

ISSUE

3

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Flight AirlineBusiness

ALL THE
NEWS FROM

WINNING CHANGE



ALTA last night recognised the achievement of Argentina's transport minister Guillermo Dietrich in developing aviation in the country with the Alas de America award.

Dietrich has overseen a transformative change in regulation of the aviation sector in Argentina, since President Mauricio Macri took office in 2015.

The country has welcomed foreign companies to launch new domestic carriers, and approved long-delayed requests from foreign carriers for new international routes. The country's domestic route network has grown by almost 50% and international routes by around 70%, says Dietrich (more on p6).

Capacity fears as vote halts new Mexico City airport

IATA director general Alexandre de Juniac believes halting a new airport project for Mexico City would be "very bad news" for the country and aviation after a public consultation launched by president-elect Andres Manuel Lopez Obrador yesterday backed stopping the development.

Almost 70% of voters in the consultation, in which just over one million people took part, backed a proposal to develop three existing facilities instead. The major new airport project was due to open in 2021.

"This country and this city needs desperately to increase the capacity," says de Juniac. "We need a new airport and we need it quickly. Cancelling the project would delay everything by five to 10 years, which would be a disaster.

The result fallout prompted Aeromexico chief executive Andres Conesa yesterday to leave the Forum early.

"We will push for a positive solution, but frankly what we have heard since the consultation has been closed, and what we heard from the new Mexican government is not very positive," says de Juniac.

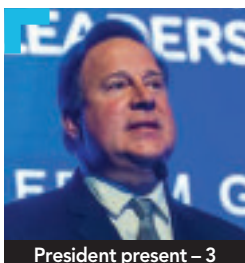
Inside this issue

Will Bolsonaro be good for business? 5
Atlas Air joins as associate member 6
IATA aims to head off infrastructure crisis 8
Who is winning the widebody battle? 10



ALTA members leading line-up 12
Latest aircraft programme developments 15
Getting to the gate on-time 18
Taking narrowbody share 20

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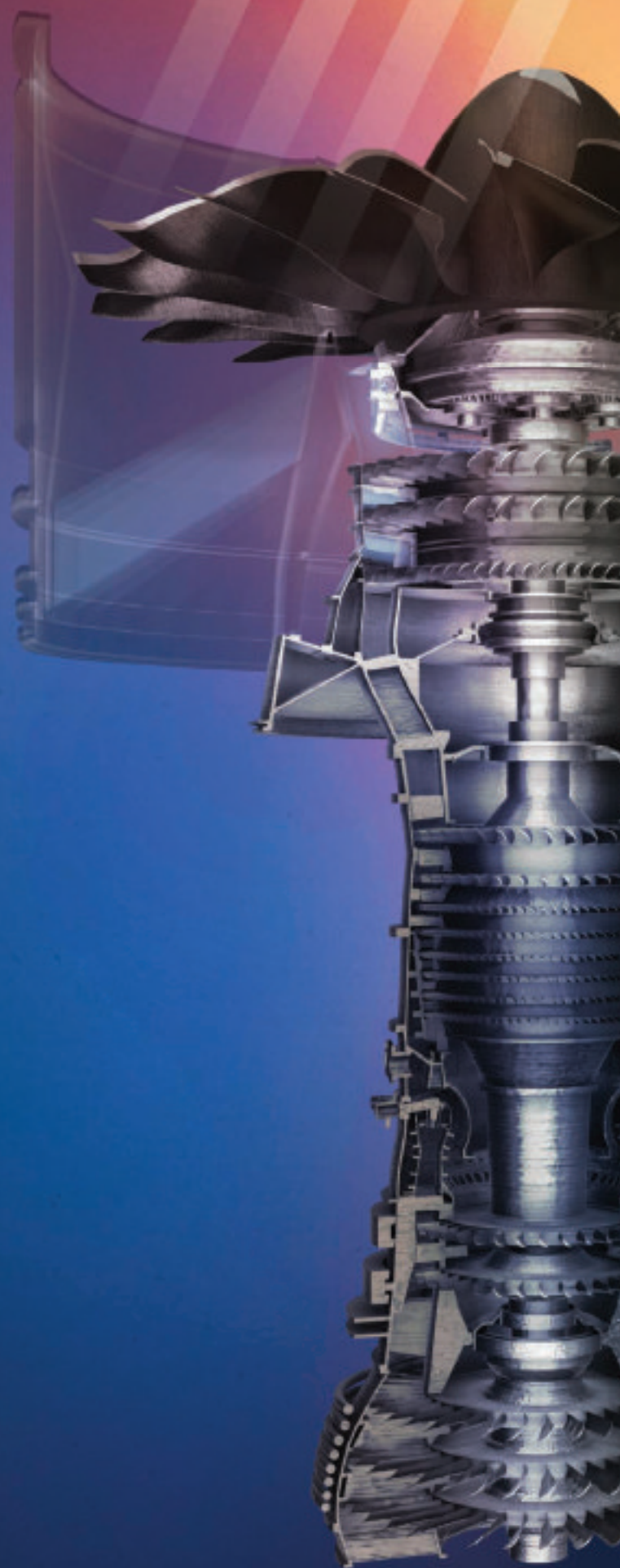
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Cautious Cueto sees more challenging climate in region

LATAM Airlines Group's chief executive Enrique Cueto has warned of challenging macroeconomic conditions for the region's airlines in 2019, even as he is cautiously optimistic that a change of government in Brazil could benefit the country's businesses.

"The Brazil currency devaluation is improving because of the election results," Cueto says. "But in any case, 2019 will be a challenge for the region."

LATAM's outlook on Brazil could be a bright spot in an otherwise sombre forecast for the region, which has been impacted by currency devaluation and softer travel demand in some countries. LATAM ended the second quarter with a net loss of \$114 million and operating profit in the period slid 86% to \$6.48 million.

"The third quarter will be more challenging for the industry," Cueto says. "We saw a mix of

weaker local currencies, impact on international demand especially in Argentina and Brazil, and higher fuel prices."

Uncertainty continues to loom in the fourth quarter. "It's not clear what's going to happen with traffic, in Brazil and Argentina, he says." LATAM had already trimmed 2018 capacity after the second quarter and Cueto indicates more capacity cuts are being considered.



Paulmann sees Q2 start for Peru unit

Varela calls for new routes

Panama president urges more connectivity in the region during opening address

Panama's president Juan Carlos Varela called for more routes to be opened in the Latin American and Caribbean region in an address to open this year's ALTA Airline Leaders Forum here in Panama City yesterday.

"This forum is a valuable opportunity to analyse the progress of aviation in the region. We want to encourage you to open new routes," he told ALTA delegates. "It used to take 72h to get to Mendoza. Now it is 6h. We have to continue to open new routes."

"We have to strengthen the connectivity of Latin America and the Caribbean with Asia, with Europe and with Africa"

Urging continued route development in the region formed part of an impassioned speech where he espoused the role of air transport as not just an economic driver but a pathway to sharing wealth and improving peaceful relations. He notes it helps support required



Varela says Panama will continue to exploit its geographic position

labour migration.

Panama has strongly developed its air transport through continued development of national carrier Copa Airlines and expansion of Panama City's Tocumen airport.

Tocumen International airport will partially open the new Terminal 2 early next year. The new terminal is expected to fully operational by the of June, providing an

additional 20 boarding gates and eight remote positions.

Varela says: "Panama has gone to great efforts to be a hub for the Americas. It has up to 90 destinations in Latin America and Europe. We will continue to exploit our geographic position."

He adds that 14% of Panama's GDP comes from air transport and tourism. ■

Chile not the limit for Sky

Chile's Sky Airline is on track to launch its new Peruvian subsidiary in the second quarter of 2019, with ambitions to set up affiliates in other Spanish-speaking countries.

"We are moving ahead, with a team of 15 very good people working on the AOC [air operator's certificate] in Peru," Sky chief executive Holger Paulmann tells FlightGlobal. "We target for operations to begin in the second quarter of 2019."

Sky's Peruvian affiliate will operate a domestic network and launch international service within the first year, says Paulmann. He declines to name specific destinations. Sky in Chile operates to a handful of international points in Argentina, Peru and Uruguay.

The Peruvian subsidiary, to be led by former LATAM Airlines executive Jose Raul Vargas, will launch with a fleet of three Airbus A320neos and grow to up to 15 aircraft by 2023, says Paulmann.

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CANSO signs for partner pact

ALTA executive director Luis Felipe de Oliveira yesterday at the Forum signed a memorandum of understanding covering future co-operation with global air navigation body CANSO. "Our experience is [that] partnership and collaboration only works when you have real projects to work on," says CANSO director general Jeff Poole (left). "So we will work together to identify what those key priorities should be... and then put some specific projects together, with people responsible and clear deliverables. That way we can make sure that many of things we have talked about, do happen."



Viva start at Santa Marta

Viva Air Group opens a third Colombian base in Santa Marta this week, as it continues to see strong demand for low-cost traffic in the region.

The new base, with two aircraft, will initially offer service to Bucaramanga, Pereira and San Andres, says Viva Air chief executive Felix Antelo. In December, it will add nonstop service from Santa Marta to Miami.

Antelo says the Miami route will cater to leisure US travellers as well as Miami-bound Colombians seeking to bypass Bogota. Viva has secured concessions from Santa Marta airport, making the investment possible, he adds. The airline already has bases in Bogota and Medellin.

Viva, which also has a Peruvian affiliate, sees sufficient demand for its "aggressive" expansion which includes three new domestic points in Peru, says Antelo. The airline is considering a second base in Peru to supplement its Lima base, he adds.

Brazil vote means business

Local operators hope for positive economic impact from Bolsonaro election victory

Initial soundings from airline executives at the Forum yesterday were cautiously optimistic on the impact for air transport of Brazil's president-elect Jair Bolsonaro, the far-right candidate who won the country's run-off election on 28 October.

"I think it might be more pro-business," said LATAM Airlines Group chief executive Enrique Cueto, in reference to Brazil's new administration. He cautions, however, that this is his personal opinion and the administration's stance on the airline industry has, "like for many things in Brazil", yet to be seen. LATAM is the country's second largest carrier.

Avianca Brazil chairman Jose



Bolsonaro win marks shift in Brazilian political landscape

Efromovich says: "In all his declarations, he has talked about how he is pro companies making more investments, reducing unemployment. When the economy starts to move, it will benefit airlines. We are a thermometer. If there is a problem, people don't fly."

Airlines in Brazil have been

buffeted by the political crisis leading up to Bolsonaro's election, after the ruling Workers' Party was engulfed in a number of corruption scandals. The Brazilian real has also suffered, falling in value against the US dollar.

Efromovich points to how the Brazilian real has already strengthened against the US dollar since the election results, as an early indicator that economic conditions are improving.

Embraer could also benefit from Bolsonaro's election. It is in the midst of finalising a joint venture with Boeing. Bolsonaro has previously said he supports the Boeing-Embraer deal, while rival Fernando Haddad spoke against it. ■



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Tocumen eyeing January opening of new terminal

Panama City Tocumen International airport aims to open its new terminal in January, after at least a year-long delay. "We'll be able to inaugurate the terminal in January, with it fully operating by mid-year," Claudio Dutary (centre), airport operations manager for the airport, said during a panel discussion here yesterday. Panama City and Copa's capacity concerns will not be solved with the new terminal. Dutary says, at current growth rates, Tocumen expects to surpass its design capacity in just "another two or three years", even with Terminal 2.

Atlas makes case for ALTA

Air freight operator cites growing trade in the region for joining as associate member

Atlas Air is the Latin American airline association ALTA's latest associate member, joining the likes of Delta Air Lines and Iberia as partners with the organisation.

Bill Flynn, president and chief executive of the US cargo carrier, touts the region's growing role in global trade, particularly with Asia, as a factor for joining ALTA.

"The South American region is an important and growing part of the global economy and an integral part of Atlas Air's operations," he says. "We are dedicated to continuing to expand our footprint and services in the region."

Atlas' Miami International airport gateway, which serves all of its South American markets, handles more than 20,000 tonnes of



freight monthly. However, Flynn talks about growth possibilities from gateways on the continent's Pacific coast to Asia in the future, especially as trade with countries

like China grows.

ALTA has also announced Mexican carrier Interjet as a full member and Lufthansa Group as a new associate member. ■

Argentina still set on course

Argentina's transport minister Guillermo Dietrich believes that ongoing weakness in international travel demand from Argentina is "transitory", as he reiterates the South American country's commitment in liberalising the aviation sector.

Devaluation of the Argentine peso and an economic recession has impacted outbound international travel from the country, contributing to an already challenging macroeconomic situation for Latin America's airlines.

"We might not have international passenger traffic growing at the same rate as before," Dietrich tells FlightGlobal. "But in a market that has grown dramatically, we are sure this is transitory."

He says Argentina still sees plenty of demand from airlines to begin new routes. The chief of Argentina's civil aviation agency ANAC, Tomas Insausti, notes that ANAC recently held a public hearing in which airlines requested approvals for hundreds of new routes. Chile's JetSmart will launch service to Argentina in December, and is planning a local affiliate to begin domestic flights in mid-2019. American Airlines is also adding new Argentina routes this year.



Airbus sees resilient Latin demand

Airbus expects traffic to double in Latin America over the next 20 years.

It forecasts Latin American airlines will carry 520 million passengers by 2037, growing at an annual rate of 4.3%, says Arturo Barreira, president of Airbus' Latin America and Caribbean commercial division.

This growth will translate into a need for 2,720 new passenger and freighter aircraft, nearly 90% of which will be narrowbodies. "We are very optimistic that the region will continue to be resilient," he says.

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IATA warns of infrastructure crisis

De Juniac tells delegates governments must make decisions to meet future airport and ATC requirements in region

IATA is warning Latin America is heading towards an infrastructure crisis unless governments in the region take action now to tackle looming airport capacity and airspace issues.

"Our requirements are not complicated. We need sufficient capacity in terms of runways, terminals and airspace. Quality must be aligned with our technical and commercial needs. And it all must be affordable," says IATA director general Alexandre de Juniac. "I believe, however, that we are headed for an infrastructure crisis - and that includes in Latin America.

"The capacity challenges at key hub locations such as Buenos



Aires, Bogota, Lima, Mexico City, Havana and Santiago are well documented. Unless they are addressed, the region's economies will suffer." De Juniac spoke on

the same day a public consultation backed halting development of Mexico City's new airport.

"We have an infrastructure problem in Latin America, which

needs to make decisions urgently," de Juniac adds. "It's not an emergency because of an immediate shortage - Mexico City being the exception - but it needs urgent action, because the decisions you make now are implemented in five or 10 years."

He does though see traction in some of its relationships in the region. "We see governments more and more turning their eyes and their ears to IATA. I mention Chile, we have a good relationship with Panama, with Colombia, and Argentina as well. So in the region we see governments more interested by the input of the industry and their representatives, ALTA and IATA." ■

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War of the widebodies

US manufacturer Boeing so far has the edge on its rival Airbus in the battle to sell new-generation twin-aisle aircraft. The infographic below illustrates the latest sales status for the big twinjets, using data from Flight Fleets Analyzer

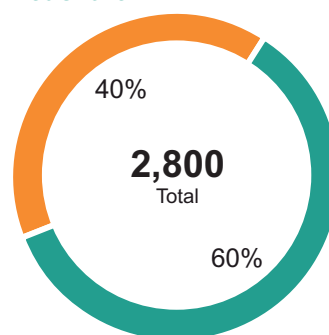


Airbus



Airbus

A330neo/A350 vs 777X/787 order market share



Source: Flight Fleets Analyzer (October 2018)

A330neo/A350	777X/787
1,111	1,689

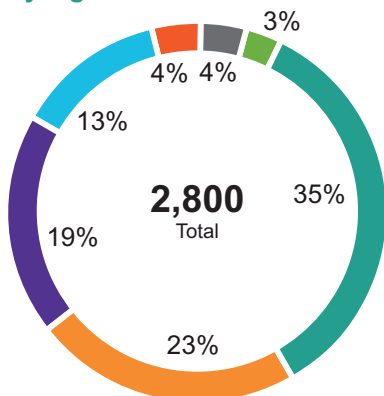


Boeing



Boeing

A330neo/A350 and 777X/787 order market share by region



Source: Flight Fleets Analyzer (October 2018)

Asia-Pacific	970
Middle East	651
Europe	526
North America	366
Latin America	106
Africa	105
Unknown area	76

61

The number of A350s and 787s flying with Latin American airlines

Increased competition

The latest *Flight Fleet Forecast* shows that with over 7,000 aircraft deliveries projected over the next 20 years, the regional sector is set for greater competition, writes Richard Evans, senior consultant at Flight Ascend Consultancy

The *Flight Fleet Forecast* 2018-2037 predicts delivery of 7,065 regional aircraft over the next 20 years, with a value of just over \$180 billion. This figure includes all regional jets and commercial turboprop aircraft with 19 seats and above.

The sector is undergoing a period of transition, with several new products entering the market from established manufacturers and new entrants.

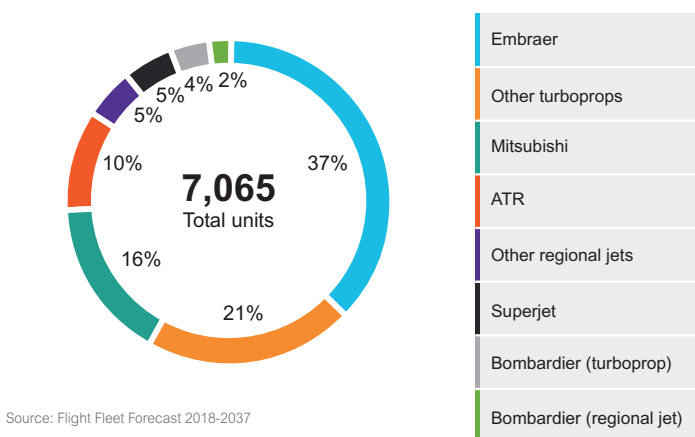
The regional aircraft market is therefore now seeing increased competition as it shifts away from the established duopolies of recent years.

ATR remains the market leader in the turboprop sector, with the ATR 42/72 delivering in considerably larger quantities than the competing Bombardier Q400. However, China is developing the 70-80 seat MA700, which will provide a third competitor in this space. The 19-seat sector meanwhile has new competition from Indonesia.

The forecast highlights the switch from Bombardier to Mitsubishi in the jet market

The regional jet market is also seeing more competition to the established Embraer and Bombardier product lines. Russia's Superjet 100 has now been in service for several years, and the Comac ARJ21 is flying with its first airline customer. Mitsubishi's MRJ has seen delays, but appears set to offer stiff competition in the 70-100 seat market, possibly to the detriment of the Bombardier CRJ family.

Regional aircraft delivery share by units 2018-2037



With the CSeries recently becoming an Airbus programme, Bombardier is only now focusing on product improvements to the rest of its commercial aircraft portfolio. The difficulties that airframers have faced in bringing new products to market emphasise the risks in this sector.

VALUE SHARE

Regional types cover a wide range of aircraft sizes, so it is useful to consider forecast market share in terms of value as well as delivery units. For example, despite making up 44% of the forecast deliveries, turboprops represent just 35% of the delivery value for new aircraft.

The ATR family has been particularly successful in emerging regions, and the forecast predicts ATR will continue to win well over 50% of deliveries over the medium term. It still appears there is an opportunity for a larger turboprop family to be developed in the latter 2020s, despite the fact that the Q400 now offers up to 90 seats in a high-density layout.

The USA remains overwhelmingly the preserve of regional jets rather than turboprops. The market here is heavily dictated by

pilot scope clause contracts with the three major network airlines. There is now very limited ability for the airlines to add more 76-seaters within current scope rules, which has led to orders for Embraer 175s and CRJ900s with 70-seat layouts, mainly for replacement. The forecast assumes gradual scope relaxation, but it is unlikely that the next round of agreements will allow the new, heavier Embraer E175-E2 and MRJ90 to be operated.

North America makes up around 35% of forecast regional jet deliveries, compared with around 45% of recent deliveries. This share has come down slightly, offering some hope that other world regions can absorb the majority of future deliveries.

The forecast highlights the switch from Bombardier to Mitsubishi in the regional jet market, with the all-new MRJ family predicted to displace the CRJ as the primary competitor to Embraer. Embraer is forecast to be the largest manufacturer, delivering more than 2,000 jets over the next 20 years.

The large regional jet market will become quite fragmented, with Superjet and the ARJ21 tak-

ing substantial shares in their own home markets.

On top of the MA700 arriving in the turboprop sector – currently forecast to enter service in the early 2020s – the Ilyushin Il-114 is set to re-enter production. Both types are likely to be focused on their home markets.

At the smaller end of the turboprop market, the 50-seat ATR 42 is the only type in serial production. As a result, popular types such as the Saab 340B and Dash 8-100/200/300 are likely to remain in service for many years to come.

The *Flight Fleet Forecast* predicts regional production of around 350 aircraft a year, similar to output in the 1980s and 1990s, but with a higher average aircraft size. Note this excludes aircraft for non-commercial uses. The figure is higher than recent annual deliveries, with the split between turboprops and jets close to recent trends. Significant new markets have developed since the 1990s, with more aircraft expected to enter service in India, China, Latin America and Africa. ■



Find out more and download the *Flight Fleet Forecast* 2018-2037 summary at: flightglobal.com/fleetforecast



Leading line-up

Airline Business Daily photographer Tom Gordon caught the ALTA airline members on camera

Standing (left-right): Freddy Rodriguez, country manager – Panama, United Airlines; Bill Flynn, president and chief executive, Atlas Air; Onur Alpan, director, international relations and agreements, Turkish Airlines; Diego Garcia, vice president commercial Americas, Air Europa; Delano Gefferie, corporate planner, Surinam Airways; Kiem Tong Lau, chief executive, Surinam Airways; Pablo Aguirre, director of marketing and strategic planning, Omni Air International; Fabricio Cojuc, senior officer, Aeromar; Octavio Perez, general manager,



TAME; **Neil Chernoff**, senior vice president network and alliances, Iberia; **Julio Gamero**, chief commercial officer, Interjet; **Steve Schulte**, chief executive, Tropic Air; **Felipe Bonifatti**, general manager Central Americas and Caribbean, Lufthansa; **José Ignacio Dognac**, chief financial officer, Sky Airline

Seated (left-right): **Oriol Hernández**, chief executive, Privilege Style; **Giselle Cortes**, director of international airports, JetBlue Airways; **José Efromovich**, chairman, Avianca Brasil; **Pedro Heilbron**, chief executive, Copa Airlines; **Luis Felipe de Oliveira**, executive director, ALTA ; **Hernán Rincon**, executive president and chief executive, Avianca; **Enrique Cueto**, chief executive, LATAM; **Andrés Conesa**, chief executive, Aeromexico; **Tracy Cooper**, managing director, Bahamasair; **Audra Walker**, chief commercial officer, LIAT; **Peter Cerda**, vice president for the Americas, IATA; **Hugo Estrada**, chief commercial planning and marketing, Boliviana

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SIA goes the distance as it restarts New York nonstop service with A350-900ULR

Singapore Airlines relaunched the world's longest commercial flight on 11 October, operating the near-19 hour nonstop Singapore-Newark service using an Airbus A350-900ULR.

The brand-new Airbus is configured with 67 business- and 94 premium economy-class seats.

The launch means that Airbus takes the crown of the world's longest commercial route from Qatar Airways' Doha-Auckland service, which is operated with Boeing 777-200LRs. The Singapore-Newark route is 8,285nm (15,345km), while the Doha-Auckland route is 7,848nm.

The -900ULR has a modified fuel system, a higher maximum take-off weight at 280t, as well as aerodynamic tweaks to stretch its range. The fuel capacity is raised by 17% to 165,000 litres compared with the baseline -900.

SIA last operated nonstop Singapore-Newark in 2013 with four-

engined A340-500s, but poor economics forced the carrier to pull out of the route.

The carrier will next deploy the A350-900ULR on Singapore-Los Angeles from 2 November, and increase the frequency to San Francisco from daily to 10-times weekly on 28 November with the type.



Tempo builds on 777X programme

Boeing is beginning structural trials on the static test 777X at its Everett plant near Seattle.

The static test airframe, dubbed "WH001", is the first 777X off the line at Boeing's Everett site, says Doreen Bingo, Boeing's static test aircraft lead. The test airframe lacks engines and avionics systems and will be used exclusively for ground-based testing, she says.

Boeing will subject the airframe to a series of tests designed to evaluate the strength of structures like the wings, struts and the fuselage.

The static test aircraft's wing includes the wingtip but lacks the wingtip folding mechanism that will be found on production 777Xs, she says.

The 777-9 will fly in 2019, with deliveries due to begin in 2020.



Delta gets set to debut its A220 fleet

Delta Air Lines will introduce the first Airbus A220 in North America at New York LaGuardia airport, making good on promises that the aircraft would initially fly from the Big Apple.

The Atlanta-based carrier will inaugurate A220 services from LaGuardia to Boston and Dallas/Fort Worth on 31 January. The aircraft will be configured with 109 seats, comprising 12 in first class,

15 in extra-legroom economy and 82 in economy.

The airline plans to use the A220s to replace smaller jets in its regional fleet.

"Where we're purposely putting [the A220s] is to improve our product on our longest-haul [Embraer] 175 or [Bombardier] CRJ900s into thinner business markets," says Joe Esposito, senior vice-president of network planning.



Max Kingsley-Jones/FlightGlobal



Boeing

Details of Embraer/Boeing plan emerge

The planned joint venture between Boeing and Embraer would give the US manufacturer complete control over all aspects of Embraer's commercial aircraft unit.

The memorandum of understanding between Boeing and Embraer also specifies that the deal would see Embraer's entire commercial unit transfer into a new, "fully-integrated subsidiary" of Boeing.

Embraer publicly released the document after it was reportedly leaked by one of Embraer's unions.

The nine-page agreement is dated 5 July – the day news broke that Boeing intends to acquire 80% of Embraer's commercial aircraft division, leaving the Brazilian manufacturer with 20%.

Executives described the plan as an evolution of longstanding collaboration between the companies. Boeing's heft will help increase sales of Embraer's products and create new jobs, they had said.

The memorandum sets 5 December as the deadline to complete much of the merger work.

Lever key to Max 10 revised gear design

Boeing's latest and largest 737 Max, the 10, will have a novel design to enable its longer landing gear to be accommodated.

After studying different gear options, Boeing has settled on a levered design that enables the gear to extend 241mm (9.5in) upon rotation during take-off, says 737 Max chief project engineer Gary Hamatani.

"We've put in this new lever... that extends down that 9.5in to provide us that rotation," he says. The design is similar to the gear

on the 777-300, Boeing says.

The Max 10 has a length of 43.8m, about 1.6m longer than the next largest Max variant, the Max 9. That meant Boeing needed to modify the gear while maintaining type commonality.

"We wanted to preserve commonality in the Max family. We needed to get the landing gear back into the same unchanged wheel well as the Max 8 and 9," says Hamatani.

United Technologies Aerospace Systems manufactures the gear.



Max Kingsley-Jones/FlightGlobal



Airbus

MRJ targets wider market appeal

Mitsubishi Aircraft is working to further penetrate the European and Asia-Pacific markets, confident that these can each account for 15% of MRJ orders.

Vice-president and general manager of sales and marketing Yugo Fukuhara says Mitsubishi still expects the majority of orders to come from North America, at 40%, with Europe and Asia-Pacific accounting for 15% each and the rest coming from China, the Middle East and Latin America.

"Europe is our immediate market, but Asia-Pacific will be for fu-

ture growth. Airlines that we speak with are either looking to upguage or downguage their services."

Alex Bellamy, head of the programme management division for Mitsubishi Aircraft, draws inspiration from the widebody sector.

"Just look at the point-to-point model with the long-haul aircraft," he says. "When you bring in a new clean-sheet that is designed and optimised for the market segment, the number of point-to-point routes also increases significantly. This is what we are trying to achieve with the MRJ."

A321neo cleared for longer missions

The Airbus A321neo has been certificated to operate with three additional centre fuel tanks, enabling it to conduct long-range operations.

The long-range version of the aircraft, designated the A321LR, has secured approval from the European Aviation Safety Agency and the US Federal Aviation Administration.

Airbus says the aircraft is able to operate up to 4,000nm with 206 passengers and has also obtained approval for extended twin-engine operations (ETOPS) up to 180min, clearing its use on

transatlantic routes. Certification covers approval to install the three optional tanks, along with the related reinforcement and new fuel-management systems.

It also includes modifications to the fuselage, following the reconfiguration of exit doors, as well as clearance to operate at a maximum take-off weight of 97t.

While the new door configuration will be standard on A321neos, the fuel system and structural changes for additional tank carriage will need to be specified by customers in advance.



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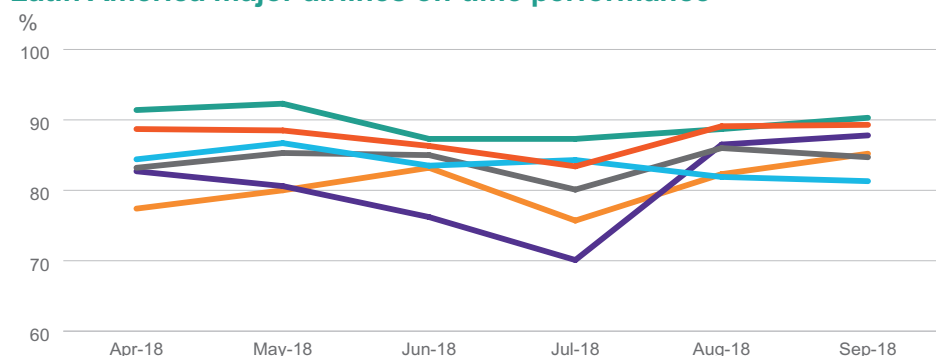
September data from FlightStats, part of FlightGlobal, reveals the six most on-time airline and airport performers in Latin America and tracks their record over the past few months

Airlines



Copa tops the punctuality table for arrivals

Latin America major airlines on-time performance

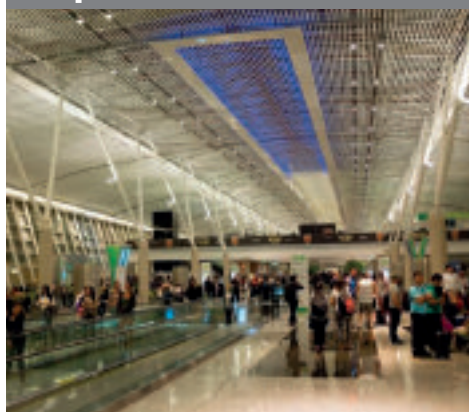


Source: FlightStats, data covers percentage of flights at gate within 15min of scheduled arrival time

Copa	Azul	Aeromexico	Aerolineas Argentinas	Gol	LATAM Airlines
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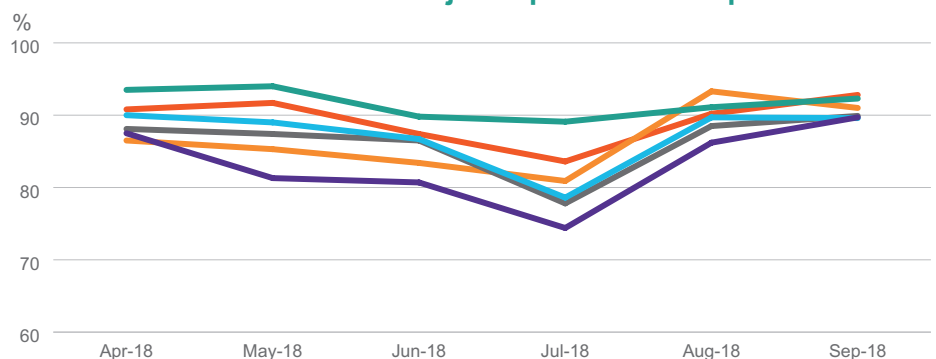
Panamanian carrier Copa Airlines led the way for on-time performance from carriers in the region in September, with data from FlightStats showing just over 90% of the Star Alliance carrier's flights arrived at the gate no more than 15 minutes after the scheduled arrival time. The carrier has largely been the region's most punctual over the past six months, the data shows, though it was pipped to the post in August by Brazilian operator Azul.

Airports



Brasilia's on-time departures were over 90%

Latin America mid-size and major airports on-time performance



Source: FlightStats, data covers percentage of flights leaving the gate within 15min of scheduled departure time

Panama City	Viracopos/Campinas	Rio de Janeiro Galeao
Rio de Janeiro Santos Dumont	Brasilia	Salvador

Copa Airlines' home base Tocumen airport was among the Latin American mid-size and major airports with the highest percentage of on-time departures in September. FlightStats data shows 92.3% of flights from the Panama City gateway left no more than 15 minutes after the scheduled departure time. But this performance was beaten by Viracopos airport, which had 92.8% of flights meeting the 15 minutes or less metric. This was one of five Brazilian facilities to feature with the best punctuality rates in September, while Goiania had the best on-time performance among regional airports.

Notes: Airline on-time arrival defined as flight arriving at the gate less than 15 minutes after the scheduled arrival time; airport on-time departure defined as flight departs the gates less than 15 minutes after scheduled departure time. Data covers airlines/airports for which at least 80% of all flights are tracked. Airports data covers mid-size and major airports. Data for regional airports is available in the full report at flightstats.com

Why so many airlines are sweet on Brussels Airport



At Brussels Airport you're in good company.

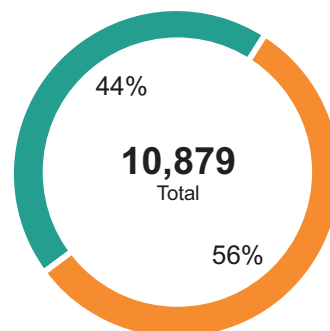
Fourteen of the world's long haul airlines use Brussels Airport as their gateway to Europe, and for good reason: 25 million passengers - a catchment area of 20 million people in Belgium, southern Holland and northern France - direct access to the 2nd conference city in the world with its EU, NATO and other international headquarters - the nearby Port of Antwerp and a huge diamond and pharmaceutical industry ... Brussels Airport guarantees high yield business travel and cargo, plus a growing number of travellers that come to discover the beauty of Belgian cities such as Bruges, Ghent and Brussels. Give wings to your business. Make Brussels Airport your gateway to Europe.

10k and counting

Combined sales of the A320neo and 737 Max have blasted past the 10,000-orders mark as customers continue to clamour for the re-engined narrowbodies. Here are the latest market statistics, with data from Flight Fleets Analyzer



A320neo/737 Max order market share



Source: Flight Fleets Analyzer (October 2018)

737 Max	A320neo
4,743	6,136

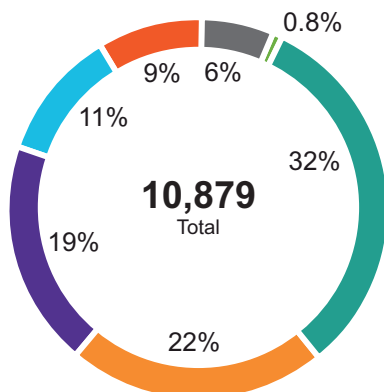
A320neo orders by engine manufacturer



Total orders: **6,136**

Source: Flight Fleets Analyzer (October 2018)

A320neo/737 Max order market share by region



Source: Flight Fleets Analyzer (October 2018)

Asia-Pacific	3,480
Europe	2,436
North America	2,083
Unknown area	1,212
Latin America	946
Middle East	639
Africa	83

84

The number of A320neo family and 737 Max aircraft flying with Latin American airlines

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Photo Courtesy: Felipe Galvez

Big Data series continues in London

FlightGlobal is making final preparations for its next Aerospace Big Data conference, which takes place at the Royal Garden Hotel in London on 28-29 November.

It will bring together manufacturers, MRO providers, suppliers and airlines from across the Europe, Middle East and Africa regions to discuss topics including information-sharing challenges and emerging opportunities to unlock the value of aircraft health data.

The five key topics for discussion will be:

- How do you define digital transformation and quantify that transition internally?
- How do you transition from reactive analytics to proactive/predictive analytics?
- Digitisation and MRO – challenges and success stories.
- How is big data improving MROs and impacting airlines in the market?



Last year's inaugural Aerospace Big Data conference in London set the template for a series of events that take place across the world

- Data-sharing and what the future may hold.

Delegates will be able to learn from those at the forefront of big

data in the airline business, while expanding their professional networks.

Confirmed speakers include:

Yasin Birinci, production planning and control director at Turkish Airlines Technic; Pedro Figueira, engineering director at Portugalia Airlines; Caroline Gorski, director of global ecosystem and partnerships for R2 Data Labs, Rolls-Royce; Karsten F Kahler, FDM specialist at Lufthansa; Ben Mayo, operations performance analyst at Flybe; John Meakin, group chief information security officer at GSK; Rodolphe Parisot, E&M chief digital officer at Air France-KLM; and Andrew Doyle, director of aerospace markets at conference organiser FlightGlobal.

The most recent event in the series took place in Miami, Florida on 11-12 September.

FlightGlobal launched the Aerospace Big Data Conference series in 2017.

After the London iteration, the next event will be in Singapore in March 2019.

flightglobal.com/BigData

DIGITAL

SMART CHOICE

Many *Flight Airline Business* subscribers are enjoying the option to view each issue for free on their smartphones. The digital edition is optimised for iOS and Android mobile devices, in addition to the tablet and desktop options. The design is responsive to each device and screen orientation. Users can also enjoy extras such as

video highlights from this year's Airline Strategy Awards. To sign up, search for "*Flight Airline Business*" in the App Store or Google Play, or visit flightglobal.com/AirlineBusiness



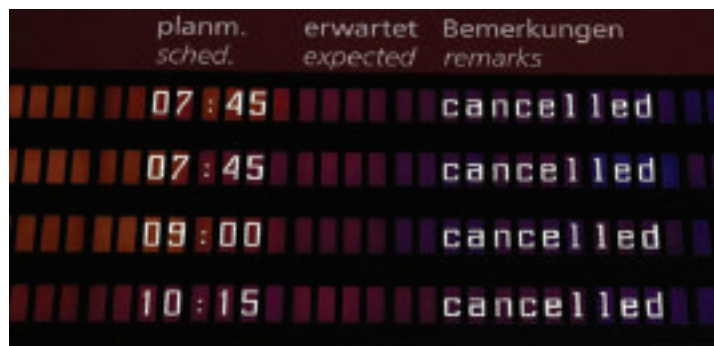
Debut for disruption event

The inaugural Flight Disruption Forum takes place on 8-9 November at the Hyatt Regency in downtown Atlanta.

This timely event comes after several high-profile incidents in recent years that have wiped millions off airlines' bottom lines, such as hurricanes Harvey and Irma, and technology meltdowns.

The event is organised by FlightGlobal, which incorporates FlightStats, a leading provider of real-time global flight data. It is designed as a networking platform for airlines, travel management companies and corporate travel managers, among others.

Areas of focus will include: ways to keep travellers moving during disruptions; methods for auditing disruption costs; ways to improve traveller experience and customer service; and proac-



Disruption can ultimately have a huge impact on airline financials

tive versus reactive strategies.

The conference will examine how data can be used to anticipate flight disruption, in order to save costs, reduce risks and deliver a better experience to the customer.

Speakers will include Claire Blades, director of travel and meetings at Veritas Technologies;

Steven Schoen, the senior director of Mobility Services Americas at Siemens; Nicole Hackett, director of Travel Services at Graham Holdings; Cindy Heston, director of Travel and Events at Anthem; and Yukari Tortorich, the vice-president of Global Travel Services at Discovery.

flightglobal.com/disruption

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