



# AIR CARGO SECURITY POLICY NEWSLETTER

CRS Report – Screening and Securing Air Cargo

December 12, 2010

This edition of the newsletter discusses a report published on 2<sup>nd</sup> December by the US Congressional Research Service (CRS). CRS is a US taxpayer funded "think tank" that provides reports to members of Congress on a variety of topics relevant to current political events.

This recent report is entitled "**Screening and Securing Air Cargo: Background and Issues for Congress**".

The report provides an excellent overview of the development of air cargo security policy in the US, starting prior to the formation of TSA in 2001. It addresses a number of policy issues which its author believes will arise due

to renewed congressional interest on air cargo security and describes risk based evaluations of shipments, including known shipper programs as key components.

Screening technologies are discussed as are supply chain security measures (tamper-evident and resistant packaging, tracking and cargo identifiers) and in-flight security measures (hardened cockpit doors, arming pilots and blast-resistant containers)

A copy of the report is attached to the newsletter e-mail. It can be viewed at

<http://www.fas.org/sgp/crs/homsec/R41515.pdf>



A number of items in this report will be of specific interest to the stakeholders in the international air cargo community who are addressing the aftermath of the October 2010 cargo security events.

The report notes that *“Proponents of comprehensive physical screening argue that it is the only way to ensure adequate security, while advocates of risk-based approaches argue that comprehensive screening is too costly, too time consuming, and given the current state of technology, potentially no better than well designed targeting strategies”*.

In an executive summary the report states:

*“Amid renewed congressional interest on air cargo security, a number of policy issues may arise regarding:*

- *the desirability of risk-based strategies as alternatives to 100% cargo screening and inspection;*
- *the adequacy of off-airport screening under the Certified Cargo Screening Program (CCSP) in conjunction with various supply chain and air cargo facility security measures;*
- *the costs and benefits of requiring blast resistant cargo containers to protect aircraft from in-flight explosions in cargo holds;*
- *the desirability of having air cargo screened by employees of private firms rather than TSA and CBP employees; and*
- *cooperative efforts with international partners and stakeholders to improve the security of international air cargo operations.*

Text from the report is quoted with comments of interest to the international air cargo community **highlighted**.

### Screening and international cooperation

Two sub-paragraphs in the report address potential challenges for:

- screening cargo on all cargo aircraft; and
- International cooperation.

*“TSA lacks the direct authority to define screening requirements at foreign airports for U.S.-bound cargo. TSA could impose regulations on foreign carriers, as well as U.S. carriers, stipulating minimum air cargo security standards and requirements, including 100% screening using certain approved methods”*.

*“However, enforcement overseas would be up to authorities in other countries. If they do not concur with the U.S. approach, disagreement over security standards could complicate U.S. foreign relations and could potentially impact foreign trade”*.

*“The impact of 100% screening on the air cargo industry could be considerable as associated costs may be difficult to fully pass on to shipping costumers.....However, more recent estimates suggest that industry-wide compliance with the 100% screening mandate may cost more than \$700 million in the first year”*.

*“Given that these estimates cover only shipments placed on passenger aircraft, which make up about 10% of all cargo shipped to and within the United States by air, the **projected cost of physically screening all air cargo could conceivably total several billion dollars annually**”*.



*“The logistical challenges of screening all air cargo may also be significant, as demonstrated by the complexities of meeting the 100% screening mandate for cargo aboard domestic passenger flights and the continuing difficulties in screening all inbound international cargo placed on passenger flights”.....*

*“With regard to all-cargo operations, there is no statutory or regulatory requirement for screening, and according to industry estimates, the overall percentage of international shipments screened prior to transit to the United States may be as low as 50%.<sup>1</sup> TSA concedes that screening international cargo poses unique challenges and constraints due to shippers’ limited control over their foreign supply chains, the scale and diversity of worldwide supply chains, and diplomatic considerations”.*

*“To address these challenges, TSA’s International Air Cargo Workgroup has developed a risk based rating system and scheduling tool to prioritize air cargo facility inspections overseas. In 2008, the TSA entered into a bilateral agreement with the European Union as well as a quadrilateral agreement on air cargo security with the European Union, Canada, and Australia”.*

*“More broadly, it is working closely with the International Civil Aviation Organization (ICAO) to draft worldwide standards for all-cargo security, which will probably entail a lengthy period of implementation”.*

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<sup>1</sup> About 20% of the 9 billion pounds of air cargo that comes from overseas each year is physically checked for bombs, according to the Transportation Security Administration, which says the tracking system picks out all "high risk" air cargo. (Reported by Thomas Frank in USA Today, Nov 2010)

*“TSA has ten international cargo transportation security requirements. Additionally, TSA has eight international industrial representatives who work with about 240 foreign passenger and all-cargo air carriers that operate flights to the United States. These individuals have responsibility for ensuring foreign air carrier compliance with TSA regulations, including those pertaining to the screening and security of air cargo. Given the volume of international air cargo, the potential threat posed by international shipments, and the extensive reliance on passenger aircraft to haul cargo from overseas inspectors deployed to field offices in Los Angeles, Dallas-Fort Worth, Miami, and Frankfurt, Germany. The role of these inspectors is to examine cargo operations at the last points of departure to the United States and assess compliance with screening and security, the size of the TSA’s international inspector and industrial representative workforce may be an area of particular interest to Congress.”*

### **Cargo screening procedures and technologies**

The CRS report includes the following paragraphs discussing cargo screening procedures:

*“The Implementing the 9/11 Commission Recommendations Act of 2007 (P.L. 110-53), enacted in August 2007, required 100% physical screening and inspection of all cargo placed on passenger aircraft by August 2010 .....”*

*“The act, however, did not specify who is to conduct the screening. TSA has interpreted the language to allow airlines, freight forwarders, or, in some cases, shippers, manufacturers, and third party screening facilities to conduct*



screening at off-airport locations, so long as they can assure the security of a shipment until it is loaded onto an aircraft. TSA maintains that this is the only viable means for meeting the mandate for 100% physical screening, as it lacks the resources to screen the volume of cargo placed on passenger aircraft using TSA employees”.

“TSA’s approach, implemented through its voluntary Certified Cargo Screening Program (CCSP), has pushed much of the operational cost associated with cargo screening and inspection on to the airlines, freight forwarders, and shippers. *The extent to which air carriers and freight forwarders have been able to pass along these costs to shippers and consumers may be an issue of particular interest to Congress*”.

A further section of the report discusses cargo screening technologies:

..... In FY2010, TSA carried out a pilot program at 18 locations to evaluate the effectiveness of selected screening technologies and chain-of-custody procedures. Participating facilities were reimbursed up to \$375,000 each for acquisition of a mix of security screening technologies. In exchange, these sites were required to provide TSA with detailed reports of cargo volumes and the effectiveness and efficiency of screening technologies used. The study concluded in August 2010. TSA is now assessing the performance of the various screening technologies and methods employed”.

*“To date, however, the only approved technologies for cargo screening require examination of individual items”.*

It is estimated that palletized cargo makes up 75% of all cargo carried on passenger planes.<sup>50</sup> The lack of an approved technology for screening pallets leaves the industry dependent on work-around solutions, largely involving the *off-airport screening of cargo* coupled with *approved supply-chain security measures to prevent tampering* after the item is screened under CCSP procedures.

In its description of supply chain security measures the report mentions tracking technologies “Tracking technologies could identify suspicious origins or unexplained delays or detours in transit”, and screened cargo identifiers.

“TSA relies primarily on a system of identifiers to designate that a piece of cargo has been properly screened and is eligible for shipment on passenger aircraft. TSA approves a variety of stickers, stamps, and tags to be used as screened cargo identifiers. The security and integrity of these identifiers is a key element of CCSP, as stolen or counterfeit identifiers could be used to pass off unscreened cargo as screened. Measures to account for all identifiers appear to be vital components of supply chain security. However, given the highly diverse and geographically distributed nature of the supply chain, it may be difficult to detect falsified or counterfeit stamps beyond the point of screening”.

*“The effectiveness of CCSP in maintaining package integrity beyond the point of screening may be an issue of particular interest to Congress”.*

