

ENGAGING AUSTERITY THROUGH INNOVATION...

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Heating Control for Courthouses and Other Historic Buildings; Using State of the Art Technology Combined with Elegant Decor to Cut Heating Costs in Half

Extreme Endeavors has developed a novel steam and hot water control system that will allow individual control of temperatures in the rooms of historic buildings. Micro sensors embedded in picture frames, wall decorations and other antiques are wirelessly sensed by a computer. A small PC is then used to record the temperature data, calculate the rate of change needed for heat control and control each heat register appropriately.

We recently began working with courthouses and the number one identified issue was the efficiency of their heating units. It is not uncommon for large, older buildings to be too hot in one location while being too cold in other areas. These temperature variations not only affect the employees' productivity, but also wastes energy. Many of our older government buildings have only one thermostatic control for an entire structure. By utilizing our technology, heat can be more effectively distributed throughout the building while saving the costs associated with inefficient heating.

LED Lighting

LED lighting is the latest in power-saving devices. It is the lowest energy consumption solution available on the market and the lighting quality is exceptional. LED lighting also has programmable features that can provide multiple colors and more lighting effects than regular light bulbs.

Most of the commercially available LED light bulbs perform an AC to DC conversion for each light. Extreme Endeavors is looking at other alternatives such as using low voltage DC busses within buildings to power the LED lighting system. At Extreme Endeavors, our goal is to overcome the barriers of what we have experienced with LED lighting, making it more efficient. Not only will our system use less power, but it will cost less to install, it will be easier to maintain and it will exceed the customers' expectations in their lighting needs. Contact us to see how our research team can enhance your lighting capabilities.

Solar and Wind Installation at Barbour County Schools

The Barbour County Career and Technical Education Center is now partially powered by Green Energy. The "Energy from the Sky" project was funded through the Appalachian Regional Commission grant program and collaboration with Extreme Endeavors. Not only are solar panels and a wind turbine back feeding the school grid, but the school now has a new tool to include in the students' curriculum regarding installation, operation and benefits of renewable energy. With the assistance of Extreme Endeavors, instructional materials are being established to educate and prepare students for a future that will include many forms of power generation. Future collaboration is being planned to further the possibilities of this project.

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Bat Monitoring System

During the past winter, Extreme Endeavors discovered bats flying around Hellhole Cave, one of the largest and most important bat caves in the West Virginia. The bats have since been confirmed to have White Nose Syndrome, resulting in a devastating blow to the ecology of the area. To combat this situation, the Department of Natural Resources and Greer Lime enlisted the assistance of Extreme Endeavors to provide some of the most advanced technological environmental monitoring for the purpose of gaining insights into this devastating disease for bats. The West Virginia DNR's initial objective was to log bat echolocation sounds using a high data rate recorder that is linked through the Internet to and from one of the most remote regions in West Virginia, thereby delivering real time bat calls to the computers at the DNR office in Elkins, West Virginia.



This systematic approach has significant benefits and has made a tremendous impact on environmental and industrial monitoring. With this approach, important bat caves can be monitored for the purpose of diagnosing the effects and survival rate of the fungus. In addition, the system can be used to place monitoring stations in any remote area of the country where there is no power or radio communications of this type available. A prime example of where this can be used is in remote monitoring of water and streams by the Department of Environmental Protection.

I-phone and Sensors

Extreme Endeavors is currently working on developments that will allow the acquisition of data from our sensor system onto an I-Phone. Call us today to inquire how we can help with your environmental or factory monitoring needs.

Partnership Development with the Missouri Department of Conservation

The Missouri Department of Conservation is utilizing Extreme Endeavors' assistance to monitoring caves in order to protect the state's natural resources. Biologists from the Missouri Department of Conservation found that the sensors and data acquisition system developed by Extreme Endeavors have unsurpassed reliability in harsh cave environments. In addition, they are aware of Hellhole Cave project and are very impressed at Extreme Endeavors' ability to perform such a complex and dangerous installation.

Technology Widgets Now Available

Extreme Endeavors has developed software that will convert an email to a voice phone call, allowing our technology to "call" and inform them of any conditions or limits that have been identified or reached. This software package is just one of the small details that help to set Extreme Endeavors' systems apart from the rest.

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