Screening for security: millimeter-wave scanner identifies non-metallic weapons

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If you're looking for concealed weapons these days, you need more than x-ray machines and metal detectors. You want something that also will identify non-metallic weapons, or any other threatening object that may be concealed under clothing.

Researchers at Pacific Northwest National Laboratory have developed an innovative screening technology that uses harmless, ultrahigh-frequency radio waves to penetrate clothing and can quickly identify plastic explosives and other types of weapons.

The active millimeter-wave technology rapidly scans people and sends reflected signals into a high-speed image processing computer which produces a high-resolution 3-D image.

The scanning technology is rapid, produce an image in less than three seconds. It can be used in a variety of public areas, such as airports, court houses, federal buildings, prisons, embassies, schools, sporting events, mass transit systems and nuclear sites to minimize delays and the indignity of physical searches that are often necessary to resolve ambiguous alarms.