of the camera lens and before the point where everything can achieve focus.

They very rarely achieve a rating above “inconclusive” with most being “natural explanation highly likely”.

© Ghost Research International 17 Blackwood Hotel 2008
00:27 “Orb type objects” - Dining Room
The DVR camera located in the dining area showed a sudden increase in “orb type objects” over a period of about a minute. This was the only time during the investigation that such a large number were recorded on any of the DVR cameras. There was no movement nearby and the fan/heating unit had been turned off. The video appears on the GRI website.

The video sequence and the number of instruments being used to monitor the area presents an opportunity to determine some facts and explain why most orbs remain in the “inconclusive” category.

The thermal imaging camera in use at the time determined that no solid object entered the area that was large enough register and of a different temperature to the environment. Warm air masses do not show on thermal cameras - which respond only to surface temperature. An image taken in the dining room during a thermal sweep however shows that although heating was turned off the outlets themselves remained hot for some time. The air around them would also be warmer which could create thermal pockets which could in turn influence the movement of dust particles.

A second DVR camera some distance away did not reveal any correlating objects. Should the objects be captured on multiple cameras, the chance of them being dust particles would be significantly reduced. If the objects were radiating their own light they would register on both cameras.

A nearby passive infrared movement detector, EMF meter and audio recorder failed to indicated anything abnormal. A data logger also failed to register any change of ambient temperature or relative humidity.

In addition two team members in the area did not report witnessing anything unusual. Despite the presence of multiple instruments, the event seemed isolated to a single camera and so it appears likely that it involved a random concentration of dust which had passed close to the camera and were caught in the “orb zone”.

Dust exists all around us and we breathe it continuously, its concentration is random and can be well dispersed or concentrated while it moves. Wind and thermal pockets can change its direction and speed. Insects, which also produce “orbs”, usually exhibit a less “graceful” movement and can move quite fast. Either will reflect the light from a camera flash or video light and, when out of focus, will produce the orb like appearance displayed on many photographs considered by some to be paranormal. Without supportive data from other instruments it can be seem why we rate them inconclusive at best.
00:38:03 Footsteps and “Light Anomaly” - Kitchen and outside Area

An anomaly was noticed in the kitchen which resembled torchlight, however there was no one present in the kitchen area. A torch was being used in the adjacent dining room moments earlier to view a region outside the hotel in which members in room 3 reported hearing footsteps.

Reviewing DVR footage from all cameras at the time could not ascertain exactly how light could enter this area, however it cannot be ruled out as a possible cause.

The “footsteps” heard from room 3 were traced to water falling from the high limb of a tree onto corrugated plastic roofing sheets near the stables area.

Session 3 concluded at 1.00am and pack was commenced, the team left the hotel by 2.00am. Over 8 hours of audio samples, 454 photographs and 28 1/2 hours of video was taken on the night.
ENVIRONMENT MONITORING RESULTS

Temperature & Humidity

Temperature and relative humidity was recorded from various points during the investigation. The overall maximum temperature recorded was 20.9°C and minimum 12.4°C, making a total variance 8.5°C which is understandable considering the areas monitored included heated upper rooms and cooler lower positions. The average temperature was 16.1°C.

Total maximum humidity recorded was 65%, minimum 47.8%, variance 17.2% and average 55%.

Figures from instruments located in specific areas provided the following data:

<table>
<thead>
<tr>
<th>Location</th>
<th>TEMPERATURE (°C)</th>
<th>RELATIVE HUMIDITY (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Maximum</td>
<td>Minimum</td>
</tr>
<tr>
<td>Piano</td>
<td>19.7</td>
<td>18.8</td>
</tr>
<tr>
<td>Kitchen</td>
<td>18.1</td>
<td>16.4</td>
</tr>
<tr>
<td>Tinder Box</td>
<td>18.1</td>
<td>16.8</td>
</tr>
<tr>
<td>Cellar</td>
<td>16.9</td>
<td>14.7</td>
</tr>
<tr>
<td>Room 3 SE Corner</td>
<td>13.7</td>
<td>12.6</td>
</tr>
<tr>
<td>Room 3 SW Corner</td>
<td>14</td>
<td>12.4</td>
</tr>
<tr>
<td>Room 3 NW Corner</td>
<td>14</td>
<td>12.9</td>
</tr>
<tr>
<td>Control Desk</td>
<td>20.9</td>
<td>19.5</td>
</tr>
<tr>
<td>Keg Room (Basement)</td>
<td>19.9</td>
<td>14.3</td>
</tr>
<tr>
<td>Dew Point</td>
<td>11.1</td>
<td>7.4</td>
</tr>
<tr>
<td>ALL AREAS</td>
<td>20.9</td>
<td>12.4</td>
</tr>
</tbody>
</table>

The coldest area of the hotel monitored was Room 3 on the lower level on the eastern side. The outside temperature was considerably cooler and fog patches had developed around the Blackwood area.
There were no notable sudden temperature fluctuations recorded from the various static instruments.

It was discovered post investigation that the sensor located in the Southeast corner of Room 3 had stopped recording at 9.21pm, this was likely caused from being touched or bumped during the first vigil.

The sensor located in the cellar displayed a cycle of raising and lowering temperature at approximately 6 minute intervals throughout the entire evening. This was caused by the fan of a refrigeration unit switching off and on nearby.

The thermal imaging camera sweep of the hotel did not record any unusual readings.

Thermal image of the refrigeration unit in the cellar.

Thermal images left to right: The dining area, front bar and outside stairs leading from room 3.

Relative humidity data was collected from various points, no abnormalities were recorded. The variance experienced is attributable to the fact that some locations were more exposed to the outside air and others to the drier air of heated areas.
Atmospheric Pressure

The relative atmospheric pressure varied by 0.6hPa throughout the night. Maximum was 954.9hPa and minimum 954.3hPa, average was 954.6hPa. No sudden substantial changes were recorded.

![BLACKWOOD HOTEL RELATIVE ATMOSPHERIC PRESSURE 20/05/08](image)

Electro Magnetic Field Levels

No unusual EMF readings or sudden spikes were reported. Ambient EMF was at normal levels, increasing in some areas around electrical fixtures which is only to be expected.

Room 3 base readings ranged from 0.01 - 0.60. Room 3 did have higher readings in one corner which was traced to wiring in the basement area.

The Keg room base readings ranged from 0.1-0.4 generally, with reading up to 1.2mG around electrical cables along overhead timber joists.

Carbon Monoxide and Carbon Dioxide Levels - Not monitored.

Infrasound - Not monitored.

Satellite Environment

The environment in which the earth is placed is monitored to identify any pattern or correlation with reported activity. Some believe that there may be an increase in activity when the earth encounters geomagnetic or solar radiation storms.

Whether the effects, if any, are on human perception of activity or indeed do promote paranormal occurrences is a matter of conjecture.

Items such as the proton flux, electron flux, averaged parallel component of the magnetic field, and readings from earth based magnetometers are released by the National Oceanic and Atmospheric Administration and are presented on a Universal Time scale.

Local time was +10 hours from UTC and no significant events were reported.
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 to data to be available. For this reason most events fall within the second, third or fourth classifications. The Blackwood Hotel investigation was no exception and many reported events were rated as inconclusive.

Indeed we can only rate according to what is experienced on the particular night of our investigation, which may be quiet in comparison to other nights of reported activity. We do like to return to sites whenever possible in order to gather more data and again have the chance to be present when activity occurs.

RECOMMENDATIONS

Further historical research may prove beneficial in confirming and documenting the finer details contained in local legend. A search of historical newspapers and government reports may be of assistance in determining the full details of Laura Dalton and Frederick Hill.

The frequency of activity seems to have waned compared to earlier reports and it may be worthwhile to conduct another investigation should an increase in activity occur.

The ultrasonic movement detector used for the first time during this investigation proved very sensitive and able to cover a large area with ease. It is envisaged that a camera and passive infrared detector will be incorporated into the unit at a future time in order to allow collaboration from multiple sources.

Recording of sound was an issue as sound travelled readily around most areas of the hotel, this should be considered on any subsequent investigation and steps taken to avoid false positives.

SITE CLASSIFICATION

The highest rating achieved by any event on the night was “inconclusive”. Collection and examination of further data would be required to adjust this rating.
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 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.

Peter Olivieri and Lynne Wright from the Blackwood hotel for allowing the investigation to take place, and staying up late trading yarns about the Blackwood area!

Margot F. Hitchcock from the Blackwood District Historical Society for sharing her immense knowledge of Blackwood area and allowing quotations from her books “Aspects of Early Blackwood” and the soon to be released “The History of Blackwood”. Researching the history of the locations we investigate is an enjoyable part of what we do, made even more so when in such company!

Frances Dillon for allowing us to quote sections of her article on the Cann family, “The Cann Family of Blackwood” (http://www.blackwoodvictoria.com).

The assistance of TechRentals, a Division of the TR Corporation, in providing additional, fully calibrated monitoring equipment.