

What is the security risk?

By: Frank Gardner June 3, 2014

This new increased threat warning has been triggered by a fear amongst western intelligence agencies that some of al-Qaeda's sophisticated bomb-making expertise has proliferated out of Yemen to Syria.

For the last five years jihadists in Yemen have been working on so-called "artfully-concealed devices" - hard-to-detect explosives that contain no metal and emit only a faint vapour.

Three times now they have been able to smuggle these onto international flights. Only one exploded, killing the man carrying it but nobody else, after the plane landed.

There is equipment in place to detect such devices at most major UK airports but it is not used on every passenger.

What is alarming the US Department for Homeland Security is the possibility that jihadists with European passports are now in Syria, learning how to construct such devices before returning home.

'Serial failures'

Ben Friedman, an expert in defence and homeland security at the Cato Institute in the US, told the BBC it was important to remember that attempts by the Yemeni bomb-makers in the past to blow up planes had failed.

He referred to the Christmas Day underwear bomber, who failed to take down a US-bound flight in 2009, and a failed attempt in which a bomb was hidden in a printer cartridge in a cargo plane in 2010, which was also bound for the US.

"These guys are serial failures," he said.

Meanwhile, a picture of home-made bombs was posted on Twitter on Wednesday by a person claiming to be Nasser Muthana, from Cardiff, who appeared in an Isis propaganda video released last week.

He tweeted next to the image: "So the UK is afraid I come back with the skills I've gained."

Body scanner

Security experts told the BBC the best defence against the type of bombs al-Qaeda is thought to be developing was a combination of two things - both a body scanner and an ion body scanner.

The former reveals concealed devices - even those hidden inside a bomber's body - and the latter detects the tiniest particles of explosive residue.

Both devices are used at most major UK airports, but are used on only a minority of passengers, alongside more common measures including X-ray scans, pat-downs and swabs.

Airports across the world ramped up security measures in the aftermath of the 9/11 terror attacks in the US. Cockpit security was also enhanced.

They introduced security checks on footwear after a shoe bomb nearly brought down a plane a few months later.

Restrictions on liquids in hand luggage were introduced in 2006 after a British plot to blow up seven US and Canada-bound flights with liquid bombs was foiled by the security services. Three men behind the terror plot were jailed for life.

Thwarted AQAP plots

- August 2009: AQAP bomb-maker Ibrahim al-Asiri sends his brother from Yemen to Saudi Arabia to assassinate a senior Saudi prince. The device explodes next to the prince but kills only the bomber
- December 2009: AQAP sends Nigerian Omar Abdulmutallab on a flight to Detroit with a bomb hidden in his underpants. He lights the fuse, but is overpowered before it goes off
- October 2010: AQAP sends two bombs hidden inside printer ink toner cartridges on cargo flights destined for Chicago. One is intercepted in Dubai, the other at East Midlands Airport after a tip-off
- May 2012: AQAP gives a newly upgraded airline bomb to a supposed suicide bomber, but he is a Saudi double agent and he passes it to Saudi intelligence