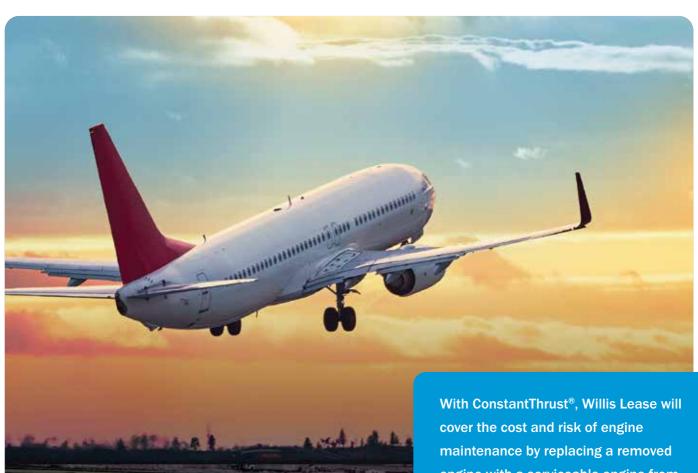




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Airline strengths and threats in 2024

Asia-Pacific airlines posted a 126.1% rise in full-year international traffic in 2023 compared with 2022, the strongest year-on-year increase among airline regions worldwide, the International Air Transport Association (IATA) reported earlier this month. The trajectory, IATA said, tees up airlines for a return to normal growth patterns in 2024. It is a view shared by the Association of Asia Pacific Airlines (AAPA).

The AAPA said the region's carriers recorded a 161.0% increase in international passengers carried last year, to 278.5 million air travellers. Passengers transported averaged 72% of pre-pandemic 2019 traffic, up 28% over 2022. The Asia-Pacific still lags all regions worldwide in reaching full recovery, but it is well on the path to achieving normality this year, it said.

Nevertheless, as our report card on the region's recovery in clearly shows, the road ahead could be rocky. A travel hungry public flocked back to the skies in the wake of the pandemic, but there is no guarantee the surge will last. Economic woes, both global and regional, especially the rising cost of living could dampen demand.

Additionally, geopolitical unrest in the Middle East, the Russia-Ukraine war and tense relationships between Western nations and China add up to a troubled world. As well, airlines continue to be dogged by supply chain issues and delayed aircraft deliveries, problems expected to persist into 2025.

Some airlines are doing well financially, but for most carriers, decent profitability is elusive, resulting in wafer thin margins unacceptable in any other industry. Air cargo markets are improving, but they are weighed down by multiple headwinds, including inflation, a strong U.S. dollar and government policies dampening trade activity and household spending power.

IATA director general, Willie Walsh, said restoration of connectivity is powering the global economy as people travel to do business, further their education, take hard earned vacations and much more.

"But to maximize the benefits of air travel in the post-pandemic world, governments need to take a strategic approach. Completing the recovery must not be an excuse for governments to forget the critical role of aviation in increasing the prosperity and well-being of people and businesses the world over."

Walsh is right. However, for airlines, including Indo-Asia-Pacific carriers, it will be yet another year of many unknowns.

TOM BALLANTYNE

Associate editor and chief correspondent Orient Aviation Media Group

A trusted source of Asia-Pacific commercial aviation news and analysis

ORIENT AVIATION











China to top global air passenger demand, toppling North America's decades of dominance

By 2042, four of the world's six largest air passenger markets will be in the Indo-Asia-Pacific, forecasts the Airport Council International annual World Airport Traffic Forecast (WATF) China will top the table followed by India (3), Indonesia (4) and Japan (5). Two decades from now, the U.S. will be global runner up after losing out to China. Also, Spain will slip from fourth to fifth position in the top 20 table, WATF said.

WATF analyzed data from 141 nations, introducing 29

countries to its information "to provide granular forecasts for passengers, air cargo volumes (in metric tonnes) and aircraft movements".

ACI World Director General Luis Felipe de Oliveira said: "The projections indicate global passenger traffic will reach 9.7 billion by year-end 2024, surpassing pre-pandemic levels, indicating a doubling in air traffic by 2042 and a 2.5-fold increase over 2023 by 2052. Longer term, the global passenger market dynamic is predicted to transition



from advanced economies to emerging and developing nations as they experience significant urbanization and population increases, often combined with rapid economic growth favorably impacting their disposable income and willingness to travel. Investing responsibly in new infrastructure remains critical to ensuring we can sustainably meet capacity growth to maximize the social and economic benefits of aviation," the director general said.

• By the end of 2024, global passenger traffic is expected to reach 9.7 billion, surpassing 2019 for the first time since the

outbreak of the pandemic.

- Global passenger traffic is projected to grow at a compound annual growth rate (CAGR) of 4.3% from 2023 to 2042 and 3.6% from 2042 to 2052.
- Global passenger numbers are forecast to approximately double from 2024 to 2042 and to be 2.5 times higher in 2052.
- By December 2024, international passenger traffic is forecast to approach the 4 billion mark and domestic passenger traffic to hit 5.7 billion.
- By 2042, international passenger traffic is predicted to reach 8.7 billion and domestic passenger traffic to be 10.6 billion.

Between 2023 and 2042, advanced economies are expected to have a CAGR of 3.2% for total passenger traffic and emerging and developing economies to achieve a more robust CAGR of 5.4%.

Sizeable population bases and rapid rises in incomes in emerging markets are the main economic engines driving air transportation demand. WATF said.

Top 20 markets for passenger traffic

Rank	2023	2042	2052
1	United States	China	China
2	China	United States	United States
3	India	India	India
4	Spain	Indonesia	Indonesia
5	United Kingdom	Spain	Spain
6	Japan	Japan	Turkey
7	Turkey	Turkey	Japan
8	Brazil	United Kingdom	United Kingdom
9	Italy	Russian Federation	Thailand
10	Germany	Thaifand	Vietnam
11	Mexico	Vietnam	Mexico
12	France	Mexico	Russian Federation
13	Indonesia	Brazil	Brazil
14	Russian Federation	Italy	Philippines
15	Cenada	Germany	Italy
16	Australia	Korea	Korea
17	Korea	France	Australia
18	United Arab Emirates	Australia	Germany
19	Thailand	Philippines	France
20	Vietnam	United Arab Emirates	United Arab Emirates

"Right time to pass on the baton" says Virgin Australia CEO

Since September last year, Australia's three largest airlines were run by women: Qantas Group's Vanessa Hudson, Jetstar's Stephanie Tully and Virgin Australia's Jayne Hrdlicka, coincidentally a former Jetstar CEO.

Earlier this month, Hrdlicka, the longest serving member of the high achieving triumvirate, announced she was stepping down, but did not name a date for her departure.

The announcement caught the industry off guard with VA quickly announcing it had commenced a global search

for her successor. It had been assumed Hrdlicka would stav the distance at VA until the Bain Capital-owned airline completed its IPO. Hrdlicka was a senior Bain consultant for several years before she joined the airline industry, a decision that culminated in her appointment as Jetstar CEO after Alan Joyce moved from the LCC to the top job at Qantas Group. After several years heading Jetstar, Hrdlicka took a break from the industry to run A2 Milk, headquartered in New Zealand.

When VA went into voluntary administration in the

first year of the pandemic, Bain Capital made a successful A\$3.5 billion bid for the airline and Hrdlicka, originally earmarked as a board director of the airline, was appointed CEO.

"I have decided the time is right to signal a CEO transition for this great airline and pass on the baton," she said on February 20. Elsewhere in Australia's airline industry this month, Qantas Group announced its new chair is John Mullen. He will take up his Qantas role, initially as non-executive director and chair-elect, from July 1, succeeding Richard Goyder.



Goyder previously has said he will step down as chairman before the company's AGM in October. ■

Governments called to arms to support "green" fuel production

Never one to mince words, the International Air Transport Association (IATA) director general, Willie Walsh, speaking at a recent Singapore summit, said airlines worldwide are doing all they can to reduce emissions but they cannot do it alone.

"I believe the industry has shown strong demand for Sustainable Aviation Fuel (SAF)," he told delegates.

"Every single drop of SAF produced has been used by the industry," he said. "In 2020, 2021, 2022, at the height of the pandemic, the industry continued to invest in this expensive product. And I have absolutely no doubt we will continue to do.

"What we need to see as an industry is greater production. We need to see governments



providing incentives for production to significantly increase.

"And with an increase in production, I guarantee you, airlines will use all SAF produced despite the cost impact it will represent.

"Working together, with the right policy frameworks in place from governments, the industry has a very credible path to achieving all of the necessary measures to ensure we are at net zero in 2050."

To illustrate his conviction that "airlines see net zero emissions by 2050 as their most important issue in the short to medium term", Walsh said: "if you look at the CO_2 produced by the industry in 2000 and compare it with 2019 just before the outbreak of the pandemic, our CO_2 footprint increased by 54%. In that same period – from 2000 to 2019 - passenger traffic grew 175%.

"There is a complete disconnect between passenger growth and our CO₂ growth. So, we can be confident, with the measures we have put in place and advances in technology, there will be opportunities for us to address this critical issue."

But "whatever way you look

at it, there is a cost associated with transitionally to net zero", Walsh said. "Ultimately, that cost will have to be reflected in the ticket prices we are going to charge customers, which will have a dampening effect on the growth the industry sees growing forward," he said.

IATA forecasts annual global airline growth of 3.3% for the next two decades, "significantly lower than 2010-2019", and reflecting issues the industry now faces. "I am pleased to say the Asia-Pacific is likely to lead the market with expansion of around 4.5% per annum in the next 20 years," Walsh said. In 2023, Asia-Pacific international traffic within the region had collapsed to 9.7%. At press time, the region was logging an international market share of 32% compared with 35% in 2019. ■



Gutsy gambit

Even as his own airline struggles to stay afloat, SpiceJet's chairman and managing director has made a daring bid for bankrupt Go First. Anjuli Bhargava reports from India.

s India's aviation sector clawed its way out of the doom and gloom of 2020 and 2021 to better times in the last two years, the country's airlines have coped differently to the pandemic.

As had been predicted by most pundits, the smaller players - Go First, SpiceJet and Air Asia India - struggled. After failing to raise funds through an IPO, Go First entered bankruptcy in 2023.

Another faltering carrier, AirAsia India, was absorbed into Air India Express after the Tata's bought the Air India group in October 2021.

As soon the pandemic hit, many argued it was touch and go for SpiceJet because it did not have the corporate backing of Vistara or Air India nor the strong cash position and balance sheet of IndiGo.

And, as was largely predicted, the airline had to whittle down in size and stature from its heydays of 2017-2018 when its fleet crossed 100 aircraft for the first time.

It's on time performance has taken a beating as has its safety record with many technical and safety glitches plaguing operations. Its market share dwindled and is now hovering in the 5% range, not far above Akasa, the youngest player in the game. Yet the airline's airplanes remain relatively full and load factors high. For a certain profile of Indian fliers, SpiceJet remains their go to airline. If not by choice by habit.

What remains a mystery many refer to it as an enigma – is how SpiceJet's chairman and managing director, Ajay Singh, has managed to keep the airline afloat, ostensibly with no cash, for at least three years. Rumors of political money and connections continue to be unproven but it could be argued there is no other explanation for its resilience.

Line Guarantee Scheme (ECLGS) funding from the government during the pandemic, but by November 30 last year the airline had 57 aircraft endorsed on its air operator's certificate, but 26 of them were grounded for one reason or another.

Singh then decided to seek fresh funds. On January 26, SpiceJet allotted shares and warrants worth Rs 744 crore (just below US\$100 million)

Go First owes banks around Rs 6.521 crore, of which Rs 1,300 has been drawn under the government's emergency credit line guarantee scheme (ECLGS). The airline's total debts are calculated to be, after adding up the claims of vendors and lessors. approximately Rs 11,463 crore.

If approved, media reports Singh and Pitti plan to re-start Go First with a minimum of 15 aircraft and are in talks with lessors. Before it was grounded, Go First had 54 aircraft. Twenty eight of them were grounded due to Pratt & Whitney engine issues and 26 were operational. Several lessors have filed court petitions to repossess their aircraft, so the duo must engage with the lessors to keep the airliners they need.

Singh argues that "apart from coveted slots at domestic



Moreover, Singh manages to stay in the eye of the storm as one of the most vocal of airline CEOs. He is constantly lobbying and representing the industry's views to the authorities and at any forum.

For at least the last two years, Singh has been claiming he will clean up his affairs. He has been in firefighting mode, but the spring cleaning he promised moved at snail pace in 2022 and most of 2023. During that time, SpiceJet steadily lost market share as it battled with its weakening financial position on several fronts. It managed to secure some Emergency Credit

on a preferential basis in a first tranche. A second tranche is expected in due course.

Armed with a slightly healthier balance sheet, Singh, known for his never say die spirit, has put in a joint bid with partner Nishant Pitti, to revive Go First with Rs 600 crore of funds, in their personal capacity. The duo plan to pay bankers by monetizing two land parcels Go First owns in Mumbai.

According to sources, Go First also has won an arbitration award of US\$300 million against engine OEM, Pratt & Whitney, which is yet to see the light of

and international airports, international traffic rights and an order for more than 100 Airbus neo planes, Go First is a trusted and valued brand among flyers".

Industry sources believe the only way for any of the smaller players to survive post the Air India sale and the airline industry's consolidation is by merging or joining forces in some manner

Based on that line of analysis, the Go First bid might be the last trick Singh has up his sleeve to keep his airline afloat. Whether he has bitten off more than he can chew will be revealed in due course |

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REGION'S RECOVERY REPORT CARD

Recovery at Asia-Pacific airlines still lags the rest of the world, but experts predict the region will catch up this year. Nevertheless, the report card on the state of the region's commercial airlines contains plenty of challenges for carriers, reports associate editor and chief correspondent, Tom Ballantyne.

aken at face value, the latest statistics for international operations of the region's airlines chart a spectacular rise. In 2023, international passenger traffic they carried grew solidly, by 161%, with passenger numbers averaging 72% of pre-pandemic 2019, up significantly from 28% in 2022. "Overall, 2023 was a good year for the region's carriers," declared Association of Asia Pacific Airlines (AAPA) director general, Subhas Menon.

"Passenger demand grew unabated while air cargo markets ended the year on a high note. Gradual restoration of flight frequencies and city pair connections in the course of the year provided more options for travelers, stimulating demand," he said.

"However, as operations were progressively restored, airlines faced capacity constraints in addition to increased cost pressures from volatile fuel prices, a strong US\$ and inflationary impacts on operations."

Despite these geopolitical concerns, this year promises to be another good one. Menon said. "International passenger traffic is poised to return to pre-pandemic numbers in the coming months, buoyed by returning tourism and resilient

expansion in the region's economies. Uncertainties remain, including potential erosion in business confidence and consumer sentiment," he said. "Against this background, the region's airlines remain vigilant to market influences while investing for future growth."

Amid this bounty of positive news, concerning trends remain. Even with the spurt of growth, the region's international air traffic was only 80.9% of the same period in 2019. In Europe, the recovery rate is at 100%. In North America, it has hit 110%. Additionally, in various parts of the Asia-Pacific, the recovery is erratic.

In the critical China market, international capacity is only 62.6% of 2019 numbers. Also, there has been a weaker rebound in Northeast Asia, now at 76% of pre-pandemic



levels. On the other hand, India, led by a resurgent Air India, has surpassed 2019 traffic and is growing fast. It is just as vital as China to other regional operators.

Mainland airline recovery will be a crucial factor for Asia-Pacific airlines, a 2024 Outlook report by analyst CAPA forecasts. "The recovery of the China market will be particularly closely watched in 2024. Even though many travel restrictions in this market were lifted in early 2023, demand and traffic did not surge back as quickly as many airlines expected. This led some airlines to dial back capacity allocated to China routes in anticipation of greater gains," it said. Pre-pandemic, China accounted for around 20% of Asia-Pacific's passenger traffic.

The International Air Transport Association (IATA) is bullish on an Asia-Pacific recovery but cautions its projections are "highly dependent on the continued strong recovery in the China market", with one downside risk being a poorer than expected China recovery, which will hurt demand, it said.

Credit rating agency, Morningstar DBRS, believes 2024 will build on recent momentum as international travel to the Mainland will likely benefit from the gradual restoration of the foreign airline capacity -because of flight capacity limitations - to serve international routes to China. "In addition, recent accommodative travel policies announced by China, such as the visa waiver that covers several countries in Europe and Malaysia that came into effect on December 1, 2023 and will expire on November 30 this year will likely boost demand for international travel," it said.

For Asia-Pacific airlines, the main theme last year was recovery of international markets, which happened overwhelmingly fast in some cases, but slower than expected in others, CAPA said. "Completing the international recovery will be a major focus in 2024 for

We can pretty much stop talking about the recovery. The recovery is kind of over. We are looking ahead and we are looking forward. But with rising costs and pressure on airfare levels the meagre margins are likely to continue

Subhas Menon AAPA director general most Asia-Pacific airlines. However, there is a raft of other factors that will shape airline planning in the New Year," it said

"These include industry consolidation, the growing importance of LCC subsidiaries, major aircraft orders and fleet availability headaches. And as always there are the broader macroeconomic and geopolitical trends that represent risk for the airline industry."

So, apart from some uncertainty about recovery in the Chinese market, what are the risks for airlines this year and beyond?

SUPPLY CHAIN ISSUES:

Airlines may be looking to ramp up capacity, but their efforts are being hampered by supply chain issues, including availability of spare parts. It is causing maintenance delays and impacting smooth and efficient fleet operations. Problems with engines - both the Pratt & Whitney Geared Turbofan (GTF) and the Rolls-Royce Trent – have plagued operators. Many Airbus A320neo family aircraft powered by the P&W GTF have to be grounded through 2024. Affected airlines in the region include Air New Zealand, All Nippon Airways, IndiGo, Cebu Pacific and Philippine Airlines. It results in fleet planning disruptions, the need to secure replacement capacity or even reduce flights. Supply chain constraints are expected to continue into 2025.

AIRCRAFT DELIVERIES:

Both big planemakers, Airbus and Boeing, have faced supply chain disruptions and production delays. As of late last year, they had massive backlogs of orders – a record 8,024 for Airbus and a near-record 5,783 for Boeing. Order a new plane today and you will have to wait till 2028 or 2029 for delivery unless you can secure the aircraft through a lessor.

There is another problem involving Boeing. Its reputation continues to take a beating, particularly after the recent Alaska Airlines mid-air incident when a door on a B737 MAX 9 blew out. As a result, the U.S. Federal Aviation Administration (FAA) grounded the type as did some other national air regulators. Eleven airlines fly the MAX 9, mostly in North and South America and Europe, with only Indonesia's Lion Air operating the type in the Asia-Pacific.

While the MAX is being cleared to fly again after safety inspections Boeing will face more delays. The FAA has halted its planned production increase of the type. "This won't be back to business as usual for Boeing," FAA Administrator, Mike Whitaker, said. "We will not agree to any request from

Boeing for an expansion in production or approve additional production lines for the 737 MAX until we are satisfied quality control issues uncovered during this process are resolved."

And there is a wider issue for airlines operating any Boeing airplane. Travel agents are reporting some customers booking flights specifically are requesting to not fly on a Boeing jet. How long that will last is anyone's guess, but public concerns about safety from months of bad publicity for Boeing is an unprecedented sentiment for an individual aircraft manufacturer and for airlines that operate its aircraft.



MACROECONOMIC AND GEOPOLITICAL **IMPACTS:**

All airlines face the uncertainty of ever swinging economic conditions, both domestic and international, that can have a dramatic impact on currency exchange rates. As a global business, all of these factors severely impact the bottom lines of airlines.

Then there is the uncertain world we live in. The never-ending Russia-Ukraine war and the Israel-Gaza conflict add complexity to flight operations, particularly for airlines in North Asia (apart from Chinese carriers) which operated direct flights to Europe using Russian airspace.

With access to Russian airspace remaining suspended airlines have to reroute their flights. As an example, this writer flew from Seoul South Korea to Frankfurt late last vear with Korean Airlines. Unable to fly to directly to Germany over Russia, the flight rerouted over China, Kazakhstan, Turkey and Austria to Germany. It adds more than two hours to the one-way trip, meaning more fuel cost for the flight. There is no indication this situation will end anytime soon for Asian carriers.

COSTS AND PROFIT MARGINS:

IATA forecasts airlines will make a \$25.7 billion profit this year on the back of record revenue of \$964 billion. But for Asia, it has forecast profits of just \$1.1 billion. For many airlines, margins are wafer thin.

In December last year, at a global media briefing in Geneva, IATA's Walsh said airlines will make, on average, \$2.25 per passenger in 2024. So, the value retained by airlines for the average plane trip won't even buy a subway ticket in New York City.



"There are some airlines doing well, but in the main, this industry is not recovering its cost of capital. It is struggling at a global level," Walsh added. AAPA's Menon said all costs - not just fuel - are spiking. "Inflation and other economic concerns will hit pockets. But travel demand is resilient," he said.

DEMAND:

Many airlines, given their supply chain and aircraft delivery issues, have had obstacles to accurately matching capacity with demand as traffic surged through last year from the public's post-pandemic stampede to travel again. This rising demand has pushed up airfares in Asia.

Last year economy class fares in the region rose around 21% and the cost of a business



Manufacturers continue to disappoint, not only from delays in the delivery of new aircraft, but in accessing spare parts for aircraft in service

> Willie Walsh IATA director general



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class seat was 17% above 2019 rates. If that trend continues, will demand continue rising, given cost of living pressures affecting people across the globe, even in Asia?

CAPA's Outlook says that from a broader perspective, one of the big questions will be what happens to demand. "International demand has generally been strong in 2023, but some airlines report signs of demand easing. This could be a natural reaction after the surge of post-pandemic travel, as demand settles to its new normal. It could also be caused by a softening economic outlook and higher prices dictated by rising airline costs. If demand does ease, particularly as capacity increases, it would obviously affect airline profitability. Time will tell if 2023 represented peak profitability for airlines. With costs likely to remain elevated, airlines will have to be careful not to overextend themselves in 2024," warns CAPA.



AIR CARGO:

Following a prolonged period of subdued demand conditions, growth in air cargo markets is gaining momentum. The AAPA said air cargo markets entered 2023 weighed by multiple headwinds, including inflation, a strong U.S. dollar and government policy dampening trade activity as well as household spending power. Nevertheless, the final months of the year saw demand grow strongly, led by an increase in e-commerce shipments. In December, international air cargo demand as measured in freight tonne kilometres (FTK) recorded a 13.2% year-on-year growth, further reducing the decline recorded for full-year 2023 to 2.8%. "Whilst international air cargo demand declined by 2.8% for the full year, the last quarter of 2023 saw an 8.2% increase compared



with the previous corresponding period," said the AAPA's Menon. Looking ahead he noted air cargo markets have picked up, but uncertainties remain, with new export orders still in decline.

AIRPORTS:

Airports too have not yet fully recovered. What happens in 2024 will largely depend on how airline growth progresses, and of course the trend in the China market. Singapore Changi Airport handled 58.9 million aircraft movements in 2023, 86% of the traffic recorded in 2019. The airport reported a strong 2023 fourth quarter when traffic reached 90% of full recovery – or 16.1 million passenger movements. Hong Kong International Airport (HKIA) said passenger throughput in December last year was more than double the 1.6 million passengers processed through the airport in December 2022. "All passenger segments experienced significant growth compared with the same month in 2022 with traffic to and from Southeast Asia, China and Taiwan recording the most significant increases," Airport Authority Hong Kong (AAHK) said. "Passenger traffic at HKIA is forecast to recover to pre-pandemic levels by the end of 2024." HKIA's passengers for the reported month were 75.6% of the 5.7 million passengers who passed through the airport in December 2019.

In contrast, reflecting activity in India, Mumbai's Chhatrapati Shivaji Maharaj International Airport (CSMIA) handled 51.58 million passengers in 2023, the highest number in its history and a 110% recovery from pre-pandemic 2019. The result was 35% better than 2022 when the airport processed 38.33 million air travelers.



No-one doubts Asia Pacific airlines will ultimately regain their globe-leading position, operating from the world's leading and fastest growing aviation market. It's just that it will be business as usual, facing volatile economic conditions, a highly competitive market with endless challenges to overcome, probably including some that are totally unexpected.

REGULATORY RISK:

On the regulatory front, airlines could face rising costs of compliance and additional costs pertaining to passenger rights regimes, regional environment initiatives and accessibility requirements. ■



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(1) ve been an engine module technician on CFM56 and CF6 engines for 10 years. Thanks to this experience I have joined the LEAP team. I'm determined to provide the best quality and TAT to meet our customers' expectations, while always looking for ways to improve our processes."

Leandro Rodrigues Oliveira, Engine Module Technician

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* LEAP engines are products of CFM International, a 50/50 joint company between GE and Safran Aircraft Engines.





Orders a plenty from Indo-Asia-Pacific carriers in 2024

midst the gloom of recent times there was one bright moment for troubled Boeing. In January, the OEM handed over a new B737 MAX 8 to China Southern Airlines (CSA), the first delivery of the type to a Mainland customer since the MAX was grounded in 2019 following fatal crashes of the type off Indonesia in 2018 and in Ethiopia in 2019. With the flight number CZ5073, used by CSA for delivery flights, the MAX departed from Seattle's Boeing Field to Guangzhou via Honolulu.

It will not be the last delivery to an airline in the region this year nor the first new aircraft order from an Indo-Asia-Pacific carrier. As they accelerate operations several airlines either have placed orders with Boeing and Airbus or are considering new fleet acquisitions in 2024.

They include Malaysia Airlines, which has indicated it plans an order later this year to complete its narrowbody replacement program. The airline already has 25 B737 MAXs on order to begin replacing its fleet of approximately 50 B737-800s, but has made it clear it will consider all



manufacturers for its next narrow-body order. Cathay Pacific is looking at a wide-body order to replace its A330s and older B777s. It already has announced it will accept 48 new generation passenger aircraft into its fleet with deliveries to 2028. They include A350s, A321neo, and Boeing's 777X.

Japan Airlines is considering options for replacement of its B767s and some of its narrow-bodies.

Elsewhere in the region, Philippines LCC, Cebu Pacific, is in talks with Boeing and Airbus for more than 100 narrow-bodies and India's Akasa Air has signaled a triple-digit airplane order is imminent. Air Astana Group took delivery of a new A321neo last month, increasing its fleet to 50 and has said it intends to fly 80 aircraft by year-end 2028.



Steady as it goes for region's aircraft lessors

Aircraft lessors enjoyed a good year in 2023 and 2024 is expected to be even better. As the airline industry returns to normality post pandemic and growth resumes demand for leased capacity will increase, reports associate editor and chief correspondent, Tom Ballantyne.

ircraft lessor performance in 2024 is forecast to remain solid from improving lease pricing, reports Morningstar DBRS, the world's fourth largest credit ratings agency. With airline profitability recovering in most regions, it also projects a low level of airline defaults this year.

"Overall, lease rental revenue improved a solid 6% year-on-year, reflecting declining lease deferral balances, declining power-by-the-hour contracts, as well as strengthening rates and modest aircraft portfolio growth. Results also benefited from sound gains of aircraft sales supported by improving aircraft values," it

The optimistic forecast for the next 12 months coincided with major lessors reporting bumper business last year. BOC Aviation announced last month that 2023 delivered record operational performance. "We executed our

largest number of transactions, including 142 lease commitments, since our inception," managing director and chief executive, Steven Townend, said.

"We committed to purchase 95 aircraft as the foundation for balance sheet growth and we took delivery of 65 aircraft - the largest since 2017. Collections exceeded 100% for a second consecutive year and our aircraft utilization rate improved to 99% from 96% in 2022. With a strong aircraft portfolio and order book, we are confident of meeting our airline customer needs and maintaining our position as a top five global aircraft operating lessor."

Avolon Leasing, based in Dublin and 70% owned by China's Bohai Leasing, also reports business is thriving.

"Our balance sheet scale allowed us to order another 200 new technology aircraft, strengthening our delivery pipeline and growth into the

next decade," Avolon CEO, Andy Cronin, said. The aircraft order was for 100 A321neo, 80 737MAX and 20 A330neo. Avolon had an owned, managed and committed fleet of 1.035 aircraft last December 31, a 24% increase year on year.

In its forecast, Morningstar pointed out supply chain disruption and production related issues are creating record backlogs of new aircraft orders at Airbus and Boeing. "Depending on the aircraft type, these backlogs have resulted in very limited new aircraft delivery slot availability before 2028," the ratings agency said.

"In the last few years, several aircraft lessors have placed large orders to capitalize on growth opportunities. While aircraft orders can serve as a source of growth, the timing of the deliveries is critical and viewed more favorably by Morningstar DBRS if scheduled as replacement aircraft and not for speculative growth."

Nevertheless, aircraft lessors charted by the agency hold orders for more than 1,840 new Airbus and Boeing aircraft. "We see this proportion of aircraft orders from lessors as demonstrating the confidence of lessors in new technology, fuel efficient aircraft," it said.

"Orders for narrow-bodies



accounted for approximately 96% of total lessor commitments with original Equipment Manufacturers. Importantly, from an asset risk perspective, all lessor orders placed in 2023 were for fuel efficient narrow-bodies, including the A320neo, the A321neo and 737 AX. Lessors held 79 orders for wide-bodies at November 2023: 54% for 787s and 35% for A330s."

"China is an important long-term growth engine for the global aviation industry with Boeing estimating in its 2023 Current Market Outlook that near 23% of the more than 42,000 aircraft forecast to be required in the next 20 years will be in China. However, with tensions between China and the West deteriorating. several aircraft lessors have been reducing their exposure with Mainland customers," it said.

"Indeed, AerCap has trimmed the net book value of its aircraft portfolio on lease to Chinese airlines to 16.9% at December 31, 2022 (the last date data was reported) compared with 20.5% at year-end 2018. Similarly, Air Lease Corporation has shrunk the percentage of its fleet on lease to Mainland airlines to 7.3% at September 30, 2023, a notable decline from 17.0% at vear-end 2018.

"We see the willingness of aircraft lessors to reduce their exposure to potentially high growth and profitable markets, to contain overall risk, as demonstrating good risk management."



High cost constraining SAF uptake

Plenty of analysts have questioned the ability of the airline industry to reach its aspirational targets for the use of sustainable aviation fuel (SAF), but if the latest forecasts for SAF production are accurate the cynics could be proved wrong, reports associate editor and chief correspondent, Tom Ballantyne.

he market for sustainable aviation fuel, or SAF, is projected to experience phenomenal growth in the next decade and beyond, predicts three separate forecasts released in January. Their projections vary from 60% annual growth to 42%. They envisage a market increasing from hundreds of millions of dollars at present to tens of billions of dollars by the early 2030s.

Future Market Insights (FMI), a global provider of market intelligence, foresees the market, which generated revenue of \$563.2 million in 2023, to be worth \$61.92 billion by 2033 recording yearly growth of 60%. Another forecaster, Research Nester, predicts expansion of 42%, with 2022's revenue of \$435 million climbing to \$15 billion by 2035. ResearchAndMarkets.com another player in the sector, predicts the SAF market to undergo "a transformative growth spurt", evolving from a \$1.1 billion industry

in 2023 to an estimated \$16.8 billion business by 2030, at a striking annual growth rate of 47.7%.

"This astronomical growth is shaped by a myriad of factors, including heightened environmental awareness, regulatory policies and ground-breaking technical advancements aimed at curbing carbon emissions in the aviation sector," said ReasearchandMarkets.

Research Nester said the SAF market in the Asia-Pacific is projected to have a significant share of about 28% over the coming years. "This market in this region is set to be dominated by growing initiatives by various organizations. For instance, in an effort to cut carbon emissions while also conveying a message to fuel providers, the Association of Asia-Pacific Airlines (AAPA) has established a target for its members to consume 5% SAF by 2030."

FMI said the demand for SAF is experiencing a notable surge, driven by a confluence of factors underscoring a global



commitment to environmental sustainability in the aviation industry. "The urgent need to reduce carbon footprints has propelled higher demand for innovative ideas and technologies in aviation," it said.

"Technological advancements, coupled with stringent government laws, create an environment for the growth of the sustainable aviation fuel market. Private airline companies, responding to increased investment, are actively seeking feasible and reliable alternative solutions to traditional aviation fuels.

"The reduction in life cycle greenhouse gas emissions not only aligns with environmental goals but provides additional economic and environmental benefits. "In essence, the adoption of sustainable alternative energy

sources is not merely a necessity for aircraft safety and general use. It is a crucial step towards achieving significant carbon reduction goals.

"This multifaceted approach, driven by innovation, technological progress, and strategic investments, positions the aviation industry at the forefront of sustainable practices, benefitting both the environment and economic prosperity."

Apart from the decision by AAPA member airlines, taken at their November Assembly of Presidents in Singapore, to aim for 5% SAF use by 2030, there are other indicators of a determination to rapidly improve SAF production and use. India's Ministry of Petroleum and Gas has set an indicative target of 1% for blending SAF with conventional jet fuel for all international flights by 2027, a major step towards reducing carbon emissions. This is expected to double by 2028 and reach 5% by 2030, an order issued by the ministry states.

Australia's first SAF refinery will soon open its doors in Gladstone, Queensland, supported by the Queensland government, and be fully operational by next year. The \$500 million project will be Australia's first commercial SAF bio-refinery, creating around 60 direct jobs and indirectly supporting an estimated 500 regional jobs during construction and operation

A new roadmap released by Australia's national science agency, CSIRO, and Boeing Australia, predicts the nation has "a moment-in-time opportunity" to develop a sovereign SAF industry, with domestic demand for jet fuel expected to increase

by 75% by 2050.

The Sustainable Aviation Fuel Roadmap builds consensus on developing an Australian SAF industry, identifying opportunities to produce and scale production from Australian feedstocks.

CSIRO senior manager and lead Roadmap author, Max Temminghoff, said Australia was in a prime position to develop a domestic industry. "By actively working to liberate feedstocks, the roadmap estimates Australia is sitting on enough resources to produce almost 5 billion litres of SAF by 2025. This could supply nearly 60% of jet fuel demand projected for that year. That's enough fuel to power 640,000 Melbourne-Sydney return flights on a B737."

Boeing Regional Sustainability Lead APAC and Roadmap co-author, Heidi Hauf, said the findings emphasised a local SAF industry will contribute

to decarbonization and energy security and generate more regional employment. "Australia imports 90% of its liquid fuel, including jet fuel, via long supply chains exposed to geopolitical and climate change risks and delays associated with quality issues, placing the country in a vulnerable position when it comes to jet fuel security," she said.

"With alternative technologies such as battery and fuel-cell powered planes still limited in long haul capabilities and the increasing competition for carbon offsets, SAF offers the largest potential for reduced aviation emissions in the near-term "

Elsewhere, the first transatlantic flight by a commercial airliner fully powered by SAF was operated by Virgin Atlantic from London to New York last November. Partly funded by the UK government, the flight was



hailed for demonstrating potential to reduce carbon emissions from flying, despite the skepticism of scientists and environmental groups.

"The world always will assume something can't be done until you do it," Virgin Atlantic founder and president, Sir Richard Branson, said. Airlines have previously flown on a blend of up to 50% alternative fuels. ■

A manufacturer's perspective on SAF production

Neste expects the global Sustainable Aviation Fuel market to reach 15 million tons by 2030, primarily driven by globally expanding policy frameworks, such as blending mandates. Voluntary demand from airlines and corporations with air travel and freight activities also could play an important complementary role in increasing SAF demand.

However, such development is heavily dependent on policy support, a key factor for establishing a growing market for SAF and ramping up SAF production by creating the demand certainty necessary to attract investments in SAF production capacity.

At present, Asia-Pacific airlines are lagging behind their European



and North American peers in SAF use. Also, governments in the region have not put in place policies to support SAF, but we do see encouraging developments, Neste told Orient Aviation.

For example, Japan is targeting 10% SAF use by 2030 and is considering a blending mandate as a tool to achieve that goal. Singapore is targeting the publication of a Blueprint for driving aviation decarbonization early this year, potentially including proposals on policy frameworks to support SAF use.

A longer forecast for SAF take up, to 2050, is unpredictable, but it is possible that it will follow a trajectory forecast to 2030. What is clear is we need to take action to combat climate change and reduce aviation emissions now.

There are challenges to overcome to increase production of SAF for commercial airlines flying in the region.

Neste said the main challenge to wider SAF adoption or higher percentage of SAF uptake for commercial airlines is cost.

SAF typically costs around 3 to 5 times more than conventional jet fuel and as fuel is a major cost factor for airlines it is not easy when operating in a highly competitive market to switch to SAF if their competitors are not required to do the same.

Additionally, current SAF production capacity is limited. We need to accelerate production to fully leverage its decarbonization potential. Investments in SAF production capacity are very capital intensive and need demand certainty to attract investments. For context, Neste's investment in the recently completed Singapore refinery expansion was 1.6 billion euros.

This is where government policies can play a crucial role in creating demand certainty and a level playing field.

