

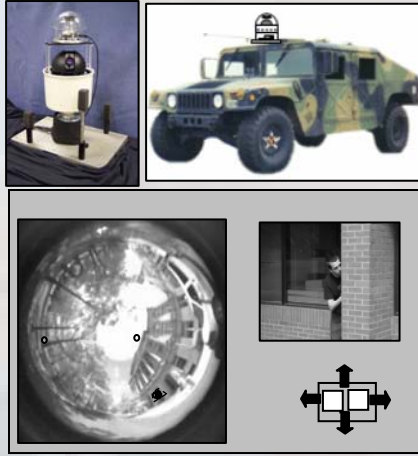
# ***N-GDLS***

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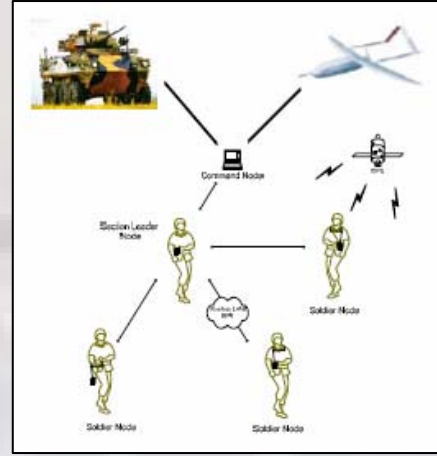
## **NETWORKED GUNFIRE DETECTION AND LOCALIZATION SYSTEM**



**WEARABLE UNIT**



**VEHICLE MOUNTED  
OPTO-ACOUSTIC UNIT**



**NETWORKED  
OPERATION**

The N-GDLS is a networked system consisting of individually wearable (helmet or shoulder mounted) acoustic sensor arrays that can operate independently or be networked with each other. It can also be implemented as a vehicle mounted system with additional optical imaging capabilities to provide wide area gunfire detection and localization situation awareness.

The wearable system consists of an array of acoustic sensors and an orientation sensor connected to a pillbox sized processor unit embedded with the ATLS® software to detect, classify and localize gunfire. The output is the bearing and range information on a PDA with an audio alert. The vehicle mounted Opto-Acoustic system includes a hemispherical imaging system for omni-directional situation awareness and a pan-tilt-zoom camera triggered by the output from the acoustic sensor array to provide high resolution image of the source of the gunfire. The optical system can be implemented with image intensification for night vision capability, or with thermal sensors for detection of muzzle flashes.

The sensor array weighs <150g and the processor unit weighs <250g. Because of the light weight, the system is also suitable for UAV installation to provide airborne acoustic gunfire localization. The ATLS® can be trained to detect different acoustic signatures and is capable of classifying various caliber small arms, rifles, machine guns, RPGs and grenades, as well as artillery gun and mortar fire.

*N-GDLS and its many variants is a joint development of InterScience Inc. and Land Warrior Acoustic Systems Inc., marketed through InterScience, Inc. ATLS® is a registered trademark of Land Warrior Acoustic Systems Inc.*