

Remote Vehicle Inspection System



Market Need

Increased inspection at vehicle check points is required to ensure the safety of the security officers. Having a vehicle pull up to the check point and then detonate a bomb causes loss of life and injuries to the security personnel. A method of checking a vehicle to determine if there is an explosive device, or in many cases smuggling of contraband, where the security officer is at a safe distance is required.

Product Description

A researcher at The Johns Hopkins University Applied Physics Laboratory has developed and patented a method and device to conduct remote vehicle inspection. The technology includes a remote inspection module located at the vehicle and a monitoring terminal located at a remote distance with the security officer. The system can be connected by wire or be wireless with distances up to 1000 feet.



The station at the vehicle consists of a video camera, bright lights, speaker and microphone. Second generation systems include pulse oximetry and a galvanic skin meter. Third generation systems will include various sensors to detect chemical vapors, radiological sources and potential biological agents.

Remote Vehicle Inspection System

The station with the security officer consists of a video monitor, microphone, speaker, switches for power and to turn on the inspection lights. Second generation systems will include physiological sensor readouts. Third generation will include readouts from other sensors.

The operation of the remote vehicle inspection system begins when a vehicle pulls up to a check point. The driver or passenger gets out and takes the remote camera. Following instructions from a security officer located a safe distance from the vehicle, the driver scans the vehicle. Only after the scan is completed is the vehicle allowed to pull up to the check point station and proceed. The physiological sensors are covert and can tell if the driver or passenger is getting nervous during the inspection. If an anomaly is detected, appropriate actions can be taken.

Key Features

- Wired or wireless system
- Covert physiological sensors
- 2 way audio communication
- Increased safety for security officer
- Remote transmission of signal to central command



The remote inspection system can be used in conflict zones such as Iraq at checkpoints for IED vehicle inspections.



The system could be used domestically at high-value facilities (nuclear power plants, oil refineries, etc.)

Availability

Seeking licensee or continued development partner

Technical Status

U.S. Patent Pending

Contact Information

For Technical Information, contact:
Protagoras Cutchis
protagoras.cutchis@jhuapl.edu

For Licensing Information, contact:
John Bacon
Technology Manager
Phone: (443) 778-8309
FAX: (443) 778-5882
john.bacon@jhuapl.edu

APL
The Johns Hopkins University
APPLIED PHYSICS LABORATORY