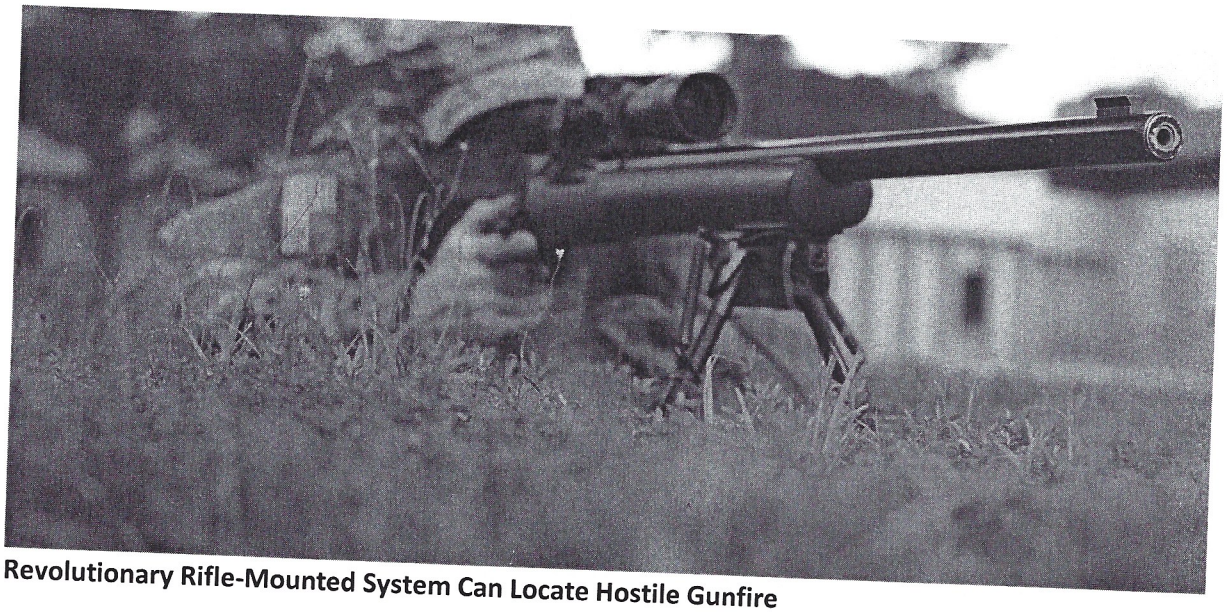


Revolutionary Rifle-Mounted System Can Locate Hostile Gunfire

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This post is also available in: עברית (Hebrew)

A new portable system small enough to mount on a personal firearm provides its user with the ability to quickly locate the source of hostile gunfire. It is designed for the infantry and dismounted soldier who is in direct contact with the enemy, providing him with the capability of finding in a few seconds and in an intuitive way the origin of the shots that are threatening them.

The PEARL system uses acoustic sensors to determine the source of gunfire during the confusion of combat. Its manufacturer, French defense contractor Metravib, describes PEARL as a "soldier protection" system, but it clearly has offensive applications.

The system detects the shock waves generated by muzzle blasts from small arms fire. These shock waves travel through the air, radiating from all directions, like radar or sonar waves. With the help of advanced acoustic sensors, PEARL can trace them back to their point of origin.

Although so-called "shot spotting" technology has been out for some time now, PEARL's system is small enough to mount on a helmet or rifle. The system attaches to the top Picatinny rail of a modern assault rifle, a sniper rifle, a machine gun or multifunction goggles/sights. An intuitive interface composed of directional LED arrows shows the azimuth and elevation of the threat, according to the company website. The system allows the user to orient on the threat and act accordingly. It is accurate within plus-or-minus 7.5 degrees azimuth, according to popularmechanics.com.

PEARL is designed to work in both urban and mountainous terrain, where the sound of gunshots might echo off multiple surfaces. It can also filter out friendly outgoing fire from hostile incoming fire. The system is supposed to be "soldier-proofed" — self-enclosed without any pesky wires and with only three control buttons.

Metravib claims that the technology is "combat proven," hinting that the company's technology has been used in Iraq, Afghanistan, Balkans, Central African Republic and Mali. A more advanced version of PEARL, the PILAR system, can tell users the range of the enemy gunfire, GPS coordinates, and display on a map the source of the gunfire.