In Air Cargo Business, It’s Speed vs. Screening, Creating a Weak Link in Security

The Obama administration is expected to announce measures soon to tighten the screening of air cargo, an area long viewed by experts as a weak link in post-9/11 security procedures. But several transportation experts say that placing a 100 percent screening requirement on cargo carriers — like the one that now exists for cargo placed on passenger airlines — would cause the system of express air delivery to grind to a halt.

Those experts note that most shipments carried by air — about 80 percent — come from frequent customers who have longstanding relationships and security programs in place. The greatest risks, they say, involve “one-off” packages by random customers, like the recent explosive-laden shipments from Yemen headed to Chicago that initially eluded detection.

“You cannot stop the flow of time-sensitive air freight,” said Yossi Sheffi, the director of the Center for Transportation and Logistics at the Massachusetts Institute of Technology. “It is simply not realistic.”

Officials at the Transportation Security Administration declined Monday to discuss what new steps might be imposed. But aides on Capitol Hill said they expected the Obama administration to demand physical inspection of certain “high risk” cargo.
carried on all-cargo flights, particularly shipments coming from nations where terror
groups are known to operate, like Yemen.

The administration is also considering demanding more notice about the contents on
cargo flights bound for the United States, so officials can perhaps intervene to request
additional screening before a flight takes off. The current requirement for cargo
manifests is four hours before the flight is scheduled to arrive.

Experts say air cargo poses unique dilemmas because of the vast volume of packages
and the patchwork system of regulations governing inspections. In addition, air cargo
moves both on airlines that carry only freight and on passenger planes. And the freight
industry is by no means uniform. There are giant players like FedEx and U.P.S. and
hundreds of small companies.

For now, freight carried on all-cargo planes does not have as stringent screening
requirements as freight on passenger planes. Also, foreign carriers that bring cargo into
the United States operate by their own sets of rules, which vary significantly from
country to country.

“The issue is you don’t have a seamless set of standards that apply globally from end to
end in the global network with the same level of sensitivity,” said Robert W. Mann Jr.,
an aviation industry expert in Port Washington, N.Y.

Still, T.S.A. officials emphasized Monday that even with the latest incident, air cargo
security has improved in recent years, as demanded by Congress, particularly on
domestic passenger flights, where cargo is now always inspected for threats before it is
loaded.

“We have taken significant steps to strengthen the security of international air cargo,”
John S. Pistole, the T.S.A. administrator, said in a statement. “T.S.A. will continue to
evolve our security procedures.”

Every day, 20 million pounds of cargo, or 16 percent of the total freight carried by air
into or out of the United States, are transported by passenger planes, according to the
International Air Cargo Association. The vast majority, or 84 percent, is carried on cargo
planes.

“Screening all these packages is not as easy as screening passengers — it’s a much more
difficult thing to do and do effectively,” said Edmund S. Greenslet, the publisher of The
Airline Monitor, an industry trade publication. “It’s the weak link in the whole airline
system.”

The air cargo system is built into the way many companies do business. Medtronic, the
world’s biggest producer of medical devices, for example, built a distribution center near
a FedEx hub in Memphis to send out thousands of devices like spinal implants and
heart pacemakers daily to hospitals worldwide.

The way cargo is packed also makes it difficult to inspect. For example, many containers
of goods headed to the United States arrive at airports shrink-wrapped and are given an
exemption from the inspection requirement, said Stephen M. Lord, director of
homeland security and justice at the Government Accountability Office.

And American transportation security officials do not do enough to ensure that the
inspections that foreign governments or air carriers conduct are rigorous enough to find
explosive material about to be loaded onto passenger flights, Mr. Lord said.

“They still have work to do to meet the existing mandate,” he said. “And that means
there is a remaining vulnerability on air cargo.”

Several European countries said Monday that they would suspend all cargo shipments
from Yemen, with Britain also restricting shipments from Somalia. Germany halted all
Yemeni passenger flights as well.
Theresa May, the British home secretary, said the government would work with the aviation industry and with the manufacturers of airport screening equipment "to devise a sustainable, proportionate, long-term security regime" that would meet the new terrorist threat to air cargo shipments.

Britain also said air passengers would not be permitted to carry on ink cartridges weighing about a pound, the size of those used in the plot. Both bans are to be in place, at first, for a month.

Union officials representing pilots who fly cargo planes said the security of those planes needed to be improved.

"We believe that current standards in air cargo screening are inadequate," said Brian Gaudet, a spokesman for the International Pilots Association.

Devices exist that would allow cargo companies to scan for explosives every container about to be loaded into the hold of an airplane, even without unloading the containers. But a single one of these machines — which use a technology known as pulsed fast neutron analysis — can cost more than $10 million, and five to 10 minutes are needed to check each shipment, industry officials said, a crippling cost given the thousands of different departure points globally for cargo.

There are simpler options — bomb-sniffing dogs or small hand-held devices that can pick up traces of explosives.

During the height of the international drug trade years ago, cargo shippers developed security algorithms to better identity suspect packages sent by occasional customers or individuals, said Mr. Sheffi, from M.I.T.

Such algorithms use factors like a package's origin, its destination and the cost of a shipment relative to the value of the object shipped, he said. Mr. Sheffi said he thought similar methods were being used today with packages that might have been sent by terrorist groups.

Brian Clancy, a managing director at Logistics Capital and Strategy, a financial and strategic advisory firm based in Arlington, Va., said: "No system is ever going to be perfect, and the tricky part is knowing what to look for."

Jad Mouawad, John F. Burns and Matthew L. Wald contributed reporting.