

## Bumps in the Night!!!!

May 2013 Issue

### Paranormal "U"

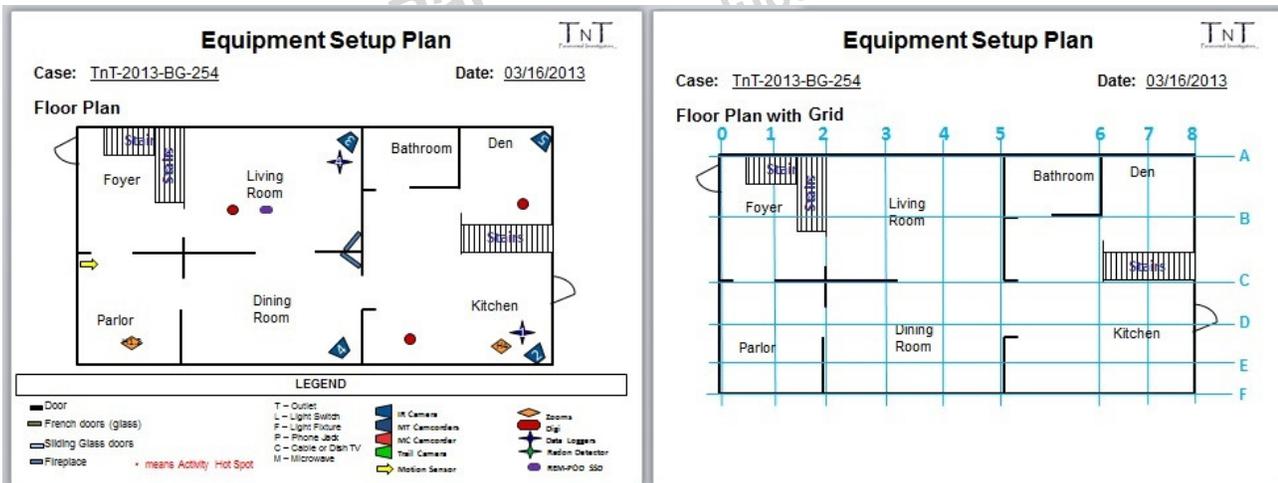
#### Importance of Baseline Readings

By Melissa Tanner, TnT Paranormal Investigators LLC

One of the first things we do during an investigation is to observe the location and obtain baseline readings (both inside and outside). This is important to be able to access the location and identify things that could cause someone to think and/or feel like a place is haunted. It is also important so that we know what the normal state of the location is in case that state changes during the investigation.

The process starts during the walkthrough when we make a floor plan of the location and make some initial observations. A few items we consider are: things that could cause power spikes or high voltage emissions; storage of chemicals or other items that could cause issues; noting open or loose windows or doors, etc. These items are noted on the floor plan and as part of the case file for future reference. To learn about more things to observe go to: <http://www.tntparanormal.com//Articles/Article8-How%20to%20check%20if%20your%20house%20is%20haunted%20V2.pdf>

The floor plan is also used to indicate equipment locations for the equipment setup, as well as to create a plan for the baseline readings / observations we will be gathering. The Grid Floor Plan is done by taking the original floor plan and dividing the location up into a "grid" pattern where each grid like is approximately 3' to 4' apart. Readings are taken at each grid point (line intersection) and documented for future use/reference. An example of the floor plan and plan with grid are below:



Before an investigation we gather an array of different baseline readings of the location using a variety of types of equipment. The baseline readings we gather are:

- **Temperature** – A very common report that paranormal teams get from clients are cold or hot spots at the location. So an area where the temperature is different than the rest of the room. The theory in the field of the paranormal is that as a spirit tries to manifest it pulls energy from the air/atmosphere around it which causes a change in that atmosphere; in this case in the air temperature (ambient). Please note this change would need to be about 10 degrees or more to be something to consider more closely. So we take baseline readings of the ambient temperature for two reasons: 1) to look for a natural occurrence of a temperature change and 2) to see what the normal temperature is each

## Bumps in the Night!!!!

May 2013 Issue

### Paranormal "U"

#### Importance of Baseline Readings

grid point in a room. Believe it or not the temperature in a room can vary several degrees from left to right and top to bottom (remember heat rises) in the room. To learn more about temperature readings and why they are important, go to:

[http://www.tntparanormal.com/Articles/Article36-Ambient\\_vs\\_Surface\\_Temperatures.pdf](http://www.tntparanormal.com/Articles/Article36-Ambient_vs_Surface_Temperatures.pdf).

- **Electromagnetic Fields (EMFs)** – Another common report that paranormal teams get from clients is a feeling of being watched, feeling sick, getting creeped out, etc.. These all can be signs of EMF exposure or just like with temperature changes it is believed it could be something paranormal. The theory in the field of the paranormal is that as a spirit tries to manifest it pulls energy from the air/atmosphere around it which causes a change in the surrounding EMFs. Please note that all electrical appliances, electronics, wires, and power lines produce EMFs. So those things have to be ruled out first.

We take baseline readings of EMFs for two reasons: 1) to look for a natural occurrence of EMFs in a location and 2) to see what the normal EMF is each grid point in a room. To learn more about EMFs and some of the dangers they present, go to :

<http://www.tntparanormal.com/Articles/Article20-Dangers%20of%20EMFs.pdf>.

To get these readings there are several types of single-axis and triple-axis meters. A great single-axis EMF detector, is the Mel-Meter; since you can take both EMF and ambient temperature readings at the same time. Another great EMF detector is the Tri-field Meter, a the triple-axis meter, which allows you to take magnetic, electrical, and radio frequency readings. We will discuss magnetic and radio frequencies below.

EMFs played a key role in a case I worked on several years ago, in which the young son of the client was seeing shadows and apparitions in his room, when we was in his bed. We found that the child was sleeping with a digital clock radio on his pillow at night. A digital clock radio gives off very high EMFs. It is believed that long term exposure to EMFs can cause things like hallucinations, sickness, and much more. We told the client to try moving the clock radio off of the child's pillow and have it at least 4' from the child head. They did this and the "visions" went away. We believed the exposure was causing the "visions" and not something paranormal.

- **Humidity** – When we say humidity what we mean is relative humidity. It is important to understand humidity and document it during an investigation.

We take readings of the humidity for four reasons: 1) Humidity can introduce false positives in the form of orbs (aka moisture or dust) in video and photos; 2) humidity can increase or decrease the static electricity in the air thus allowing for more or less dust to occur; 3) Some paranormal investigators believe that more activity is documented in the drier, winter months; and 4) since temperature drops could be an indicator of paranormal activity, why couldn't dramatic humidity changes be an indicator as well? To learn more about Humidity, go to :

<http://www.tntparanormal.com/Articles/Article37-Humidity.pdf>.

To get the humidity we use two different methods. First we use data loggers to document the humidity and temperature in a room throughout the investigation (obtains readings every 2 seconds). Second we have a portable weather station we use to monitor the humidity during the investigation.

- **Carbon Dioxide (CO)** – CO is a lethal gas that occurs when various types of fuel such as natural gas or propane do not burn completely. It is also produced by burning anything containing carbon, such as wood or cigarette smoke. CO has no odor of its own and cannot be

## Bumps in the Night!!!!

May 2013 Issue

### Paranormal "U"

#### Importance of Baseline Readings

differentiated from the substance burning that created it. The affects of CO poisoning can be very similar to reports/claims of the paranormal, however these affects can make you very sick, have long term affects, and unfortunately in high enough doses is lethal. Therefore we try to rule out higher than normal CO readings before we start the investigation. This is for the client and our safety.

We use a portable CO detector to take basic readings in the location where any appliance uses gas/propane, such as a water heater, stove, furnace, or clothing dryer. Please note that there is a natural occurrence of CO in all buildings, but it should be in low levels. We report these readings to the client. To learn more about CO and some of the dangers, go to : <http://www.tntparanormal.com/Articles/Article15-CO-Delayed%20Neurological%20Syndrome.pdf>

- **Gas** – A leaking of gas into a closed space can have similar affects as CO poisoning. Gas poisoning is very dangerous and can be lethal. Therefore we try to rule the presence of gas before we start the investigation. This is for the client and our safety.

We use a portable gas detector to check for gas leaks in the location where any appliance uses gas/propane, such as a such as a water heater, stove, furnace, or clothing dryer. We report gas leaks to the client immediately.

- **Radio Frequency (RF)** – A radio frequency (RF) is a type of EMF that is at a frequency suited for broadcasting television and radio signals. Normally included in this is microwave signals. We use a Trifield Meter to gather the RF readings in a location. Please note that these RF signals can cause false positives on various types of EMF meters. That is why it is important to know if there are RFs in the location before you start.
- **Magnetic Fields (MF)** – A Magnetic fields are produced by electrical current. MFs in a home come largely come from unimpaird wiring. We use a Trifield Meter to gather the MF readings in a location. Just like with RF, MFs can cause false positive reading in other equipment. To learn more about RF, MF, and Trifield Meters, go to : <http://www.trifield.com/content/the-trifield-meter/>. It's also important to understand Very low frequency (VLF) and Extremely low frequency (ELF) and how they can impact people and equipment at a location.
- **Barometric Pressure** – Barometric Pressure is simply a measurement of the pressure of the atmosphere. The Barometric Pressure of a location may vary slightly from floor to floor (varied elevations), but should remain consistant within a given elevation.

We take readings of the Barometric Pressure for two reasons: 1) Barometric Pressure changes can be an indicate of a weather change in the area and A) can mean we need to stop the investigation and seek appropriate shelter or B) some believe that more paranormal activity happens during a thunderstorm...so it maybe time to gather more data; and 2) since temperature drops could be an indicator of paranormal activity, why couldn't a change in the Barometric Pressure be an indicator as well?

We use a barometer to gather the Barometric Pressure readings. The barometer we prefer is the Kestrel, since it can also track wind speed, temperature, and other readings as well. To learn more about Barometric Pressure , go to : <http://www.tntparanormal.com/ToolsoftheTrade/ToolsTrade22-Barometers.pdf>.

To document the Temperature and EMF readings we write them right on the grid plan and for the other readings we use a log like the one shown below. All of the readings documented are then inputted into our tracking database for future use, as well as referred to through out

## Bumps in the Night!!!!

May 2013 Issue

### Paranormal "U"

#### Importance of Baseline Readings

the investigation of the location.

Reading	ReadingType	Notes	Reading_Flag	LocationID	fk_CaseID	fk_MemberID
29.16	Barometric Pressure (BP)			7	266	RM
0	Radio Frequency			7	266	RM
2	Magnetic Field 0-3			7	266	RM
0	Magnetic Field 0-100			7	266	RM
6	Carbon Monoxide (CO)	Water Heater		7	266	RM
5	Carbon Monoxide (CO)	Furnace		7	266	RM
29.16	Barometric Pressure (BP)			1	266	KS2
0	Radio Frequency			1	266	KS2
5	Magnetic Field 0-3			1	266	KS2
0	Magnetic Field 0-100			1	266	KS2
6	Carbon Monoxide (CO)	Stove		1	266	KS2

In addition to baseline readings we take samples of most of the above readings throughout the investigation to see if there are changes in the baseline readings . We don't jump to conclude that the changes in a specific reading prove that paranormal event occurred, but rather use it as a data point to try to gather more data and/or note of the change. This data point will be reviewed later in case we get another data point at the same time (such as an EVP). There are some teams that do another sweep at the end of the investigation to see what the ending readings are versus baseline readings. What is your thought on that? Is it necessary? Is it a good idea?

Over the years we have modified our readings procedure and we continue to refine it and add new readings to the mix. In addition to keeping our notes in the case file we upload all of the readings we gathered during an investigation into the database that we use to track data for all cases. We then access these readings and provide the client with any key factors they should know like high EMFs, natural cold spots, etc.

We would love to hear from you on the readings you gather and why. Send to [info@tntparanormal.com](mailto:info@tntparanormal.com). We hope you enjoyed the article and hopefully learned a little something while reading it.