"RADIATION DOSIMETER & DIRTY BOMB"

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Before the House Committee

on Government Reform,
Subcommittee on National Security,
Emerging Threats and International Relations on
"Counterterrorism Technology"

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Mr. Chairman, Congressman Christopher Shays and Members of the House Committee on Government Reform, Subcommittee on National Security, Emerging Threats and International Relations,

Thank you for inviting me to testify about "Counterterrorism Technology: Picking Winners and Losers"

JP Laboratories has developed a credit card sized, low cost radiation dosimeter, as I have in my hand. We have provided you samples of radiated and un-irradiated dosimeter. The dosimeter can be used to monitor radiation exposure in an event of a radiological attack by terrorists.

It is widely believed that terrorists have a new weapon called a "dirty bomb". A dirty bomb is an ordinary explosive packed with a radioactive material. When detonated, it would spread radioactive dust. High dose of radiations, such as X-ray emitted by the radioactive dust can cause cancer and even death. A dirty bomb could cause widespread panic and massive disruption while rendering the surrounding area uninhabitable for years.

In an event of a detonation of a dirty bomb, it is imperative that people affected by the bomb and first responders need to quickly assess radiation exposure. If people affected by a dirty bomb know their radiation exposure, the panic and concern can be minimized. If they have a wearable inexpensive radiation dosimeter, they will know their radiation exposure. If they are not exposed to radiation or received a very low dose, they would not need to worry and would not need to rush to a hospital. However, those who have received high dose may go to hospital and physicians would know whom to treat first. In order to determine radiation exposure, hospitals will need to obtain blood samples from every potential victim. That will be practically impossible to do with so many people affected. A panic among the people and their concern can be minimized if they have a wearable, easy to read personal radiation dosimeter.

JP Laboratories has developed a credit card sized radiation dosimeter called SIRAD (**S**elf-indicating **I**nstant **R**adiation **A**lert **D**osimeter) which can be used to monitor the high energy

radiation released in case of a dirty bomb attack. When exposed to radiation from a "dirty bomb" or nuclear detonation, the sensing strip of SIRAD develops a blue color instantly and the color intensifies as the dose increases providing the wearer and medical personnel instantaneous information on the victim's cumulative radiation exposure. The dose is estimated by matching the color of the sensing strip with the color reference bars and dose printed on each side of the strip. It can take days to get that information by other methods currently available. SIRAD is inexpensive - under $10 each.

JP Laboratories has developed several products with federal funding. The development of SIRAD was funded by (1) the Department of Defense, Naval Sea System Command and (2) Technical Support Working Group (TSWG). TSWG recognized SIRAD's significance to first responders and has proceeded to make them aware of the dosimeter's availability. TSWG has decided to fund our proposal to make a smart dosimeter, which can read from the numbers printed on the strip and indicates any false positive.

A week ago I had the opportunity to meet many first responders at the "Technologies for Public Safety in Critical Incidence Response" Conference organized by the Nation Institute of Law, in St. Louis, MO. TSWG has helped many organizations put a number of products and processes into the hands of first responders to fight terrorism. We believe TSWG can do an even better job if it becomes an independent agency with a larger budget.

I will be happy to answer your questions.

Full written testimony at:

http://www.access.gpo.gov/congress/house/pdf/108hrg/92393.pdf