

THE RISE OF AUTONOMOUS TECH

How the supply chain is going hands free

Korean cargo crisis

Hanjin is only the beginning

12

The politics of turmoil

Overcoming supply chain disruption

24

Deconstructing the TPP

Trade bloc may not be 'one size fits all'

30



American Airlines Cargo



IN-PERSON MEETING
10/20/16

SOLUTION CREATED
10/20/16

CARGO BOOKED
10/20/16

AA RECEIVED
10/24 AM

DEPARTS GATE
10:22 AM

FLIGHT DEPARTS
10:38 AM

TRACKED ONLINE
12:25 PM

FLIGHT ARRIVES
6:02 PM

CARGO ON-HAND
6:55 PM

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Contents

Volume 19 • Number 9 • October, 2016



The Rise of Autonomous Tech

How the supply chain is going hands-free

18

News Inside:

- 5 UpFront**
What's what with The Who tour; a British shipper goes green; the An-225 may soon have a sibling; a T-Rex goes for a ride; and more.
- 8 Americas**
Atlas inks a five-year deal with FedEx Express to provide five 747-400 freighters, as the integrator prepares to compete with Amazon.
- 10 Africa & Middle East**
Forwarder Panalpina opens new office in Cairo to be near the "heart of the action" in Egypt's developing oil and gas sector.
- 12 Asia-Pacific**
While the Hanjin bankruptcy is causing global headaches, it's just one of the many crises that are plaguing the troubled Korean cargo industry.
- 14 Europe**
Online broker Freightos expanded its market share in the web-based freight pricing business with the acquisition of Spain-based startup WebCargoNet.

Departments

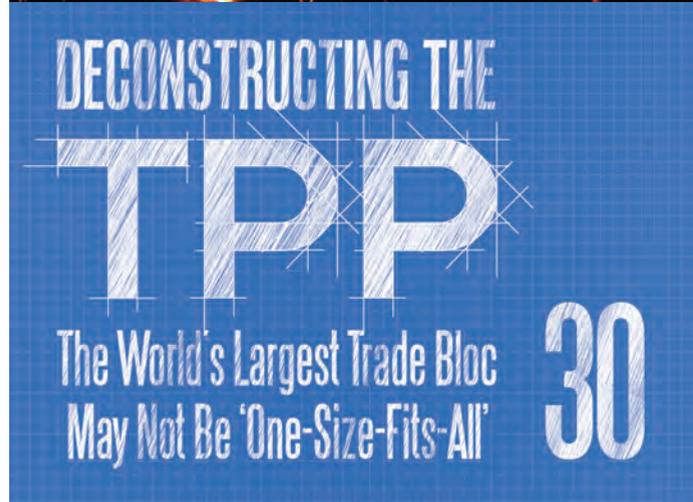
- 4 Editor's Note
- 6 Cargo Chat: Nobutoshi Torii, CEO of Kintetsu World Express
- 17 People & Places
- 33 Marketplace
- 34 Bottom Line
- 37 Events/Advertiser's Index
- 38 Forwarders' Forum



The Politics of Turmoil

Overcoming global supply chain disruption

24



DECONSTRUCTING THE

TPP

The World's Largest Trade Bloc
May Not Be 'One-Size-Fits-All'

30

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Elevation gain

It's hard to believe it's been a full year since we started planning our first-ever conference here at *Air Cargo World*, but here it is, October again, and we're just days away from the inaugural meeting of our **ELEVATE 2016 Conference**, on **Oct. 10** at the Mandarin Oriental Miami. I couldn't be prouder of the lineup of speakers we have gathered together this month for a lively discussion about a topic that everyone seems to want in their business plans, but few really understand, or even recognize: innovation.



Randy Woods

During this event, we will be discussing innovation of all kinds in the logistics sector, from forwarders to carriers to logistics startups to tomorrow's drone manufacturers. We're thrilled to be having a one-on-one discussion with **Monika Wiederhold**, vice president of product management and innovation at Lufthansa Cargo, about the importance of innovation in the logistics business.

Some of the confirmed speakers taking part in the roundtable discussions include **Terry Hartmann** of Unisys, **Dirk Schusdziara** of Fraport AG, **Sara Van Gelder** at Brussels Airport, **Phil von Mecklenburg-Blumenthal** from Freightos, **Mike Morey** of Franwell Technologies, **Wade Gerdeman** of Newport Trade Services, **Mike Gemel** of Mexpress, **Matthew Deep** of DMLogic, and many others – plus a few possible surprises.

We also want to remind readers that this **ELEVATE** conference will also include our **DEMOvation Challenge**, which will offer a unique opportunity for select innovative companies to demonstrate their ideas in front of an engaged and enthusiastic audience of aviation professionals.

But logistics innovation doesn't begin, or end, with **ELEVATE**. In this issue's cover story, we look not just at aerial drones as the hot new trend or as an exotic gimmick, we analyze the basic idea of autonomous vehicles, including pilotless, full-scale aircraft and driverless trucks, to predict the long-term impact on the logistics business (see page 18). What does an autonomously operated 18-wheeler have to do with air cargo, you may ask? Well, if driverless trucks will be able to slash labor costs and operate virtually 24 hours a day in long caravans, the market incentive for shipping by air – even for long-haul overland routes – quickly vanishes. How's that for gimmickery?

Also in this issue, *Air Cargo World* focuses on the resilience of the supply chain in the face of uncontrollable events, such as this year's terrorist attacks in Brussels or the coup attempt in Turkey. How did the contingency plans hold up during the chaos? How are we prepared for the next break in the chain, and are these events having a chilling effect on air cargo traffic?

Finally, we break down the terms of the Trans-Pacific Partnership to find out who the winners and losers would be – or who is just plain indifferent – should the TPP become ratified (see page 30). What was once considered an essential tool to revive Pacific Rim trade and create the largest economic zone in the world, is now being treated as a political hot potato in the U.S. presidential race and perhaps a lost cause. Are we missing a golden opportunity or dodging a bullet?

We're just days away from **ELEVATE**, so if you haven't already, please visit www.elevateaircargo.com for registration and hotel information, plus the latest updates on speakers and sessions. We can't wait to see you there in Miami to hear your own stories of logistics innovation.

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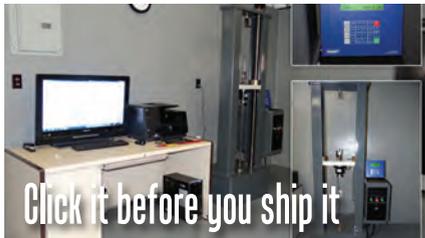
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Green thumbs

International mail and parcel shipping company, Asendia UK, has planted more than 30 acres of woodlands since joining with the Woodland Trust, to reduce the impact of its carbon emissions. According to the company, its green-thumb activities should offset more than 5,500 tonnes of CO₂. Airfreight is recognized as one of the most CO₂-intensive modes of transport, and many carriers offer carbon-offset programs to customers. Asendia UK “recognizes that it must do all it can to neutralize any impact it has on the environment,” said head of marketing, Elliott Mallow. It may not be a long-term solution, but it’s a breath of fresh air.



Click it before you ship it

Why use complicated tarping systems to secure cargo loads when you can just use a seatbelt? Midwest Precision Products (MPP) has developed a testing lab for its retractable, seatbelt-like restraining system that the company claims are a sustainable alternative to standard packaging. MPP’s retractable straps eliminate the need for plastic stretch wrap, and the metal or plastic banding responsible for many injuries and landfill waste. According to MPP’s president, Jeff Rogers, the tests ensure that the belts can protect cargo from forces encountered during load shifts in trucks, or mishandling by lift truck operators. And because the retractable belts can be used hundreds of times, it’s sustainable. Buckle up!



Goin' mobile

See me. Feel me. Touch me. Move me... IAG Cargo just wrapped up a stint as the aviation roadie for legendary British rock band, The Who, on its 65-show tour across North America. The band will continue to tour at another planned 35 concerts around the world. Starting in Detroit, the North American leg of the tour had IAG Cargo transporting the band’s production and equipment around the country. The Who travel with a high volume of expensive props and instruments. In total, IAG Cargo carried 36 tonnes of cargo over the course of the entire nationwide tour that introduces the band to a new g-g-generation of fans.

Burning rubber

DHL signed on to transport race cars for the FIA World Endurance Championship (WEC) between four races in Europe and five more across Latin and North America, Asia and the Middle East. The German logistics company is responsible for transporting 33 race cars, three safety cars, one T-car and assorted equipment, including the 10,000 tires and 198,000 liters of fuel the team burns though during the racing season. DHL said it will carry out 22 charter flights this season, transporting 2,100 tons of airfreight and 250 twenty-foot equivalent units of seafreight before the final checkered flag flies.



Guess who's back?

According to a press release put out by Ukraine-based Antonov on Aug. 30, a two-part “cooperation agreement” was reached with a Chinese company identified as “Aerospace Industry Corporation of China (AICC)” to resume production of the An-225 “Mriya,” currently the largest airplane in the world, and the only one of its kind ever built – for now. Noting that “both stages would be implemented individually,” Antonov said the first phase would be the final assembly of a second, partially built An-225 in Ukraine. In the future, the two companies agreed to consider serial production of the An-225 in China.



Jurassic cargo

KLM Cargo transported a rare skeleton of a Tyrannosaurus rex from the United States to the Naturalis Biodiversity Centre in the Netherlands in August, with cameras on hand to capture the airborne dinosaur. The fossilized beast, nicknamed Trix, weighs around six tonnes – having shed an impressive three tones following her demise – and is around 13 meters in length. (That part hasn’t changed.) Trix arrived at Amsterdam Airport Schiphol on Aug. 24. Trix’s mortal remains were then trucked to the city of Leiden with great fanfare. It took 66 million years, but better late than never.



Nobutoshi Torii

Kintetsu's Torii pumps up the volume on air cargo

In June, Nobutoshi Torii assumed the role of president and CEO of Japanese forwarder Kintetsu World Express, Inc. (KWE). As a 34-year veteran of KWE, Torii has held numerous roles at the company, beginning in sales for the export airfreight forwarding office in Nagoya, and most recently serving as president, CEO and general manager of KWE's Americas region.

During his welcome statement as overall CEO, Torii outlined a few broad goals KWE would undertake as part of its new, three-year "Going to the Next Phase" program. Central to the strategy, he said, will be placing a "higher priority" on airfreight volume growth, as well as taking full advantage of the 3PL services offered by Singapore-based APL Logistics, which KWE purchased last year. Torii also mentioned that a recent slowdown in the economies of China and other Asian countries doesn't "allow optimism" for the future of forwarding. However, earlier this year the company launched its bonded warehouse in Chongqing to expedite the delivery of cross-border e-commerce imports for Yhupu.com.



Soon after taking the reins at Kintetsu, Torii spoke with *Air Cargo World* about how KWE will meet the goal of building air cargo volume, strengthen business in China and shift its supply chain strategy, as e-commerce becomes increasingly important to the 3PLs freight forwarding activities.

Q: What some of the initiatives KWE will undertake to boost airfreight volumes?

The key to increasing our airfreight volume over the next three years is to shift our focus from Japan-centric business to trans-Pacific traffic. Trans-Pacific is the largest airfreight market, particularly Asia to North America. We already have about 15 percent market share of Japan-to-U.S. airfreight, but only about 1 percent of Asia-to-U.S. We feel there is major growth potential here. Our network spans over 700 locations in 44 countries around the world, but they are, for the large part, Japan-centric, and each of them is not exactly functioning in an organic way. In the future, by focusing on and growing our non-Japan business, we will make our network truly "global."

Q: In which markets do you see the most opportunity for airfreight growth?

We believe the key to our future airfreight volume growth will be to further strengthen retail and automotive business. Retail covers a wide range of items, including apparel, toys and sundry goods, which is a client segment in which APL is strong. Working together with APL, we think there is a great opportunity to expand our retail related business, particularly on trans-Pacific long-haul routes. KWE has been successful in permeating the Japanese automotive market, while

some of APL's top customers are North American automobile companies.

Q: What are the challenges facing KWE as the air cargo industry takes on more e-commerce activity?

It's true that the flow of goods is trending towards business-to-consumer [B2C] models, [but] we believe there is still significant room for share expansion in the business-to-business [B2B] model, and KWE will focus on this. We will continue to look into what kinds of services we can offer in the B2C supply chains, but our main focus for growth does not lie in this area.

Q: While KWE's Chongqing warehouse creates demand for 3PL services, does it also bolster airfreight services?

At this time, most of the e-commerce-related business that we are servicing in Chongqing is the actual 3PL bonded warehousing and distribution activities. However, this is a good example of an opportunity to expand e-commerce-related airfreight forwarding services. We plan to start taking the necessary steps to ensure that we can secure the forwarding business of goods from overseas to our Chongqing bonded warehouse.

Q: How will KWE be affected by China's "positive list" of

goods allowed for cross-border e-commerce in 2017?

At this time, most of the products we handle into China are shipped on a B2B model. For instance, we have a significant share of healthcare products and industrial equipment, such as semiconductor capital equipment manufacturing tools, so these items will not be impacted by the new cross-border e-commerce B2C tax laws. As for the B2C products shipped through our bonded warehouses, most of them are on the "positive list," so we do not anticipate a big impact. Overall, when you think of e-commerce as a key business, you have to think of the last-mile solution, which is a major investment. Those companies specializing in the last mile for B2C business in China might be more heavily impacted by the changing regulations.

Q: What is your outlook for the overall size of the airfreight forwarding market?

While there are various predictions about the future of airfreight, I personally believe it will continue to grow for freight forwarders. I also believe the competition among forwarders will intensify. The most important thing is that the center of the market is moving day by day. We have to keep our eye on the ball and be careful not to overlook the changing flows, and be flexible to adjust quickly.



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AMERICAS Around the world

Atlas inks five-year freighter deal with FedEx

Atlas Air Worldwide Holdings (AAWW) has entered into a five-year agreement with FedEx Express to provide five 747-400 freighter aircraft during peak flying seasons, starting

in 2017 and lasting through 2021. While Atlas has previously provided freighters to FedEx on an ad-hoc basis, the agreement is the first to lock in aircraft this far in advance,

suggesting that FedEx is confident about its position in the market well into the future.

“We have worked closely and successfully with FedEx for many years, but this is our first agreement that allows both companies to plan for the longer term,” said William J. Flynn, president and CEO of Atlas. An agreement to provide five aircraft for the 2016 peak season flying is already in place, Atlas noted.



While Atlas did not specify the exact dates of the deal, it noted that “peak season flying generally occurs in the month of December and potentially earlier.”

The news of the deal also implies that FedEx is not concerned about losing market share to potential rival Amazon.com, which recently inked its own deal with Atlas. The latter recently signed a deal to provide Amazon with a fleet of twenty 767-300 freighters, with the first aircraft entering service this month.

The entrance of a major retailer and e-commerce giant into the air cargo business has some insiders wary. In the second quarter of 2016, Amazon had a market capitalization of US\$337.6 billion.

FedEx, however, maintains that no single customer comprises more than 3 percent of its business, despite Amazon being one of its biggest customers. The five-year deal means that FedEx expects brisk future business, regardless of competition.

Atlas, meanwhile, has pivoted towards the express and e-commerce markets, as growth in the traditional air cargo market has slowed over the last few years.

—Lewis King

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AFRICA & MIDDLE EAST

Around the world

Panalpina opens in 'heart' of Egypt's cargo activities

Panalpina has moved its head office in Egypt and all Cairo operations to the newly developed Cairo Cargo City at Cairo International Airport.

The move follows last year's acquisition of Panalpina's long-standing general sales agent, Afifi, positioning the Swiss company closer to the Egypt's developing oil and gas sector. Panalpina is the first freight forwarding company to set up shop at the new 150,000-square-meter center.

Cairo International Airport moves approximately 290,000 tonnes of cargo per year, according to Panalpina. The

relocation places the forwarder closer to "the heart of action," the company said, providing better access to the government's business-related entities, such as import and export authorities and cargo terminals.

"Likewise," said Fouad A. AbouElela, country head of sales and marketing, "the proximity to the cargo handling and customs clearance will make our day-to-day airfreight operations more agile."

The export terminal has a total capacity of 240,000 tonnes per annum. The 12,837-square-meter import termi-

nal features a general cargo zone and perishable center that can accommodate up to 90,000 tonnes per annum.

The new Cargo City now has more cargo capacity than the current volume moving through Cairo Airport, reflecting Egypt's ambitious plans for economic revival, which seem perpetually confounded by geopolitical and economic events. Now, however, the government is hoping to attract energy and manufacturing investment, with a strong focus on Cairo Airport and the region of the country along the Suez Canal.

—Lewis King

Qatar automates cargo loading system

Qatar Airways Cargo has launched a "Freight Load Control Centre" that will be an integral part of pallet loading procedures for all of the airline's freighters.

Located at the carrier's hub at Doha's Hamad International Airport, the new system features an automated weight and balance system for freighter aircraft that will cut costs, reduce carbon emissions and optimize the usage of cargo space for each flight, said Ulrich Ogiermann, chief officer at Qatar Airways Cargo.

The new weight and balance system automates the time-consuming manual process of setting up the load-sheet prior to flight departure, which reduces the time needed for load planning and weight checking, and shortens flight turnaround times.

Automated loading also ensures the payloads are loaded in the most efficient manner and minimizes lateral imbalance of freighters, which can significantly reduce fuel consumption, the carrier said.

—Lewis King

SATS sets up shop in Saudi Arabia

A 150,000-tonne-capacity cargo facility, set to open in 2019 in Dammam, Saudi Arabia, will make SATS the first international cargo handler to operate in Saudi Arabia, said the Singapore-based aviation service provider. Located at Dammam's King Fahd International Airport (KFIA), the new facility is part of a broader privatization program, set to officially commence in the third quarter of 2017, according to the kingdom's General Authority of Civil Aviation.

Adjacent to the KFIA, a second airport, the Saudi Aramco Airport, serves Saudi Aramco, the world's largest energy company, which extracts the majority of its crude from fields in the county's southeast. Despite generating a sizable share of the global oil output, the region's KFIA airport has operated at below capacity, but an uptick passenger numbers suggests a turnaround. The General Authority of Civil Aviation (GACA) announced that 9.4 million

passengers and 84,803 flights were registered at KFIA in 2015. The airport also saw heavy action a quarter of a century ago when the U.S.-led allies used it as a base to fly bombing sorties in Iraq during the first Gulf War.

After opening in 1999 to commercial traffic, KFIA has become the aviation gateway to the region. "The introduction of a second cargo terminal operator will result in enhanced services, options and increased air cargo capacity for the marketplace," said Turki Al-Jawini, director general of King Fahd International Airport.

KFIA opened the doors to its new Cargo Village facility in April 2015. The facility measures more than 500,000 square meters in size and eliminates the need to ship through neighboring countries or from major airports to the west. Currently, DHL Express, TNT Express and UPS are operating as anchor tenants.

—Lewis King





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Hanjin crisis only part of Korean air cargo struggles

Amidst the shockwaves emanating from last month's news of the bankruptcy filing of Hanjin Shipping came speculation of a potential silver lining for air cargo carriers. Would the scramble for cargo originally booked on Hanjin vessels provide a windfall for airlines, with a surge in demand to drive up rates and yields?

Such a spike in traffic had yet to materialize at the time of this publication, but even if it had, it probably would not have been enough to recoup Korean Air's losses associated with Hanjin. The sister company of the stricken shipping giant (both are owned by the Hanjin Group), estimated losses on its 33 percent equity stake in Hanjin Shipping and loans to the company at US\$344 million – more than one-third of its projected operating income for this year.



Photo: ©Oliver Ohm/Wikimedia

KAL would seem to be in a good position to benefit from a surge in traffic. The airline took delivery of two 777 freighters this summer, with five more to join its fleet before the end of next year. In addition, KAL was due to receive its seventh 747-8 freighter at the end of August, but that has now been pushed back to this coming December. That plane, which had been a long time coming, rolled off Boeing's production line in December 2015, but the Asian airline has been in no hurry to deploy the aircraft.

Once KAL takes delivery of the six freighters now on order, it will have, altogether, seven 747-8 and twelve 777 cargo aircraft in its fleet. It also currently has sixteen 747-400 freighters in its colors, but these are expected to be phased out by the end of 2017.

The airline's results indicate why management was in no hurry to get the last 747-8F into action. In the second quarter, its cargo traffic, in terms of freight tonne kilometers, was down 0.5 percent, year-over-year, with the load factor down 0.9 percentage points to 76.7 percent, and yield down 5.5 percent. While revenues in the European and Southeast Asian trade lanes climbed four and two percent, respectively, y-o-y, China was down 1 percent and the Americas showed a decline of 15 percent.

Korea's international trade has also been in the doldrums. Exports finally showed a y-o-y gain of 2.6 percent in August, after 19 consecutive months of decline. Imports inched up 0.1 percent to \$34.8 billion, the first rebound since September 2014. Neither turnaround met with much enthusiasm from analysts or government officials, though, who continue to expect challenging times ahead.

The Korean air cargo market is stuttering. According to a U.S.-based airline cargo executive, it is still in a moderate downward trend with no sign of recovery. "Instead, many Korean manufacturers are active in Indonesia and Vietnam, and exports from these stations to the U.S. and Europe are growing," he adds.

Still, some forwarders are bracing themselves for a rise in airfreight rates out of Korea. "According to airlines, due to limited space capacities ex-Korea and space demand from China and Southeast Asia area for transit shipments via Incheon, we are expecting that rates will be slightly increased by about US\$0.40 per kilo ex-Korea from the fourth quarter," reported C.S. Lee, president of First Express International.

First Express has been trying to develop new markets and pursued business to Brazil, Colombia and Peru, along with the Middle East and Iran, taking advantage of free trade agreements (FTAs), the Rio Olympics and the lifting of sanctions on Iran.

Likewise, free-trade deals that Korea has struck with the United States, the European Union and a number of individual countries have boosted First Express's inbound traffic, generating flows of wine and frozen fish from Chile; cherries and meat from the U.S. and Canada, fruit from New Zealand and a range of goods from Europe, Lee reports.

In pursuit of lobster and other seafood, KAL added Halifax to its freighter network last year (served in conjunction with Chicago) to take advantage of the FTA with Canada, which came into effect at the start of 2015. According to the airline, lobster traffic from Canada to Korea climbed 50 percent last year.

KAL has been training its sights more on niche markets, in line with its business plan for the third quarter, which stresses two elements: 1) "improve profitability by transporting high-yield cargo items," and 2) "provide flexible capacity utilizing belly space of passenger aircraft."

In the summer, the carrier opened new freighter routes to Europe, including weekly 777F service from its Seoul base via Navoi to Vienna and Oslo, and a weekly 747 freighter operation from Seoul to Tel Aviv and on to Milan.

Earlier this year, KAL brought Teheran into the fold, courtesy of its cargo partnership with Uzbekistan Airways, which mounted a twice-weekly freighter operation to the Persian capital, with a 767-300 freighter.

First Express is also looking to boost its position in higher yielding cargo. It intends to invest more in temperature-controlled storage capabilities to serve clients in the healthcare pharmaceutical sector, Lee added.

It may take a lot more than a bump from the Hanjin seafreight crisis to set KAL, and the rest of the Korean airfreight industry, on the path to recovery, but at least some forwarders are seeing reason to hope for better days ahead.

—Ian Putzger

Could 'Silk Road' rail corridor threaten air cargo's 'fast fashion' market?

Air cargo has historically provided the speed that enables the fashion world to send cutting-edge couture to customers. However, news that a shipment of designer jeans left Wuhan, China, by train and arrived in Lyon, France, 18 days later, may upend aviation's primacy in "fast fashion."

Vincent Allal, head of the supply chain for clothier KAPORAL, which made the travelling pants, noted that, in addition to reducing costs, the Wuhan-to-Lyon trip appealed to consumers' desire for green products. "We have halved our bill on this transaction and we are very sensitive to the low environmental impact," he said.

The rail link is central to the China-backed "Silk Road" that runs through China, Central Asia, Russia, and Europe, giving manufacturers a viable alternative to air cargo. Meanwhile, Bangladesh, where numerous first-world fashion designers source their garments, has struggled with security of late and faces a months-long embargo on cargo flights.

—Lewis King

Samsung expands into Vietnamese aviation sector

Samsung SDS, the Korean conglomerate's information and communications technology (ICT) and logistics arm, will enter the Vietnamese market through a joint venture with Aviation Logistics Service, which operates the ALS Cargo Terminal in Hanoi – billed as, "the most modern cargo terminal at Noi Bai International Airport." Following last month's joint venture with Thailand's Acutech, the ALS deal marks the second chapter of Samsung's market expansion strategy in the Southeast Asian region.

Samsung will provide its logistics services, including global and inland

transportation, warehousing service, and customs brokerage, while ALS will use its local customer network and sales force.

Many Asian firms, like Samsung, are betting on increased trade as a result of the contentious Trans-Pacific Partnership (TPP) making its way to President Obama's desk – or that of his successor. "Vietnam has been favored as a new manufacturing location by a number of global companies seeking benefits from the changing trade environment," said Cho Chung-un at the Korean Herald.

A recent Pew Research Center survey found that 51 percent of Americans still support free-trade agreements, despite the souring public discourse, while only 39 percent oppose them. The political reality is that such treaties can still garner bipartisan support.

Samsung accounted for 20 percent of all Korean exports to Vietnam in 2015, amounting to US\$32 billion, according to local reports. Samsung SDS, meanwhile, handles about 40 percent of cargo volume at Hanoi airport.

—Lewis King

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EUROPE

Around the world

Freightos expands reach with WebCargoNet deal

Online freight broker Freightos increased the scope of routes and modes of transportation in its marketplace via the acquisition of Spanish startup WebCargoNet, which maintains a database of global airfreight rates. CEO Zvi Schreiber said he hopes that the acquisition will provide an edge for Freightos in the increasingly competitive online international freight marketplace.

With the bulk of the global airfreight business still being conducted via phone by human brokers, online services like Freightos are fighting for market share against large and established players. Many online brokers are still limited to smaller shippers that are looking for low-cost options.

Schreiber was tight-lipped about the terms of the deal, saying the offer was “part cash, part shares.” However, a source close to Tech Crunch said the deal was “in the seven-figure euro range.”

Freightos’ goals for the marketplace are similar to what priceline.com did to the consumer travel market. In fact, the company recently brought Robert Mylod on board from priceline.com as an investor and director. “Booking a flight has been electronic for 50 years,” Mylod said, “but the cargo on airplanes, trucks and ships is still booked manually. This cannot continue. Growing global trade, e-commerce B2B [business-to-business] sales and

sprawling dynamic supply chains demand the transparency and efficiency of online freight.”

The company’s platform allows customers to search for and compare all-in pricing for air, ocean and trucking freight quotes across multiple providers. Automated pricing cuts time for shippers, which previously had to wait, often for days, to receive quotes, Freightos said. After deciding on a quote, customers book it and enter their details, at which point the selected forwarders are put in touch with the customers.

—Lewis King



Aeroflot recovers on strength of domestic market

Aeroflot is back in the black, after cutting costs and seeing a rise in passenger numbers. On the cargo side, however, the results were mixed, with international freight down 1.7 percent, year-over-year, to 45,863 tonnes for the first seven months of 2016. July was especially grim, with tonnage down 8.9 percent, y-o-y, to 6,649 tonnes.

Conversely, domestic freight for the Russian carrier rose 29 percent to 54,856 tonnes for the first seven months of 2016, boosted by especially strong July numbers that saw freight rise more than 40 percent to 9,266 tonnes.

Aeroflot’s strong overall showing takes place despite the country’s ongoing economic crisis, caused by falling oil prices, international sanctions and a decline in travel between Ukraine and Turkey. “We maintained tight control of operating costs to offset the ongoing effects of exchange rate fluctuations,” explained deputy CEO for commerce and finance, Shamil Kurmashov, in a statement.

The carrier also benefitted from the absence of the country’s second-largest carrier, Transaero, which stopped flying last October.

The remarkable rise in domestic freight versus the decline in international stems from Russia’s falling trade turnover, as oil prices fall, imports grow more expensive in rubles and tit-for-tat sanctions gut the Russian economy.

—Lewis King

Turkish Airlines sees profits drop, earns CEIV status

Turkish Airlines recorded a net loss of US\$644 million for the first half 2016, ending June 30, compared to a profit of \$350 million in current dollars for the same period a year ago. However, the carrier’s Istanbul Atatürk Airport cargo hub still managed to earn the International Air Transport Association’s (IATA) Center of Excellence for Independent Validators in Pharmaceutical Logistics (CEIV-Pharma) certification.

The carrier credited political instability, security challenges in a number of its markets and an economic downturn for its poor first-half results. Cargo tonnage carried rose 12 percent to 389,000 tonnes in the first half, however revenue fell by \$1 million, year-over-year, to \$464 million. The sources of cargo revenue also shifted, y-o-y. In the first half of 2016, revenue shifted from freighters to bellyholds, with freighter revenue falling 8.3 percent to \$176 million. Bellyhold cargo revenue for the same time period rose 5.5 percent.

While the latest reports from Turkish do not specify freight tonne kilo-

Continued on page 16

“We maintained tight control of operating costs to offset the ongoing effects of exchange rate fluctuations.”

—Shamil Kurmashov



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meters or other cargo-specific metrics, the carrier's breakdown of route profitability sheds light on where the carrier is taking a beating. Regional yield development, measured in dollars and adjusted for cargo operations, fell the most on routes servicing the Americas, and the Middle East, by 19.4 percent and 20.9 percent, respectively.

Interestingly, Turkish's traffic in Europe and the Commonwealth of Independent States (CIS) was down less, decreasing 14.5 percent despite Russia-Turkey trade suffering from a diplomatic spat over a downed Russian Sukhoi Su-24 along the Turkey-Syria border last year.

Turkish Airlines Cargo, meanwhile, said it hopes to leverage its CEIV certification to compete in a crowded cargo market. Turkish Cargo has 3,000 square meters of specialized storage space at Istanbul's busiest airport, dedicated to four different temperature ranges (from -20°C to +25°C), with health-

care products stored in a dedicated 1,030-square-meter space. These specialized spaces are housed within a 43,000-square-meter indoor cargo area. The Turkish Cargo facility sits on the carrier's 71,000-square-meter footprint at the airport.

Turkish Cargo is also planning to commission "Thermal Dollies" and deploy them for the temperature- and time-critical consignments in the near future. The Thermal Dolly is a temperature-controlled, wheeled cart that protects shipments from excessive heat while on tarmacs, particularly in climates with extreme temperatures.

The carrier explained that its CIEV certification will allow Turkish to handle specialized shipments, including those of "pharmaceuticals, vaccines, biotechnological products, diagnostic samples, precision healthcare devices, organs and tissues."

—Lewis King

Finnair looks to cut costs as cargo revenue dips

Finnair's CEO Pekka Vauramo announced plans to cut costs by €20 million, as the company faces "an environment of elevated market uncertainty." The news came shortly after the carrier released its second-quarter results, showing that cargo revenue fell 5.6 percent to €42.6 million, compared with the same quarter in 2015.

Vauramo explained to Bloomberg that a delay of A350s on order and the current heightened security climate following recent airport attacks and political unrest in Europe, were depressing the carrier's outlook. "We have delays of one to two months on the A350, primarily because of cabin seats and some other cabin elements," Vauramo said. Finnair has ordered 19 of the jets with five already in service. However, he "wouldn't forecast any long-term impact."



Vauramo conceded that some of the latest security "incidents" had renewed concerns but he stressed that they too were temporary considerations.

While cargo revenues were down, cargo volume was up by 15.9 percent, year-over-year, in July, and the cargo load factor for the month was 59 percent, up 2.7 percent, y-o-y. For the first seven months, Finnair's cargo volumes were up 14.9 percent to 83,925 tonnes carried. RTKs over the same time period were up 15 percent, to 505.1 million.

The Finnish flag carrier has added routes to Asia as part of its growth strategy. Japan's Ministry of Land, Infrastructure, Transport and Tourism (MLIT) this month granted an extension of the antitrust immunity to include Spain-based Iberia in the joint business of Japan Airlines, British Airways and Finnair, allowing the four airlines to cooperate commercially on flights between Europe and Japan.

—Lewis King

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THIRD PARTIES

James Gagne will take over as president at **SEKO Logistics**, effective Jan. 1, 2017. Gagne joined SEKO Logistics in 2014 as COO of the Asia-Pacific region, based in Hong Kong.



James Gagne

William J. Wascher, who has led SEKO as president and CEO since 2002, will become chairman of the company once Gagne steps up. SEKO has also named **Michael Christensen** as president of SaaS and CPO international supply chain solutions. Christensen joined SEKO after serving as global head of forwarding for DAMCO International.

CEVA Logistics has appointed **Willie Parra Fonseca** as country

manager in Costa Rica. Parra has a background in project management and design and implementation of distribution centers across Latin America. He will now serve under Mike Wilson, managing director and senior vice president of CEVA's Mexico and Central America region, who said Parra's supply chain knowledge will help CEVA deliver a clear vision and strategy.



Willie Parra Fonseca

Former CEO of freight forwarder UTI Worldwide, **Ed Feitzinger**, has joined **Amazon** as vice president of global logistics. Feitzinger spent six years with UTI, including the last 15 months as CEO, prior to its acquisition by European competitor DSV in October.

Jochen Müller will take over for **Thomas Reuter** as COO of air and sea logistics for **Dachser** on Jan. 1, 2018. Starting Oct. 1, 2016, Müller will work on developing projects for Dachser, while Reuter will remain on the executive board until he retires on Dec. 31, 2017. Müller joined the executive board of DB Schenker in 2011, where he was in charge of air freight and sales for Central Europe.

Guillaume Burette has been appointed head of the recently formed solutions division at **DSV**. Burette has

been tasked with gathering all contract logistics business under the solutions division in six Asian areas.

Mallory Alexander International Logistics has appointed **Robert "Bob" Mallory** as its chief administrative officer, in preparation for a series of acquisitions to expand operations. Mallory has more than 20 years of experience in international sales in the U.K., Europe and Canada, and has worked for Morgan Keegan and Co., and Raymond James.

EFL has appointed **Peter M. Larsen** as its new COO at the company's headquarters in Sri Lanka. He will support Hanif Yusoof, founder and President, and S. Senthilnathan, CEO, in managing EFL's 20 offices globally.

AIRLINES

Australia's Toll Group, owned by Japan Post, has appointed **Bruce Wilson** as divisional director of **Toll Global Express**. Wilson, who has been managing the express freight operations and business logistics solutions in Australia since April, has three decades of experience working in the logistics industry. Prior to joining Toll Group, he held senior positions with PGA, Mayne Logistics and Linfox.

GROUND HANDLING



Onno Boots

Çelebi Aviation CEO **Onno Boots** has stepped down, but said he will stay on as a consultant to the handling company for its planned initiatives in the Asia-Pacific region. Boots has been at the helm of Turkish-owned Çelebi Aviation Holdings Group since 2014. Until a new CEO is found, **Dave Dorner**, an operating partner at Actera, the private-equity firm that holds a 50 percent stake in the company, will serve as interim CEO.

Air cargo ground handling and technical services provider **Worldwide**

Flight Services (WFS) appointed **Craig Smyth** as its CEO. Smyth, formerly CEO of Menzies Aviation, where he spent 20 years in various executive roles, took over the WFS reins on Aug. 29, 2016.



Craig Smyth

SOFTWARE

API and last-mile services company **project44** has hired industry veteran **Darryl Anderson** as chief architect. Anderson has 20 years of experience building large-scale enterprise software-as-a-service (SaaS) web applications. The company has also brought on **Walt Heil** as senior vice president of global sales, who has more than 22 years of experience in supply chain and SaaS technology sales.

EQUIPMENT MANUFACTURERS

Abigail French has been appointed as **CSafe Global's** newest director of strategic life science sales. Before joining CSafe, French held sales positions within LABRepCo, Covidien/Medtronic, and Aventis, giving her ample experience in biotech, pharmaceutical, medical-device and temperature-control markets.



Abigail French

ORGANIZATIONS

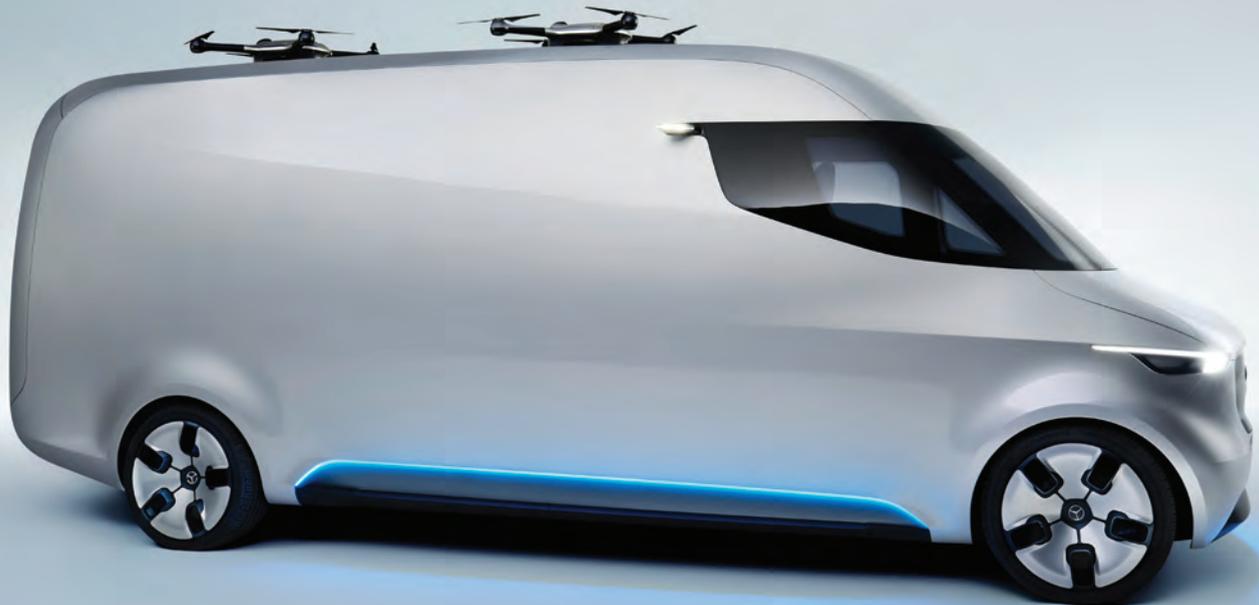
One of the most recognizable faces of the airfreight industry, **Doug Brittin**, will retire at the end of this year from **The International Air Cargo Association (TIACA)**, where he has held the post of secretary general since 2013. Brittin said he will stay on board in an advisory capacity once the new secretary general has been appointed.

Alexandre de Juniac has taken over the role of director general and CEO at the **International Air Transport Association (IATA)**. He succeeds **Tony Tyler**, who served in that IATA role from 2011 until this year.

THE RISE OF AUTONOMOUS TECH

How the supply chain is going hands free

By Randy Woods



On a gray, blustery, early-April day this year, a convoy of about a dozen 18-wheel, long-haul trucks pulled into a port facility in Rotterdam and parked in neat rows. It's a seemingly unremarkable event that happens thousands of times a day at the bustling Dutch seaport, yet these particular trucks were greeted with a gaggle of reporters while a live band played festive music in the chilly air.

The trucks themselves also looked fairly normal from the outside, but they were no ordinary vehicles. They were all participants in a continent-wide event, called the European Truck Platooning Challenge, which brought trucks of all makes from across Europe – some travelling more than 2,000 kilometers – to demonstrate cutting-edge driverless technology. While each truck carried a trained, licensed driver, the human element barely laid a hand on the wheel, leaving the actual driving to computers and arrays of sensors that could pinpoint the trucks' location and all other vehicles in the vicinity – all automatically.

The project is one of several worldwide proof-of-concept demonstrations that showcase what may become the most significant airfreight disruptors of the 21st century: the driverless, pilotless vehicles that one day – some say inevitably – will dominate freight lanes, on land and in the sky.

Robotic vehicles years ago took over the storage and retrieval duties of most modern warehouses. Now the technology is slowly moving out of the yard and onto the open highways and air corridors. In most cases, the technology has advanced well past our ability to draft regulations about its use in the real world, so the industry must make do with pilot projects, by the likes of DHL, Amazon, Google, Uber, Tesla and others.

But as Europe's platooning challenge indicates, logistics firms are planning ahead for a near future in which autonomous trucks, working together or separately with pilotless drone aircraft, will become the norm for surface and airfreight transport – perhaps sooner than you think.

For those who assume that driverless trucks won't have much effect on airfreight forwarding, Ryan Peterson, CEO of online forwarding company Flexport had this to say. "A driverless truck can drive 24 hours per day instead of 11 hours allowed, by law, today. That will make trucking more attractive than airfreight for some long-haul, next-day delivery moves."

Since labor represents about 26 percent of all trucking costs, according to the Truck Driver Institute, fully autonomous trucks could deliver goods in about half the time as conventional trucks for just three quarters of the cost. Such a disruptive technology could have profound consequences on the forwarding and logistics industries – not only in fuel savings, cost reductions and reliability but in the labor force and the training required.

Platoons, fall in

The concept of "platooning," as seen in the European project, comes from the old trucker's trick of following closely behind another 18-wheeler to help reduce drag at highway speeds and thus save on fuel – sometimes as much as 20 percent. This practice, however, also known as "drafting," is risky because if the lead truck has to stop short for any reason, the driver following has very little time to react and could cause a collision.

This is where today's technology steps in. By using a com-

Left: Mercedes-Benz's sleek concept "Vision Van" may someday deliver parcels with two integrated, rooftop-mounted Matternet M2 drones.

Right: The Matternet M2 unmanned aerial vehicle can take off and land from a truck autonomously, carry payloads of up to 2.5 kilograms and fly for 20 kilometers on a single battery charge.



bination of radar, cameras and other sensory technology, the autonomous truck can sense exactly where it is in relation to other trucks on road. Once this sensory data from all of the following trucks are linked together with the cruise control systems and the lead computer in the truck at the front of the convoy, a constant speed and distance can be maintained. Braking systems can also be linked together to ensure that any sudden stops or maneuvers made by the lead truck will be relayed instantly to the others.

For the last several years, European truck manufacturers – such as Scania, Volvo, Daimler, MAN, Iveco and Renault – have been perfecting these platooning vehicles and are now conducting several road tests to prove the technology works. Reports from Scania's research have demonstrated that platoon driving can reduce fuel consumption by as much as 12 percent.

While these various truck systems can operate completely autonomously, it's important to note they all still are designed for a human driver to sit in the cab and watch over the various sensors and take over manually, if something goes wrong. That's why many autonomous vehicles are sometimes referred to as being "optionally driven."

The key to understanding the inevitability of these technologies is to look at them in actuarial terms, said Grant Goldsmith, vice president, business development, at Avalon Risk Management. "If you look at the accidents of trucking, a lot of it comes from following too close, or changing lanes at the wrong time – that's got to be 10 to 20 percent of the accidents right there," he said. "That's significant."

When it comes to trucks, nine out of ten accidents are caused by human error, said Denis Niezgodna, project man-

ager, DHL Trend Research, for Deutsche Post DHL Group. "Our aim is to look into driverless trucks to increase safety of our own workers," he said. "We don't believe that trucks will be driving fully autonomously for another 20 or 30 years. But we'll definitely be able to assist our drivers by taking over specific tasks. It's already being done today."

The buzz about drones

On the aerial drone side of the autonomous vehicle coin, companies such as Matternet, Flirtey and Amazon have captured the industry's imagination with pilot tests and array of different unmanned aerial vehicles (UAVs), from simple quadcopters to larger, tilt-wing aircraft that function like conventional planes. After years of effort, however, these systems are no closer than the trucking industry to operating a commercial viable drone system.

Much of this inertia comes from the U.S. Federal Aviation Administration (FAA), which recently published "Part 107," the first official set of rules governing small commercial drones. In summary, commercial drones must:

- » weigh less than 25 kilograms
- » remain in the pilot's line-of-sight or in the sight of a separate visual observer
- » fly below an altitude of 400 feet
- » fly no faster than 100 miles per hour
- » only be operated during daytime
- » not be operated from a moving aircraft/vehicle unless it is over a sparsely populated area

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Operators of drones must be older than 16 and have an FAA-approved remote pilot certificate with a rating for UAVs, or be under the supervision of somebody who does.

Because of these restrictions, UAVs have mainly been used for surveillance and in humanitarian aid delivery in remote places following natural disasters.

UAVs took another tiny step closer to acceptance in the U.S. this year after Flirtey, an independent drone manufacturer, successfully completed what Matt Sweeny, CEO of Flirtey, called the “first fully autonomous, FAA-approved urban drone delivery in the United States,” which delivered a package containing bottled water, emergency food and a first aid kit via a six-rotor drone vehicle to a town in Nevada.

At DHL Group, the latest drone development is the “Parcelcopter 3.0,” the third generation of the integrator’s original quad-copter concept, Niezgoda said, featuring experimental tilt-wing technology. This larger UAV looks more like a miniature V-22 Osprey, with two tilt-rotors to allow for vertical take-off and landing and for straight-ahead, fixed-wing flight at up to 70 kilometers per hour. It also comes with a Skyport launch facility that automatically carries new shipments to the roof, loads them on the UAV for launch, and retrieves packages dropped off by incoming drones and stores them in lockers for customers to retrieve at any convenient time they choose.

Earlier this year, DHL completed a three-month trial to test the Parcelcopter system in real-world conditions. From January to March, the drone was used to deliver 130 small packages weighing up to two kilograms, containing medicines and other time-sensitive goods to remote areas around the mountainous region of Bavaria.

While the trend has been to build ever larger drones, “There’s always going to be an element of risk with drones, and the higher the payload, the higher the risk,” Niezgoda said. “What we really need to see is how to make these drones more flexible and more secure. We need an increase in sensing technology, so we can give the drones better eyes, letting them understand their environment.”

Drone, meet van. Van, meet drone

At some point, it seems likely that the independently developing worlds of UAVs and autonomous trucks will intersect and create some kind of truck-drone hybrid. At least two companies – The Workhorse Group and Matternet – seem to be headed toward that crossroad, albeit from different directions.

Cincinnati-based Workhorse Group, operates an eight-rotor “octocopter,” also called “HorseFly,” which is designed to be used in tandem with electric package delivery trucks, some of which are already deployed in FedEx and UPS fleets. The latest Workhorse drone weighs 15 pounds, empty, and has a 10-pound payload capacity. It has a maximum speed of 50 mph, and can remain aloft for 30 minutes, according to the company.

Workhorse has a drone-delivery model that works under the FAA’s guidelines, whereas Amazon has been confounded by the line-of-sight requirement. “We launch from atop the truck, and efficiencies are not as good as ... just launch[ing] from 30 miles away, but they are staggering,” explained Steve Burns, chief executive of Workhorse. By concentrating on the last mile or less of the delivery, Workhorse is able to conform to the FAA’s line-of-sight rules. “At two or three cents a mile,

which is the electricity these drones use, the efficiencies are just remarkable.”

In a similar fashion, Matternet has released its next UAV product called the “Matternet M2” drone, which also has the capability of taking off and landing on the roof of a truck or van, fully autonomously. “We’re very much targeting the smaller packages, since 90 percent of parcels are below the 2.5-kilogram mark,” said Oliver Evans, head of global business development for UAV manufacturer Matternet. “The distance our Matternet M2 drones can fly has increased to 20 kilometers on a single charge.”

In cooperation with Mercedes Benz, Matternet recently unveiled a new concept called the “Vision Van,” which is equipped with two launch and landing stations for Matternet drones. Specifically, the Vision Van concept will most likely service the business-to-business market, said Evans, who was formerly chief cargo officer of Swiss International Air Lines. “We envision the vehicles operating a trunk route, going to a virtual hub with the Vision Van,” he said. “The drones would then be operating in and out of that virtual hub, taking off and landing on the roof of the vehicle.”

In developed areas in Europe and the U.S., “you might see savings by a factor of three-quarters, so you have costs that are a quarter of the current costs,” Evans added.

Will bigger and slower win the race?

While Matternet is content to stay small, Natilus is looking to super-size the drone industry. Though it is currently working on a 30-foot prototype, California-based Natilus eventually wants to scale up to a drone that will rival the payload capacities of our largest freighters.

Co-founder and CEO Aleksey Matyushev (who will be speaking at *Air Cargo World’s* ELEVATE 2016 Conference in Miami on Oct. 10) said the full-size prototype will be about half the size of a 747, but will still be able to lift 100 tonnes of cargo and fly it from Los Angeles to Shanghai at 70 percent of the conventional cost.

The secret, he said, is to fly at slower speeds. “Drag is the square of velocity,” he explained. “So if you scale your speed from the usual Mach 0.74 back to Mach 0.4, you have a lot less drag. It’ll take you a longer time to get there, but it allows you to replace the standard turbofans with more efficient turboprops.”

Despite some intriguing artists’ renderings of a sleek, modified delta airframe, there are few details available about the full-scale aircraft. But by the second or third quarter of 2017, Matyushev said the 30-foot mock-up – which he said will be the rough equivalent of the size of a Predator drone used in the U.S. military, and will carry 700 pounds of cargo from Los Angeles to Hawaii, skimming about 80 feet above the water and flying at about 300 mph.

Curiously, this drone will only be able to take off and land on water, but Matyushev said the FAA regulations are the main reason. “There are so many hoops to jump through with the FAA, we decided to get into international waters, which is outside of FAA jurisdiction,” he explained. “When you think about it, it’s a crazy situation, but that’s what SpaceX did with their drone ship and the rocket.”

Coming into the first quarter of next year, Matyushev said he’ll have “a lot more confidence” in his future plans, which may involve a full scale test flight 2019. “We’re really focused



It may look like an average big rig, but this Freightliner "Inspiration Truck" last year became the first licensed autonomous commercial truck to operate on a public highway in the United States.

on intercontinental routes now," he said. "We're not even interested in talking about domestic airfreight because of the bellyfreight overcapacity."

And just in case the regulations change to drop the line-of-sight requirement, Matyushev said he's "leaving room for landing gear" in the next aircraft.

What's holding us back?

Matyushev is not alone in his concern about the FAA regulations – especially the line-of-sight rule, which will hamper the profitability of just about every possible application of UAV technology. Fortunately, those regulations are not likely to last forever.

"Regulations for drones will follow technology," said Avalon Risk's Goldsmith. "We will get to some common minimum standard of sense-and-avoid technology, to avoid buildings and other aircraft and people. That's when I think we will see beyond line-of-sight become safer."

And if the U.S. government refuses to change, there are a lot other countries in the world, said Peterson of Flexport. "Governments will prevent driverless technologies in some places," he said. "But other governments will adopt the technology, and those regions will have such efficient transportation networks that their economies will grow dramatically faster, which will put huge pressure on regulators everywhere to legalize the technology."

Also, because of the potential savings to be reaped with driverless/pilotless technology, risk managers such as

Goldsmith are far more willing to take the risk and offer insurance for these yet-untested vehicles. In fact, the United States Aircraft Insurance Group (AIG) just introduced its Performance Vector Unmanned policy in August, created specifically for policyholders who insure UAVs.

"We already will insure an aircraft that flies beyond line-of-sight. We'll insure someone who is not even Part 107 compliant," Goldsmith said. "In terms of just the pure risk, we didn't see someone without those certifications flying at 100 feet taking pictures of a house as more risky than someone flying at 100 feet who did have a pilot's license. This was about the technology, not the operator."

Whenever disruptive technology emerges in the marketplace, there is a natural resistance to change that always rises up to challenge the deployment of the technology – and the autonomous vehicle industry is expected to be no different.

"I suspect that the truck driver pool will push back against drone trucking – the same way they pushed back against e-logs and dashboard cameras," Goldsmith added. "But ultimately, the things these people that own these companies are worried about – safety and profitability – will win."

Preparing for takeoff

So how close are we to seeing these "optionally driven" autonomous vehicles on our highways and skyways? We may only have to wait a few months, according to Goldsmith.

As the technology begins to turn a corner, Goldsmith said he has envisioned a rough timeline for the rollout of autonomous vehicles. Starting next year and continuing into 2019, more tests will be done and pilot projects evaluated, he said. "Then, by 2020, we'll see optionally driven trucks on certain parts of the U.S. highway system, at certain times of the day. There'll be drivers in the cabs, but they won't always be driving."

After the trucking companies and forwarders have five years of data to digest, he expects that by 2025 someone will allow the those same "entry-level" highways to allow some fully-autonomous trucks on the road. "These will be operated in a caravan-style behind a truck that's optionally driven, and the rest will follow the leader."

Five years after that, in 2030, with 10 years of data logged, he added, "the systems will have gotten much better because the industry will have responded to this need," which will usher in the era of the completely autonomous vehicle.

Whatever timeline ends up being the correct one, the start point has already passed. Platoons of semi-autonomous 18-wheelers have already cruised through Europe. Mercedes is already marketing its slick Vision Van concept to the masses. UAV's are already over our heads and getting more accepted every day.

"We expect to move our first freight on driverless trucks before the end of this year," Peterson added. "This is not science fiction. We are starting on it now."



The Politics of Turmoil

Overcoming global supply chain disruption

By Lewis King

When word spread through social media that rebel factions in the Turkish Army had taken both bridges crossing the Bosphorus, Ömer's mind jumped to airfreight arriving at Istanbul's Atatürk Airport and containers sitting on the docks at a port to the city's south for which he was responsible.

"Containers were left on the dock, everything stopped, and all airfreight headed east by truck crosses those two bridges," recalled the operations manager for an Istanbul-based freight forwarder, whose name has been changed.

This was not the first time the cosmopolitan city had been frozen in its tracks, even within the past month. About two weeks earlier, on June 28, 2016, extremists supported by the ISIS terrorist organization had struck Atatürk Airport in Istanbul with automatic weapons and explosive belts, killing 45 people. And a few months prior to these attacks in Turkey, a dual bombing at Brussels Airport claimed 32 lives and caused extensive damage to the airport's infrastructure.

Now, Ömer had a military coup to contend with as his company struggled to turn a profit in an already slow economy. But ultimately, Ömer and his colleagues were able to send off critical shipments, despite heightened uncertainty.

To some, it appeared that such political instability in Turkey and Belgium might cause lasting damage to the industry, especially as airfreight struggled with overcapacity and declining profits worldwide. However,

airfreight operations at both Istanbul and Brussels airports demonstrated a remarkable resilience and were up and running in a matter of days. The Turkish coup was suppressed quickly and, although Turkish President Tayyip Erdogan seized the opportunity to consolidate his power, the resulting crackdown at least brought about a modicum of stability. In Brussels, the movement of passengers and cargo continued after a few days of cleanup and forensic investigation.

And while economic fallout depressed volumes in both cases, especially in Turkey, forwarders and other airports around the world's political hotspots remain confident that airfreight will ride out a deteriorating global security climate.

It is important to note that most terror attacks directed at airports strike at passenger operations. Subsequently, security responses have emphasized increased security measures on the passenger side. However, airfreight is still interconnected with passenger traffic via bellyholds, so supply chain workers are also vulnerable to security threats.

While the recent spate of attacks is already spurring the aviation industry to adapt, it is merely an episode in an ongoing saga, where groups or individuals acting outside the law use air travel as a means to terrorize and disrupt everyday transactions. The first incident took place in 1955, when Jack Graham snuck a bomb into his mother's luggage, causing a United Airlines plane to explode after takeoff from Denver, killing

all 44 aboard. Instead of collecting her life insurance policy as planned, Graham was convicted of murder and executed.

Ultimately, for every successful attack, many more are thwarted – such as the infamous printer cartridge bomb plot discovered in Yemen in 2010 – by the security apparatus that has been built up around airports. The latest rash of attacks across Europe shows how airfreight has largely avoided the turmoil faced on the passenger side, thus providing an interesting case study illustrating how a segment of the aviation business is able to overcome disruptions.

"Terrorism and air freight go a long way together," said Philippe Fierens, director of freight forwarder and broker a. hartrodt: Belgium. "Our industry is used to dealing with these exceptional challenges." But rather than leading to complacency, Fierens and his peers stress that, "recent events have shown that we need to continue our efforts," which he notes is, "a difficult decision in a market with the lowest revenues since the last crisis of 2008."

Belgium bounces back

On the morning of March 22, 2016, at 07:58 local time, two explosions, moments apart, tore apart the check-in area of Brussels Airport passenger terminal, while a third detonated inside a crowded metro train station. The coordinated bombings, supported again by ISIS, claimed the lives of 32 victims and seriously injured hundreds more. Over the following month, hundreds of passenger flights were



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cancelled as the airport struggled to get back on its feet.

On the day of the attack, the airport tweeted: “There are no cargo flights, only empty flights from international carriers are admitted,” but noted that, “the BRUcargo zone landside is accessible.” The following day, the airport announced there would be no passenger flights, however cargo flights were already under way. The embargo on passenger flights was then extended through the weekend, then into the following week, then into April.

By the end of that month, the passenger count fell 46.5 percent, with transit passenger numbers collapsing by 98.8 percent. As expected, belly cargo fell by 39.1 percent, as carriers re-routed or cancelled flights. But amid these dismal numbers, freighter cargo bucked the trend, jumping 29.8 percent. This significant disparity might suggest that air cargo forwarders and carriers are either remarkably resilient or more immune to disruptions.

In reality, location played a major role in the bombings’ aftermath. Cargo operations at the Brussels Airport lie approximately 2.5 kilometers northwest of where the terrorists struck. Damage was limited to an area well removed from freight facilities,

allowing cargo operations to resume as soon as flights were cleared for takeoff. “Within days, it was back to business as usual,” explained Steven Polmans, head of cargo sales and marketing at Brussels Airport. “Most airlines also resumed operations again within weeks of the attacks.”

Staying one move ahead

There are a number of reasons that airfreight remains relatively secure at airports despite the potential threats. First, passenger operations are high-value targets for terrorists. Brian Michael Jenkins, senior adviser to the president at the RAND Corporation, published an article following the 2011 bombing of Moscow’s Domodedovo Airport, explaining that, “Attacks on airports give terrorists the symbolic value they seek and guarantee the attention of the international news media,” whereas cargo operations are removed from the public.

Second, cargo operations have made remarkable progress in security, partially because they are not subject to the security variables associated with large crowds of passengers. Germany-based 3PL Rhenus Group

has invested in “security measures and in the screening of airfreight shipments,” said Jörn Schmersahl, CEO, Europe air and ocean in the business area Rhenus Freight Logistics. “At Rhenus, we use Explosive Detection Dogs and X-ray scanners for the screening of airfreight shipments. At our Amsterdam Airport Schiphol facility, we have our own X-ray scanner; in other European countries we use external providers.” Schmersahl added that Rhenus had recently added nuclear detection portals.

In addition, airports have extensive contingency plans that take cargo into consideration, said Polmans at Brussels Airport, which explains why the facility “was able to open up for cargo aircraft.” Stakeholders in the airfreight business watched events closely this summer and are developing strategies that account for the successes and failures at Brussels Airport. While airports don’t disclose details, he said that, since the attack, “plans will be updated where needed” to prepare for future disruptions.

Forwarders can also implement their own contingency plans in conjunction with affected air hubs. A critical link in these plans is the ability to re-route cargo to other airports via the forwarders’ own networks, Schmersahl said. “We have the possibility to re-direct the airfreight shipments to other Rhenus Airfreight stations in Europe and also in Asia,” he said.

As a result, even temperature-sensitive shipments survived the Brussels attack, said Polmans.



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Chilling effect

While cargo scanning and contingency plans can be an effective deterrent, there are many other, subtler ways that political unrest can disrupt the cargo delivery chain. For many of the freight forwarders Air Cargo World contacted for this story, just getting a stricken facility back into operation was less important than the long-term shockwaves from the attacks.

“Brussels

Airlines and Adelantex, which specialize in perishables, found a way to continue operations without much impact,” he said.

In neighboring Germany, “The regulations for air cargo are very strict,” explained Dirk Schusdziara, senior vice president of cargo for Frankfurt Airport. “All goods have to be checked upon arrival at the airport. There can only be exemptions if a secure process chain has been maintained with a ‘Known Consignor’ and a ‘Regulated Agent.’ It is very difficult to obtain certifications for ‘secure process chain’ status – and certification must be regularly renewed.”

These strict standards are necessary, however they come at a cost. Cargo airports need flexibility, but “restrictions and flexibility are a contradiction,” explained Steven Verhasselt, vice president for Commercial at Liège Airport. Unlike on the passenger side, the government is not stepping in to pick up the tab. So while Verhasselt noted that Liège had not yet imposed security fees, adapting was costing operators.

Following the failed coup in Turkey, the U.S. Federal Aviation Administration (FAA) briefly imposed a ban on all direct flights, regardless of carrier, from Turkish airports. Turkish diplomats launched a panicked campaign that quickly ended the embargo days later, but it was long enough to force Turkish Airways to divert significant volumes of cargo through airports like Liège in Belgium, where it was picked up by other carriers headed to the U.S.

“The attacks in Brussels have not had a particular impact on the freight business,” in terms of operations, said Nicolette van der Jagt, general director of the European Liaison Committee of Common Market Forwarders (CLECAT). What concerned her most, she said, was “the wider climate in Europe,” such as new border controls.

At Liège Airport – which is about 100 kilometers to the east and which stepped up to take flights routed for Brussels – the effects are more pronounced. “As far as finances are concerned,” said Verhasselt of Liège Airport, “the bad guys are winning.”

He explained that increasingly stringent security measures imposed after the bombings have forced the airport to reduce capacity and restrict access. Day passes that once allowed veterinarians to attend to horses on charter flights have been eliminated and Verhasselt warned that, “Ultimately, people will move elsewhere... with increased security there are some things that are no longer possible.”

Back in Istanbul, which straddles the Europe-Asia border, the mood is also less confident. Turkey’s tense security environment reflects a political instability that threatens not just the flow of commerce but the nation’s sovereignty.

With an ongoing crackdown on dissidents in Turkey and the recent escalation of military activity to the east, the terrorist attacks and coup seem to be part of an ongoing, intermingling crisis.

In the post-coup environment, convincing forwarders to route their

cargo through the traditional crossroads in Turkey has become harder. “If we don’t get this right, forwarders will turn to other hubs in the region,” warned Ömer, the Istanbul operations manager who endured the coup attempt.

Bulent Aymen, chairman of Sabay Logistics, a Turkish freight forwarder that operates out of Atatürk Airport, is confident that the state is taking this challenge seriously. “The government is taking all necessary steps to protect air traffic from terrorism,” Aymen explained. And while changes in security protocols are necessarily confidential, Aymen stressed that, “There are new standards, and we are informing our customers of them and implementing them at our warehouse.”

At the Istanbul airport, local media reported that the government had installed concrete barriers, installed x-ray machines capable of scanning vehicles, and that all vehicles were being checked upon entry into the security zone. “It’s causing terrible congestion,” quipped Ömer.

The state’s response has been “heavy handed, and spontaneous,” Ömer added. He explained that since the failed coup, armed agents from the ministry of transportation have been conducting frequent and random inspections at freight facilities across the country.

And while operations quickly resumed, much like they did in Brussels, business has been slower to follow suit. “Business has not returned to normal yet,” Aymen lamented. “But business is also affected by geopolitical problems with neighboring countries,” he added pointing to Russia and Egypt as examples.

Ultimately, Aymen and others in the business take a longer-term view of the situation, having seen their country recover from turmoil in the past. Last July wasn’t Turkey’s first coup, and during the 1980s political violence was a way of life. “We aren’t worried about losing trade. Turkey is located in a very strategic location, so while our business might be slow, it could just be temporary.”

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DECONSTRUCTING THE

TPP

How the world's largest trade bloc may not be 'one-size-fits-all'

By Lewis King

Henry Dinh Huu Thanh, president of Vietnamese forwarder Bee Logistics, is looking forward to the Trans-Pacific Partnership (TPP). Like many other Vietnamese forwarders, he said the TPP will “bring many opportunities for our company.” For example, if the mega-trade deal is ratified, Bee Logistics will be able to increase traffic volumes, diversify its customers, optimize cost structure and achieve faster market expansion, thanks to the removal of entrance barriers that once held his business back.

He's not alone in his optimism. Li Wenjun, senior vice president and head of airfreight, Asia-Pacific, at DHL Global Forwarding (DHL-GF), shares the bright outlook on Vietnam. “Airfreight inbound and outbound tonnage will increase, especially the textile and apparel industry, which will attract more carriers to route via Vietnam,” he predicted. “Vietnam will most likely have the strongest trade export to the U.S., but they will still rely on China for raw materials.” Steve Sato, vice president, alliance sales, Asia-Pacific, at United Airlines Cargo, said he is “focusing on ex-Vietnam business. We have a lot of expectations for Vietnam after TPP.”

With heavy support from pro-free-trade integrators, forwarders and carriers, it would seem like ratification of the massive TPP – a process that may take two years – would be a slam-dunk. But look elsewhere in the vast market of 800 million people covered by the proposed partnership across a dozen Pacific Rim countries, and the perspective shifts.

Markets like Singapore, for instance, are not likely to see much impact from TPP – at least as far as U.S. trade is concerned – as they already have a free trade agreement in place with the U.S. In fact, just five of the twelve TPP countries do not have such agreements with the United States at this point – New Zealand, Japan, Malaysia, Vietnam and Brunei.

The perspective is similar for Sandra Faraj, vice president of Montreal-based A.G.O. Transportation. In addition to NAFTA, Canada already has trade agreements with several TPP member countries (Chile, New Zealand and Australia), she noted. A.G.O. president Andre Goguen said TPP will be most useful for Canada in the agriculture, pharmaceuticals and automotive exporting sectors – none of which play a large factor in A.G.O.'s business. “TPP is not going to make a huge impact on our customer base,” he added.

Even in Vietnam – which most experts say will reap the richest benefits from the deal – the TPP is on the back burner. In mid-September, the Vietnamese parliament decided to hold off on a TPP ratification vote until after its next session begins on Oct. 20. In the United States, the TPP has gone from a major priority for the Obama administration to a political hot potato that neither presidential candidate wants to touch.

Ratification among the 12 member states is looking like more of an uphill battle than ever before. However, TPP advocates still insist that the benefits of the agreement outweigh the drawbacks, which may be enough to – eventually – tip the scales in favor of the trade deal.

What is TPP?

Bob Imbriani, executive vice-president, international, for logistics firm Team Worldwide, noted that the Trans-Pacific Partnership transcends existing bilateral trade agreements. “This is the beginning of global free trade,” said. “From a logistics and transportation standpoint, it is a good thing.”

The TPP agreement is comprised of 30 chapters, which aim to promote economic growth and enhance innovation, productivity and competitiveness among the 12 member countries: Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam. It also includes measures to lower trade barriers and a settlement mechanism for investor-state disputes. Equally important, the agreement has clauses to help improve the lives of the workers. This issue has fueled a backlash against the TPP agreement, hammered out last October, as potential voters in the U.S. elections voiced concerns about jobs being sent overseas because of the deal. As a result, the TPP contains language to promote the creation and retention of jobs; to raise living standards and reduce poverty; and to advocate for environmental protections.

Linking nations whose combined output accounts for one-third of global GDP and about one-fifth of global exports, TPP has the potential boost traffic significantly between participating countries. Trade will be facilitated by the elimination of 18,000 duties and tariffs, according to the U.S. Coalition for TPP. The World Bank estimates that TPP will boost the GDPs of member economies, on average, by 1.1 percent by 2030.



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Some cause for concern

While most 3PLs note the many potential benefits of the deal, an agreement of this size comes with countless variables that make it difficult to predict the TPP's overall efficacy. For instance, Li expressed concern that the anticipated growth in traffic "may exceed the development of logistics infrastructure, and this will cause further pressure on the current, tight airfreight export capacity market."

While he welcomes the opportunities offered by TPP, Dinh of Bee Logistics is also aware of potential risks, such as added global competition, human capital fluctuation, faster cost increases, more investment to ongoing services and higher costs to differentiate one company from another.

It also remains to be seen how TPP will affect foreign trade zone activities in the United States. To some extent, they may be rendered redundant, but they would still find a role as long as components sourced from non-TPP countries enter the assembly process, said Imbriani of Team Worldwide.

In light of growing interest in trade between Asia and Latin America, faster cross-border movement should benefit flows between countries like Japan and Chile. In the absence of direct air freight connections, U.S. airports could see a growing role as conduits for this kind of traffic. Team Worldwide is not making any plans in this direction, though. "It is too early to say how Asia-Latin America will play out with a U.S. transit role," said Imbriani.

And what might happen if other nations want to join years down the road? An expansion of TPP by certain interested countries – the Philippines, Thailand and Indonesia come to mind – could change the landscape significantly.

For the most part, however, many forwarders and shippers are reluctant to pay much attention to TPP. "None of my clients have made plans or said anything about TPP," reported Albert Saphir, president of logistics consulting firm ABS Consulting. "I think this is still way too far away."

Small to mid-size forwarders, so far, have not been vocal on the initiative, either. Most public comments have come from the multinational integrated express carriers and shippers, who have all extolled TPP's benefits to global trade.

According to a study published by ResearchAndMarkets, an on-line market research repository, TPP is also expected to encourage greater foreign investment in member states. The U.S. Coalition for TPP has argued that consistent trade rules will help service providers and traders venture into new markets. Naturally expectations vary greatly by trade lane.

In Japan, TPP should boost automotive exports, resulting in more parts moving by airfreight to the U.S., predicted Li, from DHL-GF. Shipments of auto parts from Japan to Mexico should also rise under TPP, given the investments Japanese auto makers have made. "Mexico will be hot for Japanese auto manufacturers," one forwarder from Japan predicted.

Besides easing the flow of goods, TPP also promises to streamline customs clearance. It requires the release of express shipments within six hours after arrival, noted Ralph Carter, managing director, legal and international affairs, at FedEx Express. "The TPP is the first agreement to seriously protect an open internet and to ensure the free movement of data across borders," he said, "which is especially critical to the continued growth of global e-commerce."

The Australian Federation of International Freight Forwarders said its members should benefit from "enhanced commitments that support integrated logistics supply chains," the organization said. "Australian providers of transport and logistics services in Malaysia and Vietnam will gain strong trade and investment protections for the first time."

For their part, the integrators have repeatedly argued that TPP should make exporting easier for small- to medium-sized manufacturers. UPS customers will also benefit from the acceleration of the release of goods through customs, declared UPS CEO David Abney.

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Phau Hui Hoon, assistant vice president, cargo and logistics development division, at Singapore's Changi Airport Group, expressed similar ambivalence. "We see the TPP as a positive step," he said. "[But] given that the ratification of the TPP could take some time ... it would be premature at this stage to make more specific forecasts."

A.G.O.'s Goguen said he is not holding his breath on the TPP. "It is a very big undertaking to get all 12 nations to ratify it," he added. "Especially with the uncertainty in the U.S. election."



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AAPA: Asia-Pacific Carrier Traffic, July 2016 & YTD

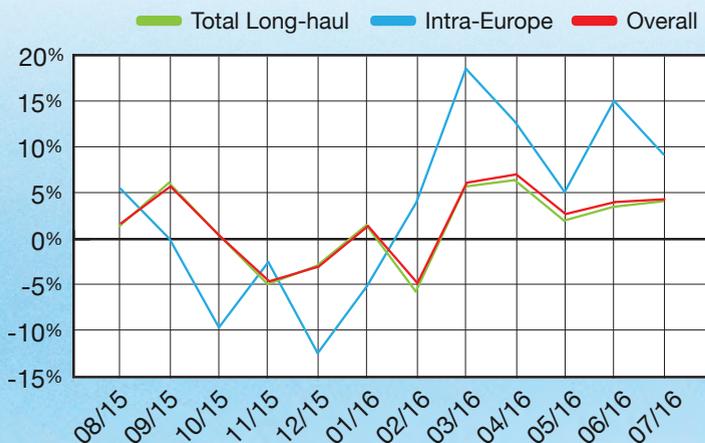
International scheduled services, monthly and YTD, for Asia-Pacific Airlines

	FTK (mil.)	FATK (mil.)	Freight Load Factor	
Monthly	Jul - 2015	5,356	8,676	61.7%
	Jul - 2016	5,567	8,970	62.1%
	YoY % Change	3.9%	3.4%	0.4 points
YTD	Jan - Jul 2015	37,440	58,726	63.8%
	Jan - Jul 2016	36,873	60,134	61.3%
	YoY % Change	-1.5%	2.4%	-2.5 points

Source: Association of Asia Pacific Airlines

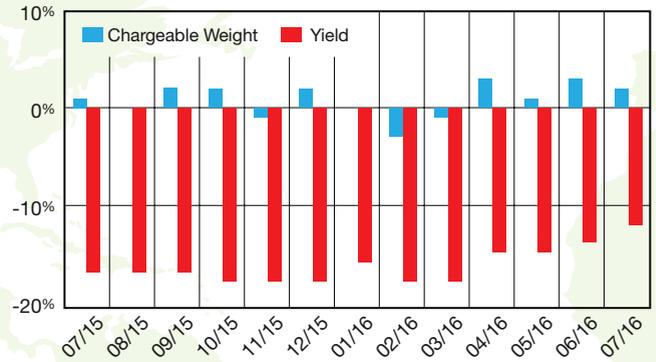
For the second consecutive month, the Asian carriers reported modest increases in airfreight traffic. Measured in FTKs, airfreight traffic rose by 3.9 percent, outpacing a 3.4 percent rise in airfreight capacity (measured in FATKs). This, in turn, pushed the freight load factor 0.4 pp higher to an average airfreight load factor of 62.1 percent for the month of July. Commenting on July's performance, Andrew Herdman, AAPA's director general, said, "International air cargo demand has been relatively weak, with year-to-date demand registering a 1.5 percent decline compared to the same period a year ago, but we have seen a modest pickup in air cargo volumes during the past couple of months."

Source: Association of European Airlines



WorldACD: Worldwide Air Cargo, Monthly Change, July 2016

Weighted average of all-in "buy rates" paid by forwarders to airlines.



Source: WorldACD

The airfreight market continues to show signs of slight year-over-year gains to the total volume of chargeable weight moving across the world, according to WorldACD. For the month of July, chargeable weight edged up by 1.8 percent over July 2015. Month-over-month yields seem to have finally stabilized, with only Europe and North America showing continued declines, compared to June, and all other regions showing modest growth. A few routes that saw notable YTD increases to chargeable weight include Germany to Eastern China, and the reverse, which clocked growth of 20 percent and 12 percent respectively.

AEA: European Carrier Traffic, Last 12 Months

Monthly year-over-year percent change in intra-Europe, long-haul, and overall freight traffic (FTKs) for European airlines over the last 12 months.

Intra-European traffic for the month of July continued to rise with an increase of 9.1 percent, following 14.9 percent in June. International and total traffic continued to clock modest gains of 4 percent and 4.2 percent — representing the fifth consecutive month of positive numbers in all three categories.



IATA: Total Freight Growth by Region, July 2016

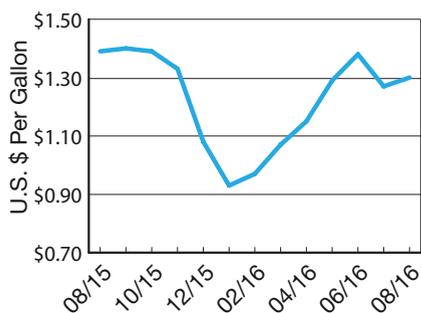
Region	% Growth YoY in FTK	
	July - 16	AFTK
Africa	-6.8%	-2.7%
Asia/Pacific	4.9%	-1.2%
Europe	7.2%	4.4%
Latin America	-5.6%	-5.1%
Middle East	6.7%	6.5%
North America	-4.1%	-0.1%
Industry	5.0%	1.2%

Source: IATA

IATA's July 2016 airfreight market analysis reported a 5 percent, year-over-year, increase in worldwide cargo traffic (in freight tonne kilometers flown) – up from 4.3 percent in June, and the strongest y-o-y growth since Q1 2015. International cargo traffic was up 4.6 percent. IATA's incoming director general and CEO, Alexandre de Juniac, said, "July was a positive month for airfreight — which is an all too rare occurrence. Despite that, we must recognize that we face some strong headwinds on fundamental aspects of the business."

USEIA: Jet Fuel - Spot Price, 12-Month Change

U.S. Gulf Coast, kerosene-type (wholesale price) over the last 12 months



Source: U.S. Energy Information Administration

Since reaching a low point of 93 cents per gallon back in January, the wholesale price of kerosene-type jet fuel has risen and plateaued right around the US\$1.30 mark, rising or falling a few cents each month, but indicating no specific trends. For August, the price rose again 3 cents since July to \$1.30 per gallon, which has been roughly the average price for the last four months. The dog days of summer continue.

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OCTOBER 26-28

TIACA's Air Cargo Forum and Exposition 2016 – Paris, France: TIACA's biennial event brings together thousands of air cargo industry leaders, customers and more than 200 exhibitors from approximately 100 countries. For more information, visit tiaca.org or send an email to kgibson@tiaca.org.

NOVEMBER 16-18

Logitrans – Istanbul, Turkey: The 10th edition of Logitrans will take place at the IFM Istanbul Expo Center. The international trade show features solutions in the field of transportation, logistics and telematics, all located in Istanbul – the ideal bridge between the markets of Europe, Asia and Russia. In 2015, the event attracted more than 15,000 participants and 220 exhibitors. For more information, please check logitrans.com.tr.

NOVEMBER 22-23

Asian Logistics and Maritime Conference – Hong-Kong: This sixth edition of ALMC will bring together logistics and maritime services providers and users, including manufacturers, traders and distributors to exchange market intelligence and explore business opportunities in the region. For more information, visit almc.hk/en/index.html.

DECEMBER 8-9

Cold Chain Distribution Conference & Exhibition – London, U.K.: This 11th annual conference will include lively debates, market updates and a platform for delegates to stay ahead of the lucrative temperature-sensitive cargo market. For more information, visit smi-online.co.uk/pharmaceuticals/uk/cold-chain-distribution.

2017

JANUARY 16-19, 2017

Middle Cargo Meet – Dubai, United Arab Emirates: This first international meeting, open to all forwarders worldwide, is a chance for those in the industry to interact and develop business ties. Meetings are optimized to provide a great business development platform via the Face2face scheduler. For more information, visit middlecargomeet.com.

JANUARY 25-27, 2017

15th Annual Cool Chain Temperature Controlled Logistics Europe – Frankfurt, Germany: Europe's largest and longest-running gathering of life sciences logistics professionals is expected to attract 500+ attendees and 60+ exhibitors. The whole program focuses on actions to implement when attendees get back to their offices. For more information, visit coolchaineurope.com.

FEBRUARY 8-9, 2017

Cargo Logistics Canada – Vancouver, Canada: This conference helps connect freight owners with freight movers, fostering multimodal synergy between diverse stakeholders in import, export and domestic supply chains. For more information, visit cargolisticscanada.com.

FEBRUARY 9-12, 2017

The 9th WCA Worldwide Conference – Singapore: One of the industry's largest conferences of the year is being held for the first time in Singapore. Expect to see more than 2,500 freight forwarding executives gather for three days of one-on-one business meetings and social networking events. For more information, visit conference.wcaworld.com/wcaworld2017/info/eng/about.php.

FEBRUARY 21-23, 2017

Air Cargo Africa 2017 – Ekurhuleni, South Africa: This mega-event, to be held near at the Casino Convention Resort, near Johannesburg, enables the global air cargo community to explore and strengthen networking corridors with the African continent. For more information, visit stattimes.com/aca2017.

MARCH 14-16, 2017

11th World Cargo Symposium – Abu Dhabi, United Arab Emirates: WCS is IATA's largest and most prestigious event of the year, held at the Abu Dhabi National Exhibition Center. *Air Cargo World* will also publish on-site Daily Reports throughout the three-day conference. For more information, visit iata.org/events/wcs/Pages/index.aspx.

APRIL 30-MAY 2, 2017

27th CNS Partnership Conference – Orlando, U.S.: Each year, IATA subsidiary Cargo Network Services Corp. brings together close to 600 air cargo professionals from the U.S. and around the world. *Air Cargo World* will also publish on-site Daily Reports during the conference. For more information, visit cns.net/events/Pages/cns-partnership-conference.aspx.

MAY 9-12, 2017

Air Cargo Europe – Munich, Germany: The world's largest conference for the air cargo industry, held biennially, returns to Messe München as part of the as part of the transport logistic exhibition. Mingle with exhibitors and experts from around the world at this event, which brings together the whole supply chain. For more information, visit air-cargo-europe.com.

Advertiser's Index

American Airlines Cargo	2	Emirates.....	25
ACS Business	40	EVA Air Cargo	11
AEMCA	33	Finnair Cargo	26
Aeroflot.....	36	Freighter Forecast.....	36
Aeroport Paris.....	29	Lufthansa Cargo CA	16, 32
Air Animal Pet Movers	33	Macau Intl. Airport.....	39
Air Canada Cargo	35	Miami Intl. Airport	15
AirCargoWorld.com	13	Precision Air	8
ALG Worldwide.....	33	Qatar Airways.....	7
Boeing.....	9	Silkway Airlines.....	31
Cargo Facts Symposium	39	Team Worldwide	31
Cargo Systems Inc.....	33	Turkish Airlines.....	27
Elevate	20-21		



Brandon Fried is the executive director of the U.S. Airforwarders Association

A practical solution to an impractical screening problem

by Brandon Fried

When it comes to the screening and inspection of cargo, U.S.-based airfreight forwarders have become experts on the topic and its challenges. Physically screening 100 percent of air cargo on passenger flights to and from all U.S. airports has been one of the

most monumental achievements in aviation since the Sept. 11 tragedies of 15 years ago. The Transportation Security Administration (TSA), working under legislation that allowed the use of multiple methods, enlisted the industry to execute the enormous Congressional mandate of inspecting each piece of airfreight before departure.

While the effort has been successful, forwarders, along with their shippers and airline partners, learned many lessons in the costly screening of the comparatively small amount of cargo shipped on passenger flights. For maritime containers, however, the task is far more challenging.

In May of this year, the U.S. Department of Homeland Security (DHS) issued a request for information to solicit recommendations on how to meet the underlying objective of a 2006 law – the Security and Accountability for Every Port at 2006 (SAFE Port Act) – mandating 100 percent scanning of maritime containers bound for the United States. The act mandated a full implementation date by 2012, but that deadline has been extended every two years and remains unfulfilled despite some Capitol Hill lawmakers refusing to accept the same technical realities, which are as true today as they were 10 years ago.

In fact, since the SAFE mandate, only 3 percent of all maritime cargo is actually examined at the port of origin before sailing to the United States. Technology, in its current state, cannot practically perform the task on the 11 million maritime containers coming to our shores annually. Depending on this inefficient and impractical technology would slow the flow of global commerce and hurt our economy while not necessarily meeting the legislative objective of enhancing port security.

Recently, U.S. Representative Janice Hahn of California called for 100 percent scanning of maritime containers before they arrive in American ports, citing the risk of devices such as “dirty bombs” being smuggled into ports on ships. We agree with this concern, but scanning all containers, while seemingly simple, is an impractical approach to a complex challenge.

The National Retail Federation recently drafted a letter signed by almost 100 U.S. manufacturers, farmers, wholesalers, retailers, importers, agribusiness, distributors,

and transportation and logistics providers, who expressed their support of the DHS decision to renew, for another two years, the extension of the deadline once again. The letter, also signed by the Airforwarders Association, expressed the belief that Congress needs to re-evaluate the SAFE Port Act’s 100 percent scanning mandate and focus on practical supply-chain security solutions.

The screening of air cargo can be a time-consuming process because the technology used has not significantly advanced over the past few years. As an example, the TSA still has neither vetted nor certified a scanner capable of screening aircraft containers and pallets, which are much smaller than their ocean-going cousins and contain multiple commodities. Thousands of pieces must be screened individually in a tedious and resource-consuming process. The airfreight screening challenge, however, pales in comparison to the idea of scanning all of the ocean freight containers coming into the U.S.

The DHS, responding to the coalition letter, says it remains committed to advancing the law’s primary objective of protecting the nation against radiological and nuclear threats. While the number of containers physically scanned is low, a far greater percentage is screened using an efficient and practical multilayered, risk-based supply-chain security strategy. The approach employs risk-analysis systems that apply targeting rules to multiple sources of data for each container to determine which ones are high-risk or warrant closer examination.



The National Retail Federation coalition letter further points out that the statutory provisions mandating 100 percent container screening did not address key operational questions. These include the definition of “scanned,” who performs the analysis of each “scan,” who pays the capital cost of the scanning equipment, and whether or not the DHS has consent from foreign governments to implement such a mandatory regime within their sovereign territories. Most important, the letter asks the question about how the U.S. would respond if our trading partners insist on a reciprocal 100 percent scanning requirement for U.S. containerized ports.

Instead of going through this waiver process every two years, now is the time for the administration to recommend to Congress a comprehensive re-evaluation of the 100 percent scanning requirement. As the letter states (and we agree), this will provide a path forward that allows the DHS, industry and our trading partners to focus on real solutions to address any security gaps that remain in the global supply chain. Congress should consider the most important lesson learned from the air cargo industry is that risk-based, multilayered screening – not just dependence on impractical technology – is the most efficient way to keep our nation safe.

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