

HOW SAFE is Our Cargo?

Bombs sent from Yemen prompt security review

By per Concordiam Staff

A shipping security gap was exposed when two printers containing the highly powerful explosive pentaerythritol tetranitrate (PETN) were shipped from Yemen for delivery to two Chicago synagogues in the United States in October 2010. Would-be bombers took advantage of a security loophole that permitted parcels on U.S.-bound international flights and cargo-only flights without a scan or inspection, thus illuminating a weak link in the counterterror fight. The Yemen printer bombs each contained 300 to 400 grams of PETN set to explode over the densely populated East Coast of the U.S., Scotland Yard said.

As a result of the bombing attempt, the United States, Germany, France and the United Kingdom banned air cargo from Yemen and Somalia. Checked or carry-on bags could no longer contain ink and toner cartridges equal to or larger than 16 ounces (nearly half a liter). But some security experts insist that nations must do more to ensure cargo is properly scanned, not just for aircraft-crippling explosives, but also radiological “dirty” bombs that could impact millions of people. The latest cargo scanning technology promises better results, but shippers complain that the upgrades would cost too much and harm international trade.

“The latest incidents may prompt the EU to deepen its cargo-screening procedures,” Brian Simpson, chairman of the European Parliament’s Transportation and Tourism Committee, told *The Wall Street Journal*. “We’ve concentrated so much on passenger security. You could argue that we have taken our eye off the ball on freight, which we now have to put right.”





Air freight sits at Leipzig-Halle Airport in 2010. After parcel bombs were found on a U.S.-bound cargo flight in late 2010, Germany announced it would no longer accept air freight from Yemen.

Siim Kallas, European Commissioner in charge of transport, in November 2010 suggests tighter mail controls and improved EU coordination after explosives were discovered in cargo shipments aboard U.S. bound planes in Germany and the U.K.

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KNOWN SHIPPER PROGRAM

One solution tested by the U.S. Transportation Security Administration is the “known shipper” vetting program. It singles out packages from unknown senders for additional screenings and pays less attention to known shipper packages. The goal is to reduce anonymous shipments of documents, parcels and freight on passenger and cargo-only flights originating in the U.S.

Known shippers are preapproved after demonstrating two years of shipping history and undergoing security checks and site inspections. Versions of the known shipper program already exist in some countries, though the U.S. is discussing creating a global system with its allies, airlines and maritime groups, U.S. Homeland Security Secretary Janet Napolitano said in January 2011.

Not all shippers have embraced the program, however. Confusion over paperwork, benefits and cost ambiguity among shippers are reasons for the lack of participation, Andrew Traill of the European Shippers’

Council said. Instead of seeing the benefits of the program, shippers are “more likely to stick to the status quo, and let their freight forwarders and logistics providers deal with any security requirements,” Traill said.

In the world of express shipping, where moving goods quickly and efficiently translates into profit, costs could rise dramatically if security checks slow service. Twenty-six million tons of goods travel by air each year, according to the International Air Transport Association (IATA). Most of this cargo consists of high value electronics, engineering and machine parts, pharmaceuticals, fruit and vegetables, and scrap metal.

Electronic screening of air freight would require unloading containers and unpacking pallets, procedures that could damage cargo. Security experts liken the delays and disruptions from cargo screening to the similar problems passengers experience at airport security checkpoints: The disruptions would become less severe as shippers learn what to expect from screeners.

At a meeting of EU interior ministers, then German Interior Minister Thomas de Maiziere said that it is essential to improve cargo security even if it means higher shipping rates. “There is no security for free,” *The Telegraph* reported de Maiziere saying.

ORIGINS OF THE CARGO BOMBS

The printer explosive plot that set off the debate over cargo security originated with al-Qaida of the Arabian Peninsula (AQAP), Reuters reported in November 2010. Terrorists made the bombs by replacing ink in toner cartridges with PETN and linking the cartridges to an electronic circuit board and ultimately to a mobile phone SIM card. The built-in remote control device would have enabled it to detonate in midair. The packages were intercepted at the UK's East Midlands Airport and in Dubai.

The crucial tip-off came from a former al-Qaida member, the BBC reported. U.S. intelligence officials suspect that AQAP bomb maker Ibrahim Hassan al-Asiri made both this device and that of “underwear bomber” Umar Farouk Abdulmutallab, who tried to bring



down an Amsterdam-to-Detroit flight in December 2009 using explosives stitched into his clothing.

Another plot was uncovered in May 2012. AQAP recruited a would-be suicide bomber to blow up a plane bound for the U.S. using a more sophisticated underwear bomb equipped with two detonators containing no metal parts. When it was disclosed that the would-be terrorist was a British undercover agent, the plot was foiled and the bomb seized. Similarly, U.S. officials revealed that AQAP has been trying to develop an explosive that could be surgically implanted. "AQAP is probably feeling pressure to conduct a successful attack to, from their perspective, avenge the deaths of bin Laden and Awlaki," a May 2012 Reuters article reported a senior U.S. official saying.

The airplane bomb plots could reflect a change toward what some in al-Qaida have called a "strategy of a thousand cuts." Scott Stewart, vice president at the global intelligence company Stratfor, told *The Christian Science Monitor* in November 2010 that the printer plot provided propaganda value for the terrorists, even though the bombs were discovered before detonation.

It has also raised concerns that terrorists could use shipping containers to move a nuclear weapon or "dirty" bomb, an explosive that disperses life threatening radiation. The consequences would be grave. If extremists shipped a weapon of mass destruction by sea and detonated it at a port, the impact on global trade and the global economy could be instantly crippling. Disruptions at ports in the aftermath could result in a backlog of shipments, spoilage, sales losses and manufacturing slowdowns, experts say.

INNOVATIONS IN SCREENING

Although international programs such as the Container Security Initiative and Customs-Trade Partnership against Terrorism have tried to protect cargo from tampering, physicists may have an attractive alternative in the form of a fast and highly sensitive screening device. A team in Israel proposes using a machine to detect explosives or nuclear materials at a rate of 20 crates an hour. Each machine, however, would cost about \$5 million (about 3.4 million euros).

Security specialists warn that it is too expensive to try to establish a foolproof system of cargo scanning since criminals and terrorists are always

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~ SIIM KALLAS
EU Transport Commissioner

changing tactics. Instead of trying to detect explosive material, security officials should "look for the detonator, which is easier to find than the explosives themselves," as suggested in *Scientific American* magazine.

Even if new technology emerges, there is no guarantee shippers will use it. In 2008, South Korea's busiest port installed a \$3.5 million scanner to check U.S. bound shipping containers for nuclear weapons. The machine sits unused today because truckers won't drive through it for fear of radiation exposure, reported *Bloomberg Businessweek*. Stephen Flynn, president of the Center for National Policy warned: "If I were an adversary who wants to cause mass destruction to the global economy, this is the system to target."

The IATA says intelligence gathering, rather than screening of 100 percent of cargo, is the key. "Intelligence is the most effective tool to combat terrorism and it must support risk assessments," according to a recent IATA press release.

Despite the shortage of security checks, terror plots involving cargo shipping have rarely succeeded. International intelligence sharing has been effective, and cooperation among the worldwide intelligence community assumes even greater importance in continuing to uncover terror plans.

"We have to come up with a proportionate response and close the potential loopholes," EU Transport Commissioner Siim Kallas told air security experts in November 2010. "But security cannot be 100 percent." □