# Air Cargo World

THE SOURCE FOR AIRFREIGHT LOGISTICS

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# 进军中国市场

(HOW FORWARDERS CAN BREAK INTO THE CHINESE MARKET)

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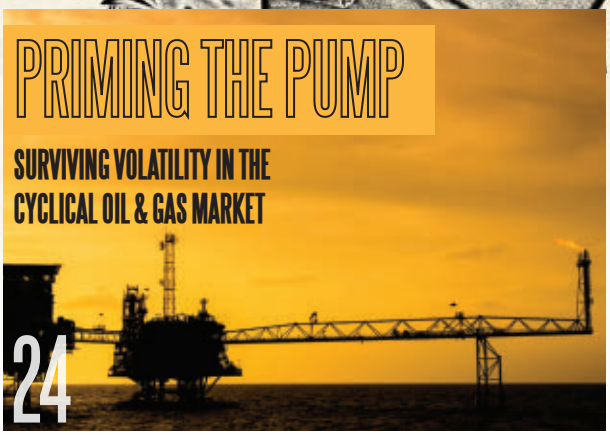

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## Editor's Note

# Changes in the Weather


Randy Woods

Through my childhood, I was fortunate enough to spend many of my summers on Cape Cod, which juts out from the U.S. Northeast coast, deep into the chilly currents of the Atlantic Ocean. This geography often produced crazy weather patterns that were completely separate from those on the mainland. It could be sunny and 95°F in Boston, but just 50 miles away on the Cape we could be plunged into a foggy 50°F. Sometimes it felt like we had four seasons in a single day.

I often get that same feeling in the airfreight industry, with economic storm fronts constantly buffeting the fortunes of logistics companies. Macro-economic realities that seemed inevitable and unchanging can be called into question with a single quarterly report, a labor strike or a project delay. In this issue, all three of our features focus on topics that have undergone significant shifts in perspective over the last several months.

For instance, our cover story is about how foreign-owned forwarders can break into the Chinese logistics market successfully (see page 18). As recently as the end of 2014, there was every indication the robust economic growth in China, led by e-commerce, would continue indefinitely. There was an aura of mystery about the country and everyone wanted a piece of it.

Then, as we turned the corner on 2015, we began to see dark clouds forming in the form of a slowdown in manufacturing growth, a plunge in property investments and a rising national debt. While everyone knew that double-digit growth couldn't continue forever, this year's economic indicators somehow made China seem less invincible – though no less attractive. As we discuss in the article, the issues today are not as much about barriers to entry in China as they are about surviving the intense competition the economic boom has created.

Another market swing currently affecting airfreight occurred in the oil and gas sector. In mid-2014, the oil exploration business was sky-high, with oil prices of more than US$100 per barrel – and the airfreight sector was right behind it, providing heavy lift and other support flights for dozens of global mega-projects. But by January of this year, oil prices were cut in half and exploration projects quickly dried up. Accordingly, in our feature on the oil and gas sector (see page 24), we explore the dizzying fall in oil prices and their effect on the airfreight companies that rely on O&G business. Fortunately, we found, the industry has been through enough boom-and-bust cycles in the past to be prepared for this contraction while awaiting the inevitable return to rising prices.

Finally, we delved into the reasons behind the popularity of narrowbody passenger-to-freighter (P-to-F) conversion programs (see page 28). Our timing, in this case, was just right. As this issue went to press, the 2015 Paris Air Show concluded as one of the most active in years regarding conversions and freighter activity. At least 29 freighter orders were made in the sluggish widebody market; Airbus and ST Aero launched a long-awaited conversion program for the A320/321 Family; and Aeronautical Engineers Inc. announced that GE Capital Aviation Services would be the launch customer for up to 20 P-to-F conversions of the 737-800 model. After just three days, the whole outlook for freighters was turned on its head.

It reminds me of what I used to hear during my New England summers: "If you don't like the weather, just wait five minutes."

Randy Woods,
Editor, *Air Cargo World*
rwoods@aircargoworld.com

# UpFront

## Delta honors the fallen

Back in 2013, a crew of Delta Air Lines workers staged a solemn ceremony for a fallen U.S. soldier and his K-9 partner when their remains arrived at Hartsfield-Jackson Atlanta International Airport. A video of the ceremony was recently discovered and has since gone viral on YouTube (see goo.gl/E9oOrN). The moving video shows volunteer members of the Delta Honor Guard standing at attention as they received the flag-draped coffins of the soldier and his service dog. The workers say a prayer at the conclusion of each ceremony and pass along a special Delta coin to the soldier's escort.

## UPS delivers Special Olympic torch

UPS Airlines transported the Flame of Hope torch from Athens to Washington, D.C., for the 2015 Special Olympics, which will be held in Los Angeles July 25 to Aug. 2. In addition to the flight crew, a UPS management pilot escorted the flame in four specially designed "miners' lamps," designed to keep the flame lit during the trans-Atlantic flight. After a stopover at the UPS hub in Cologne Bonn Airport, UPS delivered the lamps in time for the start of the Law Enforcement Torch Run race for Special Olympics.

## CEVA fights Australian poverty

CEVA Logistics, has partnered with Y Gap (Y Generation Against Poverty) in Australia to support the non-profit organization's "5cent" campaign. Now in its fourth year, 5cent asks Australians to donate their 5-cent coins throughout May to change the lives of people disadvantaged by poverty. In its first three years, the campaign collected nearly 8 million coins, amounting to nearly A$400,000. All proceeds, coordinated and delivered to Y Gap by CEVA, have been used to help poor communities become self-sustainable. 'Cents-ible' job, CEVA!

## Air Djibouti ready to rock

Air Djibouti, which fell off the radar almost 15 years ago, is making a comeback with the help of Cardiff Aviation co-owner and chairman Bruce Dickinson (pictured), a trained pilot who also happens to be the front-man for heavy-metal band Iron Maiden. Air Djibouti, established by the government of Djibouti, signed a memorandum of understanding in late May with Cardiff Aviation for the latter to manage an air operator's certificate for the revived African carrier, source its aircraft and provide operational, MRO and management support.

## Aeroflot Cup: Swissport 6, dnata 1

How does a carrier create a fun networking event for its ground-handling partners and still give them an opportunity for bragging rights? One way is to host a football match on one of the most hallowed pitches in sports: The Old Trafford, home of the Manchester United F.C. As the official carrier of Man United, Russian carrier Aeroflot arranged the friendly match in May, pitting crews from Swissport against those from dnata. Swissport seized the day with a 6-1 victory. Former Man U striker Andrew Cole also attended the event, seen here, above right, presenting a 777 model with several Red Devil player autographs to Team Swissport captain James Hoad.

## Jurassic world-traveler

When the fossilized, toothy skull of a 66-million-year-old Tyrannosaurus rex needed to be moved from the Black Hills Institute of Geological Research in the U.S. to the Fraunhofer EZRT Research Institute in Fuerth, Germany, TNT was ready to take on the Spielberg-sized production. The 1,500-pound skull, excavated in Montana in 2013, made the 5,000-mile journey from the United States in a sealed, six-foot-long wooden crate and was cared for by "special services" handlers. TNT first drove the skull 1,700 miles from South Dakota to JFK Airport in New York, flew it to its air hub in Liège using a 747 aircraft, and then trucked it again to Fuerth. No one was reported bitten or eaten during the journey.

# New TIACA chair prepares for data sharing

*With more than 18 years of experience in the aviation industry, Sanjiv Edwards has assumed the chairmanship of The International Air Cargo Association (TIACA), taking over the position occupied by Oliver Evans from Swiss International. Edwards, currently head of cargo business at Delhi International Airport, worked for more than a decade at British Airways and completed Executive Management Studies from the Oxford Brookes University. He contributed to India's air cargo policies for the country's Ministry of Civil Aviation, and is one of the founding members of the Air Cargo Forum India, heading up its Innovation Group. As he took TIACA's reins,* Air Cargo World *spoke with Edwards about priorities for his two-year term.*

**What do you see as the top priorities for TIACA under your watch?**

I want to ensure we are actively practicing and promoting our three pillars of networking, knowledge and advocacy. My priorities will be firstly to build a strong membership base; secondly to increase the global reach of TIACA, engaging with the industry globally and regionally taking up advocacy issues that bring value; and thirdly ensuring the Air Cargo Forum, Paris, in October 2016 becomes the most desired event for the industry to transact business and understand future trends that impact the businesses.

**What kinds of airfreight policies will TIACA be advocating under your chairmanship?**

Currently a key issue is Pre-Loading Advance Cargo Information [PLACI], and we are working aggressively in this area. We are advocating global standards for both the customs and civil aviation aspects of this complex issue. We want to ensure interoperability of systems globally, so we're working closely not only with the regions who currently have pilot programs [United States, Canada and the European Union/Switzerland], but also with ICAO [International Civil Aviation Organization], the WCO [World Customs Organization] and the Universal Postal Union to establish these baselines. In the area of technology, we are working toward wider adoption of software standards for cargo screening technology. This would allow broader use of the same hardware and software, and effectively reduce system cost. We are also advocating a greater commonality to training, not only regarding hardware and software, but also for security regulations. This will help groups such as ground handlers operate more efficiently.

**What are the remaining hurdles that must be overcome to prepare the industry to share relevant data?**

One of the key challenges is data transmission, in two or even more directions. Connecting proprietary systems can be challenging, and we only have a small number of participants in the pilots to date. Dual filing – for forwarders and airlines – and sharing of the information and status is also a challenge, and we still do not have a common "portal" that would enable smaller forwarders to readily participate in the programs. There are also issues concerning code-share operations, and how to process shipments managed via co-loaders. We have much to do in the area of establishing common risk analysis baselines, and this is especially important for the numerous shipments that transit what could be multiple PLACI regimes. We cannot afford to have one regime determine a shipment to be deemed high-risk after it has already been cleared by another, and is en route. We also have much to do in the area of developing common screening procedures for shipments designated as higher risk. And we still have much to do in the area of ensuring quality of data, which is essential for smooth and efficient processing.

> "We need to go beyond 'e-airway bill' and completely streamline our processes, embracing technology to the maximum..."

**What are some of the ways that India can grow its airfreight market over the next few years?**

India truly is a very potential market. With a population of over 1.2 billion, there is strong and growing consumer base. Also, the current policies are aimed towards boosting the manufacturing sector as well as exports. India can really grow its airfreight market by investing in infrastructure, which really drives growth. This has been demonstrated by Indira Gandhi International Airport in Delhi; they made significant investments in developing cargo infrastructure since 2010 and, over the last two years, have recorded the fastest cargo growth among major airports in the country to emerge as the No.1 cargo airport in the country in the last fiscal year. [India also should] enhance collaboration between industry and the government. An excellent example of this is the Air Cargo Forum India, a local not-for-profit association for the air freight industry, which is actively engaging with the government on behalf of the industry.

**How will TIACA address the issue of air cargo losing market share to seafreight?**

While some of the erosion can certainly be attributed to overall economic conditions, we feel it is important to push for simplification in our processes, which will make it easier for shippers to utilize air cargo. This means we need to go beyond "e-airway bill" and completely streamline our processes, embracing technology to the maximum. We also need to focus on expanding enhanced service options, and in this area we must continue to work closely with our forwarder partners. Looking to the future, we need to adapt to the changing and expanding "B–to-C" and "C-to-C" markets, as more of this is moving via global postal networks, and moving by air. TIACA will be exploring these areas of innovation in the supply chain, from shipper through to consignees, as the basic platform for our Air Cargo Forum in Paris in 2016. ACW


Photo: Lufthansa

# Lufthansa Cargo: A step back to the future

By Roger Turney

A slice of humble pie for Herr Peter Gerber, if you please? Lufthansa Cargo's CEO is still insistent on putting a fine gloss on the decision to put the airline's proposed LCCneo cargo terminal at Frankfurt on ice. In this case, it's perhaps not so much a case of being put on ice as being buried at the back of the freezer.

Any hope of the US$775 million project moving forward will now not even be considered until 2017, at the earliest. That, it should be noted, is not the new start date, but the date when a decision *on the decision* will again be reviewed.

The fact of the matter, Lufthansa's main supervisory board explains, is that the airline doesn't have the investment funding available to take on what would be its single largest program. Or, to put it another way, the German carrier's investment portfolio is already overstretched. Analysts point to the airline's existing high financial leverage and growing pension liabilities. Matters, of course, have not been helped by the series of crippling strikes held by the carrier's pilots' union, which have seriously dented earnings in the past year.

Ironically, Lufthansa Cargo has started posting strong results again, reporting a $110 million profit in 2014. This has continued through the first quarter of this year, with revenue up again by 5.3 percent to $680 million, while tonnage growth has only been reduced by a factor of 1 percent to 396,000 tonnes.

Alas, to no avail. Lufthansa Cargo has no choice but to bite the bullet and accept its fate, which is being meted out by the higher management echelon. The LCCneo decision is a hard hit for the carrier's otherwise independent cargo division to take, immediately exposing to the outside world where the mother airline's priorities lay, and that is apparently not with cargo.

Within LH Cargo the pain is all the more difficult to endure, given that LCCneo was due to become the very embodiment of its "Lufthansa Cargo 2020" future planning strategy, the building blocks for which have already been put into place. In particular, five new 777Fs are now flying with the airline. But within that strategy it seems that LCCneo may now limp into place sometime beyond 2020. There are even questions being raised as to whether the project will *ever* be given the green light.


Photo: Aerolearns/Flickr

*One of Lufthansa Cargo's many near-term decisions is whether or not to replace more MD-11Fs with new equipment.*

Even ahead of this latest decision, the project was reported to be some two years behind its anticipated schedule. The proposed site of the terminal at Frankfurt's Cargo City North has been found to contain poor subsoil. This, it is understood, will require a far greater amount of groundwork before actual construction can start.

But Gerber is determined that the Lufthansa Cargo greater vision will not be undermined by matters beyond his control. "In spite of this decision, we will continue implementing our Lufthansa Cargo 2020 program," he said. "This will include continued modernization of the freighter fleet, the digitalization of all paper-based processes and the further deepening of our mutual ties with Japanese carrier, ANA Cargo."

Gerber's comments bring us to the next test of Lufthansa Cargo's vision. The carrier currently has options to take delivery of five more 777Fs, if it wants to maximize the efficiency of its freighter fleet and begin to phase out its aging MD-11Fs, two of which are already grounded. It has indicated that it will make a decision on that choice in the third or fourth quarters of this year. If the carrier goes ahead with the freighter purchases, perhaps it will be some consolation, considering the loss it will have to embrace in terms of real estate investment on the ground at Frankfurt.

Lufthansa Cargo now, perhaps rightly so, describes itself as the only remaining combination carrier in the European ballpark. This is after IAG Cargo stepped out of the freighter market last year and Air France-KLM Cargo's decision to drastically reduce its reliance on such capacity. It puts the spotlight firmly on the German carrier to prove it can maintain the efficiencies required of such a business model.

*Continued on page 10*

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In reporting its recent annual results, LH Cargo said operating margins rose sharply due largely to a 15 percent saving on fuel costs. This was partly due to the reduction in fuel prices, but mainly because the carrier had made more use of available belly capacity and used its freighters only where it was prudent to do so. Could this be the sign of a future shift?

It's interesting to note that the carrier is also making merit of what it describes as a shift in freighter deployment strategy. Direct point-to-point seems to be a thing of the past. New multi-stop flights are being introduced, linking hitherto obscure destinations. Flights from Dallas and Chicago now operate to Frankfurt by way of Manchester in the U.K. An ex-Houston service ties up with Stavanger in Norway to chase oil-related traffic. Freighter flights from Cairo, in Egypt, now stop in Milan before returning to the home hub. Most recently, the town of Natal, Brazil, has been incorporated into a schedule that sees an MD-11F route to São Paulo by way of Dakar in West Africa, returning via Natal and Dakar.

The carrier says it wants to haul more cargo outside of its home market and also target key product areas, such as oil and gas and pharmaceuticals. It may be a ground-breaking strategy for Lufthansa Cargo, but it is one that European rival Cargolux has been employing for some time. And does this not play to the belly-hold brigade, which argues there is little justification in retaining main-deck capacity if it means trawling the globe with diluted service in an ever-more desperate search for cargo?

Gerber has put a positive spin on the carrier's prospects going forward in light of the deferment decision on the LCCneo project. But at this juncture it may be appropriate to think back to the presentation of the carrier's annual report barely two months previous.

This was the moment when Gerber took apparent delight at deriding IAG Cargo for the way it had presented its exit from the freighter market.

"I have got to praise them. Never has anyone sold defeat in the market so brilliantly before," chided Gerber of the Brit-Spanish combine. Yes, maybe time for that slice of humble pie. ACW

# Cargo theft highest in U.K., Netherlands


Photo: ©Rgbinsky | Dreamstime.com

*A tough-looking patrol vehicle surveys the ramp at Munich.*

The Transported Asset Protection Association for the Europe, Middle East and Africa region (TAPA EMEA), recently revealed that, in the first quarter of 2015, the highest rate of cargo theft incidents were in the United Kingdom and the Netherlands.

More than 67 percent of 206 freight thefts or attempted thefts in the first three months of 2015 were in the two countries. The 206 incidents included 18 thefts with a loss in excess of €100,000. While only 30.5 percent of reported cargo thefts in the first quarter of 2015 gave a loss value, that value still exceeded €13.25 million, which reflects an average loss for the quarter of €210,365.

The U.K. reported 70 cargo crimes, a 133 percent rise over the 30 incidents in Q1 2014. In the Netherlands, the increase was 17 percent more than Q1 2014, with 69 thefts.

Thorsten Neumann, chairman of TAPA EMEA, said cargo crime is massively under-reported globally. "While the U.K. and the Netherlands are certainly not the only countries under threat from organized cargo crime gangs, in Q1 TAPA EMEA gathered information on increasingly violent crimes in 14 countries."

Spain had 10 reported cargo thefts, followed by Italy with nine, and France and South America with eight each. Germany was the big money loser, with an average loss value of more than €100,000. However, the largest single heist in the quarter was in France, where a truck carrying diamonds, other jewels and artwork worth an estimated €9 million was hijacked close to a French motorway tollbooth.

Clothing, shoes and consumer electronics made up 15.5 percent of thefts, with 16 reported incidents in the first quarter 2015, followed by tobacco, with 10 crimes, and seven incidents involving food and beverages. Five cargo crimes were for metal, and four incidents each were targeted at pharmaceuticals and beauty/hygiene products.

The thieves mostly targeted transport vehicles and parked cars. There were 10 incidents of burglary with only 3.3 percent involving theft from a cargo facility.

*–Linda Ball*

# AirBridgeCargo has strong start to 2015

With the year half over, AirBridgeCargo, the scheduled-service arm of Russia's Volga-Dnepr group, reported that tonnage handled was up 16 percent in the five-month period from January to May of this year. During that time, the carrier transported 180,605 tonnes throughout the world, connecting Europe, Asia and the United States via Russia.

In Asia, ABC launched two weekly flights from Hanoi, with connections to Europe and the U.S. via Hong Kong. In the North American market, ABC launched flights from Los Angeles, connecting the U.S. West Coast with its global network. The carrier has added more frequencies from Asia, Europe and the U.S., reaching totals of 48, 55 and 17 weekly departures, respectively.

ABC has more than 600 weekly connections via Moscow, with average delivery times of less than 48 hours, including ground-handling, operating scheduled frequencies to 26 destinations in 14 countries. During this period, freight tonne kilometers rose 23.5 percent in the five months of 2015, said Denis Ilin, ABC executive president. *–Linda Ball*


# ASL Aviation Group rebrands

Ireland's ASL Aviation Group is simplifying its image by renaming its four European carriers ASL Airlines. Under the new branding system, the names will be as follows:

- Air Contractors will become ASL Airlines Ireland;
- Europe Airpost will be named ASL France;
- Farnair Switzerland will be called ASL Airlines Switzerland; and
- Farnair Hungary will become ASL Airlines Hungary.

The ASL Group, which employs 1,500 people globally, will retain its headquarters in Swords, County Dublin, led by group CEO Hugh Flynn.

The four European brands operate throughout Europe primarily for the big express companies and for postal services in France and the U.K. They operate from hubs in France and Germany, flying as far south as Greece and as far north as Norway. ASL's total fleet of 100 or so aircraft, depending on lease arrangements, will operate as ASL Airlines. About 75 of those aircraft are in Europe, and some will sport ASL Airline's new livery.

*–Linda Ball*

# Finnair chooses Lodige

Finnair has chosen Lodige Industries Group of Warburg, Germany, to design, manufacture and install the cargo-handling system at its new terminal within Helsinki Airport. Once the new system is completed, Finnair Cargo's existing capacities will more than double, rising from 145,000 to 400,000 tonnes annually.

The carrier is investing approximately €80 million into the 377,000-square-foot facility, located near the airline's technical operations area. Construction of the facility has begun, with completion anticipated for spring 2017.

The backbone of the Lodige logistics system is the storage and transport of ULDs and pallets; two 15-foot elevating transfer vehicles, each with a capacity of close to 7 tonnes; and an 11-aisle, high-bay storage system, with approximately 2,000 storage positions and 11 stacker cranes. The system also includes truck and airside interfaces, and three separate temperature zones for special cargo, such as pharmaceuticals and perishable food.

*–Linda Ball*


Photo: ©ChrisKay/Flickr

# Freighter influx fails to clear Vietnamese backlogs

By Ian Putzger

Freighter operators looking for markets to fill their planes at juicy rates could do worse than head for Vietnam – provided they can fly past bureaucratic hurdles.

Vietnam's airfreight market is on a roll, fuelled by surging exports. According to consulting firm IMA Asia, the country enjoyed double-digit growth in exports in each of the past four years, with a compound annual growth rate of 25 percent. The country is now expected to average growth of 13 percent a year between 2015 and 2020, which would make it the star of Southeast Asia. Agility's Emerging Markets Logistics Index, which was published in January, shows freight volumes between the U.S. and Vietnam soaring by 42.7 percent.

At the same time, Vietnam's image as a provider of low-end goods is fading, with more sophisticated products that are complimentary to airfreight gaining ground. At a recent supply chain conference in Singapore, Richard Martin, managing director of IMA Asia, declared that the country now turns out US$25 billion worth of high-tech goods, up from zero just five years ago. He attributed much of this to the likes of Samsung shifting production over from Korea. The Korean electronics giant announced by the end of last year that it would invest $3 billion in Vietnam to ramp up mobile phone production there.

> "Some airlines want to increase more frequency but face difficulty in getting licenses."
>
> –Henry Dinh Huu Thanh, President, Bee Logistics

Even more of an impact overall on Vietnamese exports has been the migration of manufacturing from China to neighboring countries, especially Vietnam. The purchasing manager's index, calculated by HSBC, indicates that this momentum accelerated in 2014.

Freighter operators have been eager to feed on this bonanza. The most recent international entrant was Turkish Cargo, which launched twice-weekly flights between Istanbul and Hanoi, with A330-200Fs, in May. The flights move via Delhi on the westbound leg, stopping in Tehran and Lahore, respectively, on the eastbound sectors. The previous month saw AirBridgeCargo begin twice-weekly flights between Moscow and Hanoi. The carrier's 747Fs are routed via Hong Kong.

Despite the influx of international freighter operations, forwarders are still scrambling for lift, as capacity to a number of markets remains tight. "There is still a shortage of space for airfreight from both main cargo hubs of Vietnam – SGN and HAN airports," despite the fact that the number of freighter flights has increased to more than 90 a week in total, reported Henry Dinh Huu Thanh, president of forwarder Bee Logistics. "Demand is still very high and space is tight, which leads to an increase in express airfreight demand. Rates are high, but it's still not easy to get a space," he added.

According to Dinh, the capacity crunch is most pronounced on the sectors to the U.S., Japan, Korea and Europe, with the backlogs for U.S.-bound cargo the worst. Airlines would love to boost their lift but are facing a slow-moving bureaucracy. "Some airlines want to increase more frequency but face difficulty in getting licenses," he noted. He pointed to Cathay Pacific, which has applied for permits to ramp up its Hanoi flights from currently seven per week but is still waiting for the green light from the authorities.

Sven Mueller, head of airfreight, Vietnam, at DB Schenker, reported that lift from Hanoi to North America had returned to normal, but from Ho Chi Minh City there were still challenges.

The government signalled this spring that it intends to boost air cargo activity, especially in key economic zones and remote areas. This is supposed to entail sweeping change in policies and administrative processes, the development of multimodal logistics capabilities, improved infrastructure and connectivity, and a framework to entice private investment in air cargo. Details have yet to be announced, though.

The current situation, coupled with the prospect of solid growth, offers an opportunity for local carriers. Vietnam Airlines, which recently took delivery of its first of fourteen A350 XWBs, has

shown little inclination to venture into the all-cargo market, but low-cost carrier VietJet is bullish on this. Its management is looking to embark on freighter operations with a mix of 737 and A330 cargo aircraft, with the former providing regional feeder service and the latter operating on intra-Asian routes. According to VietJet Cargo CEO Do Xuan Quang, this could get underway as early as this year.

"In case VietJet will invest in a regional freighter solution, Schenker will support this. We believe this can be very successful," commented Mueller.

After an initial spell of leasing cargo aircraft, Quang intends to build up the carrier's own freighter fleet. He is looking to team up with international carriers for longhaul sectors. These account for a substantial chunk of Vietnam's airborne exports.

According to Cargolux, which added a fifth weekly Vietnam frequency last December, about 48 percent of all exports from Hanoi are headed for the U.S. or Europe, and 33 percent go to Asian destinations. Out of Ho Chi Minh City, 50.5 percent of all exports move to the U.S. or Europe. ACW

## Jet Airways backs off dedicated freighter service

The Indian air cargo market has suffered yet another setback. After announcing in February that it would begin a dedicated freighter service with an ACMI-leased A330-200F from Etihad Airways, Mumbai-based Jet Airways has decided otherwise. *The Economic Times* of India quoted a source that said "the economic conditions were not conducive" to launch such a service. Etihad owns a 24 percent stake in Jet Airways.


Photo: ©Alex Kwanten

Nonetheless, cargo is moving by air both domestically and internationally in India. The Airports Authority of India reports that 2.3 million tonnes of airfreight moved in and out of India, with 75 percent of it carried in bellies.

There is no major airline in India that has a dedicated freighter service. Air India, the country's national carrier, began a freighter service in 2007, using 737s, but stopped operating it early in 2012.

*–Linda Ball*

## MASkargo expands to Bangladesh

MASkargo has begun twice-per-week freighter service to Dhaka, serving the Hazrat Shahjalal International Airport every Monday and Wednesday. Combined with the current belly capacity on Malaysia Airline's passenger aircraft, this new freighter service will provide 120 tonnes of capacity for Bangladesh's agricultural and manufacturing exports.

The service is part of MASkargo's expansion in the South Asian market. The carrier said the first freighter flight to Dhaka was a success, with both inbound and outbound flights reported as full. Dhaka is a significant exporter of perishable products, garments and seafood.

*–Linda Ball*


Photo: ©Alex Kwanten

# DHL expands global reach with Cincinnati hub upgrade

By Linda Ball

It's no surprise that DHL's largest U.S. hub is in Cincinnati. Its central location allows the express carrier to best reach the U.S. East and West coasts from a flight timing perspective. That explains why two other major express integrators – UPS, which has its U.S. hub in Louisville, only 90 miles down the road, and FedEx, 480 miles away in Memphis – are nearby. But like its competitors, DHL's concern is not merely reaching the coasts but the rest of the world – and it is now expanding to meet rising demand.

Since its exit from the US domestic express market in 2009, DHL has set its sights on growing its international service to/from that country, investing US$108 million to upgrade and expand its Americas hub at the Cincinnati/Northern Kentucky Airport (CVG). Travis Cobb, DHL's senior vice-president, network operations, Americas, said part of the investment would be for a new apron to accommodate an additional 18 aircraft, and the remainder would

> "This investment is simply because we've continued to grow with our existing customers"
>
> —Travis Cobb, senior VP, network operations, Americas, for DHL Express

## AA Cargo invests in 787 for international routes


Photo: ©Alex Kwanten

American Airlines Cargo has launched four international routes using its new 787-8s. The widebody aircraft began operating between Dallas/Fort Worth (DFW) and Beijing on June 2 and DFW and Buenos Aires, starting June 4. The carrier also added a DFW-to-Shanghai route on June 26 and will add Chicago-to-Narita on Aug. 18.

The 787-8 typically offers five pallet positions for cargo and has advanced engine technology to provide better fuel efficiency than similar-sized, older aircraft. It can carry up to 1,000 pounds of dry ice, a necessary component in the shipment of high-value pharmaceutical and perishable goods.

"The efficiency of the aircraft allows us to offer more air cargo opportunities, while simultaneously reducing our carbon footprint," said Jim Butler, President of AA Cargo. *–Linda Ball*

## Big expansions at HNL

*Processing cargo at Aloha's new facility.*

With the Honolulu airport going through a major modernization, including its first major concourse expansion in 20 years, Aloha Air Cargo needed to relocate or find a new facility. A cargo warehouse consisting of 115,000 square feet, including new administrative offices, was completed in April, and the company is now finishing up a new maintenance hangar. The project consolidates cargo operations, aircraft maintenance, loading docks and other operations into one area.

Aloha's old facilities were demolished, said Dave Squier, COO of

be used for infrastructure, including warehousing and automation.

At present, DHL's facility has 220 "splits," in which cargo is separated by destination. With the improvements, 40 more will be added to accommodate international freight.

"This investment is simply because we've continued to grow with our existing customers," Cobb said."

The CVG hub is one of three global DHL hubs – the others being Leipzig, Germany, and Hong Kong. Globally, Cincinnati is second in size and volume only to the Leipzig hub, processing approximately 46 million international shipments annually.

Cobb said serving the U.S. domestic market was a drain on DHL's resources, so the company focused on the profitable international market. Today, DHL's air network connects U.S. cities with the world through the Cincinnati hub. In addition to destinations in nearby Canada, Mexico and Latin America, Cobb said DHL has daily flights from Cincinnati to the U.K., Belgium, Germany, Gahrain, Japan, Hong Kong, and Shanghai, plus service to Australia and Singapore on weekends.

Established in 2009, the CVG hub has had a combined total of $280 million worth of investments by DHL over the last six years. Staff in the Cincinnati facility has grown from 1,600 in late 2009 to about 2,000 at present. Cobb said the ramp extension work should be operational by August 2016, with the remainder of the work completed by summer of 2017.

Cincinnati is not DHL's only focus. In the past 18 months, the integrator has announced a series of major investments in infrastructure, including $200 million to double the Leipzig hub capacity, $85 million for a new Southeast Asia hub in Singapore, and $177 million to expand its presence in the Middle East and North Africa. Additionally, DHL is modernizing its fleet with more-efficient freighters with increased capacity.

ACW

Northern Aviation Services, Aloha's parent company. The demolition made room for the widening of two taxi lanes. Aloha and Hawaiian Airlines Cargo used to share a hangar with a divider, but Hawaiian is also constructing a new cargo/maintenance facility and consolidating its operations.

Hawaiian will consolidate under one roof, with 60,000 square feet of warehouse space and 8,500 square feet of cooler space, with sales and operations on the second floor. Its new maintenance hangar and cargo facility will be separated by the supply department. Expected occupancy will be in the fourth quarter. Hawaiian's old facility will also be demolished to make room for taxi lanes.

*–Linda Ball*


# Fast-rising Etihad offers WCA perks

By Linda Ball & Randy Woods

Etihad Airways, the national airline of the United Arab Emirates, has now enjoyed four consecutive years of net profitability, and airfreight played a major role in its success. In a nod to the rising influence of small- and medium-sized freight forwarders, Etihad's cargo division and IT provider Worldwide Information Network (WIN) have teamed up to offer members of the World Cargo Alliance (WCA) special rates for booking shipments via the WIN e-platform.

Under the new service, the 5,830 independent forwarders of the WCA and the 3,000 members of Etihad Cargo's CargoConnect loyalty program will be able to receive "special rates for selected origins and destinations" within Etihad's network when they use the WIN portal. WIN provides booking and electronic air waybill (e-AWB) capabilities, plus instant pricing for all of Etihad's destinations, in one platform.

Membership in CargoConnect – modeled on Etihad's frequent flyer program – is free, provides exclusive pricing to WCA members and allows users to earn Etihad Guest Miles for cargo shipped on Etihad Airways. Etihad Cargo vice president David Kerr said the partnership can benefit member organizations of all sizes, but can be an especially helpful service for SME forwarders.

The WCA benefit program comes after Etihad had its best showing to date, posting a net profit of US$73 million for 2014 on total revenues of $76 billion, up 52.1 percent and 26.7 percent, respectively, over the previous year. Etihad's cargo division also had an excellent 2014, becoming a billion-dollar operation one year ahead of its goal. Cargo revenues were up 19.2 per cent to $1.1 billion, with freight and mail volume rising from 487,000 to 569,000 tonnes.

CEO James Hogan said Etihad Cargo "consistently outperformed" the global market, with 17 percent growth in freight tonne kilometers in 2014 – four times the industry average. He also forecast significant growth for 2015.

Overall earnings before interest and tax (EBIT) were up 32.5 percent to $257 million in 2014. Earnings before interest, tax, depreciation, amortization and rentals (EBITDAR) were up 16.2 percent to $1.1 billion, representing a 15 per cent margin on total revenues.

Etihad's growth in 2014 can be partially attributed to its partnership strategy, based on wide-ranging codeshares and its minority equity investments in strategically important airlines. This has accelerated network growth, giving Etihad Airways the largest route network of any Middle Eastern carrier.

In 2014 Etihad was busy with purchases, solidifying 49 percent ownership of Air Serbia and Alitalia, the latest additions to its partner network. Etihad Airways also owns minority stakes in airberlin, Air Seychelles, Aer Lingus (increased to 4.99 percent in 2014), Jet Airways and Virgin Australia (increased to 22.9 percent in 2014). An investment in Swiss-based Etihad Regional, operated by Darwin Airline, has now been formalized after earning approval from the Swiss government earlier this year. *–Linda Ball*

## Will Qatar pull out of oneworld?

Qatar Airways CEO Akbar Al Baker said last month that he saw no point in remaining in the oneworld airline alliance if the airline that invited Qatar in is going to block his business. Al Baker, speaking in Miami at IATA's annual meeting in June, said fellow member American Airlines Group is "impeding our growth."

The feud between the three American legacy carriers – American, Delta and United – and the three big Persian Gulf carriers is a result of the U.S. carriers' accusation that Qatar, Emirates and Etihad benefitted from more than $40 billion in government subsidies. The oneworld alliance, which has 15 member airlines, was created to share resources to assist international travelers. Delta and United are not members, nor are Emirates and Etihad.


*A Qatar Airways 777-300ER landing at JFK.*

Photo: ©Alex Kwanten

Al Baker said American Airlines wasn't providing information on its bookings to allow the transfer of passengers, adding that American was blocking terminal access at JFK for an A350 aircraft that Qatar plans to fly into the airport, according to the *Wall Street Journal*. An American Airlines spokesperson said the terminal access was unrelated to the dispute over U.S.-Middle East open skies agreements, but rather an issue of gate space at JFK. *–Linda Ball*

## Third parties

**Andy Weber** has been promoted to the position of COO of **Panalpina**, effective July 1. **Ralf Morawietz** will assume the position of CIO, replacing **Rod Angwin**. Weber, who began his career with Panalpina, re-joined the company in January as global head of operations. Morawietz started his career as an IT professional in 1998. In 2002 Morawietz joined Deutsche Post in a senior management role, and since 2010 he worked for the global IT team at Kuehne + Nagel.


Turhan Ozen

**Turhan Ozen** has been appointed senior vice president of **CEVA Logistics**. Ozen, who will be responsible for the company's global healthcare sector, has more than 25 years of experience in the supply chain management industry, most recently serving as CEVA's vice president, business development, for the Balkans, Middle East and Africa.

**Martin Brown** will take over as airfreight operations director at **Allport Cargo Services**, replacing **David Ward**, who is retiring after 42 years at the company. Brown was previously the vice president, marketing and sales, for the Middle East, North Africa and Turkey at DHL Global Forwarding. **Sean Smith** also joined ACS as business development director, after serving as the head of the southern division at Kerry Logistics.

**Stuart Williams** will be the new U.K. compliance manager for **B&H Worldwide** and its new customs compliance division. A highly experienced logistician, Williams will be responsible for new approvals and authorizations for customers in the aerospace industry and analyze and audit their trade compliance requirements.


Raimond van Kampen

**Raimond van Kampen** has been appointed vice president of international operations at **CLX Logistics LLC**. In this newly created position, van Kampen has overall operational responsibility for the company's international transportation and logistics activities, including ocean- and airfreight, as well as managed international logistics services. With more than 25 years of experience in the transportation sector, van Kampen most recently worked at nVision Global Supply Chain Services, serving as chief commercial officer.

## Airlines

**Keith Stanley** is the new manager, cargo sales and service, central Canada, for **Cathay Pacific Airlines**. He is responsible for all aspects of the airline's freighter operations out of Calgary. With more than 40 years of industry experience, he previously held the role of cargo business development manager for Calgary International Airport and, before that, Emirates Airline's cargo manager for Canada. **Simon Large** also has been appointed director of cargo at Cathay Pacific, responsible for all aspects of the group's cargo business worldwide, including operations, marketing and sales. Large is currently the airline's general manager, marketing, loyalty programmes and customer relationship management. He replaces **James Woodrow**, who will become managing director at sister company The China Navigation Co.


Simon Large

**Tom Kemp** has been elected to the position of vice president of flight operations by the **Alaska Airlines**' board of directors, effective July 1, replacing **Gary Beck**, who retired from the airline on June 30. Kemp is a 31-year industry veteran and a former MD-80 pilot with more than 16,000 hours of flight time. During his career at Alaska, Kemp has served in a variety of positions, including director of operations and managing director of standards, fleet and operation control.

## Maintenance & Manufacturing

**Bernie Dunn** has been named president of **Boeing Middle East**. Dunn, who is fluent in Arabic, will be based in Dubai, United Arab Emirates. Before joining Boeing in July 2012 as president of Boeing Turkey and North Africa, Dunn was vice president, Middle East/Africa, business development, ITT Defense International, for 10 years. He succeeds **Jeff Johnson**, who was named vice president, business development and strategy, Boeing Military Aircraft, earlier this year.

**Johan Nordenberg** has been appointed COO of **Envirotainer**, effective Aug. 1. Previously he was the head of cold chain services. He succeeds **Gabriel Andersson**, who will be the CEO and shareholder of Extend AB, a provider of cloud-based IT services for the supply chain industry.

## Associations

**Andres Conesa**, the CEO of Aeromexico, is the new chairman of the **IATA Board of Governors** for a one-year term. Conesa succeeded **Calin Rovinescu**, CEO of Air Canada, whose one-year term ended at the conclusion of the association's 71st Annual General Meeting and World Air Transport Summit in Miami. IATA also announced that IAG chief executive **Willie Walsh** will serve as chairman of the board of governors from June 2016, following Conesa's term.

**Brandon Fried**, executive director of the **U.S. Airforwarders' Association** and *Air Cargo World* columnist, has been reappointed to another two-year term on the Aviation Security Advisory Committee of the Transportation Security Administration. Fried has served on the committee since 2006. Fried also serves on the Commerce Department's Committee on Supply Chain Competitiveness and the Commercial Operations Advisory Committee at U.S. Customs and Border Protection.

**Ivan Chu**, Cathay Pacific's CEO, has been nominated as the new chairman of **oneworld Alliance**, replacing IAG's **Willie Walsh**. Chu was appointed CEO of Cathay Pacific, which is a founding member of oneworld, in March 2014. He is also chairman of Hong Kong Dragon Airlines and a director of John Swire & Sons and of Swire Pacific.

**Sam Aparo** has been appointed the new chairman of the advisory board for **Famous Pacific Shipping Group**, the independent network of forwarders and consolidators. He replaces FPS Group founder **Benny Ling**, who has taken early retirement on health grounds. The FPS advisory board also includes treasurer **Iskandar Zulkarnain** and membership director **Kettivit Sittisoontornwong**.

# 进军中国市场

## WHAT EVERY FORWARDER SHOULD KNOW BEFORE ENTERING THE CHINESE MARKET

By Randy Woods

The No. 877 bus ride from Beijing to Badaling, the Great Wall of China's most popular tourist site, is about 50 miles long and normally takes an hour on the Badaling Expressway. As the bus pulled out of the station near Dengshengmen Bus Station, in the northern part of Beijing last April, there was little traffic, despite the city's reputation for car congestion. But once the 877 hit the expressway, it braked to a crawl. The traffic was dense. This was midmorning, well past an industrial city's rush hour. Why all the traffic? Commercial trucks. Lots of commercial trucks, all heading north. For the Westerners on the bus, this was a surprise – not for the Chinese. They settled in for a long snooze. See, the expressway is usually jammed with commercial traffic, because that's how it is in an economy that continues to boom.

To most logistics professionals, China is the Holy Grail of freight forwarding – both a shining beacon representing un-

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told riches, yet somehow mythical and elusive. Its immense growth continues to draw in supply chain professional from across the globe, pulling the economic center of gravity eastward. By 2030, it is estimated that the Asian region will be home to 55 percent of the world's middle class; by 2050, the region is expected to account for 50 percent of global GDP growth. Because of this wealth, e-commerce at online retailers such as Alibaba and JD.com is booming, creating tremendous demand for short- to medium-range freighter aircraft (see "A Slim Fit", pg. 28).

China has changed dramatically over the last 20 years, from a closed, totalitarian regime to a thriving economic engine – albeit one that has cooled off in recent months. However, some myths about the Chinese market continue to persist – that it is an impenetrable, mysterious fortress – while others have sprung up in recent years – that it is a no-holds-barred, capitalistic free-for-all.

Since China joined the World Trade Organization (WTO) in 2001, many of the old Communist-era restrictions for setting up business have been removed.

For some logistics companies, the largest barriers to entry come not from Chinese red tape but from other Western competition. "Most of the big forwarders are already here," said Gerhard Blumensaat, director of airfreight North/Central China, for forwarding firm DB Schenker, which has been in the country since the late 1970s. Other major foreign-owned forwarders include DHL, Kuehne + Nagel, UPS and Panalpina, just to name a few.

"You still have paperwork to fill out, plus technical advisors and lawyers to consult, but other bottlenecks have been cleared," Blumensaat said.

German logistics group Dachser has ties with China that stretch back about 30 years. Today, Dachser has 150 offices across the country. "Growth has gone down a bit, but competing in China is still challenging," said Thomas Reuter, the company's COO, air and sea logistics. "We consider it complicated, but never a problem."

What tends to trip people up today is lack of preparation. Crucially, a forwarder cannot expect to do business for very long in China remotely, Reuter said. There has to be a permanent presence in-country. "You have to remember that any business relationship in China is also a personal relationship. You have to go the last mile for the customer."

Hong Kong-based Kerry Logistics operates 21 logistics centers and warehouses across Mainland China, including in Beijing and Shanghai, and also owns a fleet of more than 1,400 vehicles. "The Chinese market, with its burgeoning middle class, represents an exciting opportunity for foreign brands, but it comes with its own challenges," said Emma Rowlands, U.K. sales director for Kerry Logistics, who does extensive business within China. "Companies that want to do business there need to do their homework."

## A million little pieces

One of the first lessons to be learned about Chinese-style forwarding is the intense competition and fragmentation in the market, both from locally based and foreign logistics service providers.

"It's easy to consider Asia as one market, but in fact it is a collection of markets varying widely in maturity and complexity," said Mark Millar, an Asian supply chain and logistics consultant and visiting lecturer at Hong Kong Polytechnic University.


*Delivering perishables in an dense urban environment – where large inventories can't be maintained and constant shipments are needed – is Kerry's stock-in-trade.*

The trucking industry in China offers a good example. Trucking companies, Millar said, account for around 78 percent of all domestic cargo movement. Within that market, there are an estimated 790,000 road haulers, but the top 20 trucking companies have just 2 percent of the total market. In logistics, as well, the top 50 companies – including Cosco, Sinotrans, CSC Holdings and China Shipping – have combined annual sales of about US$322 million, or less than 2 percent of total market share.

The concept of outsourcing to third-party logistics (3PL) firms is also a relatively new concept in China, Millar said. As of last year, only about 20 percent of transportation and warehousing activities were handled by 3PLs. Compare that to the 45 percent penetration rate for 3PLs in the United States, the nearly 50 percent rate among Western European countries and the 80 percent rate in Japan.

The low 3PL penetration rate and reliance on a vertically integrated market structure is one of the reasons why forwarders are so interested in the underdeveloped Chinese logistics sector. However, China's logistics sector "remains hugely complex and brutally competitive," Millar said.

To do business with this fragmented market, forwarders wishing to ship domestically must engage with countless trucking sub-contractors, "with the majority of them being owner-operators with just one or two trucks,

> "The Chinese market, with its burgeoning middle class, represents an exciting opportunity for foreign brands, but it comes with its own challenges. Companies that want to do business there need to do their homework."
>
> – Emma Rowlands, U.K. sales director, Kerry Logistics


## A west that truly is wild

When Chinese e-commerce mostly involved two-hour freighter flights up and down the east coast, the airfreight industry was able to keep pace with the aircraft it had. But now that factories are springing up in the interior, the limits of the country's airfreight and surface-based infrastructure are being exposed.

The terrain in much of the country can also be forbidding, with temperatures in the north that can plummet to -40°C, affecting the transportation of perishable goods. In the west, the Himalayas and the Gobi Desert create more logistical headaches that can add to lead times for shipments and increase delivery costs, said Kerry's Emma Rowlands.

While many of the newer distribution centers are properly equipped logistics parks, the distances between warehouses can be vast. The country has made progress building roads, rail lines, super-highways and airports, but they are all still costly to use, she added.

"Considering China's sheer size, the absence of an airfreight gateway infrastructure stands out," says Agility's Poulson. "Shanghai has developed as a matured hub during the past decade, while other airports are still highly dependent on a few customers, often even a single manufacturer."

Over the years, this has offered a number of "rather adventurous" opportunities in the market place, Poulsen said. "As an industry we have made our fair share of bad experiences dealing with startup airline and services," he said. "Talking from experience, if it sounds too good to be true, it usually is."

## A sense of scale:

China's vast scale is often not appreciated, as popular perceptions of China focus on its eastern coast and Beijing. As manufacturing moves inland, provinces in central China, like Shaanxi and Ningxia, are growing in importance, as is awareness of them.

**Distance:**

**500 Miles**

rarely of good quality and with little, if any, modern technology," Millar said. On top of these concerns, the country has been experiencing more stringent regulations and tax increases in recent years. Road tolls alone, he added, now represent more than 30 percent of total transportation costs for most truckers in China.

## Westward bound

The high road tolls underscore one of the more outdated myths about China – that the cost of doing business there is almost always lower than in the West, due to an ocean of cheap labor. While there are some labor savings to be found, compared to the U.S. and Europe, the rising middle class is making cheap labor scarce in the eastern cities and provinces. Real estate prices in the big cities – such as Shanghai, Beijing, Guangzhou and Shenzhen – have gone through the roof, as well.

"Expensive retail real estate means that stores often hold minimum stock, and regular replenishment is therefore required," said Kerry's Rowlands. "But city centers are very congested and there are often tight regulations around when deliveries can be made to malls."

In search of more cost-efficient operations, many manufactures and shippers are now doing what the early U.S. pioneers did: Westward, ho!

The recent push to move manufacturing to the western and central provinces has been a boon to multinational forwarders, such as Kuwait-based Agility Logistics. "This is creating opportunities for logistics service providers to serve these companies," said Soren Poulsen, CEO of the greater China area for Agility.

Kerry is well suited to this expansion, Rowlands said, as it operates a pan-China hub-and-spoke distribution network, with scheduled long-haul and regional distribution services (in Beijing, Chengdu, Guangzhou, Jinan, Shanghai, Shenyang, Wuhan and Xiamen), serving more than 2,900 delivery zones. "Choosing a partner with a number of regional distribution centers and the right spread of vehicles is important," she added.

But sometimes just moving west isn't the answer. In his new book, "Gobal Supply Chain Ecosystems," Millar describes some examples of manufacturers moving their production facilities inland for the cheap labor only to discover that the only way to get their products to market is to barge them 1,200 miles by river to ports on the east coast – a two-week journey that is longer than it takes to transport the same goods by sea from Shanghai to Los Angeles.

CEVA Logistics, which entered the market about a decade ago, has also been focusing on expansion across the western, central and northern provinces, said Hakan Bicil, COO for CEVA and an executive sponsor for China. As the consumer market continues to demand more imported goods via e-commerce, he said, the Chinese government has come to realize that China's logistics costs, as a proportion of total manufacturing costs, are higher than other developed markets.

In fact, according to Forwarderlaw.com, the government, in recent years,

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has encouraged freight forwarders entering China to transform themselves into full-service logistics companies, hinting that the country would open itself up to greater foreign participation in exchange for an improved logistics infrastructure.

## To partner or to go it alone?

This implied green light from the government for foreign-owned logistics companies may be tempting, but many established firms in the country warn that help from inside is often needed.

By partnering with, or purchasing, a domestic forwarder, a foreign-owned company can more quickly gain a foothold in the market and leverage existing relationships and knowledge, Poulsen said. Agility, which has been involved in Chinese logistics since 1987, has taken part in the rising domestic freight market through a combination of organic and inorganic growth. Through an acquisition of a domestic freight forwarder, coupled with natural growth, Agility gained a significant domestic footprint.

However, cultural differences can create challenges, such as potential misunderstandings in customer interactions. "Local companies may be acquired to get access to the talent that exists in the organization," he said. "But keeping hold of that talent in the face of a highly dynamic labor environment is another challenge."

Forming partnerships is "not essential" for doing business in China, Bicil said, "but it can be very helpful." CEVA, he said, has thrived in China by both forming partnerships and creating turn-key, standalone operations. "We have a successful joint venture, called ANJI-CEVA, for our automotive solutions, but we are independent and autonomous for our other industry solutions in air- and oceanfreight management," he added. All this, of course, requires a lot of due diligence and a thorough vetting process for potential Chinese partners before a joint-venture is inked.

Rowlands recommended finding a business partner who has a nuanced understanding of the often-byzantine regulatory, customs and tax regimes in China. Before starting to trade, she said, companies need to establish status as a wholly foreign-owned enterprise (WFOE, see sidebar at left) or as a foreign-invested commercial enterprise, a process that can take months and involve hundreds of pages of supporting documentation. "There are multilayered tax and customs issues, and regulations often change or are updated, sometimes on short notice, so it is important to work with a local partner who has experience on the ground," Rowlands said.

Poulsen said he appreciated the local partners he had made when the government established a value-added tax a couple of years ago. "While the objective itself was clear enough, the actual implementation and execution by the local tax bureaus were unclear and inconsistent," he said. "Today these challenges still exist, and it is important for any organization – locally based as well as foreign – to appreciate the need for local talent to manage the administrative processes."

As China has developed from an export-oriented market into one that is increasingly domestically focused, Agility has adapted its product and service offerings over the years to include domestic warehousing and distribution capability. "This knowledge of the regulatory and business environment has opened up opportunities and lowered barriers to business," Poulsen

Photo © 2001sung/Shutterstock.com

## Halt! Friend or WFOE?

Foreign freight forwarders have been allowed to operate in China by setting up wholly foreign-owned enterprises (WFOE) since 2005. Foreign freight forwarders who satisfy the following requirements are able to establish a presence in China, either in the form of joint ventures (JV) or WFOEs:

- Have minimum paid-up capital of US$1 million;
- At least five staff members must have more than three years of working experience in international freight forwarding industry or have obtained relevant qualifications;
- Establish permanent office premises in China; and
- Possess the right equipment and business facilities for communication, transportation, loading /unloading packing, etc.

The above JVs or WFOEs are able to expand with their own branches across China if the following requirements are met:

- The JVs or WFOEs have been operating in China for at least one year;
- All registered capital has been paid; and
- Payment of an additional paid-up capital of US$120,000 for each branch.

China, however, still imposes restrictions on foreign investment in the logistics industry. Foreign investors are only allowed to set up JVs with Chinese partners; WFOEs are still not allowed. Foreign-invested logistics companies in China must meet the following requirements:

- Have minimum paid-up capital of US$5 million;
- Limit their shareholding percentage in international logistics businesses to 50 percent;
- Establish permanent office premises in China; and
- Possess the right equipment and business facilities for communication, transportation, loading /unloading packing, etc.

*Source: ForwarderLaw.com*


*The importance of local partners can't be overestimated, says Soren Poulsen, CEO for the greater China area at Agility.*

> "...it is important for any organization – locally based as well as foreign – to appreciate the need for local talent to manage the administrative processes."
>
> – Soren Poulsen, CEO, greater China area, Agility Logistics

said. "An extensive global network has also benefited our operations in China, as we have a large base of multinational customers that require support in China."

## Have plane, will travel

China's regulatory environment may be sluggish, but nothing yet has been able to tame the insatiable demand for e-commerce across the nation – and there's no end yet in sight. The latest figures from the China E-commerce Research Center showed that Chinese e-commerce grew by 31.4 percent in 2014, while the online retail market rose by about 50 percent, with about US$2.1 trillion changing hands through B2B trading last year.

In response, the Civil Aviation Administration of China (CAAC) recently approved the launch of two new cargo airlines – YTO Cargo and Ningxia Cargo airlines.

YTO Express, which is 20 percent owned by Alibaba, received the operating license to launch Hangzhou-based YTO Cargo. YTO also will work with Alibaba's courier company, Cainiao, and CJ Korea Express, a leading Korean delivery company, making YTO the first privately owned cargo airline in China to operate international flights. Meanwhile, Ningxia Cargo Airlines, with three newly acquired 737-300Fs, is based in the north-central agricultural region of Ningxia and is licensed for domestic operations, including services to Taiwan, Macau and Hong Kong.

Many brands are experimenting with e-commerce, but China is still trying to find the right balance between the online and bricks-and-mortar environments. "The model two or three years ago was to open up retail stores, but now the trend is to open a flagship store in Hong Kong, Singapore or Shanghai, for example, and set up an e-commerce platform to supply the rest of Asia, with a hub for distribution close to the largest percentage of suppliers," Rowlands said.

## Getting better all the time

Rather than being the hindrance that it was infamous for, the Mainland China government is keen to improve the overall quality of warehousing and transportation services, Millar said. In 2014, the Ministry of Commerce announced new policies to develop China's logistics industry – including both the B2C e-commerce and cold chain sectors – by providing tax incentives to attract more logistics firms.

Poulsen said that, over the years, it has become easier to break into the Chinese market, but only to a certain extent. While some of the original entry barriers have been removed or relaxed, the country still has a confusing licensing system and has failed to reconcile inconsistent regulatory policies that often exist between different provinces and cities. "Local relationships are as important as ever," he added.

China certainly has more experience now with international trade, said CEVA's Bicil, but there is still room for improvement regarding the rising expectations of Chinese customers. "They're becoming more exacting, and demand better resources and more convincing credentials," he said. "Finding and retaining talented people all take time and meticulous preparation."

CEVA's own expectations for the Chinese market remain strong. "The country, its economy, its industry and its society are still growing and maturing," Bicil added. "We've all heard recently about slowing output, but economic growth is predicted to stay above 6 percent – and that's a slowdown most other economies would be very happy to experience." ACW

Photo: ©liuyuhong, Dreamstime.com

## Lost in translation

To understand the Chinese forwarding market, one must acknowledge some cultural attributes about the way the locals do business and shop for services. Here are some e-commerce tips from Emma Rowlands, of Kerry Logistics:

- China has vast regional differences. Fashion brands, for example, should understand that Chinese consumers are different shapes and sizes compared to Western buyers, and have different spending patterns and expectations. Forecasting and understanding demand is key.
- Shoppers in China are historically frugal and like a bargain.
- They demand a high level of service and speed when it comes to shipping, expecting costs to be minimal or free, and orders to arrive the next day, or even the same day, at no additional cost.
- They expect to be able to pay cash on delivery, and they demand a slick returns process.

# PRIMING THE PUMP

## SURVIVING VOLATILITY IN THE CYCLICAL OIL & GAS MARKET

By Linda Ball

A 70-tonne piece of energy equipment had to be sent by air to the inland city of Erbil, Iraq, from Bakersfield, U.S., in February. Many thought it couldn't be done due to the sheer length and size of the cargo, and the fact that it had to be transported in one piece. Ruslan International, a joint venture between Antonov Airlines and Volga-Dnepr Airlines, was asked to ship the cargo, an oil refinery stripping tower, using an An-124-100. It took more than a month just to *plan* how to do it.

First of all, the tower – measuring 126 feet by 12 feet by 12 feet, with protruding elements – was 6.5 feet longer than the cargo floor of the aircraft. To accomplish the mammoth lift, Volga-Dnepr Unique Air Cargo designed two special transportation cradles developed with 3D modeling. Timing was critical, but they got it done. Even with the price of a barrel of crude oil at a less-than-optimal level, the energy business marches on.

At presstime, the price of crude oil was about US$60 a barrel, but it had dropped to a low of $46 at the start of the year. While most airlines welcomed the dramatically lower fuel costs, the oil exploration industry went into a nosedive as the more expensive methods of oil production – tar sands extraction, oil shale, hydraulic fracturing, etc. – quickly became financially dubious.

But in spite of this volatility, there is still interest in oil exploration, and still plenty of work for the carriers and forwarders who provide logistical support for energy businesses. Oil exploration takes place in virtually every harsh climate – from burning desert sands to humid jungles to the frozen tundra of the Arctic. In many cases, there are no roads, railroads or ocean port facilities near these often-remote locations. But there usually is some kind of airstrip, and the industry must rely on airfreight – there is simply no other option.

And there is optimism even during the current slow period. Like all things cyclical, the price of oil will bounce back, said most logistics firms specializing in the energy field; it's just a question of time. Soft energy prices are not halting airfreight initiatives in the oil-and-gas industry. In fact, even with the recent slowdown, existing projects have not been cancelled, and future projects are being planned.

## Cautious optimism

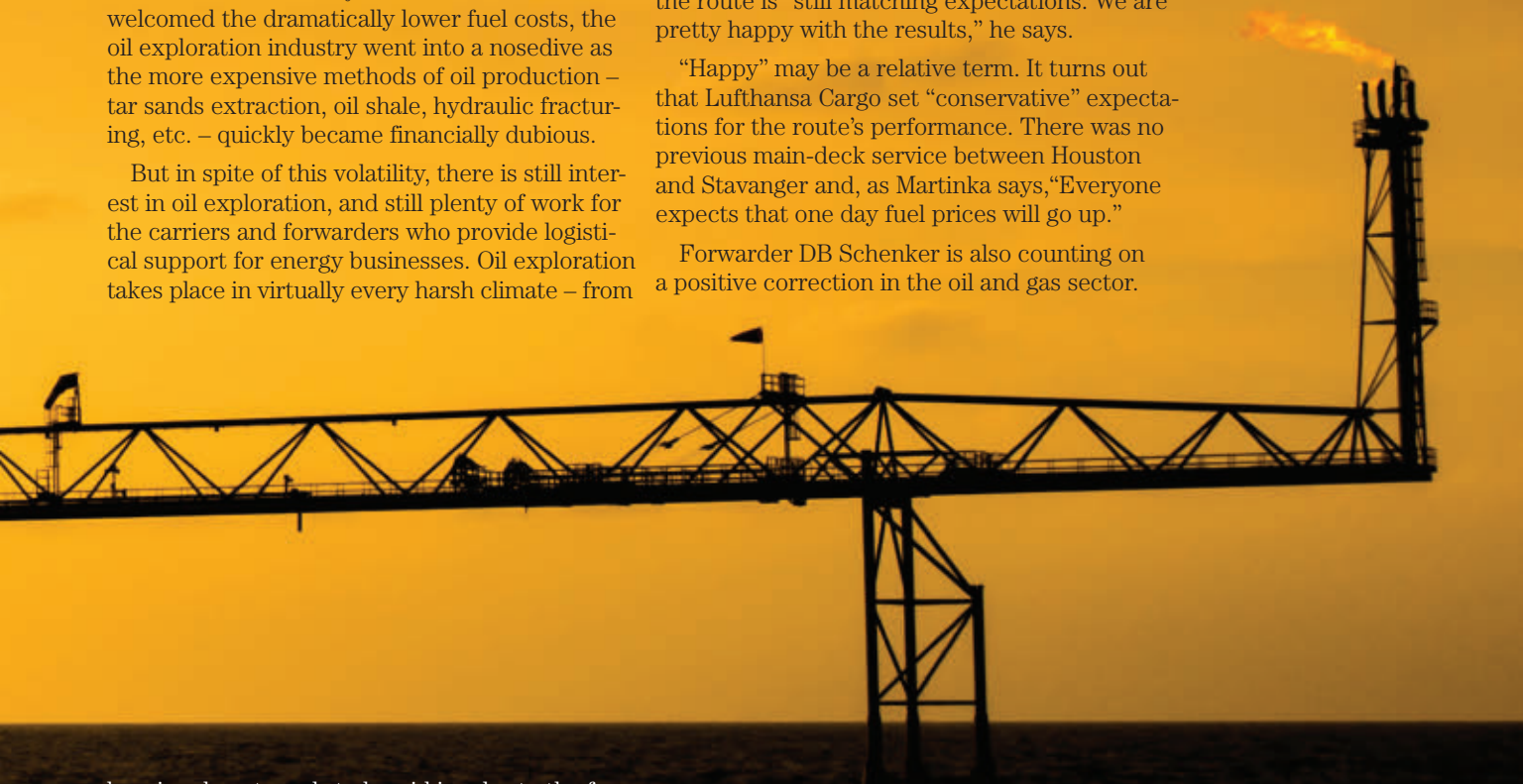
Some forwarders and carriers, although aware of the problems in today's energy market, see opportunity regardless of the price of crude. Consequently, they're positioning themselves for the comeback. Lufthansa Cargo AG, for example, recently opened a new route for the industry, despite low oil prices. The carrier launched a Houston (IAH)-Stavanger, Norway (SVG)-Frankfurt (FRA) route with a 777F. Lufthansa flies the route once a week on Wednesday, solely aimed at the oil-and-gas industry. Generally, Lufthansa is flying oil and gas equipment to Norway.

"We could have had a better time to enter this market," admitted Achim Martinka, vice president, the Americas, Lufthansa Cargo.

That is not to say Lufthansa and Martinka, who manages the route, are disappointed with IAH-SVG-FRA. On the contrary, Martinka says the route is "still matching expectations. We are pretty happy with the results," he says.

"Happy" may be a relative term. It turns out that Lufthansa Cargo set "conservative" expectations for the route's performance. There was no previous main-deck service between Houston and Stavanger and, as Martinka says,"Everyone expects that one day fuel prices will go up."

Forwarder DB Schenker is also counting on a positive correction in the oil and gas sector.



Edward Fish, Schenker's vice president of global projects for oil and gas, based in Houston, concurred that the market today has taken a hit. Many companies cut back and there were "major, major layoffs." But Schenker is what he calls a "sleeping giant," making capital investments now where many companies simply are not. Schenker recently built a 150,000-square-foot facility in Houston – and is still looking for high-quality hires in the area. The facility includes 123,500 square feet of warehouse space, 26,500 square

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feet of office space and a five-acre, secured storage yard. The facility is also certified to handle dangerous goods.

"We're sending the industry a message that we're here to stay," Fish said.

Additionally, Schenker recently launched weekly air cargo service linking Hong Kong to Chicago and Houston to fulfill the needs of the oil & gas (O&G) industry, as well as the automotive and industrial sectors, using a new 747-8F nose-loader. The route, he said, was introduced initially because of the West Coast port crisis earlier this year, but clients liked it so much that Schenker decided to keep it. Much of the raw materials for the O&G industry come from China on this new route.

"Overall, if you look at the oil drop, it was probably the best stimulus for the economy," Fish added. "This is a cycle you see every seven to 10 years." Although the current price dip hasn't hit Houston as hard as the collapse that occurred in the 1980s, he said the drop in the price of oil has impacted the carriers and added to the over-capacity. However, other verticals outside of oil and gas are doing well, and he expects that by the third quarter of 2016 the O&G price will also be in a comfortable place. He doesn't see oil prices returning to $100 a barrel unless there is stabilization in the Middle East, but he does expect $75 to $80 a barrel.

Fish said countries in the Middle East, specifically members of OPEC, are worried that the U.S. might become a self-sufficient oil producer, given the rising U.S. domestic production, which includes hydraulic fracturing. While so-called "fracking" is practiced in at least 25 U.S. states, most of the activity is in Texas, Colorado, Pennsylvania and North Dakota. "North America is the focus point now."

## The North Slope

When one mentions oil and gas exploration in North America, the conversation almost always includes Texas and Alaska, the nation's two largest states, which are also rich in oil reserves.

In Alaska, production and exploration on the North Slope, or Prudhoe Bay, takes longer to realize because of access to the oilfields. Prudhoe Bay winter weather frequently dips below -50°F with a strong wind-chill factor,


*A massive, 70-ton piece of drilling equipment bound for Iraq is loaded onto a Volga-Dnepr An-124, emblematic of the atypical lift needed in this sector.*

Photo: ©Trey Spooner

so it's frozen most of the time. Preparation for any project must be made far in advance and as weather permits.

Lynden Oilfield services, a newly created company this year, carved from the Lynden Freight Shipping and Logistics Companies, was created specifically to service the oil and gas industry in Prudhoe Bay. Heavy lift, heavy haul and getting freight to the various fields are its expertise. Jeanine St. John, vice president of Lynden Logistics, said it is most likely the only integrated logistics company serving the North Slope.

The largest cargo Lynden has taken up to Prudhoe weighed 110 tonnes. "It was the largest single unit hauled over a public highway – the heaviest weight ever shipped out of Anchorage," St. John said.

At 75 feet long, 20 feet wide, and 14 feet, 4 inches high, it was a module for BP, with corrosion detection equipment. To move it, they used one pull truck, four push trucks, three mechanic's trucks, five pilot cars, three managers and a motor home with a driver and a cook.

St. John said everything comes into Deadhorse, the "city" on the slope. From there, Lynden transports equipment and freight to the various fields using several different modalities. The Alpine field, which is near the National Petroleum Reserve, is only accessible by ice road in the winter, or air. The Oooguruk field, which is run by Caelus Energy Alaska, is on an island six miles offshore, so Lynden supplies it by truck in the winter and boat in the summer. The company uses a hovercraft to access some fields, helicopters, a "rollagon" – which operates nicely on tundra without tearing it up because of its large, rounded tires – and a fleet of L-382 Hercules to move equipment and freight. There is a large airstrip in Deadhorse that can handle jets and the Hercs, St. John said. The company's Hercules flights are scheduled or chartered and are exclusively for cargo – what she called a flying truckload.

Alaska-based airline Northern Air Cargo supports the North Slope oil business by flying food, fuel and other necessities into Deadhorse. The carrier's business boomed this spring when the 414-mile highway from Fairbanks to Deadhorse suffered unprecedented flooding and was closed on and off for two months. Dave Squier, chief operating officer for parent company Northern Aviation Services, said they were sending four to five extra aircraft each week with supplies for the oilfield workers.

Summing up, Lynden's St. John echoed the sentiment expressed by many others. Oil prices may be depressed at the moment, but "the investments for the North Slope are long-term. The outlook is for oil prices to return."

## Global chessboard

The U.S. and Canada are in the O&G spotlight now, but fortunes can turn quickly, cautioned DB Schenker's Edward Fish. Less than two years ago, the darling of the industry was Australia. In 2013, energy analysts were tossing around nicknames like "the next Saudi Arabia" for the estimated A$20 trillion worth of oil shale discoveries in South and Western Australia. These discoveries attracted liquefied natural gas (LNG) projects from Chevron and

Conoco Phillips, but when oil prices fell, the cost of extraction cooled off Australian activity dramatically.

But even as Schenker finishes its work in support of the Chevron and Conoco Phillips projects in Australia, it is moving on to new projects in the Asia Pacific region with companies such as Bechtel, Fluor, Chevron and Shell. Some of these projects may be shelved, he said, but others, particularly connected with natural gas extraction in Canada and the Gulf of Mexico, are being tendered and going out to bid.

Natural gas is seen as the future, as exemplified by Shell's recent purchase of British Gas. This is the largest takeover in the O&G sector since Exxon purchased Mobil in 1998, and the acquisition will boost Shell's oil and gas reserves by 25 percent.

Fish said Angola, an OPEC member since 2007, has always been an area for major oil exploration, while Tanzania and Mozambique are the future in natural gas production. About 45 percent of Angola's GDP comes from the oil industry, and petroleum products make up 95 percent of its exports. OPEC estimates that Angola, which is the second largest oil producer in Africa, has more than 9 billion barrels of crude oil in reserve, most of it offshore.

According to Faycal Boumerkhoufa, global projects director for Volga-Dnepr Unique Air Cargo, the main focus for Volga-Dnepr is still ongoing LNG development, specifically in the Africa/Middle East region. "LNG is continuing its growth and setting a stronger footprint in the global energy vertical," he said. "Moving gas turbines, power plants and rotors, are just a few examples of special air transport the company masters well."

Other emerging markets include Argentina, Brazil, Columbia and, if it becomes economically and politically stable, Venezuela. Venezuela has the world's largest oil reserves, but when the government began nationalizing foreign-owned assets in 2008, drilling dropped by 80 percent. Furthermore, Petroleum Venezuela owes US$1.6 billion to Exxon Mobil. Market research and consulting service Douglas-Westwood believes onshore crude production in Venezuela will continue to decline at 1 percent per year from now until 2021.

Fish also said Iran could be a big player if sanctions are lifted, adding: "It's a very, very political chessboard around the world."

## Mixed bag for smaller forwarders

While much of the world's O&G shipments involve huge pieces of machinery, there are also numerous smaller forwarders around the world that keep vital supplies moving, always trying to keep ahead of the boom-and-bust cycle.

Rosendo Gonzalez, director of Houston-based international freight forwarder Salinas Forwarding Co., is no exception. Seventy percent of her company's customers are in the oil and gas industry. "The price of crude oil has affected most of our clients," she said. "Our international shipping is 50 percent down from last year."

Gonzalez said her customers are not doing much drilling or exploration. Consequently Salinas Forwarding is shipping only spare parts to keep the current equipment working while waiting "for the price of gasoline to go up – to go back to normal. For the very first time in 40 years, we have had to lay off some employees," she added.

What's happening today isn't nearly as draconian as 1985-1986, when the price of crude oil dropped 67 percent and took two decades to recover. Granted, prices have dropped 60 percent since June 2014, but the difference is that shale oil production can come online in weeks, not years. Also, in the 1980s, the savings-and-loan business had its meltdown due to deregulation and risky lending, a scenario that has not repeated itself during the most recent price decline. World demand for oil is not pulling back, and won't be anytime soon. It might take a few more years for the price of oil to come back to a level where new investment feels right for energy companies, but that's better than 20 years.

"Our first quarter was extremely strong, when oil prices were at their lowest," said Volga-Dnepr's Boumerkhoufa. "It's hard to predict, but it is our belief that the oil and gas sector will remain a profitable sector for us."

Brian Fainter, the president of forwarder N/J International in Houston, is similarly optimistic.

"Everybody's looking at $65 to $75 a barrel by the end of the year or sooner," he said. This expectation is based on the reduction of new production in the U.S. and increasing demand over the summer, continuing into winter. He said N/J is still working because materials to maintain existing wells are needed, even if new wells are not being drilled. However, he said materials are not flowing like they used to, and many of his customers have had to furlough employees. However, while he is not seeing new exploration in the U.S., a partner firm in Venezuela told him it is picking up five new oil and gas clients, and he has been told to "power up."

Interestingly, the sector where he has started to see more action is in agriculture. Through his Venezuelan partner, Fainter sent 20 silos to Venezuela. "Agriculture-heavy machinery is being shipped around the world," he said.

N/J is currently seeing more action in agricultural heavy machinery shipment than in the oil and gas industry, but Fainter remains confident about O&G. He's shipped millions of tonnes of oil and gas equipment by air in support of GE over a 15- to 20-year period, working with carriers such as Amerijet, LAN, Qatar, Emirates, Etihad and many others.

"We're hopefully optimistic that the market is going to turn," he said. "It always does." ACW

> "Our first quarter was extremely strong, when oil prices were at their lowest. It's hard to predict, but it is our belief that the oil and gas sector will remain a profitable sector for us."
>
> – Faycal Boumerkhoufa, global projects director, Volga-Dnepr Unique Air Cargo

# A SLIM FIT

## E-COMMERCE SPURS NARROWBODY FREIGHTER CONVERSION BOOM

By Randy Woods

In recent years there has been a slimming down, as it were, regarding freighters – a turning away from the jumbo 747s and 777s and toward the squat 737s and svelte 757s. The e-commerce revolution, especially in Asia, requires smaller freighters to make more frequent stops. But because there are no current programs to build narrowbody freighters from the factory, customers must rely on companies providing passenger-to-freighter (P-to-F) conversions.

The type of conversions being ordered depends on the lanes of travel, said Rich Corrado, chief commercial officer with aircraft lessor Air Transport Services Group (ATSG). "Express freight needs quicker service with more frequencies of flight," he said. "With a 747, you typically see three-times-per-week service. But for DHL's jets, they operate on a hub-and-spoke model and fly about three hours or less. You're just not going to fill a whole 747 for express shipments in a three-hour flight."

Today, there are more widebody freighters flying than narrowbodies by a factor of nearly two to one. But demand for new-build widebody freighters is decreasing, and widebody freighter conversion programs are all but dead. Take a trip to the aircraft purgatories of Victorville and Marana in the American Southwest and you're likely to see plenty of perfectly adequate 747-400Fs parked in the desert sun.

While many shippers rely on the ample belly space of today's widebodies for cargo, there is a renewed demand for narrowbody main-deck space as express freight traffic rises and as older freighters get phased out. According to market research and global consulting firm Air Cargo Management Group, the airfreight market will need about 125 new freighters per year to meet growth and replacement needs over the next 20 years, assuming a 4.5 percent annual growth rate in freight tonne kilometers. (See FreighterForecast.com for more details on the ACMG forecast.) "The news on the freighter front over the past year was a mix of good and bad, with most of the good news coming in the narrowbody sector," said Bob Dahl, ACMG's managing director.

Indeed, this spring has been aflutter with recent announcements from the various aircraft conversion houses for narrowbody freighters. Some recent developments include the following:

- Aeronautical Engineers Inc (AEI) launched its 737-800 P-to-F program in April 2014 and, at the just-completed Paris Air Show, announced a launch order from lessor GECAS.
- The PacAvi Group, which formally introduced an Airbus A320 P-to-F conversion program last September, said it had firm orders for forty-two A320 conversions for two customers – one in Europe and one in Latin America.
- Precision Aircraft Solutions said it had booked an order from DHL Express for an unspecified, but significant, number of 757-200 freighter conversions. The company also agreed to provide four more 757Fs for China-based SF Express, and a number of converted 757Fs for San Francisco-based aircraft lessor Vx Capital Partners.

This is all great news for the conversion houses, but it does not come without problems. One concern is finding enough feedstock that meets their customers' needs. Brian McCarthy, vice president, marketing and sales, at Precision Aircraft Solutions, warned that the current appetite for narrowbody conversions could lead to a shortage of available freighter candidates, namely the mid-range (3,150 to 4,100 nautical miles), single-aisle 757, which Boeing stopped making in 2004.

He estimated that Precision, which specializes in 757 conversions with 15 pallet positions, will need to convert 130 to 135 of the mid-range planes over the next five to six years to keep up with demand. Currently, the company has seven conversion lines running in five locations simultaneously, producing a new 757 P-to-F every three and a half weeks, on average.

"Somebody has got to do another 757," McCarthy said. "Its absence will leave a bomb crater in the middle of the market space. What else can you use if you want to fly express freight more than 2,800 miles?" The only other option, he said, is to scale up to the larger, more expensive 767F, which is still very popular among the global integrators. "If you don't have 757s

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or 767s with those range profiles, you may end up with a lift problem."

## Express workhorses

While there is a need for replacement of older freighters, Bob Convey, senior vice president of sales and marketing for AEI, said the replacement market is "minimal" compared with the demand for new conversions in the global express fleets. Companies such as DHL, UPS and FedEx are responsible for about 75 to 80 percent of narrowbody conversion orders, he said.

The rapid growth of the middle class, worldwide, is driving much of this express demand, said George Fedeanis, director of sales for aviation MRO PEMCO World Air Services. Numbering roughly 2.2 billion people today, the global middle class, he said, is expected to reach about 5.5 billion people over the next 20 years – people who will have more money to spend on online purchases with the expectation of express delivery. What's different about the rising middle class in places like China, India, Brazil and many emerging nations in Africa is that infrastructure improvements, such as modern highways, are not keeping up with the pace of wealth, forcing companies to ship more products by air than is the case in Europe or North America.

As with most aviation trends these days, much of the narrowbody boom is led by China, which recently passed the United States in e-commerce sales revenue. China's Alibaba online retail empire leads the world in sales dollars spent per second, so it's no surprise that the country's consumers have developed an "I want it now" mentality. To cater to this need, domestic Chinese couriers such as YTO Express, China Post and SF Express have launched their own airlines and are seeking converted narrowbodies at a rapid clip, with some demand estimates as high as 1,000 freighters in the next 10 years. "They're not just replacing old planes, this is real growth," McCarthy said. "It's just exploding over there."

For many years, the coastal cities and factories along China's Eastern Seaboard were the main hives of activity for intra-China express service. Today, however, as companies seek cheaper land and labor, they are moving their factories much farther inland, to the central and western provinces. Because of the remoteness of these locations, the 757 is gaining in popularity, as it can cross the vast interior of the country with fewer stops than a 737F requires. "The 757 will be the racehorse until they can get more air hubs set up in the western part of the country," McCarthy added.

While China is expected to continue to be a thriving P-to-F market, Steve Rimmer, CEO of aircraft lessor Guggenheim Aviation Partners, cautioned that China may show a slight preference toward conversion programs run by the original equipment manufacturer (OEM). For many years, he said, Boeing had helped instill an attitude in China that older planes weren't a good investment. "As a result there is an in-built reluctance about non-OEM products," he said. "It doesn't mean that conversions won't be a big market, but it's a factor. With China, it's always 'be careful what you wish for.'"

## Airbus arrives

Until recently, with the brief exception of an abandoned program for the Airbus A320, the narrowbody conversion space has been an exclusively Boeing-dominated affair, with the 737 and 757 variants taking the lion's share. That changed last fall when Dresden-based PACAVI took the industry by surprise by announcing that they were going to launch a "Freighter Lite" program for the A320, and eventually the A321 (see sidebar on p. 32).

From the start, Dr. Stephan Hollmann, CEO of PACAVI Group, didn't want to do conversions the way anyone else did. After years studying the freighter conversion market, Hollmann said he wanted to turn the conversions business into a "product market," which focuses on the needs of individual customers. "We bought a prototype aircraft to bring it around to airshows to show off its capabilities," he said. "We want to create a show room, like in the automotive industry."

Currently, there are about 500 older A320s on the market that need to be replaced and are ripe for conversion, he said. More than 5,000 A320 and A321 passenger aircraft have been built by Airbus since the A320 Family launched in 1988, so the feedstock is seemingly limitless at this point. There are some problems that PACAVI acknowledges, such as the A320 Family's high-tech systems – unlike the 737, which relies on mostly mechanical systems. "They have called the A320 the Flying Xbox," Hollmann said. "It's full of software system integration throughout the aircraft."

## Today's Choices

There are eight current narrowbody conversion programs, half of which are in development, with the other half currently available for conversion.


**Conversion Houses:** PACAVI, EFW
**Configurations:** P-to-F
**Program Status:** PACAVI - announced October 2014
EFW - announced June 2015


**Conversion Houses:** PACAVI, EFW
**Configurations:** P-to-F
**Program Status:** PACAVI - announced October 2014
EFW - announced June 2015


**Conversion Houses:** AEI
**Configurations:** P-to-F
**Program Status:** Available Now


**Conversion Houses:** AEI, IAI-Bedek, PEMCO
**Configurations:** P-to-F, QC,* Combi*
**Program Status:** Available Now


**Conversion Houses:** AEI, IAI-Bedek, PEMCO
**Configurations:** P-to-F, Combi*
**Program Status:** Available Now


**Conversion Houses:** IAI-Bedek, PEMCO
**Configurations:** P-to-F, QC,* Combi*
**Program Status:** IAI-Bedek - announced June 2015
PEMCO - announced October 2014


**Conversion Houses:** AEI, Boeing, IAI-Bedek, PEMCO
**Configurations:** P-to-F, QC,* Combi*
**Program Status:** AEI - announced April 2014
Boeing - announced October 2014
IAI-Bedek - announced June 2015
PEMCO - announced October 2014


**Conversion Houses:** Precision Conversions, ST Aerospace
**Configurations:** P-to-F, Combi
**Program Status:** Available Now

*Offered by PEMCO only

But the true prize of the PACAVI approach may come in 2018, when the larger, younger, more cargo-friendly A321s become available. Because Airbus models are based on a "family approach," the supplementary type certificates (STCs, the certification required for all aircraft modifications) for both models are nearly identical, so most of the work will already be done and the A321s will be "automatic successors," Hollmann said.

In May, PACAVI and GAMECO (Guangzhou Aircraft Maintenance Engineering, Co., Ltd.) launched a strategic partnership to produce and jointly market A320 and A321 P-to-F conversions at GAMECO's facility in Guangzhou, China. A prototype for the A321 conversions is expected to enter conversion at the Guangzhou plant before the end of this year.

Given the huge head start Boeing aircraft have in the narrowbody conversion business, Precision's McCarthy said the PACAVI A320 program will likely face some tough challenges getting started, including the fact that the A321's cross-section is a bit wider that the 737's, for which most ULDs were designed. "When you make a change from Boeing, you have to change to a whole new tooling arrangement, a new MRO setup, new ground support – new everything," he said. But he added that the A321 conversions have a great future ahead because "it's a good size for the integrators."

## Generation gap

Beyond the never-ending Boeing vs. Airbus debate, there is a gray area looming in the conversion business concerning feedstock, and the transition from older to newer aircraft models. As the workhorse 737 Classics – the -300 and -400 variants – start coming to the end of their life cycles, the conversion industry is preparing for the 737 "Next Generation" series, or 737NGs, particularly the -700 and -800 variants.

The first of the NGs hit the market in 1997, and they are more efficient, fly farther and carry more payload than the Classics – but they come at a cost. The initial price tag for converting a 737NG will be higher than the costs to convert a Classic variant. But the 737 Classics, while less expensive to acquire and convert, have higher maintenance costs and are less fuel-efficient. It's the age-old quandary of whether to trade up-front costs for operational costs, amortized over several years.

So, as the 737 Classics begin their slow fade from the freighter scene, there will be a brief period during which those who want converted freighters will delay their purchases until the price of the younger, more fuel-efficient NGs begins to drop. The length of this transition between the Classics and the NGs is anyone's guess, but most of the conversion houses estimate it will last several years, at least.

"The NG program is an exciting thing for us," said PEMCO's Fedeanis. "In the next couple of years, we will start to see the 737 Classics run out, and the Next Generation -700 model will begin to emerge. It's the right size and has the right economics. The -800s will also become popular, but they're not ready yet – they're still too expensive." During the segue period for the NG, there are still about five hundred -737-400s around and about 1,100

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737-300s that are suitable candidates to bridge the gap.

AEI's Convey, however, was not as optimistic for the 737-700. "I've heard that some leasing companies are passing on them," he said. "It's about the same size as a -300, and there is a problem of finding room for a front cargo door that won't interfere with the engine nacelles." The 737-700 P-to-F business, he predicted, will be minimal, with "maybe 20 to 30" being converted. The 737-800, he added, will likely be the first star of the NG family, with its increased payload compared to the Classics and a "virtually unlimited feedstock."

Chris Damianos, executive vice president, marketing – specialty markets, for aircraft lessor GE Capital Aviation Services (GECAS), said the 737-800s and 757s will both have a big role to play among the integrators over the next few years. But he also said he doesn't see any immediate shortage coming for 737-400s. "You still see some of our customers flying Classics for 30 years," he said. "The 737-800s will roll into growth routes and the 737 Classics are staying in service. They're not in a hurry to retire them."

## Future is open wide

While these are undoubtedly boom times for the conversions industry, how long can this period of intense activity last? Most of the conversion houses and lessors say the good times may remain for quite some time.

According to Dan da Silva, vice president of modification and conversion services at Boeing Commercial Aviation, the market outlook for narrowbody freighters is expected to remain "strong for the foreseeable future." In 2014, Boeing forecast that world air cargo traffic would grow 5.1 percent per year between 2015 and 2018. "The results from the first quarter of 2015 support this forecast," he added. "This demand will be satisfied by new production freighters, parked freighters brought back into fleets, and new freighter conversions."

At AEI, Convey said there will be enough narrowbody business to support 20 to 25 conversions each year through 2018. "Then there will be a dip for about six to nine months until we can start the 737-800 program."

McCarthy said Precision expects to continue to complete about three to six 757 conversions per year for several more years before the program slowly tapers off. While he is unsure what direction the company will take after the 757s disappear, he said he prefers the prospects of the A321 P-to-F program to the "saturated" market for 737-800 conversions.

Hollmann, at PACAVI, said he hopes to receive an STC for A320 conversions from the U.S. Federal Aviation Administration, and the EU's European Aviation Safety Agency in 2016. "From then on, our plan is to grow fast," he said. "We expect HAITEC to account for about a dozen commercial conversions a year, with the first conversions ready to hit the market in early 2017. We are well positioned to dominate this market in the coming years." ACW

## ST Aero, EFW enter A320 conversion race


As *Air Cargo World* went to press, Airbus and ST Aerospace announced at the Paris Air Show that they have launched an A320 Family P-to-F conversion program through their EFW joint venture. The first type to be converted will be the A321. The companies said the A321 conversions will enter service in 2018, while the smaller A320, is scheduled to follow a year later.

ST Aerospace will take responsibility for engineering development and the conversion kit, while EFW will manage the program, including sales, marketing and customer support. Airbus will provide the OEM data, cockpit computer modifications and certification support.

In response to the announcement, Stephan Hollmann, CEO of rival conversion house PACAVI Group, said he sees the ST Aero/EFW effort as "an endorsement of our market assessment and our own P-to-F program. It's no surprise to us that others want to participate in such an attractive market as well. As we are on track to obtain the STCs for both the A320 and A321 in 2017, PACAVI is ahead of the game."

## 757: Bulls-eye for Blue Dart


India is a subcontinent full of immense potential, yet it is plagued with disorganization and false starts. The recent decision by Jet Airways to postpone the launch of main-deck operations with a freighter leased from Etihad is only the latest example of India's cargo setbacks.

But Chennai-based Blue Dart Aviation Ltd., the country's first domestic cargo airline, which flies for DHL Express, is the exception to that dismal track record, and narrowbody freighter conversions have played the starring role.

Blue Dart launched its operation in 1996 with a fleet of five freighter-converted 737-200Fs, said Tulsi Mirchandaney, the company's managing director. But beginning in 2003, Blue Dart began replacing these older freighters with newly-converted 757-200Fs. These freighters helped the company develop markets in seven "Tier 1" airports across the country: Chennai, Bangalore, Mumbai, Delhi, Kolkata, Hyderabad and Ahmedabad.

"The 757s have served us well," Mirchandaney said. "They are more fuel-efficient, the higher capacity meets the increased demand, and the fast turnaround at the airports help ensure that our delivery schedules are met."

Depending on demand, Mirchandaney said she expects to add another freighter by the end of the year. But like many 757 conversion customers, she laments that the feedstock for the popular aircraft will soon run out. "Unfortunately, there is no immediate replacement," she said. "As they grow older, it would become necessary to explore other options, but for now it is clearly our preferred workhorse."

She added that Blue Dart is "exploring the viability" of acquiring a 767 as a potential future alternative to the 757, but said that "widebody aircraft operations will present a huge challenge," requiring across-the-board economic growth in all regions served by Blue Dart.

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## AAPA: Asia-Pacific Carrier Traffic April 2015 & YTD

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

| | | FTK (mil.) | FATK (mil.) | Freight Load Factor |
|---|---|---|---|---|
| Monthly | April 2014 | 5,191 | 8,096 | 64.1% |
| | April 2015 | 5,384 | 8,476 | 63.5% |
| | YoY % Change | 3.7% | 4.7% | -0.6 points |
| YTD | Jan.-Apr. 2014 | 19,957 | 31,277 | 63.8% |
| | Jan.-Apr. 2015 | 21,388 | 33,057 | 64.7% |
| | YoY % Change | 7.2% | 5.7% | 0.9 points |

*Source: Association of Asia Pacific Airlines*

In terms of airfreight demand, April is usually one of the quieter months. But according to AAPA calculations, freight tonne kilometers (FTK) for Asia-Pacific carriers in April rose by 3.7 percent, compared to the previous April, although a 4.7 percent increase in capacity drove down the freight load factor by 0.6 points. Andrew Herdman, AAPA's director general, said the 7.2 percent increase, y-o-y, in the year-to-date FTK figures was "partly boosted by increased demand for air shipments due to the backlog of goods at U.S. seaports."

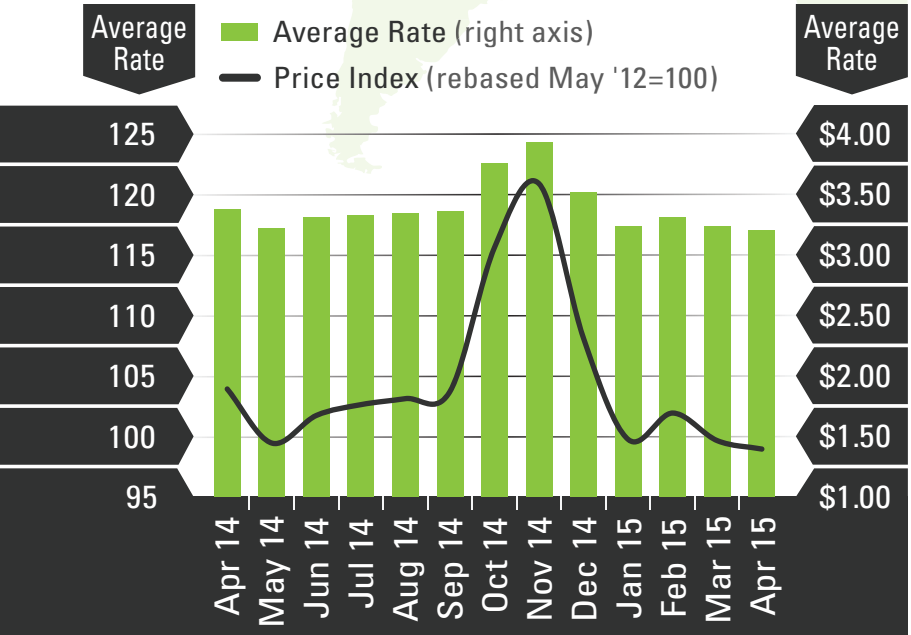
## IATA: Total Freight Growth by Region

% GROWTH YoY in FTK

| REGION | April 2015 | YTD |
|---|---|---|
| Africa | -0.2% | 3.4% |
| Asia / Pacific | 4.5% | 7.3% |
| Europe | -0.3% | -0.7% |
| Latin America | -6.8% | -7.6% |
| Middle East | 14.1% | 12.3% |
| North America | 0.1% | 1.4% |
| **Industry** | **3.3%** | **4.3%** |

*Source: IATA*

April figures from IATA showed a 3.3 percent increase in global volume, measured in FTK, but regionally, only two areas – Asia-Pacific and the Middle East – showed growth; North American FTKs were essentially flat for April. Tony Tyler, IATA's director general and CEO, said "the market is settling down," due partially to "a weakening of economic indicators in the crucial air cargo markets of Asia-Pacific and Europe."



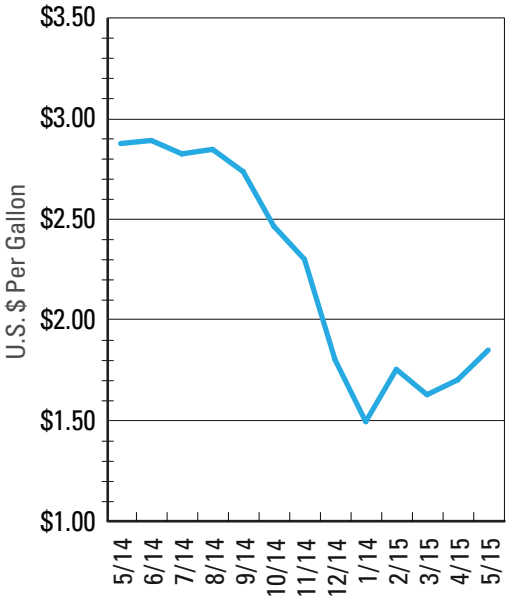

## Drewry East-West Airfreight Price Index

*Source: U.S. Energy Information Administration*

Drewry's East-West Air Freight Price Index declined by 0.7 points in April to 98.8, its lowest level in more than 12 months. Compared to the same month last year, average rates fell by 5 points, suggesting evidence of underlying market weakness rather than seasonal factors. Simon Heaney, Drewry's senior manager – supply chain research, said he expected airfreight pricing to remain stable through June, "but some softening is anticipated thereafter as carriers release additional passenger capacity."

## USEIA: Jet Fuel - Spot Price, YTD

*U.S. Gulf Coast, Kerosene-Type (wholesale price)*




*Source: U.S. Energy Information Administration*

After spending the last few months hovering around the US$1.70 mark, spot prices for U.S. Gulf Coast kerosene-type jet fuel rose to an average of $1.85 per gallon in May, a 15-cent spike over the April figure and the highest per-gallon price seen since November 2014.

# Events

**JULY 28-29, 2015**

**South Caspian Transportation Summit – Istanbul, Turkey:** Discussions will include doing business with Iran once sanctions are lifted, Silk Road railway projects, modernization of Iran's airport, shipping routes to Asia, and routes for oil and gas transportation. For more information visit *caspiansummit.com*

**SEPTEMBER 1-3, 2015**

**Air Cargo Handling Conference – Bangkok, Thailand:** The seventh annual ACH conference will be held at the Shangri-La Hotel, the first time this event has been held outside of Europe. Panel discussions, workshops and focused presentations will cover the most up-to-date developments in airport and cargo operations. For more information, visit *evaint.com/our-events/air-cargo-handling-conference*

**SEPTEMBER 9-10, 2015**

**Fly Pharma – London, U.K.:** Industry experts will address the pharma supply chain's hot and cold topics in a lively and motivational manner. For more information visit *flypharmaconference.com*

**SEPTEMBER 27-30, 2015**

**Council of Supply Chain Management Professionals conference – San Diego, U.S.:** Over 95 educational sessions, 15 continuing education units for SCPro certification holders, networking opportunities and exhibits. For more information, visit: *cscmp.org/annual-conference/2015-registration*

**SEPTEMBER 18-20, 2015**

**Freighters and Belly Cargo World Conference – Abu Dhabi, UAE:** To be held at the Park Hyatt, Abu Dhabi, this 16th annual conference provides a forum for industry debate on key belly cargo themes. For more information and to register visit *aircargonews.net/freighter-and-belly-cargo-world-conference*

**OCTOBER 26-28, 2015**

**Cargo Facts Symposium - Miami, U.S.**: The Cargo Facts Symposium is where the air cargo aviation community gathers to network and shape the future of the industry. Presented by Air Cargo Management Group, *Air Cargo World*'s sister company, the symposium promises the latest industry information and updates, the highest-quality presentations, and accessible and thought-provoking interactive discussions. For more information, visit *http://cargofactssymposium.com*

**NOVEMBER 4-6, 2015**

**Air Cargo Americas - Miami, U.S.**: The Air Cargo Americas International Congress and Exhibition in 2014 is one of the largest air cargo exhibitions in the Western Hemisphere. For more information, visit *aircargoamericas.com*

**NOVEMBER 17-18, 2015**

**Asian Logistics and Maritime Conference – Hong Kong:** For the fifth year, this conference brings together logistics services providers, airfreight specialists and users, including manufacturers, traders and distributors, to explore business opportunities in the region. For more information, visit *almc.hk*

**DECEMBER 14-16, 2015**

**Life Sciences and Pharmaceuticals Conference – London, U.K.:** This will be of interest to those engaged in the supply and distribution of pharmaceutical and life sciences products, including product wholesalers, airlines and air cargo suppliers, ground handlers and more. For more information, visit *aircargonews.net/lifescienceand pharma-conference.html*

**MARCH 10-16, 2016**

**World Cargo Alliance Annual Global Conference – Abu Dhabi, U.A.E.:** The event will be held at the Abu Dhabi National Exhibition Center.

**MARCH 15-17, 2016**

**World Cargo Symposium – Berlin, Germany:** The World Cargo Symposium is the largest annual event of its kind. To be held at The Intercontinental Hotel. For more information, visit *iata.org/events/wcs/Pages/index.aspx*

**APRIL 10-12, 2016**

**26th CNS Partnership Conference – Nashville, 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, including executives from airlines, freight forwarders and shippers. For more information, visit *cnsc.net/events/Pages/cns-partnership-conference.aspx*

**JUNE 8-10, 2016**

**Air Cargo 2016 – Phoenix, U.S.:** This will be the twelfth annual conference and exhibition presented by the U.S. Airforwarders Association. The event will be held at the JW Marriott Phoenix Desert Ridge Resort and Spa. For more information, visit *aircargoconference.com/aircargo 2016*

**OCTOBER 26-28, 2016**

**TIACA's Air Cargo Forum and Exposition 2016 – Paris, France:** TIACA's biennial event brings together thousands of air cargo industry leaders, customers and over 200 exhibitors from approximately 100 countries. The forum and exposition was previously hosted in Paris in 1998. For more information, visit *tiaca.org*

# Advertiser's Index

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

# Time to call the exterminator

**by Brandon Fried**

I noticed the small hole in the wall while descending the steps to my basement in the spring of last year. I really didn't think much of it until the intruder's tiny head peaked out for a quick glimpse. The exterminator I called confirmed my worst fear, that the unwanted visitor was one of thousands of termites – ant-like creatures that had moved into my house undetected during the winter and ravenously began eating its inner structure. The uninvited houseguests cost me a fortune to evict and to repair the damage they had done.

I was reminded of my termites during a recent cybersecurity webinar sponsored by the U.S. Airforwarders Association. The presenters told their audience that computer hackers can get into any business' network and stay there, lying in wait, undetected for six to nine months before taking down your operations. As with the insidious termites devouring a house, criminal groups in places like Eastern Europe and Russia now have the time and resources to find a weak link within your organization and quietly nibble at it. And we in the air cargo industry, as stewards of critical infrastructure, have no choice but to do everything we can to fight back. We are targets, to be sure.

Cybersecurity is not just something we have to worry about in our personal lives; we need to be vigilant in our logistics world, as well. We're hearing with alarming frequency about cyber-scams diverting cargo and misappropriating hard-earned dollars. It is now apparent that everything connected to the internet can be hacked, and, to an ever-increasing degree, our business is an online one. Accordingly, our shipment data and vital customer information is vulnerable to significant information denial, disruption or degradation of our operating environments.

The aviation industry has been warned against cyber-related intrusions, including hacks into reservation systems, air traffic control, navigation and worse – potential hijacking of an aircraft. Recently, the news media reported that a cybersecurity consultant told the FBI he had hacked into computer systems aboard airliners up to 20 times and managed to control an aircraft engine during a flight.

Likewise, the airfreight business faces debilitating threats, where data breaches can intrude on proprietary customer business relationships, hijacking and holding for ransom information, including pricing data, customer lists and trade secrets. Most importantly, once hacked, customers may not come back after they lose confidence in your ability to protect them and your system.

The termite infestation experience taught me that the government was not going to provide much guidance and leadership in my predicament. I had to take quick and decisive action to save my own home, much as freight forwarding companies and their affiliates must do now.

According to a recent Cisco Systems annual security report, security must be viewed as a "people problem." A technology-centric approach to security does not improve security; in fact, it exacerbates it. Technologies are merely tools that can enhance the ability of people to secure their environment. Security teams need to educate users about safe habits that they should apply, no matter where they are using technology – at the office, at home, or on the road.

As with many business challenges, company leaders need to begin educating employees on the issue and its risks. There are plenty of free and commercial resources available to provide assessments on systems and best practices. Forwarders should create security policies anchored by training and education for administrators and users. The training should include procedures and tactics as well as evaluation tools in the selection of appropriate security technologies.

Since most cyber-threats enter systems through email, companies should invest in quality anti-spam products and services to prevent users from receiving the malicious emails in the first place. Staffs should be trained to validate senders and not click on the links in emails without careful verification and consultation with IT departments. Under no circumstances should users respond to "pop-up" messages requesting user action.

> "As the experts tell it, there are two types of companies: ones that have been hacked and those that will be."

Wi-fi security networks should use strong administrative passwords and disable unsafe or older wireless security standards where possible, while keeping firmware up-to-date. Employees should be trained on basic security principles, including password complexity, email security, ways to detect "phishing" scams and safe web use. And since many cyber attacks are the result of insider threats, there should be no sharing of accounts between individuals, which can frustrate auditing and forensics efforts.

There are many other defenses to ensure data security, including extensive use of encryption, file transfer and data storage mechanisms. While learning about them may prove difficult for nontechnical individuals, effective IT administrators should remember to focus communications particularly on these employees, since they may be the most vulnerable to cyber attack.

As the experts tell it, there are two types of companies: ones that have been hacked and those that will be. Cybercriminals are organized, automated and persistent. They are continuously looking for new ways to compromise their targets. All this means it is absolutely essential that forwarders stay current, keep their guard up and constantly look to improve their defenses before the termites do too much damage. ACW

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