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Threat of Plastic Guns Rises

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WASHINGTON—New plastic guns made by 3-D printers could beat metal detectors and compromise security around the country, federal authorities warned Wednesday—and an expiring law could soon make them legal.

Law-enforcement agencies have grown increasingly concerned about plastic guns since late last year, when a Texas man posted online gun blueprints for 3-D printers, which build three-dimensional objects using plastic materials.

The ability to build a working gun from plastic has excited technology geeks and gun enthusiasts, but law-enforcement officials say plastic guns could compromise security measures in countless schools, government buildings and other areas.

There is additional urgency around the issue because next month a 1988 law that bars production of firearms that don't contain enough metal to be read by metal detectors is set to expire. Congressional aides say the legislative calendar is so uncertain it's unclear how or if legislation to renew the law would come to a vote.

"It does create a public-safety concern…whether we appear in court, whether we get on an airplane, whether we go to a concert—any type of venue, it presents a challenge for law enforcement," said Richard Marianos, an official with the Bureau of Alcohol, Tobacco, Firearms and Explosives. Plastic guns can defeat security procedures "that have been tried and true for the last 30 years," he said.

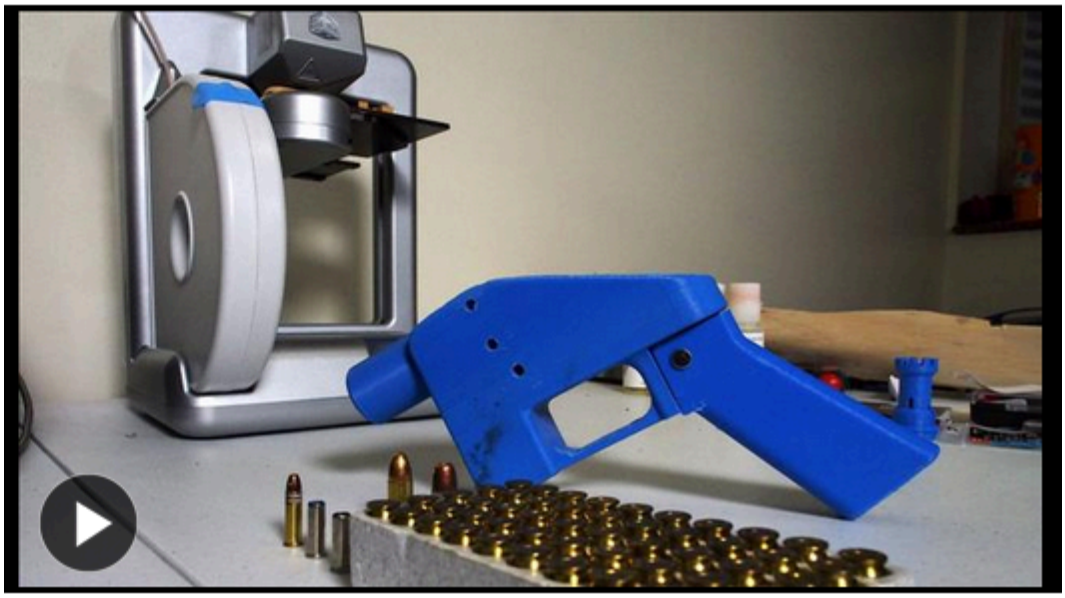
To date, there haven't been any known instances of a person being shot with a plastic gun in the U.S., nor are there currently any criminal investigations for possession of such a weapon, ATF officials said.

The weapons are still expensive to produce, and quality is uneven. A cheap 3-D printer can cost as little as $1,000, but to make a working gun requires more expensive printers, which can cost $100,000 or more.

Law-enforcement officials say the risk so far isn't that street criminals will find a new source for weapons. "This is more for someone who wants to get into an area and perhaps be an assassin," Mr. Marianos said. "Or they want to go to a courthouse and shoot a witness."

Late last year, a firearms dealer named Cody Wilson posted online instructions for how to make a gun called a "Liberator" with 3-D printing. Such weapons can use a roofing nail as a firing pin—an amount of metal so small that many metal detectors wouldn't sense it.

Mr. Wilson couldn't immediately be reached for comment.



Earl Griffith, chief of the ATF's firearms technology branch, on Wednesday showed reporters videos of plastic guns made according to the Liberator design. The gun holds a single bullet. Made out of a readily available type of plastic, the gun will fire a bullet but shatters into pieces. ATF officials said these weapons are also dangerous to people who try to use them.

But with a more high-tech type of plastic, the gun doesn't shatter and can be repeatedly reloaded and fired. Mr. Griffith said he expected evolving technology, such as the development of ceramic firing pins, would continue to make such weapons harder to detect—and potentially more dangerous. Mr. Griffith said he also believed it was possible to build a fully automatic plastic gun.

Under the soon-to-expire Undetectable Firearms Act, anyone making a gun has to include a certain amount of metal, even if it's unnecessary for operating the weapon. The Liberator is designed to hold such a piece of metal, but it can be easily removed.

At the time the law was passed, an all-plastic gun was still just a theory, but Congress was trying to make sure such weapons weren't produced in the future. Now that the technology exists, the law is due to expire in less than a month, and it is unclear if Congress will take action to extend it.

Sen. Charles Schumer (D., N.Y.) said the law's expiration, combined with 3-D printing advances, "make what was once a hypothetical threat into a terrifying reality. We are actively exploring all options to pass legislation that will eliminate the threat of completely undetectable weapons."