S.A.V.E.-Safety and Vitals Emitter

Brandon Pun (Architecture)
Thomas Jefferson University, pun5242@mail.philau.edu

Fred Ramirez (Architecture)
Thomas Jefferson University, ramirezii1112@mail.philau.edu

Follow this and additional works at: http://jdc.jefferson.edu/nexusmaximus

Part of the Medicine and Health Sciences Commons

Let us know how access to this document benefits you

Recommended Citation
http://jdc.jefferson.edu/nexusmaximus/12

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University’s Center for Teaching and Learning (CTL). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Nexus Maximus by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.
The Safety and Vitals Emitter is a series of devices that will assist in locating individuals during times of crises and natural disasters. More specifically, it will help first responders and rescue teams to locate those who need to be rescued.

**What is S.A.V.E.?**

S.A.V.E. is a device which uses ultrasound technology and infrared thermal imaging to pick up heat signatures which can be used to locate people during a natural disaster. The technology in this device is using these two technologies together cohesively to make each other more efficient. The ultrasound detection “hears” what we cannot hear, and the infrared imaging “sees” what we cannot see. The infrared imaging will pick up heat exchanges in certain areas, this makes it easier for rescuers to quickly determine areas where people can be trapped. This saves both time, which some people in need may not have. The heat exchanges are then located using the ultra sound technology to ping the exact locations of people in need of rescue. These two technologies work simultaneously with the S.A.V.E. device. The location of these people are then transmitted to a black box located in several areas around the city, in safe locations for rescuers to find and use to locate victims of natural disasters.

**How does it work?**

S.A.V.E. is a device which uses ultrasound technology and infrared thermal imaging to pick up heat signatures which can be used to locate people during a natural disaster. The technology in this device is using these two technologies together cohesively to make each other more efficient. The ultrasound detection “hears” what we cannot hear, and the infrared imaging “sees” what we cannot see. The infrared imaging will pick up heat exchanges in certain areas, this makes it easier for rescuers to quickly determine areas where people can be trapped. This saves both time, which some people in need may not have. The heat exchanges are then located using the ultra sound technology to ping the exact locations of people in need of rescue. These two technologies work simultaneously with the S.A.V.E. device. The location of these people are then transmitted to a black box located in several areas around the city, in safe locations for rescuers to find and use to locate victims of natural disasters.

**How will it help me?**

Our service will maximize the efficiency of rescue teams, which in turn means maximizing your chances during times of crisis. S.A.V.E. will find your location in proximity to a series of black boxes which will be scattered around the city. Through its use of checking for a heat signature and the location of the device, it can warn first responders of where to first search for survivors.

**Example of the S.A.V.E. System**

![Example map showing the coverage of the S.A.V.E. system.](image_url)