

Thinking Outside the Box



■ Trade and Transportation

By Thomas O'Brien

This issue's focus on the aviation and aerospace industry reminds us that there is more to international trade than containerized cargo. The supply chain, or value chain as it is increasingly called, encompasses the various activities, including transport, that rely on one another to see a product through a total process, from the sourcing of raw materials to its ultimate destination, usually the store shelf. Sometimes it involves the shipping container - the box that changed the world - but there are other ways to get from point A to B.

Air freight has become an increasingly important alternative to ocean carriage for the delivery of high value, low-weight goods from centers of production to markets all across the world. For products like electronics, customers are willing to pay a premium price for rapid delivery via air. For time sensitive deliveries or perishable items, reliability and transparency of the transport system are essential; and air is the only real option.

By nature of the business, air freight is intermodal transport. Air transporters rely upon trucking and, to a lesser extent, rail operations to complete the trip. As such, it's an important part of the supply chain. Like

the rest of the industry, air transport has suffered during the economic downturn. The world's airlines have grounded 12 percent of their fleets of all-cargo planes. Air freight experienced an \$11 billion loss in 2009. That represents a 14 percent drop in cargo volume, worse than that experienced in the wake of 9/11.

A growing segment of the air transport industry involves small package carriers, often called integrators. Integrators offer premium service because they are able to provide seamless transport to the customer. They control both the air and trucking portion of the trip, which improves reliability and allows the shipper (often you or I) to track the trip from beginning to end. Small packages are perhaps the most common example we have of next-day, just-in-time delivery. Well known service providers like FedEx and UPS are examples of integrators. They have been at the forefront of the use of technology to streamline and integrate the supply chain.

While small package carriers serve a niche market - letters and small packages up to approximately 150 pounds - they are an important part of worldwide transport networks. A list of the largest air cargo facilities in North America demonstrates the prominence of integrators like FedEx and UPS. Memphis and Louisville, both air package hubs, are in the top three. FedEx is itself the 5th largest air cargo carrier in the world. UPS is 9th. Small package deliveries represent approximately 40 percent of the air cargo at LAX so they play an important, if underappreciated, role in the local trade-based economy.

Back at the port, we also tend to forget about other vessels, apart from container ships, that contribute to

the movement of goods and to the economic health of the region. Bulk carriers transport break bulk items that are not containerized, and either shipped on pallets, in drums, cartons or bales. Dry bulk carriers are used for goods such as coal, phosphates, ores, grains and other loose materials.

RO-RO vessels, or roll-on/roll-off vessels, are used for the transport of rolling stock, like automobiles. Heavy lift vessels transport large and heavy items that cannot be kept in containers or shipped on other vessels. Large cargo decks accommodate items such as locomotives, bridge spans and military equipment. The cargo is usually loaded by onboard or shore-based cranes. Oil tankers carry liquid bulk items such as crude oil.

This type of trade, while not as prominent as containerized cargo, still has its impact. Among the Port of Long Beach's list of top exports are petroleum coke, refined petroleum and chemicals. In April, Long Beach moved some 140,000 metric tons of steel, break bulk cargo, vehicles and lumber products. It moved 2.5 million tons of petroleum and liquid bulk products in the same period. And these figures are another indication of the port's recovery. While containerized cargo jumped 20% between April 2009 and April 2010, the comparable figures were even higher for these other kinds of cargo. This includes a 112% increase in vehicle movements and a 155% increase in steel and break bulk items.

So while we quite correctly count the TEUs, looking for signs that the recession is over, we should also remember that the supply chain moves more than the container. This is another occasion when thinking outside the box can pay dividends.