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ISSUE 3 / VOLUME 5 JUNE 2022



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Air Logistics International is published in February, April, June, August, October & December. Subscription rate per year applies to UK

Qualifying subscription: £64 or €92 or US\$100 **Non-industry subscription:** £170 or €240 or

MA Business

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www.markallengroup.com

Published by MA Business

a Mark Allen Group Company Hawley Mill, Hawley Road.

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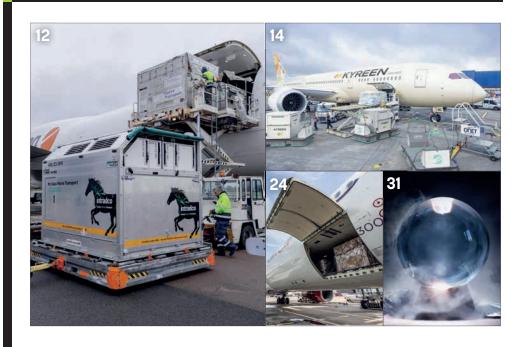
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Front cover courtesy of Intradco Global

Print - ISSN 2633-2450 Online - ISSN 2633-2469

Printed by Pensord Press Ltd, NP122YA





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MISSION STATEMENT

ALI comes from the same team responsible for the well-established titles of Ground Handling International and Ramp **Equipment News.** As such, it builds on over 20 years of industry experience and, with a comprehensive and skilled team of writers based in both Europe and the US, aims to bring the reader up to date with the world of air transportation.

Summer of discontent?

s we head into the summer, the outlook is not all rosy with a never-ending list of challenges facing the industry.

Here in the UK, we have just congratulated Her Majesty the Queen on 70 years of dedicated service but now it is back to reality. Politicians are wasting a lot of effort being their usual pompous, idiotic, self-serving selves, unions are threatening extensive strike action, and inflation is at rates not seen for decades. Fuel prices are noticeably higher; at the time of writing, filling up is exceeding £1.80 a litre and by the time you read this, who knows how high prices will be. At the start of the year, it was a bit over £1.40.

Back in the aviation industry, now that travel restrictions have largely been lifted, people are eager to fly again. The problem is that, with so few staff, the airports can't cope and horror stories of queues and flight cancellations are too numerous to list. If you have a holiday in August, start queuing outside the airport now and you may just about clear check-in in time for the flight to be cancelled.

For cargo, having saved the aviation industry and the world, it will have to cope with the latest new normal. The pandemic-fuelled growth has stopped with industry data from IATA saying that demand fell over 10% in April and the numbers suggest that the coming months will be a challenge. Belly capacity is returning but war in Ukraine means a lot of cargo capacity is unavailable, along with Russian airspace, and the effects of China's zero-Covid policy will be felt for some time.

I don't have an answer for how this will all turn out, I will leave that to people who do actual work and I will continue to write about people doing work.

Now if you'll excuse me, I need to talk to the crystal ball repairman to see if he has fixed it yet.

James Muir, Deputy Editor



HUNTER MIDWEST

eal estate developer Hunt Midwest has acquired 1,300 acres of land adjacent to Kansas City International Airport to develop the largest logistics park in Missouri.

The site, dubbed KCI 29 Logistics Park, will support up to 18 million square feet of Class A logistics and manufacturing space along with 20 acres of commercial mixed-use. Acquiring the 1,300 acre site adds to the 2,000 acres already under Hunt Midwest's control.

It provides immediate access to the airport's air cargo operations and Interstates 29 and 439 via the Mexico City Interchange. The site has infrastructure including onsite transmission level power, a transmission waterline and a wastewater treatment plant.

Ora Reynolds, President and CEO of Hunt Midwest, says, "Disruptions in the global supply chains have driven the need to store more inventory closer to the end consumer and to re-shore manufacturing back to the United States. We hope to capitalise upon these demand drivers with some big 'wins' right here in Kansas City."

Users of the KCI 29 Logistics Park will be able to reach 90% of the US population via truck in two days or overnight via airfreight. The KCI Air Cargo operations is home to companies such as UPS, FedEx and USPS, and tenants will also be close to the manufacturers that they supply.

Tim Cowden, President and CEO of the Kansas City Area Development Council, says, "With shifts in consumer demand, the need for accelerated speed-to-market is essential for companies in today's global economy. The KCI 29 Logistics Park provides prime, vertical ready offerings and will join the more than 60 million square feet of industrial development that has been built in the Kansas City region since 2012."



Swissport opens second Vienna cargo centre

wissport has inaugurated its 8,000 square-metre cargo centre near Vienna Airport, which is connected to its on-airport facility with an electric truck.

The facility is located in the DLH SkyLog Park in Fischamend in the immediate vicinity of the airport, and Swissport is one of the companies to move in. Opening a second cargo centre in Vienna means Swissport can resolve local constraints and provide carriers and forwarders with additional capacity and flexibility.

Dirk Goovaerts, Swissport's Global Cargo Chair, says, "We've invested in this state-of-the-art air cargo centre to support our growth ambitions in forwarder handling, and to serve existing and new airline customers with an

even better product. "We're very excited to more than double our capacity in Vienna and

in place to support our vertical integration plans."

The building features a 900,000kWh photovoltaic system and on the ground, the cargo centre is connected with the airside facility by a dedicated electric cargo shuttle. High-performance charging is available on both sites to ensure the e-truck can shuttle between the two cargo centres.

Henning Dieter, Head of **Swissport Cargo Services** Germany and Austria, says, "We are pioneering e-mobility in air cargo handling here in Vienna together with Mercedes, Siemens, XL Forwarding & Transports and the Austrian Federal Ministry of Climate Action. The public charger available supports sustainable mobility as the dedicated Swissport e-truck shuttles air cargo between our two terminals at Vienna International."



WFS enters Indian market

Worldwide Flight Services (WFS) has been awarded a 15-year licence to operate its first cargo handling operation in India at Bengaluru's Kempegowda International Airport.

The partnership will launch in May 2023 with WFS taking responsibility for developing, operating, managing, and maintaining one of the cargo terminals, and also operating and investing in expanding Kempegowda's Cold Chain Facility.

The cargo terminal awarded to WFS has the capacity to handle 210,000 tonnes of cargo a year and it will be used exclusively by WFS to handle international cargo. WFS will reorganise and refurbish the facility to increase throughput to serve volumes in excess of 250,000 tonnes per year. The Cold Chain Facility will be expanded in two phases, initially doubling capacity to 80,000 tonnes per year then 150,000 tonnes in the second phase.

NATILUS OPENS SAN DIEGO BASE



Autonomous cargo aircraft manufacturer Natilus has picked Brown Field Municipal Airport in San Diego as its manufacturing and engineering base.

The Brown Field facility includes a 12,000 square-foot facility for final assembly, structural testing, systems integration and secondary structural bonding. Brown Field's 8,000-foot runway can accommodate large gircraft and 1,500 square feet of office space will supplement Natilus' engineering offices in downtown San Diego.

Aleksey Matyushev, Co-Founder and CEO of Natilus, says, "As the design of the prototype aircraft nears completion, we are expanding the team and facilities to move into final assembly. Our tier one suppliers are excited about the new platform which will reduce carbon emissions, while increasing cargo volume. On continents, such as Africa and parts of Asia, with limited infrastructure, our new 3.8 ton autonomous aircraft will become an essential mode of rapid and safe transportation."

Natilus plans to make four types of aircraft and the smallest model with a payload of 3.8 tons is expected to start flying next year. It also has designs for a 60 ton payload drone for medium and long-haul services, a 100 ton payload UAV for long-haul flights and a 130 ton payload cargo aircraft for long-haul services. The aircraft will use JetA or SAF fuels and existing ground infrastructure and standard air cargo containers.

DNATA ENTERS GERMAN MARKET

dnata will enter the German air cargo market with the acquisition of Wisskirchen Handling Services at Cologne/Bonn Airport.

Wisskirchen is the exclusive operator of the Cologne Bonn Cargo Center, a 12,000 square-metre facility at the airport employing 180 people. It handles 85,000 tonnes of cargo a year including general cargo, perishables, pharmaceuticals, dangerous goods, electronics and fast

moving consumer goods. dnata plans to buy 100% of shares from Wisskirchen's owner, Oliver Hellwig. The acquisition is subject to approval by Germany's Federal Ministry for Economic Affairs and Climate

Stewart Angus, Regional CEO for Europe at dnata, says, "Since 2014 we have invested in nine new cargo facilities in Europe. We look forward to playing our role in the next stage of development of

Cologne/Bonn Airport as a major cargo hub and I would like to thank Oliver Hellwig for his professionalism during this process."

dnata has opened Phase II of Cargo City East at London's Heathrow Airport to handle cargo for Virgin Atlantic Cargo and Delta Cargo. The 10,500 square-metre facility handles imports and Phase One, the 22,500 square-metre facility, which opened in 2019, handles exports.



LUFTHANSA CARGO ORDERS BOEING 777-8 FREIGHTERS

Lufthansa Cargo has ordered seven Boeing 777-8 freighters and two more 777Fs to provide capacity while it waits for the new model to be ready.

Boeing launched the 777-8F in January this year and has already received 34 firm orders. The first deliveries of 777-8Fs is scheduled for 2027 and Boeing says it offers 30% better fuel efficiency and emissions and 25% better operating costs per tonne than older freighters while offering the same payload and range.

Lufthansa Group has also ordered seven 787-9s and is the launch customer of the 777X with 20 firm orders.

Ihssane Mounir, Senior Vice President of Commercial Sales and Marketing at Boeing,



says, "With the investment in the 777 and 787 fleet, the Lufthansa Group will operate the most advanced, fuel-efficient twin-engine airplanes in the industry. Each of these airplanes reduces emissions by 15 to 25% compared to previous models with a noise footprint up to 50% smaller than their predecessors, helping to advance the Lufthansa Group's sustainability objectives."



CMA CGM partners with Air France-KLM



ir France-KLM Group and CMA CGM Group have signed a long-term partnership to combine their networks, capacity and services.

By signing the 10-year deal, the two groups operate freighter capacity with 10 aircraft combined with 12 more on order. The freighters consist of four operated by CMA CGM Air Cargo with eight more on order, two of which may be operated by Air France-KLM in the future, and six Air France-KLM freighters based at Paris Charles de Gaulle Airport and Amsterdam Airport Schiphol, with four more on order. The partnership also covers Air France-KLM's belly capacity and combines both partners' global sales teams. It will combine Air France-KLM's air cargo experience with CMA CGM's logistics and multimodal network, particularly in sea and land transport.

CMA CGM is investing in Air France-KLM, taking up to a 9% share of the airline's ex-post

share capital, subject to approval from the board and completion of the deal.

Rodolphe Saade, Chairman and CEO of CMA CGM Group, says, "I am very pleased with this strategic partnership with Air France-KLM. It allows us to significantly accelerate the development of our air division, CMA CGM Air Cargo, which was created just over a year ago, and to position our two companies among the world's leading players in air freight."

CMA CGM has taken delivery of its first two Boeing 777Fs, with the first one arriving on 31 May and the second was handed over on 7 June at a ceremony held at Boeing's headquarters in Everett, Washington. CMA CGM Air Cargo will have a fleet of 12 aircraft by 2026 including two more B777Fs.

CMA CGM Group established its air cargo division in March 2021 and on 1 June this year. It received its Air Carrier Certificate from the French Civil Aviation Authority, the Direction Générale de l'Aviation Civile française.

IN BRIEF

- Jordi Boto has succeeded Andreas Sperl as CEO of Elbe Flugzeugwerke. He took over on 1 April, taking over from Sperl who has retired after more than 15 years of leadership.
- Roger Larreur has joined Alliance Ground International as Chief Commercial Officer. He joins from Swissport where he was Chief Commercial Officer Americas.
- WestJet Cargo has taken delivery of its first Boeing 737-800 converted freighter. It is the first of four on lease from BBAM Limited Partnership and was converted by Boeing at an approved MRO facility in Guangzhou, China.
- Air France-KLM has confirmed its order for four Airbus A350Fs, with the option for four more. They will be operated by Air France and based at Paris Charles de Gaulle Airport.
- Aeronautical Engineers will provide EgyptAir Cargo with a Boeing 737-800SF freighter conversion. It will be converted by Commercial Jet in Miami, Florida, and work will start in October.
- CDB Aviation took delivery of its first Airbus A330-300P2F from Elbe Flugzeugwerke in April followed by a second one in May. The two aircraft are being leased to Mexican airline mas.

DRONE DELIVERY CANADA STARTS EDMONTON OPERATIONS

Drone Delivery Canada (DDC) has launched commercial operations at Edmonton International Airport to make deliveries to off-airport property.

Using its Sparrow drone, DroneSpot takeoff and landing zones, and FLYTE software, cargo will be transported for Ziing Final Mile and Apple Express, located in the industrial park in Leduc County, Alberta. The route will operate for 12 months and DDC has received an upfront fee for the route and will receive a monthly fee for managing the service.

It is DDC's first international airport drone service and the first of its kind in Canada. Air Canada is assisting as its sales agent. Operations are being conducted in accordance with Canadian regulations and flights are monitored remotely from DDC's Operations Control

Centre in Vaughan, Ontario.

Myron Keehn, Vice President, Air
Service, Business Development, ESG
and Government Relations at Edmonton



International Airport, says, "Our partnership with DDC is helping create a flight path forward for this growing industry and we know there is tremendous potential still ahead. Congratulations to DDC, Apple Express, Ziing Final Mile and Leduc County for the vision to make this possible."

Nasser Syed, CEO of Apple Express, adds, "Advanced last-mile delivery systems are paramount in meeting consumer expectations now and into the future. Our association with Drone Delivery Canada as an early adopter in drone technology serves to accomplish these crucial objectives."

CHAPTER 3 LET'S STAND TOGETHER



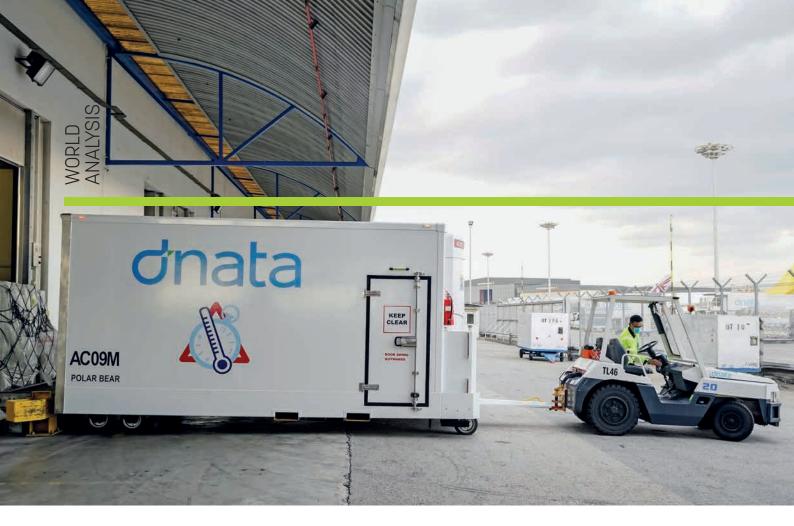
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or dnata, demand was strong in 2021 and still is in 2022 as the operating model returns to the prepandemic model, says Head of Cargo at dnata Singapore, Sam Gould. Tonnage was steady throughout the year due to strong demand and maritime issues, caused by widely-publicised congestion, not helped by temporary issues such as the blockage of the Suez Canal.

Gould says, "Demand for air cargo remained high and with the price between air and sea freight narrowing at times throughout the year, it boded well for the air sector. Other supply chain issues such as the blockage of the Suez Canal helped to increase demand for air cargo earlier in the year."

Alongside operational performance, entrepreneurship was a focus area for dnata, providing the opportunity to develop bespoke services and focus on areas that had not previously been a priority.

He says, "The introduction of new services, like fasttracking import solutions, increased digitalisation and our strong cooperation with

ASIA PACIFIC

The rest of the world has opened up but Covid restrictions remain in place across much of Asia Pacific. Demand is still strong but slowing as global economies manage high inflation and other issues.

customers set us up for continued strong performance for the rest of the year."

When borders closed during the pandemic, cargo was the focus, handling freighters and cargo being transported on cargo aircraft. With the lifting of restrictions, the old operating model is returning to cater for passenger traffic.

Gould explains, "At a basic level, this means more flights are spread throughout the whole day but less capacity per flight. This takes time to prepare thoroughly as new schedules typically come at short notice, so making sure we are ready to react quickly will be imperative to our continued success."



We will continue to maximise system and equipment upgrades 77

Sam Gould, dnata

The pandemic had a noticeable effect on the types of cargo transported; PPE was in strong demand at the start and in Singapore, food imports were up dramatically, taking advantage of dnata's facilities for temperature-sensitive cargo. PPE is still in demand, and microchip shortages and semiconductor materials requiring aircraft including Boeing 747s and 777s are increasing demand for large aircraft in the region.

Gould says, "For dnata, we will continue to maximise the system and equipment upgrades and investments that we had made in previous years. A lot of our initiatives had a long term goal and we are now



Knowing they are making a difference gives staff a sense of duty

seeing the tangible benefits."

The pandemic was a challenging time for everyone but Gould thinks dnata were lucky, they were an essential service so not locked up in their homes all day even when restrictions were at their tightest. Keeping cargo moving gave them a sense of duty and purpose knowing that they were saving peoples' lives and keeping economies alive.

This gave people a sense of achievement, Gould says, "We managed to overcome an unprecedented struggle by working together, supporting each other and putting in the hours. There is definitely a feeling of shared success that can be felt now that we are at the back-end of previous restrictions and safety concerns have lessened."



CATHAY PACIFIC ADDS CAPACITY

Volumes at Cathay Pacific are picking up but remain below pre-pandemic levels as capacity remains limited, despite resuming some services.

In April, Cathay Pacific handled 92,361 tonnes of cargo, 26.3% above 2021, but 43.6% below 2019. On a yearto-date (YTD) basis, cargo was down 5.4% to 328,894 tonnes.

Capacity is still down, with available cargo tonne kilometres down 10.2% in April and 42% YTD. Load factors remained high in April, at 80.2%, down 2.7 percentage points and it was 79.9% for the first four months of the year, down 1.8 percentage points. It started to recover in April with Frankfurt flights, the first flight to Europe since the end of December, but cargo capacity is still at 29% of pre-pandemic levels.

Ronald Lam, Chief Commercial Officer says, "Demand was mixed, with cargo exports from Shanghai affected by the city's lockdown, which has disrupted supply chains in the eastern part of the Chinese Mainland. On the other hand, demand from Hong Kong began to recover as cross-border bottlenecks began to ease, driven primarily by sea feeders that helped offset the impact from cross-border trucking services remaining constrained."

He adds that demand for machine parts and industrial products from northeast Asia and the Americas was strong, and the month ended well due

to the pre-holiday rush ahead of Labour Day and Golden Week in Japan.

In April, Cathay Pacific launched its Priority service to offer different options for time-sensitive shipments. First is the highest level with guaranteed uplift once booking is confirmed and in the event of unforeseen disruption, the shipment will fly on the next flight. Essential is the standard service and Essential Plus provides more access to capacity with a higher handling priority.



CORREOS FLIES TO HONG KONG



Correos Cargo has launched two weekly flights between Madrid and Hong Kong using an Airbus A330.

The flights are operating on Mondays and Fridays, offering 50 tons of capacity each way, adding to charter flights which were launched in March last year. Correos is planning to expand its fleet with three new aircraft by the end of 2024.

Noah's air cargo service

With over 30 years of experience, Intradco Global, part of Chapman Freeborn, has welcomed its fair share of exotic guests. Director **Charlie McMullen** gives us an update on this exciting market.

espite the pandemic, animals have still been flying, but, like all companies, Intradco had to adapt and adjust how it worked so it could continue its vital work. Director Charlie McMullen says 2021 was a solid year, not a growth year but considering the disruption Covid was causing, it was a performance Intradco could be happy with. Import permits for animals were not being issued and high prices have continued into 2022.

McMullen says, "Lots of live animal shippers were priced out of the market. When shippers in the pharmaceutical, electronics, e-commerce, automotive sectors are competing for space, our guys couldn't afford the rates that the rest of the market was willing to pay."

Despite this, Intradco performed well and McMullen has nothing but praise for the team. Equine transport and breeding livestock did well, and the poultry market did not slow significantly.

The biggest change caused by Covid was not having people on flights to accompany shipments. Pre-pandemic, 99% of flights would have a team member on board in case there were issues with handling or airline staff but this was not possible during the pandemic due to travel restrictions. McMullen says, "It was difficult for me because you had to really put trust in third parties, which previously we

never did. During 2021 and, to an extent a lot of our flights in 2022, we haven't got people at airports; we are relying on local parties such as handling agents and agents we have appointed on our behalf, which has been a big change for us but it has meant our growth curve can happen quicker because we don't have to be in all places at all times."

Technology has been brought in for operational planning to plan where crews and third parties are and to track animals digitally. Project management tools are being used to manage international movements and crews, a task previously done on spreadsheets. This has significantly improved how shipments are managed.

Intradco has always been a UK-based company but the team is growing with offices in Toronto and Dubai, and an office is planned in the Far East.

Spreading the knowledge was difficult but the new tools make it much easier as training can be done online and does not always require a more experienced member of staff to be with new recruits.

The live animal segment has slowed, with IATA figures saying it has declined 2%, but McMullen says some sectors have done very well and others have not, with lockdowns in China having a major impact on the market. So far, the year has been strong for Intradco with turnover expected to exceed \$70m.

Pets have been particularly strong, but Intradco does not handle that market. Equines have done well with demand from events, dressage, show jumping, and similar, but the thoroughbred market covering racehorses has been stagnant. McMullen says it is stable but not growing.

Intradco was never a big player in the poultry market but has expanded into this strong sector. It is the largest section by tonnage in the animal transport market and Intradco has been focusing on the day-old chick market.

"We have been operating





Pigs can fly when handled by quality service providers

with some really good customers based in the UK, Europe and the US, and hopefully we will extend that to Dubai and the Far East shortly," says McMullen.

Rather than dealing with freight forwarders, Intradco deals directly with shippers, and it has been working directly with large hatcheries and breeding associations, some of which are the giants supplying poultry for the supermarkets. Intradco moves the breeding stock, the high-value chicks going to breeding farms to populate the flocks at the farms.

Livestock remain strong; split between genetic and commercial livestock. Genetic or breeding are high value, low volume shipments, and commercial are for food stock typically imported from the Americas, Europe and Australia, mainly heading to the US.

"Africa is a growing export market because of its proximity to the Middle East and I'm sure over the coming years we will see their numbers increase massively from east coast Africa," says McMullen.

Large breeders of pigs can be moving up to 20,000 pigs a year into different markets, typically the Far East and South America, and Intradco is operating a lot of charters in this area.

"They are such high value shipments that quality is needed, quality carriers and quality service throughout the supply chain," continued McMullen.

Conservation

Conservation projects have been limited recently; there have been plenty of requests on the market but few fixtures due to airfreight rates doubling or even tripling on many lanes. Often funded by NGOs or public funding, conservation movements have limited budgets so cannot afford current market rates.

McMullen says, "Typically, Europe into Africa, which is a common route for conservation with zoo animals being moved back into the wild, a B747 was around \$300,000 prior to Covid. Now you're lucky if you can find something for less than \$700,000 into sub-Saharan Africa. That is a very big chunk out of a conservation company's budget. Many are holding off; we have four or five projects that are being delayed for that reason alone."



if you can get a B747 for less than \$700,000

Charlie McMullen



Exotic guests are still flying, particularly big cats, such as lions and tigers, often flown in ones and twos. One that stands out is described by McMullen as a Noah's Ark movement from South Africa to Armenia including giraffes, wildebeest, nyalas, and waterbucks, among others, requiring cages of all sizes to cater for these diverse guests. A B747 was necessary due to the giraffes, and price meant using a carrier with no previous live animal transport experience.

McMullen says, "We delayed the movement by two weeks to bring the crew up to date with what was needed and ensure that the operational plan was set on both sides. In Johannesburg, every handler is experienced with live animal exports but not in Armenia so we had to have intense training lessons and double-check the off-loading procedures before we committed to the date of the flight."

Luckily, the flight went well and the importer was at the airport to greet the shipment, with all animals arriving in good condition.

Animals will keep flying

McMullen sees a strong outlook for the market. Using sea freight for animal shipments is coming under scrutiny due to welfare issues, presenting aviation with opportunities to move livestock.

"The transit times are so much less, inevitably that means the risk is a lot less. If shippers or governments can subsidise some of the airfreight movements to sustain their agricultural sector, then that bodes well for the increase in commercial livestock on airfreight," says McMullen.

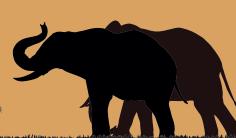
The horse market is expected to be consistent and McMullen cannot see any reason why that should change.

He says, "Hopefully when companies like us make it easier for shippers, that brings the cost down and keeps increasing the numbers of horses flying."

The whole market is expected to go up at consistent rates. McMullen concludes, "We will be growing 4-5% a year, I can't see it exceeding that like some other verticals that can take a 20% leap sometimes, but it's a consistent market."









Road cars are being fitted with an increasing number of autonomous systems and these are working their way airside. **James Muir** finds out how the market is developing.

river assistance systems such as adaptive cruise control and emergency braking have been available on road cars for years but the concept of driverless cars were the preserve of sci-fi fantasy until Tesla became a mainstream manufacturer. At airports, autonomous vehicles are still rare but are developing at quite a rate to move cargo and baggage around airside.

French company Orok had been developing robots for competitions for years but was looking for a practical place to use its technology. CEO Pierrick Boyer said the company looked at several possibilities but was unconvinced before looking at airports.

He says, "We entered the airport by thinking about an autonomous and electric solution for taxiing, and so proposed a much greener

solution and less expensive. Our analysis concluded that the project was very complex, and we decided to check other use cases at the airport."

Baggage and cargo handling would bring much quicker results, it was concluded, and would be much less complex than taxiing, both for regulations and complexity. "Once validated that the use cases were the right one, we defined the solution and checked that we helped resolve a real problem," says Boyer.

At Paris Charles de Gaulle Airport, Orok has been working with Air France KLM Martinair Cargo and airport operator Groupe ADP, driving a prototype between two warehouses transporting AKE containers.

Boyer says, "The main goals were to prove that we can have all authorisations for an autonomous vehicle to drive in an airport, and to prove that the vehicle can drive within the existing traffic without disturbing the ongoing operations."

The project was a success and both the airline and airport were happy with the results. Boyer says, "We had



Leady and safety are crucial to ensure the project's success

Pierrick Boyer, Orok

zero accidents or incidents during this period, and they are looking forward to the next phase of the experimentation, which should start in the coming months."

Implementing experimental technology such as autonomous vehicles is challenging; not only are there regulatory issues but people need to be convinced that it works and is safe. It needs to be easy to use otherwise people will not use it. In aviation, there is no room for products that are a hazard so maximum safety is vital for the design.

Boyer says, "Both aspects, usability and safety, are crucial to go to the market and ensure the project's success, and this is why we also have several experimentations planned, they allow us to show our seriousness, to show things iteratively, and to get feedback from both users and



The first full size AGV was delivered to Swissport in Autumn 2021

Bjorn Ussat, Lödige Industries



authorities to improve the solution at each step."

Technology from driverless cars such as LIDAR has been helpful for Orok but its products are much simpler than road cars, making them cheaper.

Boyer says, "In the end, people who we are talking to are used to having AGVs or AMRs when talking about warehouse management, especially for the cargo industry, so yes the fact that they know this technology helped us to convince them that it works and how it can be helpful outdoors."

Clever though autonomous cars are, and the speed at which they have developed is impressive, Boyer does not believe they will be mainstream for some time, mainly due to regulations not being ready. This made the airport a more attractive environment for Orok.

He says, "The airport is an ideal environment as it is a closed environment (or semi-closed), with rules and regulations, with trained professionals and with fewer hazards and situations to deal with."



Putting experience to good use

With almost 50 years of experience in air cargo, Lödige Industries knew that autonomous vehicles had great potential in the cargo warehouse, says Bjorn Ussat, **Director Airport Logistics** Solutions. Lödige started developing its automated guided vehicles (AGV) in 2018, showing off the first generation at the Inter Airport Show in 2019. The first one was designed to carry 5ft ULDs and run along floor markings but since then has been upgraded significantly and a larger model has been developed to transport 15ft ULDs using natural navigation.

Ussat says, "After extensive testing in our own Technology and Innovation Centre in Paderborn, Germany, the first full size AGV was delivered to Swissport's new Cargo City Süd Terminal in Frankfurt in the Autumn of 2021."

The cargo terminal is a busy place where heavy and unwieldy objects such as ULDs and pallets have to be moved. Any equipment must be fast, accurate, reliable, durable and have a minimal footprint.

Ussat says, "Our AGVs are all of that, but they are also extremely smart, fully integrated into the terminal's cargo management system Cargo Professional and delivering to schedules that can be changed at any point."

Lödige's AGVs can replace ULD conveyor equipment and slave pallet movers, and they reduce the risk of accidents in the warehouse. Rigid conveyor lines are replaced with flexible access routes that are easily scalable, increasing flexibility and speed inside the terminal.

Ussat says, "AGVs provide the missing connection between individual handling zones inside the terminal 24 hours per day without the need of staffing a slave pallet mover fleet."

Demand is expected to come from medium and large-sized cargo terminals and the three key trends will be labour shortages increasing pressure to automate manual processes, digitalisation and transparency, and the anticipated growth of global trade and air cargo.

Ussat says, "AGVs are a flexible and safely scalable in-terminal transportation solution, that we believe, cargo handlers will want to access and incorporate either on a purchase or rental basis."



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Low code - B G pportunities



Agility and adaptability are key in today's environment. **Tobias Grabler,** Chief Operating Officer of TOPO explains the benefits of low code platforms.

role to play in supporting compliant, sustainable supply chains, but in a constantly evolving business landscape it can be hard to keep up with the pace of change, and that is where low code can help.

Factors ranging from new regulations to geopolitical tensions and Covid, as well as changing consumer behaviour mean organisations need to react quickly to deploy innovative solutions that keep supply chains moving, at the same time as ensuring they stay compliant.

Conventional software, which relies on the involvement of IT developers, can prove too costly and time consuming in this environment.

Low code on the other hand, which is a visual approach to software development that does not rely on developers, can enable a business to be truly agile and adapt to changes at speed.

With low code, a user with no formal knowledge of coding can use visual interfaces with simple drag and drop features instead of having to be trained in formal coding languages.

Low code has, for example, enabled sellers across the world to build their own e-commerce web sites and helped marketeers to design and send out e-newsletters.

It is perfectly suited to support an organisation's compliance and sustainability goals.

Supply chain compliance is no longer only a box-ticking exercise to please the regulators. Market expectations now also dictate that companies must prove their sustainable credentials, from environmental concerns to being free of misconduct.



Supply chain compliance is no longer only a boxticking exercise 77

It is an on-going job, with organisations needing to meet or exceed the rapidly evolving expectations of their stakeholders, from sourcing to manufacturing and delivery.

Competitive edge

Sustainability, which covers social, environmental, and economic dimensions, goes beyond compliance and it is rapidly becoming the competitive edge to win consumers over – it is the new competitive battlefield.

Supply chains are by their nature complex and technology can provide the efficient collaboration tools needed for the different parties in the chain to achieve both sustainability and compliance goals.

TOPO's solution is a low-code supply chain platform for cloud-based collaboration and process automation covering a



product's journey from sourcing, product development, ordering, and production to quality, chemical, and sustainability management.

Unlike conventional software, with low-code, because the user does not have to be a developer, organisations can keep up with the pace of change driven by external factors, such as more stringent regulations or the pandemic, or internal moves such as extension of product assortments or changing processes.

Speed and agility are of the essence to ensure organisations can deliver new applications when needed, expand on existing services, and integrate with legacy systems when required.

It takes time and investment to do this with conventional software as opposed to low code, which can be used by organisations of all sizes to develop solutions to fit their specific business requirements.

Maintaining and updating traditional platforms can be time-consuming when there is a reliance on IT teams adding new features manually before rolling them out across an entire system.

TOPO enables organisations to build tools for their supply chains, digitise processes and collect data from sourcing, sampling, and production to quality checks and compliance and sustainability factors.

We are a platform for supply chain collaboration between suppliers, factories, agents, and third-party service providers such as testing, inspection, and certification companies.

Our solution eliminates the need for tedious, manual work through process automations and we estimate that our users save 40% of time because of this.

Because TOPO is low code, users can develop their own platform to fit their unique supply chain requirements, rather than using a 'one-size-fits-all' platform.

We encourage users to think in terms of the only limit being their imagination because they can build the interfaces, templates, and apps that their supply chain needs and save time and money without having to rely on third-party suppliers.

We also help to improve communication with instant messages and video call functionalities and empower organisations through data-driven decision-making with insightful dashboards and analytical reports.

Transparency

Collecting and sharing data is important, but it is not enough in itself.

Advanced analytics can help brands and retailers predict risk at product design or development stage, provide insights about a product or supplier, and add an additional dimension to existing commercial data on price or quantities.

The more data you have, the more insight and transparency you can create in your supply chain and the better your risk evaluation of suppliers or products can be calculated.

Organisations can plan better preventive actions and make smarter decisions to have fewer problems in their supply chains, ideally at a point in time before anything is even produced and resources are wasted.

TOPO's low-code solution allows organisations of all sizes to build customised solutions to run more efficient, compliant, sustainable supply chains without the need to hire IT teams or outsource development to a third party.

Low-code is revolutionising the digital landscape, allowing whole business teams to be part of the creation and development of new capabilities and customer interactions – it is the democratisation of an important process and one which provides agile, cost-effective solutions for supply chain compliance.





uch talked about in the past, interest and practice have flared during the pandemic when collaboration was needed to move huge numbers of vaccine shots on the double.

Adding to the urgency are changes in medicine. As gene and cell therapy become more important they will shift air cargo from moving mass manufactured medicines to more individually tailored products.

"There is only one formula. It takes qualified professionals, adequate cold chain infrastructure and the right packaging, standards and process, all these factors to the power of community collaboration," said Jaisey Yip, General Manager Cargo & Logistics Department, Changi Airport Group at a recent summit.

This has already been happening with Brussels' BRUcare, Hong Kong's HKIA Community Task Force for Covid-19 Vaccines Handling, Miami's MIAVAC Task Force,

Already looking set to be a key driver of an increasingly confident air cargo sector, pharma needs to be more collaborative in its approach, industry officials have said, reports Michael Mackey.

Changi's Ready Task Force, Abu Dhabi's HOPE Consortium and Edmonton's YEG CEIV Cargo Community Ready Response, all providing good examples of collaboration.

The HOPE Consortium is maybe one to watch here as it bids to make its Gulf Kingdom base a recognised pharma hub - the aim itself being an index of how things have and will change in the future.

"Our goal is to enhance Abu Dhabi's positioning as a

world-class pharma logistics hub and a destination focused on global welfare by investing in strategic public and private sector collaborations, and the allocation of expertise and resources," said H.E. Dr Jamal Al Kaabi, Undersecretary of the Department of Health - Abu Dhabi at a recent signing ceremony.

What is striking is the use these groups were in helping to contain and then roll back the Covid pandemic.



There will be a shift in terms of production and logistics 77

Jaisey Yip, Changi Airport Group

Another good example is Uruguay, one of the first countries in the world to vaccinate most of the population, said Bruno Guella, Managing Director of Montevideo Free Airport largely because of the way procedures were redesigned and done so collaboratively.

During the early days of the emergency the airport was aware of the need for a new way of doing things and set up an internal task force which also pulled in outside experts. "It was private and public cooperation driven by the airport community," said Guella.

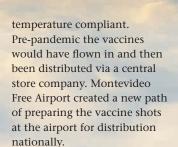
In turn this lead to an effective reworking of source materials, IT and staff. "We had all the staff trained," he said.

It is also involved a lot of repacking of the vaccines in order to keep them



GDP certification put Brussels Airport in a strong position

Nathan de Valck, Brussels Airport



Another example of how it can work came from Nathan de Valck, Head of Cargo Product and Network Development at Brussels Airport which so far has moved close to one billion vaccine shots.

Like Montevideo early on, Brussels set up a group bringing together everybody involved in the supply chain in a task force.

Not only did it facilitate the "alignment of processes", an important step in its own right, as de Valck said but it meant direct talks between the airport and the manufacturers themselves, he added.

This let the airport "understand their specific requirements which were not clear at the start, not for them, not for us. So it allowed us to come up with specific SOPs and make new investments wherever. It allowed us to go through the development in an accelerated way," he said.

Some of the details of this are significant as this produced



improvements such as more dedicated pharma warehouses on site that were both GDPCFC and GDP certified. This put Brussels in a strong position to not just move the vaccines but also for the future, de Valck added.

That is what has been achieved to date and it sets a good precedent for what air cargo will have to do in the future despite the lack of capacity.

As Changi's Jaisey Yip pointed out, medicine is changing and it and the air cargo industry will see much less the mass movement of the same product but more and more individualised health care products (and packages) being moved as cell and gene therapy make treatment highly personal.

"These supply chains will become more complex. They will require greater collaboration, visibility, traceability, reliability and speed. And there will be also a shift in terms of production and logistics from forecast driven to demand driven,"

No one will be able to do it all by themselves hence the need for down the line working together. "In the new normal we can only collaborate in order to compete more effectively," Yip concluded.

There can be no doubting the current optimism about the coming couple of years although there is a debate about how long it will last. Cargo remains a strong almost stellar performer with pharma products leading the way – something that not many are expecting to change.

Indeed so powerful is the growth it is reconfiguring the sector not just in the mix of products being moved, and their volumes, but in the destinations, air cargo nodes and the way pharma works, with Abu Dhabi offering an





Abu Dhabi and Brussels Airport have opened a pharma distribution corridor

excellent example of this.

Etihad Cargo's PharmaLife product tonnage has increased 45% compared to 2020, the carrier told Air Logistics International (ALI) and its belief is this is likely to persist at least for this year and maybe even beyond.

"For 2022 all the way through to 2023, we are expecting a very strong year, especially with the carrier's plan to launch a new pharma hub in Abu Dhabi to address the growing demand which contributes to the vision of positioning Abu Dhabi as a pharma hub," Martin Drew, Senior Vice President Sales and Cargo, Etihad Aviation Group told ALI.

This business did not come out of nowhere; it had been growing from 7% to 12% in volume during the past 15 years and is considered to be one of the fastest-growing segments across the industry. The pandemic increased this trend in early 2020 and forecasts are showing more than 40 billion doses of Covid-19 vaccines are already planned to be produced until the end of 2023.

"Roughly 40% of pharma products are being shipped by air and with our pharma hub launch planned for April, there will be a larger share of our pharma business into the global development," Drew added.

All this of course has a healthy impact on the bottom line. Cargo, as Drew said at the recent World Cargo Summit organised by Euroavia, now generates 62% of the Etihad

Group's revenues. "A real lifeline for the group there's no doubt about that," he added.

That figure is close, so close, to the 61% increase in cargo yields it's almost uncanny, Steve Saxon, a partner with McKinsey reported at the same summit.

The Abu Dhabi-based carrier is planning to lock in these gains and plans to double its pharma capacity through a fully dedicated warehouse which will be available in a few months.

"With our capacity for handling active containers, our premium PharmaLife solutions leasing the latest technology through partnerships with Envirotainer, CSafe Global and Dokasch, will be tripled," Drew said.

It is aware of the challenges it faces in this sector such as predictability and temperature requirements and is working internally and externally on a



For 2022, all the way into 2023, we are expecting a very strong year

Martin Drew, Etihad Aviation Group



regular basis with main stakeholders, not only to fix issues but to make sure it is investing in the right tools and product features.

As well as the technical issues of how to run complex multiple supply chains, Etihad and indeed the industry is aware whilst a bright future is already happening and looks like being sustainable for at least a couple of years, there are some issues it is going to have to deal with.

Within the industry these, according to IATA's Global Head of Cargo, Brendan Sullivan are reshoring, new technologies such as robotics, predictive AI of which there is "significantly more use," drones, interactive cargo and digital multimodal interoperability.

Beyond that, the other challenge is the need to keep borders open and the thorny issue of capacity "or the lack thereof" as Asok Kumar, Executive Vice President, Global Head of Airfreight at DB Schenker put it.

Kumar's argument is all available freighters and a good many preighters are already there, working hard and not likely to be joined by any new planes that soon. "It takes time," he said.

These new planes are unlikely to join the industry in significant numbers until the end of next year maybe not even 2024 meaning an ongoing tight capacity.

Against this, demand is strong and likely to remain so with e-commerce booming, ocean-side disruptions "sapping capacity," as he put it and the pandemic itself creating new sources of demand. It began with the need to move PPE and it is now about the need to get test kits to places fast.

His projection is capacity growth of 3-4% against volume growth of 5-6% with things not easing until the tail end of 2023 maybe even 2024.



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nder the impact of the pandemic, communication in Crane Worldwide Logistics went digital. MS Teams was a critical tool to keep everyone connected and give them the feeling that they were not skipping a beat, recalls Megan Soltura, Vice President of Global Human Resources.

Technology investment did not stop at communication software, as shippers and consignees were screaming for supply chain visibility and solutions to move their traffic. "Doing business as usual is not accepted any more. Customers demand automation, shipment transparency," observes Brandon Fried, Executive Director of the US Airforwarders Association.

This has opened new doors. The accelerating flow of data between supply chain partners and the deployment of new capabilities and digital formats enables companies to solve problems they did not know existed or how to deal with them, notes Henk Mulder, Head

The past two years have accelerated change, such as the shift to digitisation and process automation. This calls for new skill sets and approaches, writes **Ian Putzger**.

of Digital Cargo at IATA.

This also has ramifications for the people who are wielding these tools, he adds. A broader skillset is required that harnesses understanding logistics as well as data management. Training environments have begun to include digital business as well as traditional business elements in their programmes, notes Mulder.

"It definitely helps to have skills in data management," says Soltura.

Some observers describe the new ideal recruit as a cross between a logistics specialist and a data scientist. "That's been coming for a long time. In the past it wasn't so widespread. Now you need somebody who is at least tech-savvy, at least able to use the data," comments

Helmut Berchtold, President & CEO of logistics recruitment specialist adi Consult.

Fried observes that roles which traditionally involved virtually no technology, like trucking, today require electronic management of appointments at cargo facilities. "There's more emphasis on data – understanding data, data manipulation," he says.

Charles Edwards, Vice President of consulting and training firm Strategic Aviation Solutions International (SASI), notes that the emerging skillsets follow the migration of beneficial cargo owners as they embarked on the Industry 4.0 concept. Besides the use of emerging technologies, this also calls for a broader grasp of supply chains. "We need people trained with a helicopter view of end-to-end supply chains," he says.

Jens Tubbesing, CEO of GSSA Airline Network Services, is leaning towards hiring candidates who know technology. Some people don't like technology and are not familiar with things like Zoom, he says. "It's difficult to change that. I can teach people airfreight," he adds.

Edwards sees benefits in recruiting people from other industries, as they can bring in a new perspective. SASI's training courses teach participants to look at everything from the outside.

This is not the only gap in most training programmes that SASI tries to plug. "The industry is not training people how to be a member of a project team or how to lead a project team," he says.

In today's hyper-tight employment market, it is very tough to find qualified candidates, reports Berchtold. This has shifted the rules of the game. "You're not hiring for skills any more, you're hiring for attitude. Skills can be taught," he says.

Crane, which largely develops talent in-house rather than hire externally for management positions, is looking for the right mix of recruits with the right fundamental skills whose attitude matches the company's culture. Knowledge of technology is an asset, but it can be taught, remarks Soltura.

Younger recruits tend to be at ease with technology, notes Tubbesing. "It's their lifestyle. That's how they do things. We use it as a tool," he says.

He adds that the work environment has to adapt somewhat to their ways of doing things in order to attract and retain young talent. Mulder remarks that often it is not that employees lack the digital skillsets but rather that they are frustrated with not being able to utilise them more because their environment has been slow to transform itself. Companies are not going to throw away their legacy investment, so they still have to work with paper.

Firms that have ventured deeper into digitisation and the use of artificial intelligence are faced with another problem. They see new roles emerging that have to be defined and fitted into the corporate structure. At the same time, these structures themselves are in flux, as the experience of the pandemic and the disruptions it brought on operations not only exposed vulnerabilities in supply chains but also the inflexibility of siloed organisations. Business consulting firms have been preaching to C-suites to break up silos to allow for unfettered flow of information across companies.

Some industries are further ahead in this transformation than the logistics sector.

Whereas beneficial cargo owners (BCOs) embarked on Industry 4.0 principles, transport and logistics continued to be siloed, observes Edwards.

"Break down the silos – internally and externally. You've got to share information. That's what BCOs are doing and expect you to do," he says.

This transformation aims at more than accommodating talent that can harness new technologies and bring in new efficiencies; it is about transforming companies themselves to meet new requirements in the market. Edwards argues that the forwarding industry needs a new business model. With a growing palette of choices from digital platforms and integrated logistics providers like Maersk (and, increasingly, Amazon), BCOs are questioning the benefit of using forwarders, he says. If they can book their shipment on one of these providers and get a fast transit time, why use a forwarder, who has to consolidate traffic to make margins work, which means longer transits, asks Edwards.

Forwarders have to change and embrace digitisation, he states. "The smart forwarders get it, but the majority are so scared of sharing information. They're going to get run over by the train," he says.

Stan Wraight, President & CEO of SASI, sees the airlines in a similar predicament, at risk of losing the higher yielding traffic and ending up as commoditised carriers of low-margin cargo. "If you think like an airline, you're doomed. You need to think logistics. It's what you do in logistics that makes the difference, and that's a different skillset," he says.



The smart forwarders get it, but the majority are so scared of sharing information ??

Charles Edwards,

an airline, you're doomed. You need to think logistics







Lit definitely helps to have skills in data management 77

Megan Soltura, Crane Worldwide Logistics

Louing business as usual is not accepted anymore

Brandon Fried, Airforwarders Association





It's their [the young's] lifestyle.
That's how they do things

Jens Tubbesing, Airline Network Services



After more than 30 years in engineering, **Phil Wardlaw** took up the opportunity of leading Virgin Atlantic Cargo as its Vice President and Managing Director, a move he has not regretted.

he last two years have been incredible times for the air cargo industry, and when he was approached with the chance to lead Virgin Atlantic Cargo, Phil Wardlaw could not say no. Taking up the role at the start of the year, Wardlaw is delighted to have made the move, commenting that earlier in the day when he spoke to Air Logistics International, he had told someone it was one of the best career moves he had ever made.

"Over and above the general interest in cargo and how fascinating it is in itself; I've joined a fantastic team. The cargo team have demonstrated themselves to be fantastic even within a fantastic group of teams within Virgin Atlantic," he says.

The cargo department spent two years achieving record revenues, hitting £448m in 2021, up 40% on 2020 and 200% compared to 2019. Following these results, Wardlaw expected to be managing a downward trend, but this has not happened; Virgin Atlantic Cargo posted its best Q1 and March results ever.

Wardlaw says, "The opposite of what I expected to happen is happening because of the team and the market conditions we were expecting have not yet materialised, predominantly because the global supply chain is not back to normal, so we see these exceptional revenues being achieved."

Running an international business means challenges are never-ending, with lockdowns in China and Hong Kong, and the fallout of the war in Ukraine. The commercial and operations teams have been working hard to manage the situation, and the latest challenges are keeping them busy. Aircraft and crews are being fully utilised, and new routes have been opened such as to Austin, and operations to Pakistan that started during the pandemic have continued.

Where it can, Virgin Atlantic Cargo has been helping the people of Ukraine with humanitarian cargo and passenger flights. The Far East is still challenging with passenger flights to Hong Kong not expected to restart until September. Longer flight times due to the closure of Russian airspace is tying up resources but the situation is being reviewed and the plan is to resume services to Hong Kong and Shanghai when possible.

The world is opening up again and passenger demand is exceeding all expectations, which is putting belly capacity back into the market but, due to the state of global supply chains, demand for air cargo is still high in relative terms. Sanctions against Russia due to the war in Ukraine means considerable freighter capacity is out of the market, meaning disruption will not be going away any time soon.

Ever-changing situation

Following a record-breaking Q1, Virgin Atlantic Cargo is about 30% ahead of plan but Wardlaw admits this included services to the Far East and cargo-only flights. Whether these record-breaking results will continue remains to be seen but Wardlaw has high hopes for the year.

"Even if that's not the case, we will still see some relatively healthy revenue figures come year-end," he says.

Cargo-only operations have

ended but a few more flights went into Brussels in May using Virgin Atlantic Cargo's own aircraft, utilising the aircraft and crew before peak flying resumed for the summer. An exciting new development has come about, with Virgin Atlantic Cargo operating wet-lease Airbus A321F flights starting at the end of May. This means that, for the first time in its history, Virgin Atlantic Cargo is flying its own full-freighter operation.

Wardlaw explains, "What we have seen is heightened opportunities for European cargo operations, something that we had never done before but as the market conditions changed, we see a real opportunity using our own aircraft in the first instance. It's really opened up some routes and markets that had never been there before."

Even with passenger services returning, this cargo opportunity remained, so the team spent time finding the right type of aircraft that was available, and the A321F suited Virgin Atlantic Cargo's purposes. The first flights have now operated between London Heathrow and Brussels and the plan is to extend the services further afield, but these are yet to be confirmed.

Using up slots was another consideration; Wardlaw explains, "We weren't fully utilising our slots at Heathrow, so it gave us an opportunity to use some of those up with cargo flights. We have an exception this year to do that through the summer period, so it was a two-fold opportunity for short-term revenue, continue that market we had started during the pandemic but also to secure that slot usage at Heathrow."

Loyal partners

Working together strengthens business, and Virgin Atlantic Cargo's partnerships with dnata and Delta Cargo have only got stronger during the pandemic. As an experienced cargo and ground handling provider, using dnata services at Heathrow makes sense. Discussions are ongoing to decide when Virgin Atlantic Cargo will start using Phase 2 of dnata City East as an import facility, a move that is likely to happen later this year.

Wardlaw says, "dnata are a world-renowned cargo and ground handling operator. They are experts in this field; we have worked with them for a number of years and we find them to be an excellent partner, very flexible, willing to work with our requirements as a business so it is a perfect fit with their expertise in running large facilities then using our expertise to utilise those resources to our best advantage."

Delta Air Lines is a large shareholder in Virgin Atlantic and the joint venture has gone from strength to strength. The two companies are co-located in several buildings, sharing offices, and they have regular meetings to discuss business.

Support goes right to the top, Wardlaw says, "At an airline level, the support we have from them and the personal support of CEO Ed Bastian on a number of occasions, providing guidance and insight has been exceptional. They were a key component of our survival."

New aircraft

Fleet plans are exciting for Virgin Atlantic Cargo with the arrival of Airbus A330-900neos, with three deliveries this year



The cargo team have demonstrated themselves to be fantastic ??

Phil Wardlaw

and nine by 2025. Airbus A350s continue to arrive and Virgin Atlantic Cargo will have 12 by 2025, meaning the fleet will have grown by 11 aircraft, bringing the total to 46.

Wardlaw says, "This is a sizeable growth strategy of which cargo will be a fantastic part."

In Q1 next year, Virgin Atlantic Cargo will implement the latest version of Accelya's Voyager platform, giving it the ability to go online and offer online bookings. Virgin Atlantic Cargo will look at digital marketplaces and how to develop its digital services.

These investments give Wardlaw confidence about Virgin Atlantic Cargo's future. He says, "It shows the faith that our board has in cargo and the outlook we have as an airline. We have made it through the pandemic and now we can look towards growth and sustained profitability from next year onwards."





Pre-pandemic, Bournemouth Airport handled very little cargo but the pandemic gave it the opportunity to transform its business and provide the UK with much-needed capacity.

argo was always part of the plan at Bournemouth Airport but it took the pandemic and the need for capacity to transform the business. Two years later, Bournemouth has exceeded the 20,000 tonne a year mark and has big plans for the future.

When Managing Director, Steve Gill, joined the airport three and a half years ago, cargo was part of the strategic plan but Covid was what swung the plan into action. Passenger traffic dried up due to Covid restrictions but with partners at the airport, this was the time to embrace change.

Commenting, "Sometimes out of adversity comes opportunity", the airport partnered with European Cargo, which had just acquired a fleet of Airbus A340s, to ramp up cargo operations. Cargo was always





The word's out on the street that we can do things the right way

Bob Matharoo



moving a mix of traditional cargo and e-commerce.

Bournemouth Airport has created the brand, Cargo First, to raise awareness and change behaviour. Gill says, "A lot of operators don't think further than the key cargo hubs. We have an abundance of capacity, flexibility and efficiency, and we want to capitalise on all of those opportunities that we can bring into the market to offer a freighter-friendly service and do something a little different."

The brand name is self-explanatory and behind the scenes, the team has been built up with appointments including Bob Matharoo as Head of Cargo to spearhead development. There are more people behind that to help set up facilities and the airport is investing millions of pounds to create additional cargo apron handling areas.

"Cargo First brings all of that together to create the platform where we can be more interactive with our audience and try to attract and change the behaviour of what traditionally has been going into the larger hubs for many years," says Gill.

London connection

Not wishing to knock other airports, Gill says the lack of

congestion combined with its availability of capacity, flexibility and efficiency makes Bournemouth an attractive alternative to the London hubs. He says aircraft can be unloaded, and cargo on the road and at collection sheds at Heathrow Airport quicker than coming through a congested London hub.

Gill says, "Even though we are not a London airport, we can offer a service into London more effectively than some of those London hubs."

With over 25 years of experience in the air cargo sector, much in the Heathrow area, Matharoo joined Bournemouth last year and has been putting his experience and knowledge to good use to oversee development.

Highlighting the speed of service at Bournemouth, something that is particularly important in the e-commerce sector, Matharoo says, "We have the facilities and infrastructure in place. We are very proud of what we do; the aircraft comes to the back of the shed, we offload, where an aircraft at a congested Heathrow can take five hours to get to the backdoor of a warehouse, at Bournemouth, we can be on the road within five hours and delivering directly to the customers."

part of the plan but development would not have happened nearly as quickly without the pandemic. The A340s have operated as P2Cs and the long-term plan is to reconfigure them into conventional freighters.

"We invested pretty quickly in a team, facilities and capabilities to offer a cargo service and long story short, entered the market on the back of movement of PPE coming in from China. Between then and now, we have developed commercial activity to the point that at the end of the financial year that has just finished, we have moved 21,000 tonnes," says Gill.

Of the 21,000 tonnes, about half is commercial traffic and the other half consisted of PPE and helping the UK government. For commercial traffic, there were between two and five flights a week to New York's John F. Kennedy airport



■ A lot of potential customers are very interested in talking to us ? ?

Steve Gill

Bournemouth has a reception point at Heathrow and can also provide trucking throughout the UK and Ireland. Trucking to Europe is also available with consolidation services.

Being a less well-known airport, it has been a challenge to get people to use Bournemouth Airport, but the JFK flights have been successful, as have charter flights for consolidators flying e-commerce from China.

"I think we have proven to clients that we can offer a speed to market service and the word's out on the street that we can do things in the right way so we are hoping to grow the business," says Matharoo.

Feedback from the market has been very positive, helped by Cargo First's unique One Team approach to cargo handling. Gill says, "You always get a little bit of hesitancy, about their ability, but I think we've won over most of the clients we look after and that's bringing about a lot more interest. We've got several discussions and very warm leads, a lot of potential customers are very interested in talking to us."

Room to grow

Having grown so rapidly, the target is now the UK top five. Owning the airport and adjacent business park means potential to grow with further investments. With the business park on the north side of the airport, there is space for one million square feet of first and second line sheds.



Now that the worse of the pandemic is over, PPE shipments have reduced significantly, so Bournemouth is transitioning to more traditional cargo and Gill wants to be moving 50,000 tonnes in five years' time.

Gill says, "Our business plan suggests that we will get to that point by 2030 but I'm more ambitious, I would like to be at that level in five years. Covid changes a lot of things including the buying habits of people in the UK, it's gone online and people are ordering goods from a variety of online platforms, everybody wants things by tomorrow. E-commerce has boomed and will continue to grow, and we, along with other service providers, want to be able to provide that level of service."

Having European Cargo based at the airport is another advantage. European Cargo has six aircraft it plans to reconfigure into full freighters, and by the end of this financial year, the fleet is expected to grow to ten.

"They are as ambitious as we are, and having a based airline is a bonus, and having a based airline who wants to grow in the same world as we

do is an even bigger benefit. We work in partnership with them on a multitude of opportunities," says Gill.

For Matharoo, the year since he joined has been a "whirlwind" that has gone so quickly, describing the cargo concept in Bournemouth as new and fresh. Everything being under the airport's control makes operations much simpler and more efficient.

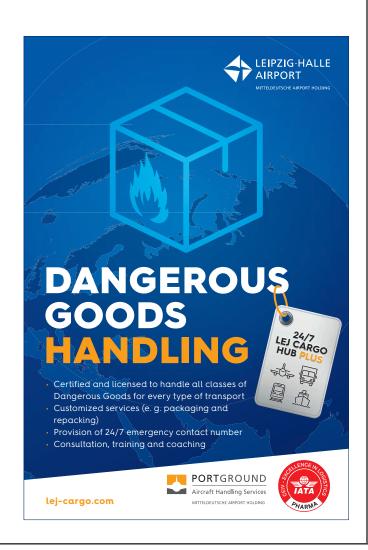
"A key selling point for us is that there is no other regional airport in the UK with a similar One Team approach to cargo operations. A lot of complications that I've experienced from my time in the business is working with several service providers and communication breakdowns delay the business," he says.

For e-commerce consolidators, Bournemouth has explained its processes, SLAs and timeframes, providing them transparency and giving them confidence in the airport. He also has nothing but praise for the team, working day and night to provide a top-quality service.

The goal is to expose Bournemouth's Cargo First brand, and Matharoo has attended several events to spread the word and explain what the airport does and how it does it.

Matharoo says, "It has raised a few eyebrows; since the closure of Manston Airport, we are the only airport in the south with flexible night slots. The south is a booming market for industries such as pharma, automotive and marine, and it's continuously growing with more and more e-commerce hubs opening up."



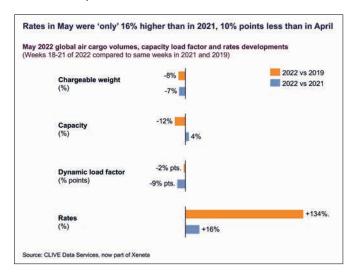






TOUGH TIMES AHEAD

A combination of Covid, the war in Ukraine, and inflation hitting rates not seen in decades means air cargo is heading into a difficult period.



Covid in Asia and the Russia-Ukraine war, with Asia registering the largest fall, reports the International Air Transport Association (IATA).

The key reasons for the fall were the war in Ukraine removing cargo capacity to serve Europe, and the zero-Covid policy in China causing flight cancellations because of labour shortages. New export orders are shrinking in all markets except the US, and global goods trade continues to decline with China's economy growing slowly because of Covid-19 related lockdowns.

The lockdowns have brought Shanghai, the world's largest port, to a standstill, and supply chain disruptions due to the Ukraine-Russia conflict are adding to the downward pressure on trade. Lockdowns in China are being lifted so congestion should start to clear soon.

Willie Walsh, Director General of IATA, says, "The combination of the war in Ukraine and Covid-19 lockdowns in China have pushed up energy costs, intensified supply chain disruptions, and fed inflation. The operating environment is challenging for all businesses, including air cargo."

In Asia-Pacific, volumes were down 15.8% with airlines being impacted by lower trade and manufacturing due to Omicron-related lockdowns in China.

North America was down 6.6% compared to April 2021 because the Asia-North America market declined significantly while Europe-North America remained strong.

Europe was down 14.4% in total and by 26.4% month-on-month

within Europe due to the war in Ukraine. Labour shortages and lower manufacturing volumes in Asia also affected volumes.

The Middle East fell 11.9% with the significant benefit of traffic being redirected to avoid flying over Russia failing to materialise, likely due to persisting supply chain issues in Asia.

Latin America was the bright spot with 40.9% growth in April with airlines introducing new services and adding capacity.

Following growth of 3.1% in March, Africa was down 6.3% in April.

Clouds on the horizon

Figures from industry analysts CLIVE Data Services show that May was also a difficult month and the challenges are showing no signs of going away.

According to CLIVE's figures, air cargo was down 8% in May compared to May 2019.
Capacity was 4% higher than May 2021 but 12% lower than May 2019. Lower demand and increased capacity caused the dynamic load factor to fall nine percentage points compared to May 2021, pushing it down to 60%.

Rates are still well above pre-pandemic levels but are coming down. In May, rates were 16% above 2021 and 134% above 2019, but this was less than in April when it was 26% above 2021 and 145% above 2019.

In May, performance was affected by the war in Ukraine, the cost of living crisis meaning consumers have less money to spend, stock market declines, higher interest rates, Covid-related restrictions in China,

and warnings of a global recession. Founder of CLIVE, Niall van de Wouw, who is also Chief Airfreight Officer of Xeneta following its takeover of CLIVE in January this year, says that the May figures show how susceptible air cargo is to macroeconomic events.

North Atlantic data may provide a test case for the direction of other markets once they return to pre-Covid levels, with dynamic load factors falling from 82% in March to 64% in May. May was 22 percentage points below May 2021.

Van de Wouw says, "So, this is not just seasonality, it is the capacity coming back into this market. In March it was 44% higher than in 2021 and in May around 82%. This is a big swing, and it emphasises the jump in the cubic capacity on these routes."

Rates are falling as passenger flights return, and in the last week of May, rates from Europe to North America showed negative year-on-year growth for the first time in two years.

Van de Wouw says, "The Atlantic market is interesting to follow to see how rates shift in the coming months, as it might be a bellwether on how other markets will develop when the capacity of passenger flights returns to it former level and beyond."

The summer market is expected to be slow followed by hope for growth in Q3 but the market is not looking good right now.

"There are more clouds on the horizon than there were two months ago," adds van de Wouw.

Navigating turbulent times

fter the initial shock of Covid-19, the air cargo industry stayed strong and has posted impressive results but industry data shows that momentum has stopped and volumes are in decline.

CEO Sebastiaan Scholte was happy with Kales' results in 2021 and business is still good in 2022 with new contracts and helping existing clients grow. A new office was opened in Hong Kong last year and Kales is always looking for new opportunities.

Scholte says: "Obviously capacity has been restricted due to the lack of belly capacity last year, which has resulted in much higher yields. Agility is key in these turbulent times. We have been able to adapt quickly to market changes and offer the best solutions to our customers."

The outlook is unclear with Scholte commenting, "nobody has a magic crystal ball", but he predicts volumes will fall later this year as global economic growth slows. The issues that he highlights are capacity returning on the north Atlantic reducing yields and inflation not seen for decades caused by high energy prices, labour shortages, high shipping costs and supply chain disruption reducing disposal incomes. With fewer travel restrictions, consumers are likely to spend less on purchasing goods and more on travel and leisure, further reducing demand to transport products.

Scholte adds: "Therefore I

Global issues are impacting air cargo, meaning the coming months are likely to be challenging, says **Sebastiaan** Scholte, CEO of Kales Group

think we inevitably will see a slowdown of economic growth and subsequent volumes later this year."

The pandemic has changed the role of the GSSA, says Scholte, explaining that airlines are not the only ones offering capacity now. He says: "This has gradually changed, now forwarders and even larger shippers, maritime companies and e-commerce companies are offering capacity."

Airlines are increasingly looking at the complete unburdening 77 Sebastiaan Scholte

Scholte adds: "We believe that we as a GSSA are the ideal neutral partner to commercialise any idle capacity be it on a free sales or block space or charter arrangement. Since we have a very strong financial basis, we can take longer term commitments to guarantee the space.'

Recent high yields and demand returning to prepandemic levels mean revenues could justify insourcing sales activities but Scholte says this has not happened. He explains: "On the contrary, more is being outsourced by airlines, and what we notice is that airlines are increasingly looking at the complete unburdening, where we as Kales also take over capacity and yield management and operational flight supervision."

The roll out the GSSA is changing to what Scholte calls the "integrated GSSA", adapting and including more services on behalf of customers. Scholte says this means GSSAs are taking more financial positions and acting more like an airline.

He says: "The outlook for Kales looks very promising. We have recently been awarded a big Total Cargo Management contract and we have just signed a global agreement with Cainiao. We will expand more in the 26 countries where we are now present but the goal is definitely to expand geographically as well." 🕮

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ith global events, air cargo is being affected by one issue after another, requiring charter companies to think quickly to serve their customers. Chief Commercial Officer, Neil Dursley, says 2022 started with Q1 exceeding the record results posted in 2021 but demand for air cargo has softened.

The outlook is positive; Chapman Freeborn has longterm contracts from Asia to Europe, between Europe and the US, and between Europe and Africa.

Dursley says, "The outlook, if it all comes together as we assume it will and production levels in Asia increase again in Q3 and Q4, we could see an unprecedented peak season in Q4."

The pandemic and now the war in Ukraine means fewer aircraft are available but being part of Avia Solutions Group means Chapman Freeborn has access to a variety of aircraft.

"We've been able to source capacity where there was none, as well as utilising many of our longstanding third party airline partners," says Dursley.

Antonov Design Bureau was Chapman Freeborn's largest client in 2021 but the war in Ukraine means most AN-124s are unavailable for the foreseeable future.

"With the grounding of the Russian fleet, this has created a significant impact on both capacity and the movement of oversized equipment on a global scale. We are pleased, however, to confirm the utilisation once again of some Antonov AN-124s in support of governmental, humanitarian, and commercial movements," he says.

The pandemic was an incredible time for aviation.

Aircraft were utilised in new ways with cargo-in-cabin flights



Following a record-breaking year in 2020, Chapman Freeborn did even better in 2021, which proved to be the strongest year in its 48 year history.

and Zero LOPA services where the seats were removed. These are ending now that passenger services are returning but they were vital during the pandemic.

By supporting supply chains, Dursley says, "This has been a godsend, not only for supply chains but also for many airlines – it has provided a lifeline."

Moving pandemic-related cargo was a success story for air cargo, firstly with PPE, then Covid test kits, followed by vaccines. Strong demand combined with a lack of capacity pushed airfreight rates to unprecedented levels.

He says, "This has since reduced, however, other geopolitical impacts have created additional problems with fuel prices surging on a global scale, with inflationary pressure on governments around the globe."

Being part of Avia Solutions Group and diversifying its services has put Chapman Freeborn in a strong position, unique products and services to clients such as freighter capacity using Magma Aviation's B747-400Fs. Arcus Air Logistics has been acquired, servicing the automotive market, and the group has expanded its ACMI, onboard courier, and GSSA-related activities.

Dursley adds, "We have also seen that the world has finally appreciated the need of both the air freight and the wider charter market due to the pandemic, with many airlines as well as ocean carriers acquiring either freight forwarders or aircraft which will be converted into freighters in the coming years to ensure supply chain continuity."



We have been able to source capacity where there was none



he pandemic was the most challenging time in aviation's history, a phrase that we have heard enough times, especially now that the worst is over. It forced the industry to re-think processes but for those who embraced change, they have come out stronger.

Not calling it a restructuring but a recalibration of its trajectory, Shoukroun says, "We have streamlined our business flow and rethought our dynamics through the interaction between our subsidiaries and the revision of our business model to meet the needs of our customers. It is successful, there is a real change that we are quite happy with."

Challenge Group is made up of three airlines, CAL Cargo Airlines, Challenge Airlines BE, Challenge Airlines MT and its commercial arm, Challenge Air Cargo. The group also contains ground handling company Challenge Handling, formerly Liege Air Cargo Handling Services (LACHS), road feeder service Challenge Logistics, aircraft and parts leasing division Challenge Aviation, and maintenance provider Challenge Technic.

With its motto "Challenge Accepted", turning challenges into opportunities is something Challenge Group relishes, says CEO **Yossi Shoukroun.**

Living up to its motto
"Challenge Accepted",
Shoukroun says, "We quickly
adapted to the new global
approach to business by
adopting a multi-modal
approach combining
different channels, which
differentiated us from the
way our industry was reacting
to the crisis."

Growth was underway pre-pandemic, the group has tripled its capacity in the past four years by increasing its fleet, AOCs, destinations and ancillary services, and purchasing capacity from third party providers. By expanding its fleet, Challenge Group will continue on this path.

The fleet will grow with 767-300 and 777-300 converted freighters, four of each over the next two years to complement its fleet of 747-400s. As twin-engine aircraft, they are more efficient and less polluting than older aircraft, making operations more sustainable.

Shoukroun says, "They will be deployed in the short to medium term to meet the demand of business partners willing to buy more than just air cargo capacity from us and with a specific activity on specific trade lanes."

Helping the air cargo industry is important to Challenge Group, and is a major reason for joining The International Air Cargo Association. With over 40 years of experience in the airline industry and 25 years in cargo handling, Challenge Group has much to offer the industry, working with other stakeholders to make a cleaner, more efficient and collaborative air cargo industry.

Collaboration will be vital for the future, and Shoukroun says the group is inspired by the concept of the cooperative shared economy. It has made this the pillar of its new business model.

He says, "The upheavals the world is facing require us, the global industries, to join forces and face the lack of resources and bottlenecks. We therefore call on the industry to join us in this ambitious spirit: to leverage our expertise in order to co-construct and grow mutually, paving the way for the air cargo industry of tomorrow."



We quickly adapted to the new global approach to business

Yossi Shoukroun

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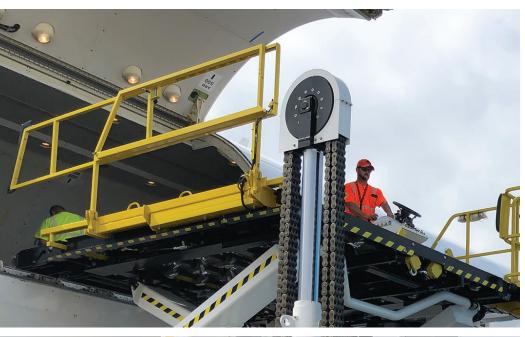
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