

# Caught on the Run

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There have been much loss of lives and properties during gun fire exchange and pursuit of criminals by law enforcement agencies. Furthermore criminals do escape with bullet wounds and there are only few reported cases of the wounded criminals or accomplice medical personnel that treats them being apprehended. A radio frequency micro-transmitter and reconfigured GPS module were embedded into the bullet, powered with a cell of e.m.f. of 1.5V while the copper casing of the bullet was configured as a micro-antennae. When the bullet was projected into a body, the body fluids activate the pressure sensor, producing a vibration that generated 100 millivolts which is detected by the transmitter, thereby activating it and causing the transmitter to transmit at 313 MHz. The GPS module embedded in the bullet ensured the tracking of the exact location of any shot suspect through trilateration. The GPS receiver deduce the location of the bullet trapped in the suspect body which was estimated using the angles at which the Radio Frequency signals arrive at multiple receivers hence accurately estimating the location of a shot suspect. This helped tracked the exact path taken and location of a shot suspect ensuring swift arrest without the usual pursuit. Vibrations activated tracker version was developed for tracking a shot vehicle. The further development of this device will go a long way in reducing crime in our society while at the same time minimizing loss of lives and properties in the process of crime control by the law enforcement agencies.