Aviation Daily

AVIATION WEEK Intelligence NETWORK

The Business Daily of the Global Scheduled Airline Industry Since 1939

August 6, 2024

Inside:

AIRLINES

CrowdStrike Letter Questions Delta IT Decisions, Response To Outage

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CrowdStrike is pushing back against what it has termed a "misleading narrative" from Delta Air Lines, after the carrier said it would pursue compensation for a global IT outage it values at half a billion dollars in related operational impacts.

The July 19 outage unfolded ahead of a busy summer travel period and was linked to a software update from CrowdStrike that affected computers using Microsoft Windows, impacting various industries around the globe including airlines and airports. Among U.S. airlines, Delta took longest to recover. The Atlanta-based carrier said more than half its IT systems were Windows-based and necessitated manual repairs and reboots—on roughly 40,000 servers.

The airline has largely blamed CrowdStrike for the operational disruption, which the cybersecurity company contends is not a full picture.

"Delta's public threat of litigation ... has contributed to a misleading narrative that CrowdStrike is responsible for Delta's IT decisions and response to the outage," writes representation for CrowdStrike in an Aug. 4 response to airline counsel. "Should Delta pursue this path, Delta will have to explain to the public, its shareholders, and ultimately

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The Daily Memo

Antitrust Probe Blocks IAG From Surfing Consolidation Wave

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For an airline group that came into being through consolidation, the failure of its latest planned deal must be a big disappointment.

International Airlines Group (IAG) said Aug. 1 that it was abandoning plans to take over Air Europa amid an ongoing European Commission (EC) probe into the proposed deal. IAG will have to pay a €50 million ($54 million) break fee to the Spanish airline's owner, Globalia, but the real disappointment will come from the missed opportunity of bolstering its subsidiary Iberia.

The long wait for approval and strict conditions attached to another high-profile deal—Lufthansa Group's investment in ITA Airways—also highlights how hard it is for large airline groups to get mergers over the line in Europe.

Nonetheless, IAG is not giving up on consolidation, according to CEO Luis Gallego.

"We want to consolidate the industry because we consider it good for the customers and to have strong groups that can compete globally," Gallego said after IAG dropped its Air Europa bid.

That same thinking was behind the Air Europa move, which IAG had hoped would accelerate the development of Iberia's Madrid hub to make it more competitive in capturing transatlantic market share.

After IAG announced the deal was off, Margarethe Vestager, the EC's executive vice president in charge of competition policy, said the merger would have negatively affected competition on a large number of domestic, short-haul and long-routes within, to and from Spain on which Iberia and Air Europa compete closely.

The transaction was going through an in-depth phase II investigation when IAG decided to pull the plug.

"We were concerned that the transaction may have led to adverse effects for passengers—business customers and consumers alike—in terms of increased prices or decreased quality of services," Vestager said, adding that the remedies IAG had offered were not sufficient.

Gallego said IAG had put forward "a very generous and

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a jury why CrowdStrike took responsibility for its actions—swiftly, transparently, and constructively—while Delta did not."

Among the factors it believes Delta will have to explain should litigation proceed are "the design and operational resiliency capabilities of Delta's IT infrastructure, including decisions by Delta with respect to system upgrades," CrowdStrike's letter states.

The union representing Delta's pilots has also called into question the role internal systems may have played in broadening the event's impact, describing a "complete communication breakdown" as turning the IT issue into a multi-day event and pointing to what it termed "our company's continued failure to invest in and improve employee-facing technology."

Some of the airline's messaging during what it called "the CrowdStrike outage and resulting operational disruption," noted that a crew tracking-related tool had been "unable to effectively process the unprecedented number of changes triggered by the system shutdown," describing the critical system as "deeply complex" and requiring the most time and manual support to synchronize.

CrowdStrike pledges to "respond aggressively" to litigation should it proceed, alleging in the letter that the airline had turned down its offer of free onsite support. The cyber company "to this day" continues working with the Delta information security team, said attorney Michael Carlinsky. Any liability by CrowdStrike is contractually capped at an amount in the single-digit millions, he notes in the letter.

"Public posturing about potentially bringing a meritless lawsuit against CrowdStrike as a long-time partner is not constructive to any party," added a CrowdStrike spokesperson in a statement. "We hope that Delta will agree to work cooperatively to find a resolution."

In the aftermath of the disruption, the U.S. Transportation Department (DOT) determined that airline delays and cancellations resulting from the system outage were "controllable," and said it had launched an investigation into Delta's response. Speaking to CNBC after operations had been restored, Delta's CEO described the airline as having invested in considerable redundancies, attributing its outsized impact to being "by far the heaviest" in its usage of both CrowdStrike and Microsoft.

"It's been a wake-up call for me because we have issues regularly in this space," CEO Ed Bastian said. "We thought we had the best, between Microsoft and CrowdStrike.

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ambitious remedy package," which proposed transferring 52% of Air Europa's frequencies in 2023 to two remedy takers, but claimed that the EC's conditions on the deal were too onerous.

Gallego has not been deterred from his desire to build up Madrid.

"The inorganic growth was a way to accelerate that growth and to put Madrid in the first division of the hubs," Gallego said of the abandoned Air Europa plan. "It is going to take longer [to grow in Madrid] and it is a pity that we have missed this opportunity. But we will continue investing in Iberia and the development of the company in Madrid."

To that end, Iberia has already grown available seat kilometers (ASK) from Madrid by 14% this year, while second-quarter ASKs to Latin America were up by 24%.

Gallego had also wanted IAG to be part of the current wave of European consolidation—hardly surprising for a group that came into being with the 2011 merger of British Airways and Iberia.

The hurdles that undid IAG and Air Europa, not to mention the laborious process Lufthansa faced to win partial approval for its ITA investment, highlight the tight scrutiny on airline consolidation in general.

When the German airline group finally got the go-ahead for its deal to buy ITA in July, it came after a lengthy phase II investigation which attached strict conditions to the transaction.

When that deal received the green light, Gallego had sounded a positive note, telling the *Financial Times* that the approval was "positive news ... because it means that the European Commission sees the value of consolidation, to have a stronger airline industry in Europe."

While Air Europa is off the table, there is another M&A opportunity that offers southern European growth in a slightly different format: the long-talked-about privatization of TAP Air Portugal.

"The termination of the group's pursuit of Air Europa is disappointing, but other targets (especially TAP) exist, and we expect the group to be back on the hunt," Bernstein analyst Alex Irving wrote in a research note.

IAG has said it is interested in the move, but not urgently and only if it improves its financial results. Air France-KLM and Lufthansa have also made their interest in TAP known.

"Maybe it's something that can be interesting for us," Gallego said of a potential TAP takeover. "In the same way that we have a dual-hub strategy in the north with Dublin and London, we consider that a dual-hub strategy in the south with Lisbon or Madrid can be optimal for the group."

He added: "We will continue exploring opportunities that make the group stronger."

SUPPLIERS

Leonardo Eyes 787 Shift Cut, Looks For September Deal With Boeing

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Leonardo is cutting work at its site making 787 fuselages for Boeing to a single shift as a short-term measure to address the slow pace of aircraft deliveries as talks with the aircraft OEM continue over financial terms of making the parts.

"We are now analyzing a number of short-term initiatives because we need to mitigate immediately the reduction of the shipment of the fuselages that went from about 10 to three recently," Leonardo CEO Roberto Cingolani said in an earnings call.

The company is moving to a single shift, from two per day. "This gives us the time to empty the warehouse, where there are more than 40 fuselages, so we have time to mitigate the impact of the present situation" he said July 30.

Leonardo expects production will ramp back up quickly and output to reach 10-15 fuselage sections per month in 2025.

Leonardo previously said it expected about €50 million ($54 million) in losses from the situation. That rough number still stands, Cingolani said, though is contingent on contract talks with Boeing that could wrap up in September. He credited Boeing for "a very constructive attitude."

To help put its aerostructures business on a firmer footing, Leonardo also is looking to shift potential assembly of the AW609 tiltrotor and AW101 helicopters to the Grottaglie facility in Italy to make it less reliant on a single product. The company hopes to secure certification of the AW609 in 2025, with orders to build at least 30.

Cingolani added the company is in talks with Airbus about taking on more work on the A220 narrowbody, noting an agreement on making rear parts of the aircraft could be finalized before year-end.

MRO

Air India Outlines Plans For In-House MRO

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FARNBOROUGH—Flag carrier Air India's planned maintenance operation will initially focus on servicing the group's fleet, but it could eventually look at the possibility of servicing third-party operators.

Earlier this year, Air India announced plans to establish its base maintenance facility in Bengaluru, southern India in partnership with Singapore-based SIA Engineering Company (SIAEC) separate from its former MRO division, AI Engineering Services (AIESL). "We're breaking ground imminently and will look to have that operational by the end of 2025," said Campbell Wilson, CEO of Air India, who spoke at a media briefing held at the recent Farnborough Airshow.

Campbell envisages the operation conducting base maintenance initially for Air India's narrowbody and widebody fleets, but this could eventually be expanded to service third-party customers. "As we become comfortable with our own capabilities to the extent there's spare capacity, then yes, third-party business is something that we will pursue," he said. "But principally it will be about servicing the Air India fleet first and foremost."

AIESL was formerly the MRO arm of Air India, but unlike the Tata-backed airline, was not privatized as part of the divestment process in 2021 and remains government-owned. "As a consequence, while we're contractually obliged to use them for a while, they [AI Engineering] haven't changed trajectory in the sense that the airline has. There are still a lot of government processes, practices and still a lack of investment," said Wilson.

According to Wilson, Air India is in the process of in-housing its line maintenance, with much of the work performed by AIESL. "We're building up our in-house capability so that we are doing line maintenance," he added. Wilson does not see an immediate challenge in relation to slot availability for the airline's fleet—it has managed to get the maintenance slots it needs for its ongoing fleet retrofit program for 2025.

Air India's fleet is expected to grow substantially following last year's huge firm order for 470 new Boeing and Airbus aircraft, including 400 narrowbodies and 70 widebodies.

Wilson noted that Air India is also readying training capabilities in anticipation of its growing fleet. The airline plans to build a new training institute in Amravati, Maharashtra in South India, which is expected to be open by the first quarter of 2026.

AIRLINES

Allegiant Adjusts Boeing MAX Delivery Expectations

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The U.S. FAA's scrutiny of Boeing is proving doubly challenging for Allegiant Air, with the Las Vegas-based ULCC juggling delays as the soon-to-be first U.S. operator of the 737-8-200 MAX variant on top of a more widespread 737 program delivery slowdown.

Since Allegiant's initial MAX delivery will be the first 737-8-200 delivered to a U.S. airline, it is subject to additional FAA review; the agency has been issuing final airworthiness certificates for all 737 MAXs since the fleet was ungrounded in December 2020.

"[The FAA] can choose whether or not to retain or delegate some of those certifications—if they delegate, it would be to Boeing," CFO Robert Neal said during a July 31 second quarter (Q2) earnings call. "What has happened since the [first quarter earnings] call is that they chose to retain those certifications ... it means that the clock starts ticking, and so we're marching to what we are hoping is around another 30 days or so before an airplane is delivered."

The carrier now anticipates taking its first 737-8-200 in September. The -8-200 is a higher-density version of the -8, a MAX variant already operating with 382 currently in-service with U.S. operators, according to the Aviation Week Network Fleet Discovery database. Allegiant is configuring its -8-200s with 190 seats.

"These airplanes are already flying, so there's no certification issues outside of the cabin," outgoing Allegiant CEO Maurice Gallagher said. "It will be all one class configuration for the most part with a little 'upfront niceness' and it's just hard to believe you can't certify that interior ... we're going to try and push Boeing and the FAA to get together and get this thing done. They've been doing this for a year now, it's taking too long."

Though Allegiant had expected to add six of the variant to its all-Airbus fleet by the end of 2024—a number halved from prior projections—it is now planning for an elongated delivery cycle, forecasting a slower cadence to persist through 2026. The carrier anticipates receiving a total of four units this year, based on internal estimates rather than a forecast from Boeing. Allegiant remains in active discussions with the OEM on an updated delivery schedule, and in the meantime is absorbing $30 million of annual expenses it described as not associated with productive assets, such as pilots that were hired and trained on the MAX.

"Our team is focused on getting to a realistic delivery schedule and fair compensation for the extended delays," Allegiant president and incoming CEO Greg Anderson said.

As a result of the continued delivery delays shifting its initial 737 MAX operations into the fourth quarter, Allegiant now expects full year 2024 capacity to increase roughly 1.5% year-over-year, versus prior projections of 2-4%. The ULCC first announced its order for 50 737-7s and 737-8-200s, plus options for 50 additional jets, in early 2022, before expanding those options to 80 and converting six 737-7 positions to the -8-200 variant in the third quarter (Q3) of 2023. The airline's orderbook of 50 MAX aircraft is now roughly split between 26 737-8-200s and 24 of the yet-to-be certified

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Published daily except Saturdays, Sundays and holidays by Aviation Week, 2121 K Street, NW, Suite 210, Washington, DC 20037. (ISSN No. 0193-4597).
Gregory Hamilton, President, Aviation Week.

Vol. 437 • No. 26

TECHNOLOGY

Dovetail Testing Prototype Hydrogen-Electric Powertrain

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Startup Dovetail Electric Aviation is testing a prototype hydrogen-electric powerplant at its facility in Seville, Spain.

Except for the gaseous hydrogen storage tank, the complete system is packaged into a replica of an engine nacelle for the Beechcraft King Air.

The 600-kW powerplant is being developed to re-engine aircraft with up to 20 seats powered by Pratt & Whitney Canada PT6A turboprops. Dovetail, a Spanish-Australian joint venture, says the technology will reduce operating costs by 40% on regional routes.

The startup began testing its hydrogen-electric powerplant at Latrobe Regional Airport, near Melbourne, Australia, earlier this year. The first flight of its initial all-electric powertrain, for the Cessna Caravan, is planned for next year in Australia.

Tests in Spain took a more powerful version of the hydrogen-electric powertrain to maximum power and rpm, Dovetail CEO David Doral says. The tests, which also involved the battery system that works with the fuel cell, were a precursor to the yet-to-be-scheduled first hydrogen aircraft retrofit, he says.

While the work in Australia has been supported by the Victoria government, the prototype being tested in Seville has been partly funded by Spain's foreign trade agency ICEX though its Innova Invest program, Dovetail says.

Spanish airlines Air Nostrum and Volotea are investors in Dovetail as is Spanish aerostructures supplier Aciturri. Dovetail is working to close its second round of seed funding and is in talks with the governments of Andalucia and other regions on the location of its future operations center in Spain.

Dovetail is one of several startups aiming to bring hydrogen to commercial aviation by first retrofitting small regional aircraft. These include: Cranfield Aerospace Solutions: developing a 250-kW powertrain initially for the nine-passenger Britten-Norman Islander with first flight planned for 2025 and service entry for 2027; H2Fly: developing 175-kW and 350-kW fuel cell modules for megawatt-class hydrogen-electric powertrains for 40-80-seaters beginning with a Do328 testbed planned to fly in 2025; Hydroplane: developing a 200-kW modular powertrain to re-engine piston-powered light aircraft with first flight in a Piper Comanche testbed planned by 2025; MTU Aero Engines: developing a 600-kW hydrogen-electric powertrain with first flight in German aerospace center DLR's Do228 testbed planned for 2026; Stralis Aircraft: developing a liquid-hydrogen powertrain for retrofit to the Beechcraft 1900D with first flight of a demonstrator planned in a Beech Bonanze testbed planned for 2025; ZeroAvia: developing a 600-kW powertrain for retrofit to nine- to 19-seaters beginning in 2025 with the Caravan followed by a 2-5-megawatt system for 40-80 seaters in 2027-29.

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737-7, Fleet Discovery shows.

"There's a lot of value in that order, not just equity value in the aircraft themselves, but the long-term benefit that we feel the MAX brings to us," Anderson said. "We look forward to concluding our talks with Boeing on a fair resolution to help address the challenges that we faced but also to bring these aircraft online and begin flying them. And we're close; we're near that point."

The company reported airline Q2 operating revenue of $649.5 million, down 5% year-over-year, on an 8.3% increase in operating expenses. Allegiant's airline Q2 net income excluding special charges was $41 million, more than halved from the year-ago quarter's $84.2 million, and it reported an adjusted 10.3% operating margin for the three-month period. Ancillary revenue lifted 5% year-over-year to $75.34 per passenger and total renumeration from its co-brand credit card with Bank of America jumped 24.6% to $36.1 million. During the quarter, the company recorded $20.1 million in airline special charges. Though yields were impacted by industry overcapacity, airline management described its network structure as having provided a layer of insulation.

Parent Allegiant Travel Company reported $666.3 million in total Q2 operating revenue and $13.7 million in Q2 net income, down 84.5% year-over-year. The company expects a cash loss of roughly $15 million for the year related to its Sunseeker resort in Florida and has engaged a firm to help improve the wholly owned resort's performance while also developing potential strategic alternatives for that asset.

Looking ahead, the airline's Q3 scheduled service ASMs are projected to be up by roughly 1.3% year-over-year. Allegiant Air expects a Q3 operating margin of negative 4.5% to negative 6.5%, including an estimated three-point impact from the global software outage in mid-July and related customer compensation for disrupted travel.

SAFETY

NTSB Hearing To Scrutinize Boeing's Aircraft Manufacturing Process

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The NTSB's planned two-day hearing on Alaska Airlines Flight 1282 will provide a rare and extensive look into Boeing's commercial aircraft manufacturing process, from front-line employee readiness to nuanced elements such as how the company attempts to ensure first-time quality, the meeting's agenda shows.

Set for Aug. 6-7, the hearing will see board members and NTSB technical experts question witnesses from Boeing, key supplier Spirit AeroSystems, the FAA, and the International Association of Machinists (IAM). Their aim is to understand how a 737-9 door plug was left unsecured during a non-routine pre-delivery repair and was not detected before it blew out on the aircraft's 154th flight.

NTSB's agenda shows investigators will look carefully at the history of the specific fuselage involved in the accident, from its origins within Spirit's Wichita factory through delivery to Alaska in October 2023. Among the key questions Boeing will answer is why the company has no documentation detailing the plug's opening and closing as part of the repair—a necessary step to give workers access to non-conforming rivets that prompted the fix.

But the probe also is delving deep into Boeing's intricate and sometimes convoluted commercial airplane production process. Day one's agenda items include 737-9 fuselage manufacturing and inspections at both Spirit and Boeing, how tasks are assigned to specific mechanics, and non-conformance documentation and processing. Investigators will also ask about shop floor worker training and retention and examine some Boeing-specific systems that play integral roles in aircraft production.

A day-two topic will cover production rate increases "and actions taken as rate changes" by both the manufacturer and the FAA.

Among the key industry witnesses slated to testify are Elizabeth Lund, SVP, Quality of Boeing Commercial Airplanes (BCA); Doug Ackerman, BCA VP-supplier quality; Terry George, Spirit's SVP and general manager of Boeing programs; Scott Grabon, Spirit's senior director, 737/P8 quality; and Gregg Brown, Spirit's SVP-quality and support.

The board also will dig into FAA's oversight of Boeing and aircraft manufacturing in general. One panel slated for Aug. 7 will examine both an eight-week audit prompted by the Alaska occurrence and the "effectiveness of FAA guidance" for manufacturers. Another second-day panel is dedicated to safety and quality management systems.

Boeing has made numerous changes to its production process since January, prompted by early lessons learned from the Alaska accident. It has stopped accepting non-conforming fuselages from Spirit, for example, cutting down on extra work done in its factories that often led to production-line bottlenecks. It also has stopped prioritizing "movement of the airplane through the factory over getting it done right," as CFO Brian West explained in March.

The most visible changes have come in key leadership positions, including the departure of CEO Dave Calhoun, whose last day is the second day of the hearing. Industry veteran Kelly Ortberg takes over as Boeing's top executive Aug. 8.

Despite the changes, Boeing remains under close FAA scrutiny. It is unable to add a planned fourth 737 production line or ramp up production rates past 38 per month until the FAA is satisfied the company's safety and quality improvements are bearing fruit.

AIRLINES

Hawaiian Airlines Focuses On U.S. Market Amid Japan Struggles

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Hawaiian Airlines is refocusing its efforts on the U.S. market to counterbalance a decline in demand from Japan, its largest international market, due to the weakening yen.

"Across our international routes, most notably in Japan, where the yen remains historically weak against the U.S. dollar, international point of sale remains below traditional levels," CEO Peter Ingram said on an earnings call following the publication of the airline's second-quarter financial results. "We've backfilled some of this missing Japan point of sale demand by proactively intensifying our focus on the U.S."

The depreciation of the yen has impacted Japanese travelers, making trips to the U.S. more expensive and reducing the revenue Hawaiian Airlines generates from the country. This has necessitated a strategic redeployment of capacity from international to U.S. domestic routes.

Ingram highlighted the carrier's recent additions of flights between Hawaii and mainland U.S. cities. "The three recently

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AIRLINES

Air Astana's First Boeing 787 Delivery Delayed Until Late 2025

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Air Astana now expects to get its first Boeing 787-9 widebody nine months later than planned, according to the airline's CEO.

When announcing the Kazakh flag-carrier's first-half results on Aug. 5, CEO Peter Foster told investors that Boeing had pushed its 787 deliveries back from March 2025 to December.

Air Astana signed an agreement with Air Lease Corporation for three 787s in 2022 with deliveries from Boeing planned to start in early 2025 and finish in 2026.

Foster said the second aircraft will now arrive in the second quarter of 2026, while the third and final aircraft is delayed to the end of 2026 or even to 2027.

"This is very disappointing," he said, blaming Boeing's supply-chain problem for the delay.

As a result of the delays, Air Astana is likely to postpone the launch of New York flights, which the airline had planned to operate with the 787.

Instead, the airline has decided to extend the operation of its three 767 airliners. These 10-year-old aircraft will be used to launch flights to some long-haul destinations.

"We are looking at routes to Vietnam, Malaysia, Singapore and Japan for introduction in the course of the next 12 to 18 months," Foster said.

Meanwhile, the group continued to top up its narrowbody capacity. In the first half of 2024, it received six Airbus A320 family aircraft and plans to receive six more by year-end for both the parent airline and low-cost subsidiary FlyArystan, expanding its total fleet to 59 passenger jets. This includes the lease of five additional A320ceos to mitigate PW1100G engine issues with the neo fleet. Two of them arrived in June and July. The third will join in September, with two more such aircraft to follow in early 2025. The group also purchased seven spare PW1100G engines and leased three more powerplants.

Air Astana has meanwhile started to phase out its Embraer E190-E2s. The first of the five jets was withdrawn in April, the second one was redelivered in July.

The group carried 4.03 million passengers in the first half of 2024, which was almost 15% more than a year ago.

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added routes, Salt Lake City to Honolulu, and between Sacramento and both Kona and Lihue, have performed very well," he said.

"The availability of our fleet is critical, and we've been challenged over much of the past year and a half with well-chronicled shortages of [Airbus] A321neo engines. I am very pleased to share that our A321 fleet has been at full strength since the Memorial Day weekend with a full complement of engines. We expect this to remain the case through the rest of the year and into 2025."

Chief Revenue Officer Brent Overbeek echoed Ingram's optimism regarding the performance of the new domestic routes. He also noted that while the Maui market continues to recover slowly following the 2023 wildfires, other routes have provided stability for the airline's North American operations.

Overbeek added that the yen exchange rate remains the biggest headwind in the Japanese market but said that the carrier continues to see "strong affinity among Japanese consumers for Hawaii and for our brand."

Hawaiian Airlines operates four routes from Honolulu to Japan at present, OAG Schedules Analyser data shows, flying double-daily to Tokyo Haneda, daily to Tokyo Narita and Osaka Kansai and 3X-weekly to Fukuoka. Overall, the carrier offers about 17,000 two-way weekly seats between Hawaii and Japan, compared with about 19,200 at this time in 2019.

Earlier this year, the carrier returned seven nighttime slot pairs at Tokyo Haneda from Honolulu and Kona, saying the Japan-Hawaii market was "still encountering headwinds" and therefore "does not forecast a turnaround in the performance" of the services.

Although Hawaiian Airlines continues to see sluggish outbound leisure demand from Japan, All Nippon Airways Holdings has posted record-high quarterly revenue for the three-month period ending June 30, noting that inbound tourism and outbound business travel are continuing to increase. ANA recently announced plans to add routes to Istanbul, Milan and Stockholm this winter to cater for demand to Europe.

Hawaiian Holdings Inc., the parent of Hawaiian Airlines, reported operating revenues of $732 million in the three months to the end of June, up by 3.5% on the same period in 2023. Operating losses came in at $55.4 million, compared with $9.6 million at this time last year. The carrier is currently awaiting government approval for a proposed $1.9 billion merger with Alaska Airlines.

AIRFRAMERS

Deutsche Aircraft Starts D328eco Prototype Production

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Deutsche Aircraft has begun production of the first D328eco prototype by cutting one of the existing legacy Dornier 328 fuselages into three pieces.

The manufacturer plans to use for flight testing one of the fuselages taken over from its predecessors. The fuselage never has been flown and was produced around 20 years ago. Deutsche Aircraft also is stretching the center fuselage by 2.1 m (9 ft.) so the cabin can accommodate 40 passengers.

The 328eco is supposed to make its first flight at the end of 2025, but entry-into-service recently was delayed by another year to 2027. Chief Operating Officer Nico Neumann says meeting more stringent certification requirements will take more time. The 328eco is designed to operate on 100% sustainable aviation fuel (SAF), the manufacturer says.

Deutsche Aircraft also will use the time for some avionics and short-field performance improvements that are believed will make the aircraft more attractive to customers.

According to Neumann, the 328eco field performance is supposed to come as close as possible to that of the De Havilland Canada Dash 8-100, which is used by regional carriers such as Norway's Wideroe to serve remote destinations. Deutsche Aircraft is aiming to offer a 250-nm range from takeoff runways as short as 800 m (2,600 ft.) with a 70% load factor. The nominal range from unrestricted runways is 800 nm at full load and 1,200 nm with some payload penalties.

Deutsche Aircraft is targeting the replacement market for smaller turboprops such as the Saab 2000 and some 50-seat regional jets. Enhancements are expected to include a new cabin, new Garmin avionics, and Pratt & Whitney Canada PW127XT-S engines.

SUSTAINABILITY

United Airlines To Use SAF On Chicago O'Hare Flights For First Time

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United Airlines said it has agreed to purchase up to 1 million gal. of sustainable aviation fuel (SAF) this year for use at its base hub, Chicago O'Hare International Airport (ORD).

Finnish fuel producer Neste will start delivering the SAF to ORD before the end of August, United said in a statement. It will be the first operational use of SAF for commercial flights from the airport.

The Star Alliance carrier already uses SAF to partially power departing flights at four airports: Amsterdam Schiphol, London Heathrow, Los Angeles International, and San Francisco International.

"While the market for SAF is still in its infancy, there is a huge opportunity today for airlines and policymakers to work together to support its continued growth," United President Brett Hart said. "SAF at O'Hare was made possible thanks to ... the Illinois legislature passing [SAF] tax incentives."

United has aggressively worked to push the development of SAF for flights, including creating the United Airlines Ventures Sustainable Flight Fund. But SAF still only comprises around 0.1% of United's total fuel use.

"We are excited to expand our partnership with United and see our SAF being used at one of the major airports in the U.S.," said Alexander Kueper, VP of Neste's renewable aviation business. "It underlines our commitment to supporting the U.S. aviation industry in its efforts to decarbonize."

AIRPORTS

Hobart Runway Extension Underway To Boost Tasmania-Asia Connectivity

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An upgrade has commenced on the runway at Tasmania's Hobart International Airport (HBA) intended to enable widebody aircraft and allow for nonstop flights between the Australian island state and Asia.

The A$130 million ($87 million) project will allow the Tasmanian capital gateway to handle widebody jets, with the runway, taxiways and apron set to be made suitable for Code E aircraft like Boeing 787s and Airbus A350s.

HBA expects the work to be completed by May 2025. The Australian government pledged A$60 million to the program, with the remainder of the cost covered by the airport itself.

Hobart Airport intends to spend a further A$200 million to redevelop the terminal, increasing floor space and hiking the number of boarding gates from five to seven. The terminal works will be complete by 2027, the airport says.

CAPA – Centre for Aviation and OAG Schedules Analyser data shows Jetstar Airways, Virgin Australia and Qantas are the top three airlines serving Hobart, each of which offer solely domestic routes. Melbourne is the top destination served from Hobart by seat capacity, followed by Sydney and Brisbane.

Industry Data

Carbon Analysis: Middle East Big Three

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This week's Carbon Analysis highlights the emissions of the big three Middle Eastern carriers: Emirates, Etihad Airways and Qatar Airways.

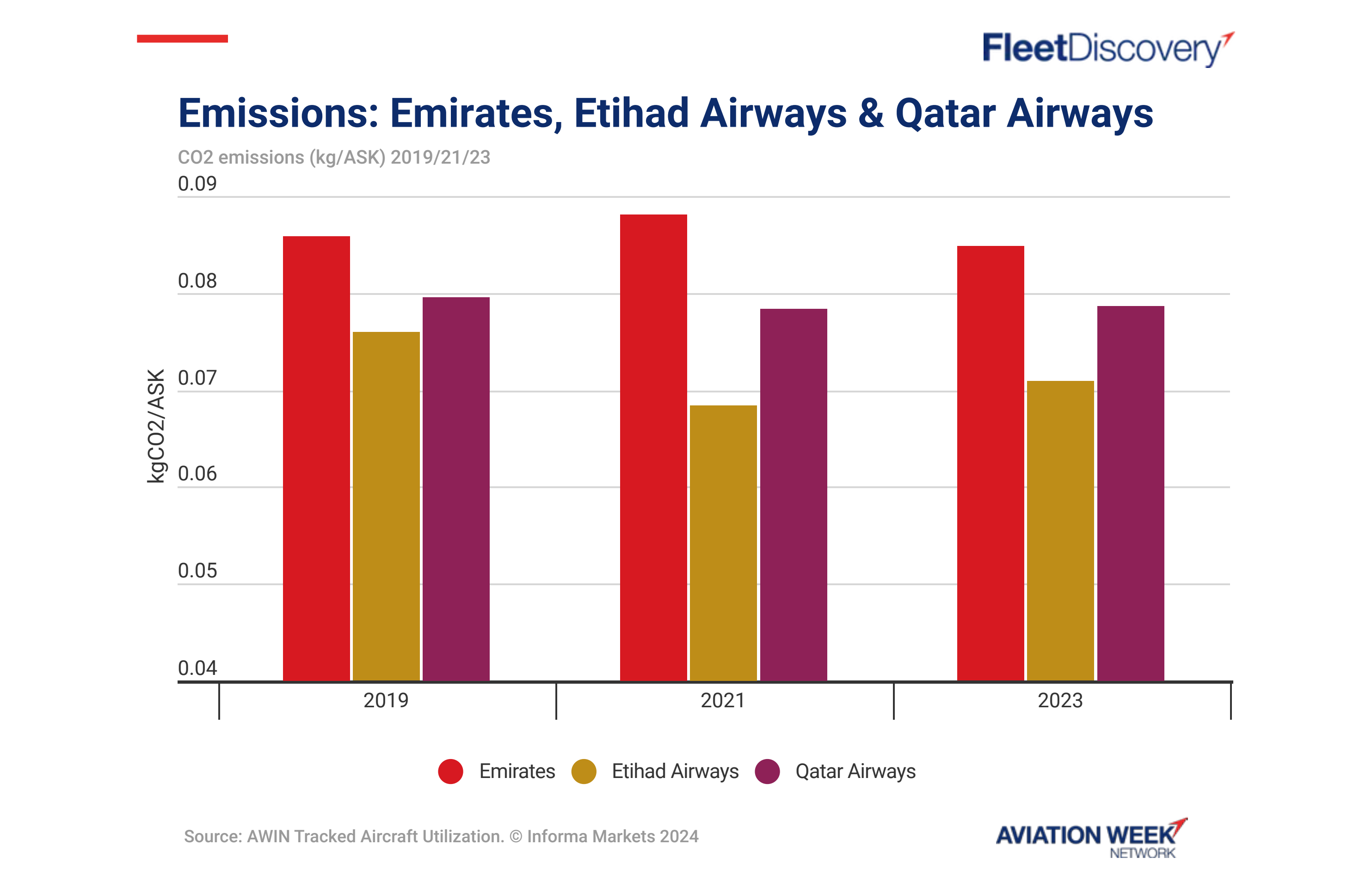
Emissions are shown for 2019, 2021 and 2023 in kgCO2/Available Seat Kilometer (ASK).

Emissions are generally on the higher side, which is not too surprising considering these airlines' large fleets of luxuriously fitted widebody aircraft. Etihad performs quite well here, although it's difficult to see a downward trend in any of the three carriers.

Etihad's reasonably strong performance in this analysis comes as a result of its fleet. With only 60 passenger-carrying widebodies in operation, Etihad's overall emissions per ASK remains favorable. A higher proportion of more efficient, more seat-dense narrowbody aircraft gives the carrier a below industry-standard result. However, the return of the Airbus A380 in 2023 brought figures back up again. This, coupled with an order book full of widebodies, may halt Etihad's progress.

Emirates' strategy relies upon a fleet consisting solely of widebody aircraft. As described above, this leads to higher emissions per ASK. Spacious aircraft layouts perpetuate the issue and the presence of the highly emitting A380 in its fleet causes Emirates to display a CO_2 per ASK result above industry standard. The aircraft on order for this carrier indicates no divergence from this strategy.

Qatar Airways' performance is somewhat lackluster, although it could be worse. Emissions sit around at what one might expect for an airline of this type, but little change is seen through the years. This is a simple case of lack of fleet renewal leading to lack of emissions reduction. However, with the carrier's first A321neos on order, as well as more Boeing 737 MAXs, the tide could be turning.



Industry Data

Airbus Commercial Aircraft Orders & Deliveries July 2024

In July, Airbus delivered 77 aircraft to 40 customers, including 57 A320neo family aircraft, up four from June. Airbus had two cancellations in July: these were the last two A350-1000s Virgin Atlantic had on order. Notably, Virgin Atlantic ordered seven A330-900s in July. As of July 31, 2024, the Airbus backlog stands at 8,565 aircraft.

Airbus Orders July 2024

Model	Airline/Lessor (Lessee)	Region	Total
A320neo	BERNIQ AIRWAYS	Africa/Middle East	6
A321neo	JAPAN AIRLINES	Asia-Pacific	11
	UNDISCLOSED	undisclosed	15
A330-900	VIRGIN ATLANTIC AIRWAYS	Europe	7
A350-900	JAPAN AIRLINES	Asia-Pacific	20
TOTAL			**59**

Airbus Deliveries July 2024

Model	Airline/Lessor (Lessee)	Region	Total
A220-100	ITA AIRWAYS	Europe	1
A220-300	AIR LEASE CORPORATION (CROATIA AIRLINES)	North America	1
	AIRBALTIC	Europe	1
	AZORRA (BREEZE AIRWAYS)	North America	1
	JETBLUE AIRWAYS	North America	2
	QANTAS AIRWAYS (NATIONAL JET SYSTEMS)	Asia-Pacific	1
A319neo	PRIVATE CUSTOMER	undisclosed	1
	TIBET AIRLINES	Asia-Pacific	1
A320neo	AERCAP (ITA AIRWAYS)	Europe	1
	AERCAP (SICHUAN AIRLINES)	Europe	1
	BOC AVIATION (LATAM AIRLINES GROUP)	Asia-Pacific	1
	BRITISH AIRWAYS	Europe	2
	CALC (AIR INDIA)	Asia-Pacific	1
	CDB LEASING (AVIANCA)	Asia-Pacific	1
	CHENGDU AIRLINES	Asia-Pacific	1
	CMB FINANCIAL LEASING (HAINAN AIRLINES)	Asia-Pacific	1
	EASYJET	Europe	1
	FLYNAS	Africa/Middle East	1
	ICBC LEASING (VIETNAM AIRLINES)	Asia-Pacific	1
	INDIGO	Asia-Pacific	3
	JETSMART (CHILE)	Latin America-Caribbean	1
	LUFTHANSA (BRUSSELS AIRLINES)	Europe	1
	MACQUARIE AIRFINANCE (AVIANCA EL SALVADOR)	Europe	1
	MALTA MEDAIR (KM MALTA AIRLINES)	Europe	1
	NAS AVIATION SERVICES (LOONG AIR)	North America	1
	NAS AVIATION SERVICES (TRANSAVIA FRANCE)	North America	1
	SAS	Europe	1
	SMBC AVIATION CAPITAL (AIR INDIA)	Europe	1
	VOLARIS	Latin America-Caribbean	1

Source: Airbus

CONTINUED, P. 11

Industry Data

Airbus Commercial Aircraft Orders & Deliveries July 2024 (cont.)

Model	Airline/Lessor (Lessee)	Region	Total
A321neo	AERCAP (SPIRIT AIRLINES)	Europe	2
	AIR LEASE CORPORATION (CONDOR)	North America	1
	AIR LEASE CORPORATION (ITA AIRWAYS)	Europe	1
	BRITISH AIRWAYS	Europe	1
	CALC (CHINA AIRLINES)	Asia-Pacific	1
	CATHAY PACIFIC AIRCRAFT SERVICES LIMITED (HK EXPRESS)	Asia-Pacific	2
	FRONTIER AIRLINES	North America	2
	INDIGO	Asia-Pacific	3
	JUNEYAO AIR	Asia-Pacific	1
	NAS AVIATION SERVICES (AIRASIA)	North America	3
	PEGASUS AIRLINES	Europe	3
	QANTAS AIRWAYS (JETSTAR AIRWAYS)	Asia-Pacific	2
	SMBC AVIATION CAPITAL (AIR TRANSAT)	Europe	1
	SMBC AVIATION CAPITAL (TURKISH AIRLINES)	Europe	1
	TURKISH AIRLINES	Europe	2
	UNITED AIRLINES	North America	3
	WIZZ AIR	Europe	3
A330-900	AIR LEASE CORPORATION (ITA AIRWAYS)	North America	1
	AIR LEASE CORPORATION (STARLUX AIRLINES)	North America	1
	CEBU PACIFIC	Asia-Pacific	1
	DELTA AIR LINES	North America	2
A350-900	AIR LEASE CORPORATION (AIR FRANCE)	North America	2
	DELTA AIR LINES	North America	2
	LUFTHANSA	Europe	1
	TURKISH AIRLINES	Europe	1
A350-1000	JAPAN AIRLINES	Asia-Pacific	1
TOTAL			**77**

Source: Airbus