OPINION



A Transportation Security Administration employee trashes products collected from passengers at a security checkpoint at Chicago's O'Hare International Airport in 2006. A terrorist plot uncovered in London to destroy planes bound for the United States led to a ban on liquids and gels in carry-on luggage. DAVID KLOBUCAR/TRIBUNE

Should the TSA end the 3-ounce liquid restriction?

By Sheldon H. Jacobson

The plot to bring liquid explosives onto flights from London to the U.S. and Canada in 2006 prompted the Transportation Security Administration to institute a limitation of 3 ounces on all liquid and gel containers placed in

carry-on bags.
This led to the now well-known and much maligned 3-1-1 rule for carry-on much mangined 3-1-1 rule for carry-on bags: 3-ounce containers inserted into a 1-quart bag for each passenger. The 3-1-1 rule has endured for 17 years. Since that time, airport security has moved forward strategically and technologically. The most significant strategic change has been the introduction of PreCheck in 2011, the risk-based system that makes travelers better known to the TSA, giving them access to expedited screening lanes at airport security checkpoints.

Currently, the TSA is deploying computed tomography (CT) screening devices for carry-on bags, which provide a more precise, 3D view of bags'

Given such enhancements and improvements, is the 3-1-1 rule still needed?

The United Kingdom decided that it is not and is taking steps to gradually phase out the rule. London City Airport is the first in the U.K. to abandon the rule and is using CT screening devices to scan carry-on bags, which can screen liquid containers of up to 2 liters or

around a half gallon with greater precision. Liquid explosives have a different density than water, which the CT

screening devices can detect. To date, the U.K. government has said that where CT screening devices have been in place, there have been no secu-rity incidents. That is a nonsensical way

rity incidents. That is a nonsensical way to measure success.

If any terrorist groups want to get liquid explosives through an airport checkpoint, they are best served by waiting until more U.K. airports participate and more countries follow suit in permitting larger liquid containers in carry-on bags. A large-scale attack could have presented with the boxes for some be orchestrated with the hope of some liquid explosives getting through secu-rity, which would cause widespread chaos and damage.

Progress in airport security is neces-

sary, and what was needed 10 or 20 years ago may no longer be required to maintain the security of the air system.

The good news is that almost all travelers pose no risk to the air system. Terrorist threats are akin to needles in haystacks. The likelihood of any secu-rity breach in the short term due to the

policy change is extremely small. The one blemish related to the U.K. decision is that not all passengers are the same from a security standpoint. Most are indeed benign. Some would even argue, correctly, that on any given day, all travelers are benign. Yet policies must be instituted to not only manage most days, but also outlier days. The CT

screening devices provide an enhanced layer to lower risk and provide the necessary protection.

However, CT screening devices are not without limitations. They are subject to false alarms, which can slow the flow at security checkpoints, and false clears, which can lead to a security breach if it occurs with the wrong passenger. In the U.S., travelers going through screening lines have experienced slowdowns as TSA officers get acclimated to the new CT devices, even

with the 3-1-1 policy still in place.
The U.K. is not proceeding blindly. It is also aggressively pushing for biometric facial recognition as a means to confirm travelers' identities. Hence, if travelers are known to their security administration, then item restrictions, such as limitations on liquids and gels, could be relaxed.

Implementing a similar policy change

Implementing a similar policy change at U.S. airports would require that more passengers be known to the TSA. This could be achieved in two ways. One is by offering PreCheck at no cost to any traveler willing to undergo the necessary background check. The other way is to expand the use of biometric identity verification such as facial recognition, which would achieve a similar risk reduction benefit. risk reduction benefit. Such passengers should be permit-

ted to abandon 3-1-1 bags. The passen-gers who remain unknown to the TSA would still be required to abide by the

explosive through a security check-point and cause harm. This highlights why the rigor of the vetting process to become a known traveler or using biometric information should be key to relaxing the 3-1-1 rule, since the risks associated with such people are extremely low. The additional layer of security that CT screening devices provide would decrease any remaining

So will the TSA follow the U.K.'s lead?

In the short term, no. However, the lesson learned is that responses to past threats need to be periodically revisited. Getting past the 3-1-1 rule will require more passengers to become known to the TSA. The most significant headthe 15A. The most signment nead-wind to achieving this using facial recognition is privacy concerns, which at least five senators have spotlighted, hoping to pause its expansion. If these senators are successful, the likelihood that the 3-1-1 rule will be abandoned for

all passengers is small.

What the U.K. policy change is doing what the U.N. pointy change is soon is pushing other countries to reexamine their liquid policy. The question is not whether a new policy is needed, but when and for whom a new policy should be instituted.

Sheldon H. Jacobson is a professor of computer science at the University of Illinois at Urbana-Champaign.