



Home Authentication / Biometrics Business / Finance Continuity / Recovery Cybersecurity Detection Education / Sci-Tech Emergency / Police / Mil. Government policy Infrastructure Public health / Biodefense Surveillance Systems integration Transport / Border

THE BUSINESS OF HOMELAND SECURITY

Thursday, 4 February 2010

ADVERTISE SIGN UP FOR OUR FREE DAILY REPORT

Search

Eye -- and ears -- in the sky

Mississippi company develops elevated acoustic sensor

Published 13 August 2009

Acoustic sensors are typically located on the ground; a Mississippi company developed an elevated acoustic sensor that can be mounted on a balloon; the sensor can be combined with a camera to create a visual and auditory sensor

OE - Oxford company making waves in homeland security - Eye in the Sky

If you have driven near Highway 7 recently, you may have noticed a UFO hovering just south of Oxford, Mississippi, which has taken the shape of a single large white balloon. Do not panic. The balloon is friendly and, in fact, is watching out for your safety. *Y'all Politics reports* that it is part of a project being developed at the **Miltec Research and Technology Co.**, which is based at the Oxford Enterprise Center.

The company, purchased by Ducommun in 2006, has a parent company in Alabama and locally joined with the University of Mississippi National Center for Physical Acoustics before branching out into its own business in Oxford. The focus of the company is audio products that are often used for defense mechanisms. The balloon is one of its newest of the products and is a homeland security project now in its demonstration phase.

Working with two other companies, Floatograph and Strong Watch, the company has engineered an elevated acoustic sensor, or what its developers call, ELF. "This is the next generation of a previous product called the fence post," said Geoffrey Yoste, a consultant for Miltec through his Yoste Strategic Partners LLC. "What we've now developed is the elevated ground sensor."

When testing is completed, Miltec intends to manufacture the product in Oxford which will in turn create local jobs, Yoste said. **New combination**The sound component can be combined with any camera system and any balloon system to combine a visual and auditory sensor. While visual systems already exist that are similar, Miltec is the first to create a combination sound and visual system.

Floatograph supplied the balloon which Miltec has managed to fuse with its acoustic sensor and the Strong Watch camera. The result of these efforts is the creation of a monitoring system that has a variety of applications.

"Potential applications for this are not only militarily but also for homeland defense/security, such as monitoring illegal alien traffic along the northern and southern Borders, stadium and sports security and maritime domain awareness (port security)," Yoste said. "Civil applications may include traffic control and critical infrastructure."

Although ELF is designed to be able to pick up sound and visuals in an area ranging from 10,000 to 100,000 square feet, the purpose is to capture unique sounds, such as gunfire or other loud noise. "It's not listening to your conversations; we couldn't even if we wanted to," said Wayne Grather, a Miltec engineer.

What the system can capture is a large noise. The auditory system then tells the camera where to look, something that current visual systems can not accomplish. During a recent test, Sound Watch chief executive officer Andrew Griffis said that for military uses, if the balloon is shot down, it can remain in the air for two to three hours, providing more than enough time for the auditory sensor to pinpoint where the gunfire originated.

The other benefit to the ELF is that the system is mobile, allowing owners to place it wherever it's needed, rather than building a stationary tower.

Topics: Business | Companies / JVs / Partnerships | Business / Finance | Surveillance

IN TODAY'S ISSUE

- 950 whole-body scanners in U.S. airports by end of 2011
- Ahern signals support for airport body scanners
- U.K.: Yemen must upgrade airport security
- IBM filed patents for airport security profiling technology
- Partnership aims to help air shippers meet security deadline
- Super Bowl, Winter Olympics, soccer World Cup take extra security measures
- Climate change experts argue for international geoengineering effort
- Public policy should be based on science, but the science must be sound
- Cold war offered odd benefit: it limited species invasions

H Home Authentication / Biometrics Business / Finance Continuity / Recovery Cybersecurity Detection Education / Sci-Tech Emergency / Police / Mil. Government policy Infrastructure Public health / Biodefense Surveillance Systems integration Transport / Border
 About us Sign up Advertise Contact Privacy policy