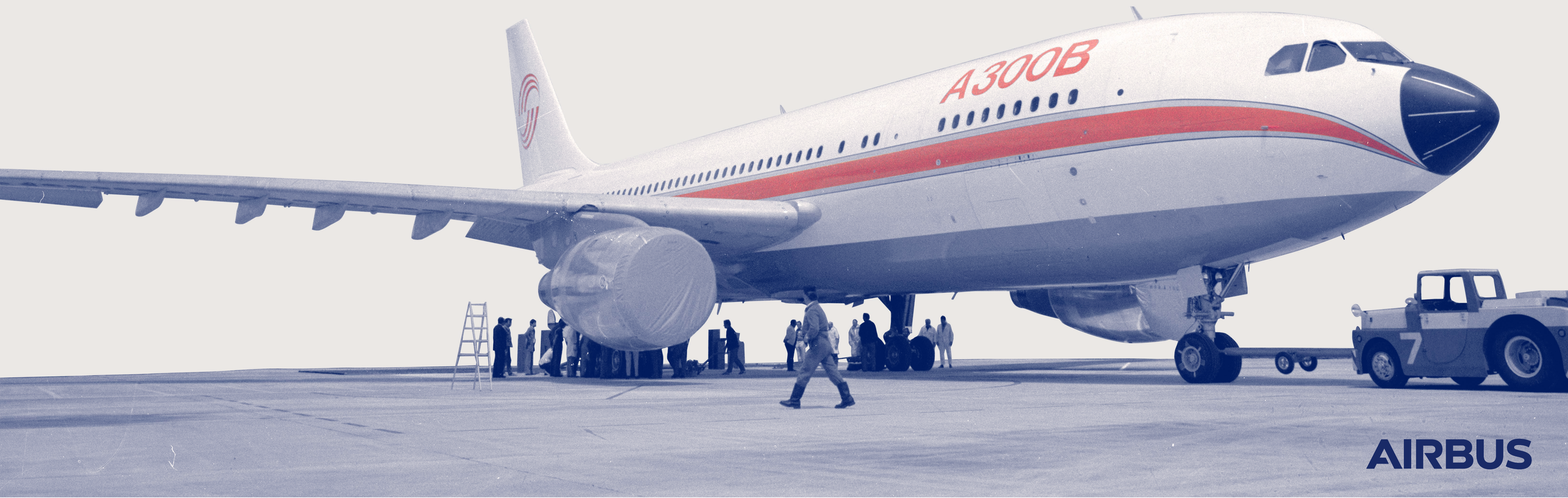
OUR HISTORY

Commercial Aircraft



EARLY DAYS

EUROPEAN CONSOLIDATION - CONCORDE

THE "FATHERS" OF AIRBUS

EARLY DAYS (1967)

EARLY DAYS

The A300 programme was launched with a milestone agreement signed by French Transport Minister Jean Chamant and German Economics Minister Karl Schiller at the 1969 Paris Air Show.

At a meeting in July 1967, ministers from France, Germany and Britain agreed "for the purpose of strengthening European co-operation in the field of aviation technology and thereby promoting economic and technological progress in Europe, to take appropriate measures for the joint development and production of an airbus."

EUROPEAN CONSOLIDATION - CONCORDE

The weighty language of the declaration concealed the economic reality behind the decision. In reaching this agreement, the three nations were acknowledging a simple truth: that without a joint programme of aircraft development and production, Europe would be left trailing in the wake of the Americans, who dominated the industry – and, with the planned long-range 747 "jumbo" on the horizon, looked set to consolidate their supremacy. The proud European firms which had produced some of the world's best passenger aircraft and pioneered commercial jet travel would become little more than sub-contractors to American manufacturers. Hundreds of thousands of jobs could be at risk and European airlines would be dependent on the United States for new aircraft.

Until this point Europe's aviation industry had remained strongly rooted in nationality. The British had built the Comet, the BAC1-11 and the Trident, among others. The French had produced the Caravelle. Together the two countries had built the world's first supersonic airliner, Concorde. But Concorde was the product of a political dream. It was never going to be the saviour of the European aircraft industry because it was highly expensive to build and operate and catered for relatively few people. The idea behind the short-haul European airbus, on the other hand, was to capitalize on the dawning of a boom in popular air travel. More people wanted to fly, and for less.

THE "FATHERS" OF AIRBUS

Throughout the 1960s, firms like France's Sud Aviation and the British Aircraft Corporation planned new aircraft with the aim of catering for the growth in demand for air travel. Sud Aviation's Galion was to be a 200-seat wide-body, while BAC talked of a similar-capacity BAC 2-11. Britain's Hawker Siddeley Aviation planned a twin-engine stretch version of the Trident.

Hawker Siddeley Aviation also carried out joint studies with French firms Nord Aviation and Breguet for a wide-body named the HBN 100. Yet it was becoming clear that if all these aircraft were built, none of them would sell enough to make it viable.

They would be competing against one another in the same market. Only if Europe combined the considerable talents and expertise which existed in individual companies and nations and put them into one aircraft to compete directly against the Americans – who held more than 80 per cent of the world market - could there be any hope of success.

Within days of the July 1967 meeting, a brilliant French engineer, Roger Béteille, was appointed technical director of the A300 programme. Henri Ziegler, president of Sud Aviation, was later named general manager of what would become Airbus Industrie and a German politician, Franz-Josef Strauss, was made chairman of the supervisory board.

These men were to become known as the "fathers" of Airbus, along with a man whose skills Béteille recognised at once: Felix Kracht, a young German engineer, who had been working for Nord Aviation but was about to join the German Airbus group as head of sales and marketing. Kracht, who later described himself more as the "midwife" of the Airbus manufacturing system than as a father of the company, took on the role of production director: overseeing and co-ordinating the job of building the A300.

TROUBLE AND STRIFE (1968-1969)

TROUBLE AND STRIFE

Between the signing of two documents – the memorandum of understanding in July, 1967, and the A300 launch agreement in May, 1969 – the bold and visionary venture that was Airbus could have foundered at several turns.

Roger Béteille, Felix Kracht, Henri Ziegler and Franz-Josef Strauss faced repeated claims that a twin-engine passenger jet could not be operated safely over long distances. Three engines was still the accepted minimum, and in America new three-engine jets – the DC-10 and the Lockheed Tristar - were being developed which would be in direct competition to the A300.

To operate the A300, Béteille wanted a more powerful engine than was then available. Rolls-Royce was already developing a new engine, the RB211, aimed at the American market, and it pledged to build a version with more thrust, the RB207, for Airbus. As the months went on, however, it became clear that Rolls-Royce had overstretched themselves and were concentrating all their efforts – and funds – on the RB211. Development work on the RB207 had all but stopped: Airbus had no engine.

RESPONDING TO MARKET REQUIREMENTS

But what appeared at first to be a disaster turned out to be a boon.

For a large chunk of the development costs of the A300 was accounted for by its new Rolls-Royce engines. Béteille realised that if he could buy engines "off-the-shelf," it would considerably reduce costs.

By now Béteille had also realised that major European airlines were revising their passenger growth forecasts and that a 300-seat A300 was in danger of being too big for the market.

With a small team, and working in secret, he set about designing a scaled-down version of the aircraft which would take up to 250 passengers and have a range of 1,200 nautical miles. This would become the A300B, the aircraft launched at Le Bourget in 1969.

The reduced size of the A300 meant that it could be flown with any one of three less-powerful engines already available – the RB211, the Pratt and Whitney JT9 or the General Electric CF6. The A300, which would need only two engines, would be therefore even more attractive to potential customers.

A SIGNIFICANT WITHDRAWAL BY BRITAIN

Despite the momentum gathering pace, there were growing doubts, too, about the escalating cost of the Airbus programme.

Ziegler, a war hero and resistance fighter, and a former head of Air France, fended off a threat from the French government to stop further finance because it said it could not go on funding three aircraft: the Concorde, Airbus and the Mercure.

In blunt terms, Ziegler told French transport minister Jean Chamant: "To stop Airbus is to condemn 30,000 workers, most of them French, to unemployment. Do you want to take the responsibility for that?" The threat evaporated.

In Britain, already stung by the cost of Concorde, the doubts were turning to a firm anti-Airbus stance. When it emerged that Rolls-Royce would not be supplying the engines for the A300 – the company had done a deal to supply its RB211 to Lockheed for the Tristar only – the British government's mixed passion for the European project turned icy cold.

In December 1968, the day after the A300B had been announced, Britain's minister of technology, Tony Benn, told the House of Commons that "the withdrawal of the A300 design presents the three governments with a new situation which they will have to consider…I must make it absolutely clear that I cannot in any way commit the government to give financial support to any new proposals which may be brought forward by the consortium."

GERMANY STEPS UP

Sure enough, within a few months Britain announced they were pulling out of the Airbus programme. West Germany, which had anticipated such a move, immediately stepped in, offering to contribute up to 50% of the costs of the programme if the French did the same. The Germans saw Airbus as an opportunity to rebuild its civil aviation industry, devastated during World War II.

Also behind the German enthusiasm for Airbus lay the exuberant Franz-Josef Strauss, then West German finance minister - a fervent believer in European industrial cooperation and a keen aviator. Hanko Von Lachner, who became Airbus' general secretary, summed up Strauss's contribution to the company's success: "Without any doubt, Strauss was the man in Germany who kept, at least on the government side, the programme going....He was a man with a strong personality and a lot of courage. He saw the overall goal, that the Airbus project was the chance for a European industry. Strauss was the archetypal European."

At this difficult time, another man of vision and courage made his mark. Sir Arnold Hall, then managing director of Hawker Siddeley, decided that despite the British government's withdrawal from the project, his company would stay in as a favoured sub-contractor – enabling it to take part in future board meetings, but without a vote. Hawkes Siddeley Aviation invested £35 million in machine tools to design and build the wings for the A300, but it needed a further £35 million to fund other aspects. Here again the German government came to the rescue, this time with a loan.

LAUNCH OF THE A300 PROGRAMME

It was to be no easy task. At his base at the Sud Aviation site in Toulouse, Béteille drew up the workshare plan which would form the basis of the Airbus production system for decades to come. He proposed that the French should make the cockpit, the control systems and the lower centre section of the fuselage. Hawker Siddeley, whose work on the Trident had impressed Béteille, should make the wings while the Germans should make the forward and rear fuselage sections, plus the upper part of the centre section. The Dutch would make the moving parts of the wing such as flaps and spoilers. (The Spanish, who would become a full partner in 1971, would build the horizontal tailplane.) "I wanted to use all the available talents and capacities to their utmost without worrying about the colour of the flag or what language was spoken," Béteille said later. Kracht's job would be to make all the pieces come together as efficiently as possible: "The essential thing was to execute a given task once, and in a single place," said Kracht.

In September, 1967, ministers from France, Britain and Germany met in London to sign a memorandum of understanding to launch the first phase of the development of the A300, a short-to-medium range twin-engine aircraft. Work was to be shared 37.5% each between France and Britain, with 25% for Germany. Sud Aviation was given the role of "lead company," while Hawker Siddeley was selected to be the British partner company.

A300: Birth of a saga,

A EUROPEAN AMBITION

Some of Airbus' early leaders – including Bernard Lathiere, Felix Kracht, Bernard Ziegler and Roger Beteille – reflect on the milestone A300 programme in this series of retrospective videos.

FIRST ORDER, FIRST FLIGHT (1970-1972)

FIRST ORDER, FIRST FLIGHT

From the beginning Roger Béteille insisted that a high level of technology should be built into the A300 to give it the edge over competing aircraft.

He also decided that English should be the working language – and that measurements should not be metric because most airlines already had U.S.-built aircraft. Béteille had spent time listening to airlines such as Air France and Lufthansa, as well as visiting U.S. airlines like United, TWA and American. "I wanted to try to understand what the customers really wanted," he said, laying the groundwork for much of the future success of Airbus where a culture of listening to customers has become endemic.

Even in these early days, Béteille and Kracht shared a bold vision of the Airbus future. They knew, as Kracht said later, that to succeed, Airbus would have to produce more than one aircraft – they must offer a family of aircraft covering all sectors. They also had a firm and ambitious commercial target: to win at least a 30% share of the market.

"GREEN LIGHT" FOR THE A300B

The A300B given the go-ahead by France and Germany at Le Bourget in 1969 would be smaller, lighter and more economical than its three-engine American rivals.

Its fuselage had been reduced from the original A300's 6.4 metres in diameter to 5.6m, its length from 53.92m to 48.3m. As a result it was 25 tonnes lighter than the first planned A300.

Making the A300 as economical to operate as possible was seen as key to ensuring its success. To this end, Béteille ingeniously decided to raise the cabin floor slightly.

This provided enough space in the hold to accommodate standard LD3 freight containers side by side, allowing airlines to increase the profitability of each flight by carrying more cargo.

Hawker Siddeley designed a new wing which provided greater lift and improved the A300's performance.

Airbus was able to declare that the A300 would climb faster and attain a level cruise altitude sooner than any other passenger aircraft, giving the cabin crew more time for the in-flight service.

THE A300 TAKES SHAPE

The engine finally chosen for the first A300 was the GE CF6-50A, built by Americans but – in a deal insisted upon as part of the package – with the aid of French firm Snecma. This engine produced 49,000 lbs. of thrust, as powerful as anything else on the market, yet it was more economical.

An increasing use of weight-saving composites would be a major factor in the design and development of all Airbus aircraft. The A300 featured the first composites used on a passenger aircraft. Leading and trailing edges on the tail fin were made from glass fibre reinforced plastic, as was the radome (the tip of the nose housing the radar).

The A300 was taking shape, but the formal setting up of Airbus as a consortium did not take place until 18 December 1970, when Airbus Industrie was officially created as a GIE. France's Aerospatiale (a merger of SEREB, Sud Aviation and Nord Aviation), and Germany's Deutsche Airbus – a grouping of four firms, Messerschmittwerke, Hamburger Flugzeugbau, VFW GmbH and Siebelwerke ATG - each took a 50% stake. The headquarters were to be in Paris initially – they would not move to Toulouse until January, 1974 – and would provide a single interface for design, development, flight testing, sales, marketing and customer support, as well as media relations and publicity. Franz-Josef Strauss was appointed president and chairman of the supervisory board, the forum in which policies would be decided and decisions made as to how the work on new programmes would be shared out.

A300: Birth of a saga,

TOWARDS FIRST TAKEOFF

THE CONSORTIUM GROWS

Years later, Béteille spoke of the importance of technology and recalled how the mix of cultures at Airbus brought tangible benefits: "The basic idea of Airbus has always been to compete against established manufacturers. We had to bring something more. That something more was daring to use advanced technology wherever it could bring economic results. We had to take more risks of failure than the established manufacturers. But we had the ability to make use of different experiences, education, ways of looking at things. We had each of the three teams looking at different aspects of the aircraft, and having the ability through our established system to express their views and to support them until a decision was made. That enabled us to avoid mistakes. If we had not given a degree of high technology, Airbus would not have succeeded."

Adam Brown, who joined Airbus in 1973 and became the Vice President-Customer Affairs Directorate, recalled: "Right from the start we realised our products would have to offer significant advantages over the established U.S. aircraft. Specifically, we decided that we must exploit the rich heritage of European creativity to develop aircraft which were more advanced and efficient."

Having scaled down the original A300, Airbus now learnt that an all-economy 250-seater was not big enough for Air France. More capacity was created by stretching the fuselage and the A300B1 became the A300B2 with 270 seats. On 3 September, 1970, Air France signed a letter of intent to buy six A300s, the first order won by Airbus.

A300 FLIGHT TESTING COMMENCES

With the test programme well under way Airbus took another revolutionary step by setting up an international team of test pilots. It was decided that Airbus Industrie – rather than Aerospatiale – would be responsible for the flight test. Bernard Ziegler (son of Henri) was asked to organise the A300 flight test "on the basis that it was a European organisation" and he set about recruiting some top names, including Aerospatiale veterans Pierre Canet and Max Fischl. Later he recruited British and Spanish test pilots.

The first flight of the A300 took place in Toulouse on 28 October, 1972, a month ahead of schedule despite several delays due to bad weather. It lasted one hour and 23 minutes. Fischl was captain, while Bernard Ziegler, then head of flight test, was his number two. Ziegler explained: "It was a kind of tradition that the boss was in charge of making the first flight, but I took the decision to reverse that, to make it a team effort. I was not willing to have, any longer, a star in the system...The decision was to the surprise of the Airbus management of that time, Béteille and my father."

A300: Birth of a saga,

THE TIME OF DOUBT

Despite a successful first flight for the all-new A300 on 28 October 1972, Airbus faced a challenge – convincing airlines that it had designed the world's most economical, innovative and comfortable aircraft. The solution? Take the A300 on a six-week odyssey across the Americas to show off Airbus' new creation to customers, pilots and executives. Early Airbus leaders Bernard Lathiere, Felix Kracht, Bernard Ziegler and Roger Beteille are interviewed.

CHAMPAGNE... AND DROUGHT (1973-1977)

CHAMPAGNE... AND DROUGHT

EXPANDING HORIZONS WITH THE A300B4

AN AGGRESSIVE APPROACH TO THE MARKET

CHAMPAGNE... AND DROUGHT

Roger Béteille and Henri Ziegler knew that if Airbus was to succeed it would have to crack the lucrative U.S. market. They decided on a courageous move – to take the A300 on a six-week odyssey across South and North America which would show the U.S. airlines what they would miss if they failed to buy.

It was to prove perhaps the most unusual sales expedition ever undertaken by an aircraft manufacturer. On board were the crews, sales team, engineers and spares needed for the trip. The A300 was also loaded with crates of the best champagne for the thousands of guests invited to view the aircraft at stopovers.

The A300 took off from Toulouse in September, 1973, for Dakar in West Africa and then flew across the Atlantic to Sao Paulo, Brazil. It went on to Florida, where it touched down on North American soil for the first time, and then to Mexico City and Chicago. Felix Kracht recalled: "The whole world thought we were mad because we arranged it without any support from abroad. But the trip went without a hitch and left a very good impression. It helped us a great deal." In fact there was one small incident – a birdstrike caused minor damage to one of the engines, which had to be replaced in Chicago. But even then, the speed and ease of the replacement operation served to impress watching U.S. airlines that Airbus product support was up to the mark.

Another benefit to emerge from this imaginative adventure was that the A300 had made a strong impression on Frank Borman, the former Apollo astronaut who then headed Eastern Airlines, one of America's "big four." Within three years Borman's support for Airbus would prove crucial to the consortium's survival and help establish the basis for future success.

EXPANDING HORIZONS WITH THE A300B4

While the flight and ground tests of the A300B2 continued, Airbus began talking to Korean Airlines about producing a longer-range version, the B4. Airbus saw South-East Asia as a vital market ready to be opened up and Korean Airlines were the key. A year later, in September, 1974, Korean Airlines duly signed a contract to buy four A300B4s, with two options, becoming Airbus' first non-European customer – a statement of faith which showed Airbus could win orders outside its home territory. (Following the first Air France order, Lufthansa had ordered three A300s with four options.)

French and German type certification for the A300 was obtained in March, 1974. And on 23 May, the first A300 to go into service made its initial commercial flight from Paris to London for Air France. Its economy, efficiency and technological standards in comparison to its rivals, the American tri-jets, were impressive.

As Adam Brown, the former Vice President-Customer Affairs Directorate, put it: "An element of Airbus policy right from the start has been not to incorporate new technologies for their own sake but to carefully select meaningful applications which produce clear pay-offs in safety, operational capability and profitability benefits.

This approach enabled the A300, when it entered service, to offer airlines a 20% saving in direct operating costs per trip relative to the competing tri-jets." Another factor, beyond the control of Airbus, contributed to the growing recognition among airlines that the A300 offered valuable economic advantages over its rivals. Not only did having one less engine considerably reduce the capital cost involved in buying the aircraft, but the A300's fuel efficiency became increasingly important as the 1973 oil crisis began to bite and prices soared.

AN AGGRESSIVE APPROACH TO THE MARKET

Nevertheless, sales were slow. In 1975, the extrovert and gregarious Bernard Lathière took over from Henri Ziegler at the helm of Airbus and instigated an aggressive sales approach which would see a number of crucial deals clinched. One of these was with Indian Airlines, a deal negotiated by Ziegler just before handing the reins to his successor. In the face of fierce competition, Lathière paid a rapid visit to Delhi and famously played on his Indian heritage – he had been born in the country and was able to produce a picture of himself as a boy with Gandhi – to persuade the airline's president to stick with Airbus and confirm its order for three A300s, with three options.

Other orders followed from South African Airways (four plus four options) and Air Inter (three). But then, despite the best efforts of Lathière and his team, sales dried up. For 18 months from December 1975 Airbus entered into what became known as its "black period" when virtually no deals were struck and the number of "whitetails" – aircraft built but not sold – began growing in Toulouse. Production dropped to just half an aircraft a month during this period. Béteille, Lathière and Kracht resisted calls from some quarters to shut down production altogether, knowing that if they did this it would be the end of Airbus. Instead they redoubled their efforts to sell the A300, concentrating heavily on markets in the Far East – Japan, Korea, China – while continuing their assault on U.S. airlines.

The so-called "Silk Road" strategy paid off. A deal with Thai Airways for two A300s with two options finally broke the sales deadlock in May, 1977 – Lathière having travelled to Bangkok to complete the deal despite an attempted coup in the country.

TECHNOLOGY LEADERS
(1977-1979)

TECHNOLOGY LEADERS

COCKPIT ADVANCES

THE AIRBUS FAMILY IS BORN

BETTING ON AIRBUS

TECHNOLOGY LEADERS

As we have seen, Roger Béteille had been determined from the start that Airbus should set new standards in technology and innovation.

By its very nature, the A300 had done just that by becoming the world's first twin-engine wide-body. Other features, including the first use of composites in secondary structures on commercial aircraft and its raised cabin floor – allowing it to carry more cargo and therefore increasing its economic efficiency – had contributed to its innovative appeal to customers.

In 1977, the A300B4 became the first "ETOPS compliant" aircraft – its high performance and safety standards qualified it for Extended Twin Engine Operations over water, providing operators with more versatility in routing. With the A310, launched in July, 1978, Airbus employed its innovative skills and technological know-how to even greater effect. And, as with all future Airbus programmes, the advances made in the development of the new aircraft were fed back into the existing model, the A300.

The A310, which once again was developed in consultation with airlines, was to be a shorter, longer-range aircraft than the A300, seating 218 in a two-class configuration. It also incorporated another concept which would later become a cornerstone of Airbus' success: both models would have maximum commonality.

Airbus introduced the use of lighter-weight carbon fibre reinforced plastic on secondary structures such as spoilers, airbrakes and rudder - first in trial on an A300 and then with the A310-200 when it entered service in 1983. Two years later, the A310-300 with its all-composite fin saw the first use of composites on primary structures, as well as the highly-effective addition of drag-reducing wing-tip devices which improved fuel efficiency.

COCKPIT ADVANCES

The A310 also marked another step in Airbus' pioneering efforts to advance the technology of cockpits and significantly enhance the man-machine interface – thereby improving operational safety. Beginning with the A300, Airbus improved the cockpit layout, allowing a two-pilot flight crew to operate the aircraft without the need for a flight engineer.

The new concept, called the Forward-Facing Crew Cockpit, went into service on an A300B4-220 delivered to Garuda Indonesia airlines in 1982, and it heralded a new era in flight decks which was to be followed by all other large aircraft manufacturers worldwide.

Airbus took the next step in cockpit development on the A310, introducing electronic flight instrument displays that replaced many of the traditional analogue dials on the main instrument panel. This A310 "glass cockpit" used six computer-driven cathode ray tube displays to provide the captain and co-pilot with centralised flight and navigation information as well as monitoring and warning data.

The glass cockpit subsequently was incorporated on the A300 as well, providing commonality between the two aircraft – an approach that was to be further developed on the other Airbus aircraft that followed.

THE AIRBUS FAMILY IS BORN

The A310 marked the beginning of the "Airbus family" development and, with its lighter weight and fuel efficiency, helped attract new customers. Jean Roeder, chief engineer of Deutsche Airbus, said: "We showed the world we were not sitting on a nine-day wonder, and that we wanted to realise a family of planes... we won over customers we wouldn't otherwise have won. The A310 supplied us with the starting point for the A300-600 we would never have had without it....What the A310 gave us was new systems technology, the efficiency and the productivity of the 'glass cockpit'...now we had two planes that had a great deal in common as far as systems and cockpits were concerned."

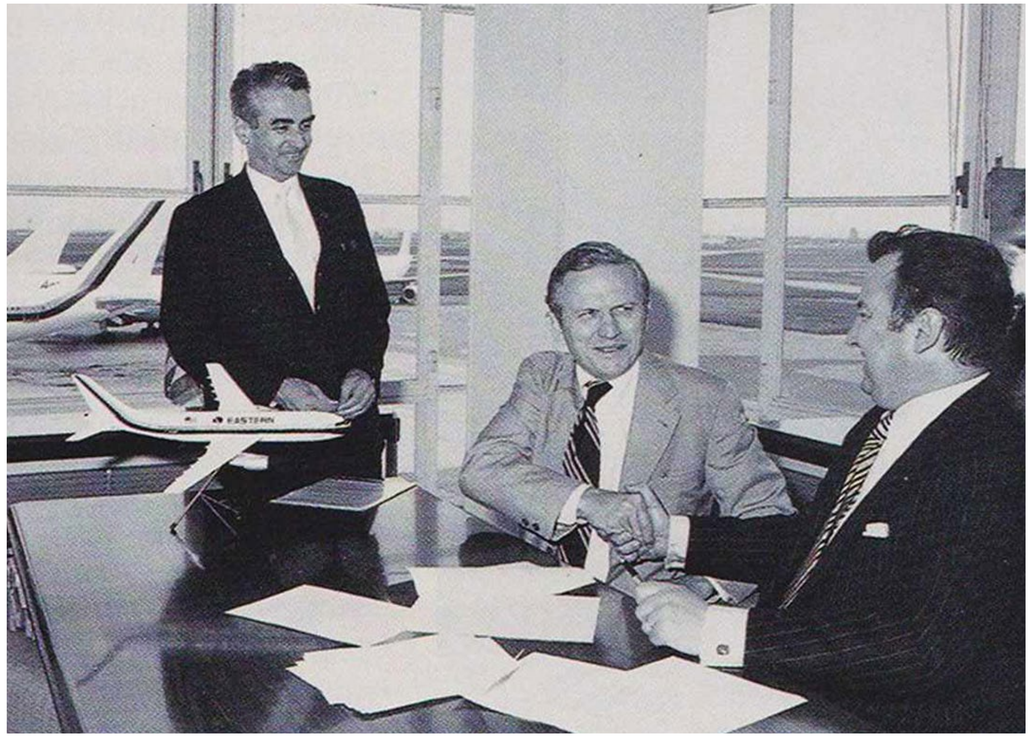
The A310 also marked Britain's return to Airbus as a full partner. A new, smaller wing than that produced for the A300 had to be designed. Hawker Siddeley had by now been incorporated into British Aerospace, and as the British dragged their feet about commitment to the project there was talk of the A310 wing being produced elsewhere. Eventually the British government put up a reported £50 million in a repayable loan towards development costs and from January, 1979, British Aerospace took a 20 per cent stake in Airbus Industrie, roughly equivalent to the work it would gain from being part of the consortium. France and Germany's shares went down to 37.9 per cent each, with the rest held by CASA of Spain.

An order from Sir Freddie Laker for 10 A300s in late 1978 – the first British order for Airbus aircraft – had satisfied one of the conditions of British money for the A310, that there was a British order for Airbus.

A further oil crisis in 1979 had, like the first six years earlier, focused airlines' attention even more keenly on economy, especially fuel consumption. Demand was growing for a new short- to medium-range 150-seater aircraft which could be used to match capacity to demand more flexibly. Airbus announced its intention to build its first single-aisle, the A320.

A300: Birth of a saga,

FROM THE A300 TO THE AIRBUS FAMILY



BETTING ON AIRBUS

After the Eastern Airlines success, there followed a series of orders which confirmed Airbus as a serious contender in the global aircraft manufacturing industry. By the end of the decade, Airbus was able to state that it had delivered 81 A300s to 14 airlines, serving 100 different cities in 43 countries. Its order book was healthy: 133 firm orders and 88 options. Just 10 years after its official launch, Airbus Industrie had achieved 26 per cent market share in dollar value.

Throughout the sales drought of 1976-77 Béteille had not only been convinced, rightly, that Airbus would pull through – he had also nurtured plans to build the second aircraft in his dreamt-of Airbus family, to become the A310.

FLY-BY-WIRE
(1980-1987)

FLY-BY-WIRE

The idea of a family of Airbus aircraft to cover all sectors had been embedded in the minds of Roger Béteille and Felix Kracht from the earliest days. It seems logical now that after the A300 and the A310, the next aircraft in line should be the A320.

But in fact, for a while there was pressure from some sections of Airbus to go first for the longer-range A330/A340.

Projects in development in the late 1970s were wide-bodies: a high-capacity twin and a smaller, ultra long-range four-engine aircraft. But now Airbus could see demand building for a medium-range single-aisle aircraft in the 130-170 seat market.

One of the A300-600 and A310's notable innovations had been the introduction of electrical signalling on secondary flight controls, replacing the web of cables and pulleys tradionally used. Béteille wanted to take this evolution further with the next Airbus aircraft – to computer-driven digital "fly-by-wire", in which the deflections of the flying control surfaces on the wing and tail are no longer driven directly by the pilots' controls, but by a computer which calculates exactly which control surface deflections are needed to make the aircraft respond as the pilot wishes. In place of the pilots' control column would be a simple sidestick control. Airbus also planned to increase the proportion of components built with composites on the A320 to include the horizontal tailplane and flaps.

THE A320 MOVES FORWARD

These were bold and imaginative advances, but once again it was innovation not for its own sake but in order to deliver concrete economic and performance benefits: reducing an aircraft's weight would mean better fuel efficiency, for one thing.

But first the decision had to be made – medium-range A320, or long-range A330/A340?

Béteille recalled: "As far as I was concerned there were two elements, one being the market needs, which was for an A320 earlier than a A340; and secondly for the technical reason that, having to make a significant step forward in technology, like fly-by-wire, it was considerably easier and less risky to enter the field with a smaller aircraft than with a big, long-range aircraft.

Correcting a mistake is much cheaper, and the accumulation of experience is faster with a smaller, short-range aircraft which makes many more flights and is used in larger numbers than the long-range.

There were some divergent ideas within Airbus, but the final decision to go for the A320 was a smooth one."

A320 KEY ADVANTAGES

The A320's fly-by-wire technology was not only a way of improving flight controls and reducing weight. It enabled Airbus to take safety to a new level by introducing the flight envelope protection. Pilots flying the A320 were free to operate it as normal, but the flight envelope protection prevented the aircraft from performing manoeuvres outside its performance limits.

Fly-by-wire also firmly established the concept of commonality which is so central to the appeal to customers of Airbus aircraft. No matter how one aircraft varies in size or weight from another, fly-by-wire commonality allows the pilot to fly them in the same way because the computer "drives" the aircraft's flight controls. This leads to considerable reductions in the time and costs involved in training pilots and crew to operate them.

A further advantage which the A320 offered over its rivals was that its cabin was wider, enabling airlines to install more spacious seats with a wider aisle.

In June, 1981, at the Paris Air Show, Air France gave the A320 programme a huge boost by declaring its intention to buy 25 of the planned new aircraft, with an option on 25 more. Yet the A320 was not officially launched until March, 1984. Talks over funding and workshare agreements between Airbus partners were complex and prone to delay, conducted as they were against a backdrop of world recession and the effects of deregulation in the American airline industry. The number of A300 "whitetails" had again begun to build up in Toulouse as recession-hit customers cancelled orders. Nevertheless, when the A320 launch day finally arrived Airbus was able to announce an impressive portfolio of more than 80 firm orders from five launch customers. British Caledonian, then Britain's second largest airline and later to be taken over by British Airways, ordered seven A320s with three options, joining Air France, Air Inter, Cyprus Airways and Inex Adria of then Yugoslavia.

A ROYAL ENTRANCE

A hard-won order from one of America's leading airlines, Pan Am, crowned the A320 programme's successful beginnings. It was achieved in the face of stiff competition from rivals and was only the second order won by Airbus in the U.S.

In February, 1987, the A320 was rolled out in a glittering ceremony in Toulouse featuring lasers, dry ice, champagne and royalty – the Prince and Princess of Wales joined French Prime Minister Jacques Chirac as special guests, and 1,400 people attended. Worldwide publicity ensued and optimism was running high.

But even the likes of Béteille, Kracht and Jean Pierson (who had replaced Bernard Lathière as President and Chief Executive Officer in 1985) might have hesitated to predict the kind of success the A320 would actually go on to achieve.

The A320 Family has recorded spectacular sales success, becoming the best-selling jetliner aircraft family ever.

THE FAMILY GROWS (1988-1991)

THE FAMILY GROWS

As is often the way with the cyclical nature of the aircraft industry, by the time the A320 entered service in 1988 the world economy had recovered from the earlier recession and, much to the delight of Airbus, demand for new aircraft was booming.

At the end of 1984, the consortium had obtained 411 firm orders from 50 customers, with 282 aircraft in service. By the end of 1988 firm orders stood at more than 900 from more 74 customers, with more than 450 aircraft delivered.

Two years later the number of delivered aircraft had reached more than 650 to over 100 customers, and there were 1,700 firm orders booked.

Airbus was continuing to build on its success, each year gaining marketshare in one of the most aggressively-contested industries in the world.

INTRODUCING THE A330 AND A340

With the A320 unveiled to the world, Airbus now pressed on with plans to build the medium to long-range A330 twin and longer-range A340 four-engine aircraft. These were launched jointly in June, 1987, just four months after the A320's first flight. Again, Airbus showed remarkable ingenuity in launching two aircraft together. It was the world's first combined aircraft programme, with both models sharing the same basic fuselage, wing and tail. As ever, hard, practical logic was at work. The A330 and A340 offered extensive commonality of cockpit systems, not only between themselves, but with the A320 – and, later, with other members of the A320 Family still to come. This made possible the Airbus concepts of cross crew qualification – pilots trained to fly one Airbus aircraft can qualify to operate another with relatively little extra training - and mixed fleet flying, in which airlines are able to switch their Airbus aircraft and their pilot crews at short notice to better match capacity to demand.

The ultra long-range A340-300, able to seat 295 in a three-class configuration and fly 7,150 nautical miles/13,200 kilometres, was rolled out in October, 1991. (A shorter version, the A340-200, could carry 262 passengers over 7,750nm/14,400km.) The medium to long-range A330, carrying 335 passengers in two classes, followed a year later. The Airbus family was growing but in a measured, considered fashion. As it continued to build up marketshare, Airbus followed the policy initiated by Roger Béteille of always listening to customers when designing and developing new aircraft and bringing new technology to the industry. Accordingly Airbus tailored both new aircraft to meet the specific needs of its customers, with a special emphasis on economy, fuel efficiency and – crucial to long-range operations – cabin comfort. Indeed, Airbus maintains that the A340 offers "the quietest cabin in the sky."

The A330 marked another milestone with the first Rolls-Royce engine – the Trent 700 - on an Airbus aircraft, one of three engine types offered to customers.

TOP-LEVEL CHANGES

While Airbus got on with the business of designing, building, selling and – with increasing effectiveness – supporting its aircraft, changes were taking place at the very top.

In Germany in 1989 Daimler-Benz took over MBB, the consortium which had run Deutsche Airbus since the beginning, forming Daimler Aerospace SA, or DASA.

Bernard Lathière had taken up a place on the Airbus Industrie supervisory board as vice chairman. Roger Béteille had retired in 1985.

Franz Josef Strauss, who remained chairman of the supervisory board until his death in 1988, said at the time: "His technical, commercial and management skills were unanimously recognised by the world aviation community, and it is only fair to say that if one single person deserves the title ‘father of Airbus’ it is Roger Béteille."

EXPANSION (1991-1992)

EXPANSION

IN THE BLACK

THINKING BIG: A3XX

EXPANSION

Since the early A300s, all Airbus aircraft had undergone their final assembly in Toulouse, with cabin installation carried out in Hamburg. But after the launch in November, 1989, of the 186-seat A321, the stretch version of the A320, it emerged that this tradition was to be broken. Final assembly and interior-fitting of this aircraft, Airbus announced, would take place in Hamburg.

Subsequent members of the A320 Family launched in the following years would also be assembled and outfitted in Hamburg, while final assembly of the A320, A300-600 and A310 would remain in Toulouse. Both final assembly and interior-fitting of the A330 and A340 would be done in Toulouse. Airbus said the integration of final assembly and cabin installation at the same site would improve efficiency and reduce lead-times.

Sales of Airbus aircraft, buoyed by the A320, were going well when the first Gulf War broke out in January, 1991. A dramatic slump in the number of people flying followed. Airlines cancelled orders for new aircraft, making their existing fleets last longer. As fears for future profitability grew, confidence withered.

Like every aircraft manufacturer, Airbus suffered in what the industry referred to as "the downturn". Yet, despite the gloomy economic climate, Airbus doggedly persisted with its expansion of the A320 Family in the belief that downturns would end and demand would return – a brave decision which would pay huge rewards. In March 1993, came the first flight of the A321, followed three months later by the launch of the 124-seat A319. (The so-called "baby" of the family, the 107-seat A318, would be launched several years later.)

By offering such a comprehensive range of the most advanced passenger aircraft possible, Airbus was giving its customers the opportunity to build a fleet with maximum flexibility. Thanks to fly-by-wire commonality, an airline could operate Airbus aircraft across the whole range of sectors, from short-haul to ultra long-haul, switching cross-qualified pilots and crews according to need at short notice. Maintenance costs were also lower, a significant benefit to operators.

IN THE BLACK

In 1991, Jean Pierson, in a lecture to management consultants in Britain, revealed that Airbus had made its first operating profit the previous year.

He also spoke of the Airbus achievement: "Airbus Industrie stands as a symbol of what Europe can accomplish when it combines its forces around a common project... It stands today as the only recourse against a monopoly of the civil aerospace industry by US manufacturers. Our products come in over one hundred different colours – the colours of our customers around the world. That is the real commercial power that is back in European hands."

In the same lecture, Pierson paid tribute to those who had invested in Airbus knowing that it would take years before they saw a return because "in so doing they generated wealth in Europe, the wealth that comes from skills retention, employment and career opportunities, import substitution, export earnings."

And he made a forceful rallying cry for the multicultural spirit of Airbus which summed up the organisation's essence from its beginnings to the present day: "The determination of the partners to keep the damaging demons of intra-European rivalry at bay was a key factor in the success of Airbus Industrie. It is in the interests of Europe that this determination should prevail. If there could be one lesson...to be learned from the Airbus Industrie experience, it would be that co-operation is the key to prosperity and that there simply is room no more for narrow nationalistic endeavours."

THINKING BIG: A3XX

Later the same year Airbus began talking to airlines about its most ambitious plan yet – to build the world's biggest passenger jet. The A340 could fly further than the rival "jumbo" but Airbus envisaged a double-decker which could carry far more people than either aircraft. With characteristic vision, Airbus argued that the design of what was then the world's largest passenger aircraft had barely altered in nearly 30 years. What was needed for the 21st century was an entirely new large aircraft for the increasingly high-density long-haul routes such as Hong Kong-London where passenger traffic was growing relentlessly and capacity was under pressure.

As the idea gathered strength Airbus' chief rival also began talking about a stretched version of its jumbo. For a while the two manufacturers would even hold discussions about building the new "superjumbo" together. But, as before, these talks fizzled out. Airbus' position remained steadfast. It was certain a lucrative market existed for what it called the A3XX and, in the coming years, pushed ahead with consultations with airlines, airports, aviation safety authorities and pilots. With environmental restrictions at airports getting tighter, Airbus knew it had to come up with an aircraft which would meet noise and emissions requirements not just for the short-term but with the future in mind.

At the same time its design teams began drawing up a series of versions of what the new aircraft would look like.

RECORD BREAKERS (1993-2000)

RECORD BREAKERS

At the 1993 Paris Air Show, Airbus showed the world what the A340 – which had entered service earlier that year with Lufthansa and Air France - could do. An A340-200 dubbed the "World Ranger" set a series of records by flying around the globe with only one refuelling stop.

From Le Bourget, it flew to Auckland in New Zealand and after just five hours on the ground continued its flight around the world to land in Paris 48 hours and 22 minutes after setting out. Such showmanship, albeit with a serious purpose, was a badly-needed tonic for an industry suffering its worst-ever financial crisis. The downturn which followed the first Gulf War lasted nearly three years.

Yet Airbus had continued to pursue its ambitious new objective of capturing 50% of the world market. In 1994, it almost achieved it for the first time as passenger numbers returned to normal, industry confidence surged back and aircraft sales picked up considerably. During the year – which saw the wide-body A330 and the single-aisle A321 enter service - Airbus recorded 125 firm sales from 11 customers, compared to just 38 orders the year before. (In October 1993, the A330 had become the first aircraft to be simultaneously certified by the European Joint Aviation Authorities and the U.S. Federal Aviation Administration.)

Of the 1994 orders, 95 were for single-aisles, including 42 for the A319 - which was two years away from roll-out. The A330/A340 Family attracted 30 orders. Another milestone reached the same year was the 1000th delivery of an Airbus aircraft. To Airbus, this success, coming as it did on the back of a period of downturn, validated its strategy of offering families of aircraft sharing commonality to cover all sectors. The same year also saw another development in the commercial success of Airbus aircraft. The first A300-600 Freighter was delivered to Federal Express, marking the arrival of what was to become the most popular freighter on the market.

AN INCREASINGLY GLOBAL PRESENCE

Airbus now had 16 manufacturing sites in Europe. The Super Guppy which had transported components for Airbus aircraft to Toulouse (and more recently to Hamburg) was replaced by the A300-600 Super Transporter, which would become known as the Beluga. Airbus had established offices, training centres and spares centres around the world, with strongholds in North America, China and Japan (Airbus would later set up subsidiaries in all three).

It was able to offer customers a degree of product support comparable to the quality of its aircraft. Recognising that to maintain its own profitability Airbus occasionally had to be able to help airlines buy its aircraft, it also set up a finance company, based in Dublin, Ireland, which provided credit facilities.

As Airbus celebrated its 25th anniversary year in 1995, its success in challenging what had once been the American domination of the aviation industry was beyond doubt. Indeed, it was now vying for the top spot. Since the entry into service of the A320 in 1988, Airbus had brought to market five new aircraft models, a remarkable output.

And it was outselling its rivals in all the categories in which it was represented. At the start of the year, Airbus published its annual calendar with a series of stunning floral pictures, each month annotated with key dates from the evolution of the company. In the introduction to the calendar Airbus management thanked employees and pronounced the company "experienced, fit and growing stronger every day."

GETTING SERIOUS ABOUT THE A3XX

Further evidence of this increasing strength came on 1 May, 1996, when Airbus announced it had set up a "large aircraft division" to develop plans for the A3XX. This was the moment Airbus is said to have "got serious" about its vision of an aircraft which would carry around 600 people and dominate the most lucrative end of the market. The role of the newly created division, said Airbus, was to "further refine the market studies undertaken so far, to define the basic specifications of the new airliner, taking into account the design studies done since 1990 and inputs from the airline working group."

But the unprecedented size of the A3XX programme and the financial risks involved required a bold and imaginative approach to development funding. Airbus said its large aircraft division "will also look into the broadening of the industrial and financial structures for the programme and establish a business case."

When Noël Forgeard took over from Jean Pierson as President and Chief Executive Officer in January, 1998, he found an organisation in great form – 1997 had been a record year for sales, with 460 firm orders and 13 new customers. (Firm orders included 124 A319 and A320s for US Airways, consolidating Airbus' foothold in North America, and the milestone of the 2,500th firm order received by Airbus since it began.) Airbus had won 50% of the market. Plans to build the A3XX were well advanced. Ever mindful of the need to listen to customers, Airbus was in consultation with some 20 leading airlines about what they wanted to see in the new double-decker.

And within weeks of Forgeard's arrival Airbus won a major order, the first from British Airways: 59 A319s and A320s, with options for a further 129. It was British Airways' biggest ever order for new aircraft and opened the way to a new relationship with Airbus and the British flag carrier. Tony Blair, the British prime minister, travelled to Toulouse for the celebrations.

AN OPTIMISED CORPORATE STRUCTURE

The success continued during 1998, another record year which saw Airbus clinch 52% of the market for new aircraft with 556 firm orders, a figure still unsurpassed by Airbus in addition to the A3XX Airbus, was developing new versions of the A340: the A340-500 which would become the longest-range aircraft in the world; and the A340-600, which would carry 380 passengers in the longest fuselage of any aircraft yet built, with a cabin whose standards of comfort and innovation were unmatched. In the following year it would also launch the A318, the 107-seat "baby" of the A320 Family.

Yet it had long been accepted within Airbus that if it was to continue building on its success, its structure had to be streamlined and placed on a conventional company footing. Up to now the partners had operated as both shareholders and suppliers.

None of them were under any obligation to disclose their profits from Airbus programmes. Forgeard, a former adviser to French President Jacques Chirac, had come to Airbus with the express objective of leading it into a new era as a single integrated company.

The process would not be easy, or smooth. The privatisation of Aerospatiale in 1998 and its merger with Matra was the catalyst for a series of behind-the-scenes talks between pairs of Airbus partners. The situation was eventually resolved with a merger of Aerospatiale (now a third owned by the Lagardère Group) DASA and CASA of Spain to become the European Aeronautic Defence and Space Company. EADS would own 80% of the new Airbus company, while BAE SYSTEMS – as British Aerospace became known after its merger with Marconi in 1999 – would hold the remaining 20%.

INDUSTRIAL LAUNCH OF THE A380

The new integrated company, Airbus S.A.S. (Societé par Actions Simplifieé) began operations in July, 2000. A shareholders' board of seven members, five from EADS and two from BAE SYSTEMS, would decide on new programmes and investments. It would also appoint members of the Airbus executive committee who would be based in Toulouse and be responsible for all core functions and strategy.

In 1999, Airbus Military was set up with a view to producing the A400M, the first Airbus military transport aircraft in consultation with a number of European governments. It was, as Noël Forgeard declared, "a very significant event in the life of our company. Not only does it open up an entirely new market opportunity, it also represents a major integrated venture of key European aerospace actors in the field of military air transportation."

And in the first year of the new millennium, on 19 December 2000, came the industrial launch of the A3XX, from now on to be known as the A380, the "flagship of the 21st century". With 50 firm orders and 42 options from six of the world's major operators spread across five continents (Air France, Emirates, International Lease Finance Corporation, Qantas, Singapore Airlines and Virgin Atlantic) the programme to produce the world's largest and most advanced passenger aircraft - capable of carrying 525 people in a three-class configuration - was officially under way.

GOING GLOBAL
(2001-2004)

GOING GLOBAL

A MARKET LEADER

GOING GLOBAL

Warnings of a new economic downturn in the aviation industry had been sounded by Airbus as early as 2000, even after four years of record orders and deliveries. Being able to forecast trends in the market was essential to the Airbus philosophy of developing new aircraft and new technologies only to meet the needs of its customers.

No one, however, could have predicted the tragic events of 11 September, 2001, when hijacked passenger jets were deliberately crashed into the twin towers of New York's World Trade Center. Inevitably in the aftermath of such an attack business confidence, already shaky in the face of a creeping recession, collapsed further. The number of people wanting to fly dropped immediately and cancellations of bookings for the following months flooded in. As companies everywhere cut costs many business travellers opted for economy seats. Most airlines, like many industries affected by the fall-out from 9/11, had to dramatically revise their growth forecasts. The slump, similar to that which followed the first Gulf War in 1991, was to lead to several major airlines going bankrupt before the industry began to recover.

Ironically the downturn coincided with the rapid growth of low-cost airlines, especially in Europe. Companies like easyJet found the A320-Family and in particular the A319 - ideal for their short-haul routes, which paired cities previously not directly linked by air. For Airbus it meant its strategy of producing a family of fly-by-wire aircraft which shared commonality and provided airlines with the greatest flexibility possible had, once again, paid off. Low-cost airlines found the economy, reliability and quality of Airbus A320 Family aircraft perfectly suited to the new market. In 2002, in the midst of the downturn, A319s accounted for 148 of the 300 firm orders won by Airbus, with the A320 securing 78.

A MARKET LEADER

But Airbus was sensitive to the plight of operators struggling to cope with the fall in business. With the number of parked in-service aircraft building up, the profitability of customers had to be protected – without customers, Airbus would have no market. So the company devised an array of finance schemes and rearranged terms where possible to help its customers to continue to buy Airbus aircraft. It was a typically long-sighted solution to an immediate crisis in the industry.

As it had done with the earlier downturn, Airbus pressed ahead aggressively in the knowledge that better times must return. The first A340-600 was delivered in July, 2002, the same month in which Airbus celebrated its 3,000th aircraft delivery. The first deliveries of the ultra long-range A340-500 and the short-range A318 followed in 2003, the year in which manufacture of the major components of the A380 began.

Indeed, 2003 was a landmark year for Airbus: defying the effects of the downturn, it overtook its rival in deliveries of aircraft for the first time. Its total of 305 represented 52% of the world's aircraft delivered. After setting out in 1970 as a challenger. Airbus could now call itself the world's leading aircraft manufacturer. The success of Airbus had always been driven by the spirit and passion of its leaders and employees.

THE "WOW" FACTOR... AND A NEW ERA DAWNS (2004-2007)

THE "WOW" FACTOR... AND A NEW ERA DAWNS

On 7 May, 2004, before more than 3,000 guests, the French Prime Minister Jean-Pierre Raffarin officially opened the A380 final assembly line in Toulouse.

The size of the site itself was impressive enough – the main assembly hall was one of the largest buildings of its kind, measuring 490 metres by 250 metres with a height of 46 metres and, with other buildings on the site, comprised 32,000 tonnes of steel (the equivalent of four Eiffel Towers).

But the impact of the occasion was even more so. Now the pioneering spirit of Airbus which had inspired the company's success from the very earliest days and through all its programmes and technological innovations had risen again in the A380. It was more than a new aircraft capable of carrying 525 people in two classes 8,000 nm/15,000 km - or non-stop from Europe to Asia, North America and South America.

Production of major components for the first A380s, which would be used for ground and flight tests to achieve certification, were well-advanced – the airframe to be used for structural tests was revealed in its assembly jigs at the A380 Final Assembly Line opening ceremony. Using its innovative know-how Airbus had devised a new system to transport the wings, fuselage sections and horizontal tailplane on a specially-built ferry, then by barge and road to Toulouse from its manufacturing sites in France, Germany, Spain and Britain.

As the year moved on, the first complete A380 to be assembled came off the production line and was painted in readiness for its unveiling to the world.

A380: "A NEW WAY OF FLYING"

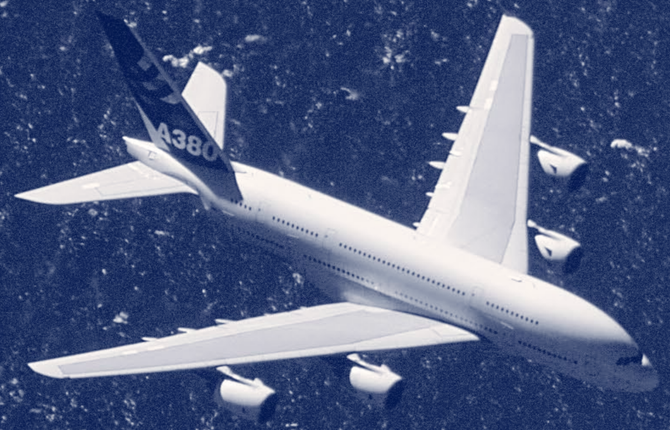
The A380 Reveal on 18 January, 2005, created publicity around the world and won plaudits for its imaginative style. The national leaders of Britain, France, Spain and Germany joined more than 5,000 guests – including customers, suppliers and hundreds of journalists – to witness the unveiling of the aircraft Airbus said would usher in "a new way of flying". The aircraft was painted in a new Airbus livery. By now there were 14 launch customers and 149 orders for the A380 and its freighter version, the A380F. The spectacular Reveal ceremony, held in the A380 Final Assembly Facility, featured fireworks, dry ice, lasers, dancers, and projected images of all of Airbus' aircraft flying around the hall, while a narrator in the form of a hologram wizard spoke of the magic of aviation and how the dream of the A380 had become a reality thanks to the vision and spirit of Airbus. The event was streamed live to hundreds of thousands of people through the airbus.com website – which recorded a record number of visitors - and a number of television channels broadcast it live. (On the following day some 5,000 Airbus employees enjoyed their own special replica Reveal ceremony, which was broadcast live to employees at Airbus sites around the world.)

Following the Reveal, anticipation built towards the A380's first flight, which took place in Toulouse on 27 April, 2005, in front of the world's media. On a brilliant spring day the A380 – with the registration F-WWOW and powered by four Rolls-Royce Trent 900 engines – took off for a flight lasting three hours and 54 minutes, jointly captained by Claude Lelaie, Senior Vice President Flight Division, and Jacques Rosay, Chief Test Pilot and Vice President. Other crew members on this historic flight were Fernando Alonso, Vice President Flight Division, flight test engineers Jacky Joye and Manfred Birnfeld, and test flight engineer Gérard Desbois. The flight could not have gone more perfectly. Afterwards Rosay said flying the biggest passenger aircraft the world had seen was "like handling a bicycle". And Lelaie enthused: "We now really sense the potential of this magnificent machine."

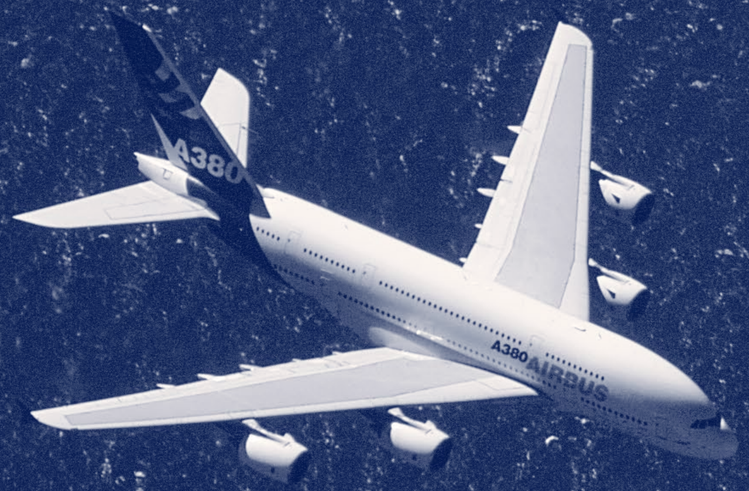
2005, A YEAR TO REMEMBER

With a substantial number of firm orders, the A380's economy and environmental superiority – along with its technological innovations and use of weight-saving composites confirms Airbus' position as one of the world's leading aircraft manufacturers. As passenger traffic is expected to triple over the coming 20 years, the A380 will help ease the pressures faced by its customers for airport slots by carrying more people per flight.

But other significant events also made 2005 a year to remember for Airbus. In July came the 2500th delivery of an A320 Family aircraft – an A320 to China Eastern Airlines. The Airbus Corporate Jetliner, based on the A319, enjoyed its most successful year to date by winning 11 new orders and increasing the number of customers to 25 (by end of August). The wide-body programme continued to win new orders for its highly-popular A300-600 freighters. And as Airbus strengthened its global foothold, a new engineering centre was set up in China to join others in Wichita (set up in 2002), and a joint venture in Russia (2003), and a second U.S. engineering centre in Mobile, Alabama (in 2007).



CHALLENGES AND ACHIEVEMENTS (2006-2009)



CHALLENGES AND ACHIEVEMENTS

CORPORATE AND VIP JETLINER EXPANSION

THE A380 TAKES CENTRE STAGE

A REVAMPED A350 XWB

GROWTH OF THE A350 XWB

FIRST FINAL ASSEMBLY LINE OUTSIDE OF EUROPE

CHALLENGES AND ACHIEVEMENTS

As Airbus approached its 40-year anniversary in 2009, the company was doing what it does best: expanding the jetliner family, broadening its worldwide customer base, and seeking innovative ways to remain a market leader.

And – as it has done during many periods of its four-decade existence – Airbus was achieving these goals after flying through turbulence, both inside and outside the company.

The period from 2006 to 2009 included the A380's certification by European and U.S. airworthiness authorities, clearing the way for this 21st century flagship's commercial service introduction in October 2007. Also during this timeframe, Airbus launched its all-new A350 XWB, gave the programme go-ahead for a freighter version of its popular A330-200, and became a key player in the marketplace for military airlifters.

CORPORATE AND VIP JETLINER EXPANSION

The three-year period also saw Airbus' corporate and VIP jetliner family expand with the A318 Elite's introduction as its smallest member, and the first booking of an A380 as the world's largest VVIP aircraft. A major step in Airbus' internationalisation was the rapid-paced development of its initial final assembly line outside of Europe, which is located in Tianjin, China and produces A320 Family aircraft – the first of which made its initial flight in May 2009.

During the same time, Airbus was faced with challenges on multiple fronts: its A380 production was lagging, the A350 underwent a makeover, and the internal and external effects of a weak dollar were magnified by growing pressures on the worldwide economy – which ultimately developed into the global economic "meltdown" beginning in late 2008.

THE A380 MOVES FORWARD

An historic Airbus achievement occurred on October 15, 2007 with the first delivery of an A380 – which was received by Singapore Airlines. During a colourful ceremony at Airbus' Toulouse, France delivery centre, Singapore Airlines unveiled its new interior for the double-deck aircraft, using a cabin layout featuring 471 seats in three classes – including individual suites for premium passengers. Singapore Airlines inaugurated A380 revenue service on 25 October, 2007, operating the Rolls-Royce Trent 900-powered aircraft on its Singapore-Sydney route.

The carrier also received Airbus' next three A380s, followed by the initial aircraft for Emirates, which was presented at the Hamburg, Germany delivery centre on 28 July, 2008. This was the first A380 delivered with Engine Alliance GP7200 powerplants, and Emirates used a 489-passenger configuration for its aircraft – composed of 14 first class suites, 76 business class seats and 399 in economy – along with innovative ceiling mood lighting throughout the cabin.

Qantas became the third airline to receive the A380, with its no.1 aircraft provided on 19 September 2008. Equipped with Rolls-Royce Trent 900 engines, Qantas configured its aircraft in an extra spacious 450-seat arrangement, accommodating 14 passengers in first, 72 in business, 32 in premium economy and 332 in economy.

With the worldwide A380 fleet crossing the globe on routes to Asia, the Middle East, Europe and North America, the jetliner quickly became a passenger favourite, and was confirmed as the quietest aircraft in the skies – both in terms of external noise levels and the internal passenger cabin environment.

A REVAMPED A350 XWB

Building the world's largest airliner was not without difficulties, however. Bottlenecks encountered in the definition, manufacturing and installation of the A380's electrical systems and their more than 500 km. of internal wiring – combined with the customisation of aircraft to customer specifications – led to the build-up of delivery delays. In June 2006, Airbus outlined a series of actions dealing with the situation, including new processes for the outfitting of A380 fuselage sections and a revised pacing of their transfer to the final assembly line. The recovery process would take some time to put the A380 output back on track, but its initial results were confirmed with Airbus' delivery of 12 aircraft to customers during 2008, meeting a personal commitment made by company President and CEO Tom Enders.

Another challenge faced by Airbus was bringing the new A350 to market. Originally launched in December 2004, the A350 was designed to complement Airbus' existing A330-200 and A330-300 jetliners, offering extended range while retaining the same 222-inch (5.64-metre) fuselage cross-section used in the A330/A340 and the original A300/A310 aircraft. However, A350 customers were pushing for a more radical evolution with this new-generation aircraft, and after much discussion and debate, Airbus undertook a redesign that included an expansion of the A350's fuselage cross-section to 232 inches (5.9 metres). On December 1, 2006, Airbus announced the industrial launch of the revamped A350 XWB (extra wide-body) as its new medium-capacity long-range aircraft family.

GROWTH OF THE A350 XWB

Finnair was the first airline to sign a firm A350 XWB contract, becoming the initial customer in March 2007 to convert its original purchase of A350s into an order for A350 XWBs. This was followed by A350 XWB orders and commitments from airlines and leasing companies in Europe, the Middle East, Africa, Asia-Pacific, as well as North and South America – confirming that Airbus had once again surmounted another test of its will in the high-stakes game of commercial aviation.

Challenges faced by Airbus during the 2006-2009 period were not only related to its new aircraft programmes. The company was feeling the direct impact of a weak U.S. dollar, while many of its customers were reviewing their aircraft order and delivery commitments as they reacted to global financial pressures that cut into their passenger volume and impacted the bottom line.

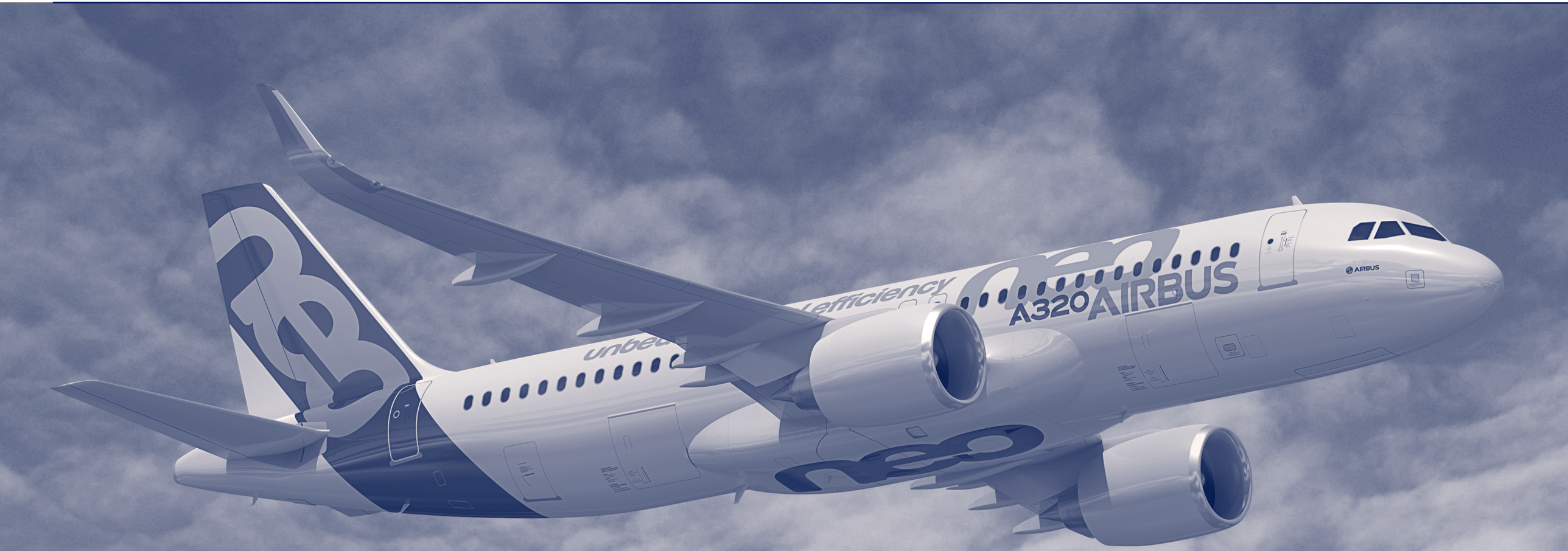
These were among the factors that contributed to the development of a strategy for a "new Airbus," which started with the Power8 restructuring plan. Introduced in February 2007, Power8 was designed to help Airbus face the very substantial challenge of the U.S. dollar's weakness, as well as increased competitive pressures, the financial burden related to A380 delays, and the need to meet its future investment needs. This programme – and the steps that followed – provided for responsive cost-cutting measures, helped transform the Airbus business model, and realigned its network of facilities and partners.

FIRST FINAL ASSEMBLY LINE OUTSIDE OF EUROPE

Despite the global financial pressures and internal trials, Airbus continued the sustained production of its successful A320 single-aisle Family and the A330/A340 wide-bodies, responding to the growing order book and an expanding list of customers. Programme milestones included Airbus' January 2007 delivery of the 3,000th single-aisle aircraft, with AirAsia receiving an A320 as this milestone jetliner. During the same month, Airbus reached the 5,000th order mark for its A320 Family. Also in 2007, the 800th A330/A340 Family aircraft was provided to a customer (an A330-200 received by Qatar Airways in March), and the 5,000th overall Airbus delivery milestone occurred on December 14 with the handover of an A330-200 to Qantas.

Building on the unparalleled success of its A320 Family, Airbus expanded its industrial network by creating a new final assembly line in China – the company's first outside of Europe. The decision to locate this facility in Tianjin was announced in June 2006, and a framework agreement for its development was signed in October 2006 with a Chinese consortium comprising the Tianjin Free Trade Zone, China Aviation Industry Corporation I (AVIC I), and China Aviation Industry Corporation II. A formal kickoff of the Tianjin final assembly line's construction occurred in May 2007, and the initial aircraft built at this facility – an A320 for Dragon Aviation Leasing – made its maiden flight on 18 May, 2009.

Throughout the company's history, Airbus has always taken the long view of its role in the global aviation marketplace. Looking to the future, this is reflected by Airbus' major commitment to limiting aviation's impact on the environment, and includes its role in the European Clean Sky initiative (one of the largest ever European-funded research and technology programmes), as well as support for eco-efficient technologies such as synthetic jet fuel and the eventual use of fuel cells as emission-free onboard energy sources. Airbus' eco-efficient efforts are focussed on the full life cycle of its products, and range from the ISO 14001 environmental certification of its production sites and facilities (an aerospace industry first) to the development of recycling procedures for aircraft once they reach the end of their useful lives.



PREPARING THE FUTURE
(2009-2010)

PREPARING THE FUTURE

RECORD-BREAKING DELIVERIES AND BUSINESS AGREEMENTS

NEW AIRCRAFT DEVELOPMENT MILESTONES

A FOCUS ON INNOVATION AND TECHNOLOGY

PREPARING THE FUTURE

In 2009, Airbus celebrated the milestone 40th anniversary of its first aircraft programme's launch – along with the four decades of innovation and success that followed.

Looking forward to the next 40 years in its role as an industry leader, Airbus built on its positive momentum during 2009-2010 with important orders and deliveries, new aircraft programme developments and key technological advancements.

RECORD-BREAKING DELIVERIES AND BUSINESS AGREEMENTS

Airbus set an all-time company record in 2009 with 498 aircraft deliveries, which included: its handover of the 4,000th A320 Family jetliner – an A319 for Brazilian flag carrier TAM – from the final assembly line in Hamburg, Germany; delivery of the 500th A321 aircraft, received by Air France; and the 30th A380, provided to Emirates.

Air France became the initial European carrier to receive an A380, taking delivery on 30 October 2009 – inaugurating the first commercial flights in November between Europe and the United States with Airbus' 21st century flagship jetliner.

Lufthansa joined the growing list of A380 airlines with the 19 May 2010 delivery of its no. 1 aircraft – which joined the operator's expansive Airbus fleet of jetliners ranging from single-aisle A319s, A320s and A321s to wide-body A300s, A330s and A340s.

Airbus handed over its 6,000th aircraft in January 2010, and in doing so underscored the company's continued role as a leading provider of highly efficient jetliners to customers worldwide. This historic aircraft was an A380 for Emirates, which has flown Airbus-built airliners from its creation in 1985. "It took 19 years for Airbus to produce its first 1,000 aircraft, and just two years for the latest 1,000," said President and CEO Tom Enders at the milestone delivery ceremony in Hamburg. "Our strong order backlog and the continued delivery rates will help us on our way to reaching the 7,000th."

On 18 May 2009, Airbus' Tianjin facility marked a milestone of its own when the first jetliner built on this Chinese final assembly line – an A320 – completed its maiden flight, taking off from Tianjin International Airport for a 4 hr. 14 min. airborne evaluation. This same A320 was delivered on 23 June 2009 to Dragon Aviation Leasing for operation by Chengu-based carrier Sichuan Airlines, marking the first customer handover of an Airbus jetliner produced outside Europe.

Key agreements signed during the 2009-2010 time period included the largest order in civil aviation history (by U.S. dollar value): 32 additional A380s for Emirates at a value of more than $15.3 billion, announced during the ILA Berlin Air Show in June 2010; and the 500th order for Airbus' new-generation A350 XWB, booked by Ethiopian Airlines at the November 2009 Dubai Airshow.

NEW AIRCRAFT DEVELOPMENT MILESTONES

From a programme aspect, 2009-2010 brought significant development strides for three future Airbus aircraft: the A350 XWB, the modern mid-size A330-200F freighter and the A400M military airlifter.

Airbus' A350 XWB programme transitioned from concept to reality in early 2009 with an important milestone: construction start-up of the A350 final assembly line. The 74,000-square metre facility in Toulouse, France, is designed for a parallel work flow capacity of more than 10 A350s per month.

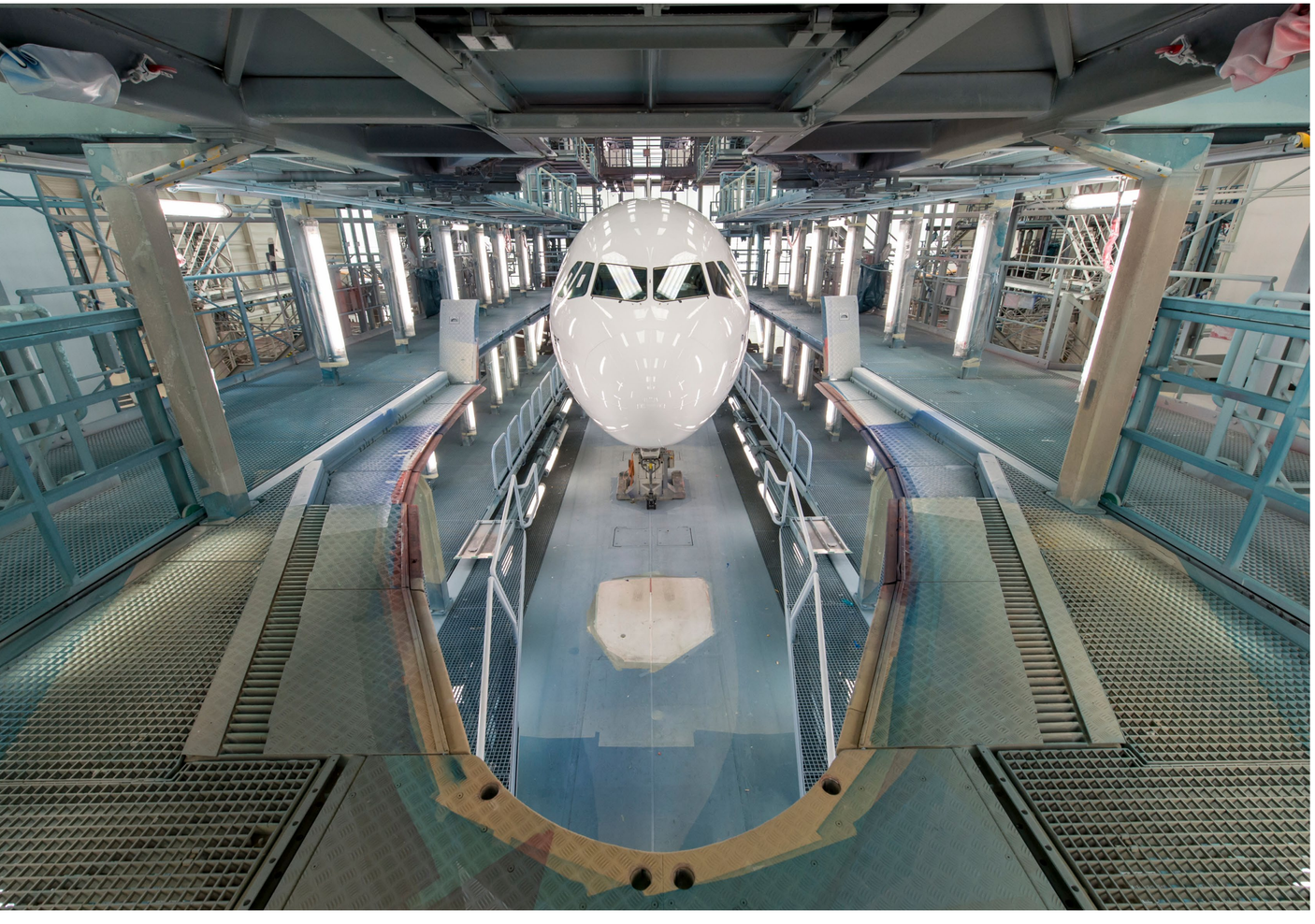
Later that year, an initial composite panel for the long-range A350 XWB was manufactured in a lay-up process at Airbus' Nantes, France facility. With a surface area of 36 square metres, this centre wing-box panel – entirely made of carbon – was the largest "monobloc" composite panel ever manufactured at the site.

Another new Airbus aircraft, the A330-200F, received its Type Certification from the European Aviation Safety Agency at the conclusion of a successful 200-hour flight test campaign with both available engine types – the Pratt & Whitney PW4000 and Rolls-Royce Trent 700. The certification milestone occurred in April 2010, and paved the way for the freighter's delivery start-up, targeted for later in the year.

Airbus' multi-role A400M airlifter performed a highly successful maiden flight in late 2009, initiating a 3,700-hr. test and certification campaign in advance of its future service entry. Powered by four 11,000-shp. turboprop engines, the no. 1 A400M lifted off from Seville Airport in Spain on 11 December 2009 for a 3-hour, 47-minute-long first mission, during which the six-member crew validated a significant portion of the A400M's flight envelope.

The A400M made its public debut during the June 2010 Berlin Air Show. Taking part in the event's flying display, this airlifter showcased its rapid climb-out capabilities, slow-speed handling qualities and manoeuvrability during flight demonstrations.

A FOCUS ON INNOVATION AND TECHNOLOGY



Airbus continued its efforts to improve air transport's overall eco-efficiency during 2009 and 2010 with a series of key milestones – led by an extension of ISO 14001 environmental certification to each of the company's existing facilities in America and China.

In September 2009, Airbus delivered the first of two A318s equipped with "steep approach" capability to British Airways for operation on long-haul flights between London City and New York's JFK Airport. The A318's ability to land at steeper than usual gradients and its ultra-low noise characteristics make it ideal for operations at downtown airports and in other constrained locations.

Airbus unveiled its advanced Sharklet™ wingtip devices during the 2009 Dubai Airshow with an initial commitment from Air New Zealand. Offered as optional equipment on new production A320-series aircraft, Sharklets provide aerodynamic improvements that result in a number of benefits for operators – including lower fuel burn, reduced emissions and increased range. At the 2010 Berlin Air Show, Finnair became the first operator agreeing to acquire A321s equipped with these fuel-saving devices.

Also showing progress were Airbus-supported environmental initiatives such as Tarmac Aerosave – a joint-venture company for the dismantling of end-of-life aircraft in an entirely "green" manner – which became operational during 2009. In addition, Airbus partnered with the U.N. Environment Programme's Convention on Biological Diversity to support the Green Wave, a 2010 initiative to raise awareness among young people about the complexity of life on earth and its role in a sustainable future.

In December 2010, Airbus announced its offer of new fuel-saving engines as an option on the A319, A320 and A321. Designated the A320neo, this option applies the advantages of engine technologies that are becoming available in the middle of this decade, providing a choice of CFM International's LEAP-X and the Pratt & Whitney GTF™ engines. In addition, the A320neo incorporates Sharklet wing tip devices. The A320neo brings the minimum in change for maximum benefit on Airbus' best-selling A320 Family of jetliners, resulting in a 15 per cent reduction in fuel consumption, two tonnes of additional payload, up to 500 nautical miles of more range, lower operating costs, along with reductions in engine noise and emissions.

In its eco-efficiency roadmap, Airbus continued to support environmental initiatives such as Tarmac Aerosave – a joint-venture company for the dismantling of end-of-life aircraft in an entirely "green" manner – which became operational during 2009. In addition, Airbus partnered with the U.N. Environment Programme's Convention on Biological Diversity to support the Green Wave, a 2010 initiative to raise awareness among young people about the complexity of life on earth and its role in a sustainable future.

CONFIRMING AIRBUS' INDUSTRY LEADERSHIP

10,000TH ORDER MILESTONE

ANOTHER RECORD ANNUAL PERFORMANCE

THE A320NEO TAKES CENTRE STAGE

AMERICAN AIRLINES SELECTS THE A320 FAMILY

EXPANDING THE A320NEO CUSTOMER BASE

A DEBUT FOR A320 SHARKLETS

NEW – AND REPEAT – A380 CUSTOMERS

FIRST A380 DELIVERIES TO KOREAN AIR AND CHINA SOUTHERN

MILESTONE 7000TH DELIVERY: US AIRWAYS' A321

AIRBUS ADVANCES ITS AGENDA FOR A CLEANER ENVIRONMENT

CONFIRMING AIRBUS' INDUSTRY LEADERSHIP (2011)

CONFIRMING AIRBUS' INDUSTRY LEADERSHIP

The airline industry demonstrated its resiliency in 2011.

With signs of renewed strength following a period of economic crisis, airlines and leasing companies turned to Airbus for new aircraft that will help them respond to future growth and market trends, improve their operating efficiency and meet growing demand for eco-efficiency in the air transport sector.

Much of the sales activity during the year was focussed on the A320neo (new engine option) for Airbus' popular A320 single-aisle jetliner family, which was launched in December 2010 and accumulated 1,256 firm orders from 23 customers through December 2011 – making it the fastest selling commercial jetliner ever.

Airbus' total gross orders for 2011 totaled 1,419, while net orders for the 12 months (taking cancellations into account) reached 1,608 – both representing new records.

In addition to bookings for the A320neo and the current A320 Family, business logged during 2011 also included orders for the A330, A350 XWB and A380.

With a record 534 deliveries completed in 2011, the Airbus backlog as of December 31 stood at 4,437 aircraft, consisting of 3,345 A320 Family jetliners, 906 A330/A340/A350 aircraft and 186 A380s.

10,000TH ORDER MILESTONE

2011 began with a milestone order: Virgin America's acquisition of 60 A320s, which included 30 of the A320neo version to seal the first firm booking for the single-aisle aircraft's new engine option, and lifting total Airbus orders above the 10,000 mark.

This milestone for the A320 Family underscores how Airbus sales have grown steadily since its first aircraft went into service in 1974.

Having sold 1,000 jetliners by 1989, the order book doubled in less than half the time, reaching 2,000 in 1996.

The 3,000 mark was attained in 1998, again cutting the time it took to sell another 1,000 planes by more than half. By the year 2000, a total of 4,000 aircraft had been sold.

"We hit our 5,000th order in August of 2004 – after more than 30 years," said Tom Enders, Airbus President and CEO. "To achieve the 10,000th order just over six years later is a ringing endorsement of our product line."

ANOTHER RECORD ANNUAL PERFORMANCE

The historic Virgin America order was revealed at Airbus' annual New Year's kickoff press conference in January 2011, where the company also announced another industry-leading performance in 2010 – during which it booked 644 commercial aircraft orders.

This volume was well above expectations, and it represented 51% of the worldwide market share.

Commercial aircraft deliveries in 2010 totalled 510 jetliners provided to 94 customers – of which 19 were new clients for Airbus.

Also in January 2011, Airbus inked a Memorandum of Understanding with IndiGo for 180 A320s, making it one of the largest jet orders in aviation history and positioning India's largest low-cost carrier as a launch customer for the A320neo new engine option version.

This landmark booking was composed of 150 A320neos and 30 A320s.

THE A320NEO TAKES CENTRE STAGE

Sales successes for the A320neo were logged throughout the year, with a series of key announcements coming during the 2011 Paris Air Show in June – including AirAsia's history-making booking for 200 A320neo aircraft, which represented the biggest order placed to date for Airbus' best-selling A320 family of jetliners.

This agreement also made AirAsia the largest customer for Airbus in terms of aircraft. Revealed as well during the biennial aerospace event was IndiGo's firming up of its order for 150 A320neo and 30 A320s.

A total of 667 commitments for the A320neo were announced during the week-long event at Le Bourget Airport, representing a value of $60.9 billion. This unprecedented volume more than validated Airbus' decision to launch the enhanced fuel-efficient version of its single-aisle jetliner family, and even exceeded expectations from the company's senior management team.

AMERICAN AIRLINES SELECTS THE A320 FAMILY

The A320 Family's commercial success continued in July with the announcement of American Airlines' firm order for 260 aircraft, which made this U.S.-based global operator a new customer for Airbus' single-aisle product line.

As an important component of the carrier's fleet modernization strategy, half of the jetliners ordered by American Airways are to be Airbus' New Engine Option (neo), while all 260 will be equipped with fuel-saving Sharklets wingtip devices.

Upon start-up of deliveries for these aircraft – which includes A319s, A320s and A321s – American Airways will benefit from improved efficiency and additional operational savings, while offering state-of-the-art technology to its customers.

EXPANDING THE A320NEO CUSTOMER BASE

The biennial Dubai Airshow in November was the location of other strategic A320 Family commercial announcements, including Qatar Airways' firm order for 50 A320neo aircraft that marked a step in this Doha-based airline's decision to form the backbone of its future single-aisle fleet with Airbus' A320 product line.

Another Middle East customer, Kuwait's ALAFCO, signed a firm order for 50 A320neo Family aircraft and took options for 30 more, with these aircraft to complement the aviation lease and finance company's existing A320 portfolio.

Completing the A320neo's firm transaction activity at the Dubai Airshow was the U.S.-based Aviation Capital Group's purchase agreement for 30 jetliners, which will be made available for the aircraft leasing company's global customer base.

Spirit Airlines of the U.S. signed a memorandum of understanding for 45 A320neo jetliners and 30 A320s, marking an additional market commitment in North America from an existing A320 operator.

The new A320s to be acquired by Spirit will be equipped with Airbus' Sharklet™ wingtip devices that cut down on aerodynamic drag for lower fuel consumption and reduced carbon emissions, which are optional on A320s and incorporated as standard fit on the A320neo.

A DEBUT FOR A320 SHARKLETS

Later in the month, the Sharklets took to the sky for their milestone first flight from Airbus' headquarters in Toulouse, France – which also marked the start of a multi-month test campaign to validate the devices' performance, confirm their aerodynamic behavior and gather data for certification.

These Sharklets, which have been specially designed for the Airbus A320 Family, will reduce fuel burn by up to 3.5 percent, corresponding to an annual CO2 reduction of around 700 tonnes per aircraft. Such a reduction is equivalent to the CO2 produced by around 200 cars annually.

The new wingtip devices are approximately 2.5 metres tall and will replace the aircraft's current wingtip fences, which have a modified triangular shape. Sharklets, which are standard on the A320neo Family and offered as an option on new-build baseline A320 aircraft, also will enhance the aircraft's payload-range and take-off performance.

NEW – AND REPEAT – A380 CUSTOMERS

Other high notes of 2011 were new A380 bookings – beginning with the addition of two airlines to the 21st century flagship's customer list early in the year that further reinforced its presence in the Asia-Pacific marketplace.

The first was a six-aircraft A380 firm order by Asiana Airlines of South Korea in January. Deliveries are scheduled to begin in 2014, and Asiana Airlines plans to operate the jetliners with a premium layout on key routes to Europe and the U.S.

It was followed by the confirmation in February of Skymark Airlines' contract for four A380s – later increased by two more, representing a further expansion of Airbus' Japanese customer base. At the Dubai Airshow in November, Qatar Airways announced a repeat order for the A380, adding an additional five to the two initial aircraft ordered in 2003, followed by three more in 2007. This brought the total number of A380 firm orders to 243 from 18 customers worldwide as of November 2011.

Also joining the A380 "family" during the year was another new carrier, Hong Kong Airlines, whose booking for 10 of the airliners was logged in December. This brought the overall number of A380s sold to 253 from 19 customers.

FIRST A380 DELIVERIES TO KOREAN AIR AND CHINA SOUTHERN

In May, Airbus marked the delivery celebration of Korean Air's first A380, which was highlighted during a ceremony at Airbus' Toulouse, France headquarters.

The Seoul-based carrier has a long-standing relationship with Airbus that dates back to 1974, and will expand its global network with the 10 A380s on order.

Korean Air initially will operate these double-deck jetliners from Seoul to destinations in Asia, followed by non-stop long-haul services to North America and Europe – making it the sixth airline to utilize the A380.

During October, China Southern Airlines became the first Chinese carrier to operate the A380 after taking delivery of its no. 1 aircraft in Toulouse.

This airline began service between the major Chinese cities of Beijing, Shanghai and Guangzhou – to be followed by operations on international routes.

China Southern is the seventh operator worldwide to receive the A380.

MILESTONE 7000TH DELIVERY: US AIRWAYS' A321

Airbus achieved several delivery milestones during 2011, underscoring the company's sustained production rates to meet the growing worldwide customer demand for its single-aisle and wide-body jetliners.

This commercial activity included handover of the milestone 7,000th Airbus aircraft – an A321 for US Airways, delivered in December from the company's facility in Hamburg, Germany. Occurring nearly two years after the 6,000-jetliner benchmark, it further underscores Airbus' successful production increase to meet demand from a widening global customer base.

On 1 June, Airbus marked the handover of the 50th jetliner manufactured at its A320 Family final assembly line in Tianjin, China – which occurred less than two years after delivery of the no. 1 aircraft assembled at this facility. This aircraft was received by Shanghai-based Juneyao Airlines, with its delivery highlighted by a special event attended by National Development and Reform Commission of China and Tianjin government officials, Juneyao executives and Airbus representatives.

The 50th A380 delivered by Airbus was provided on 16 June to Singapore Airlines – which also was the first carrier to inaugurate revenue service with the 21st century flagship jetliner in 2007. The delivery expanded Singapore Airlines' A380 fleet to 12 aircraft. Other A380 operators as of this date were Air France, Emirates, Korean Air, Lufthansa and Qantas Airways.

For its A330 Family, Airbus celebrated another achievement on 13 July when it delivered its 800th aircraft – an A330-200F freighter – to Aircastle Advisor Ltd for operation by the HNA Group. The delivery was celebrated at Airbus' Toulouse, France headquarters and is the third A330-200F for the HNA Group fleet.

To date, over 1,180 of the twin-engine A330s have been ordered – underscoring the cost-efficient advantages in its jetliner category.

AIRBUS ADVANCES ITS AGENDA FOR A CLEANER ENVIRONMENT

Airbus continued its proactive approach in 2011 for a more sustainable air transport industry, taking the opportunity to partner with airlines, governments and others on a full range of promising projects.

During the first half of the year, Airbus signed an agreement with the Spanish government and Iberia Airlines that brings together farmers, oil-refiners and airlines to develop a complete Spanish "value chain" of sustainable and renewable aviation sustainable aviation fuel for commercial use. The company also teamed with Interjet to conduct the first Jatropha-based sustainable aviation fuel flight in Mexico in an effort to accelerate the country's commercialisation of sustainable aviation fuels for aviation use.

In its support of research activities for a greener and emission free industry, Airbus sponsored an electric concept aircraft demonstrator called "eGenius" that performed its maiden flight in May, featuring an electric propulsion system that pushes the limits of electric flight to a level of 60kw.

On 15 July, German airline Lufthansa launched the world's first-ever daily scheduled commercial passenger flights using sustainable aviation fuel, performing four daily round-trip flights between the cities of Hamburg and Frankfurt. These flights – planned initially for a six-month period – operate on a sustainable aviation fuel blend using 50% Hydro-processed Esters and Fatty Acids (HEFTA), with Airbus providing technical assistance and monitoring fuel properties.

HIGHER PRODUCTION GOALS, NEW AIRCRAFT (2012)

HIGHER PRODUCTION GOALS, NEW AIRCRAFT

THE A350 XWB TAKES SHAPE

THE 5,000TH A320 DELIVERY... AND MORE A320 ORDERS

FUEL-SAVING A320 FAMILY "SHARKLETS"

90-PLUS A380S DELIVERED

GIVING MATURE A330 JETLINERS A NEW CAREER

FABRICE BRÉGIER NAMED PRESIDENT AND CEO

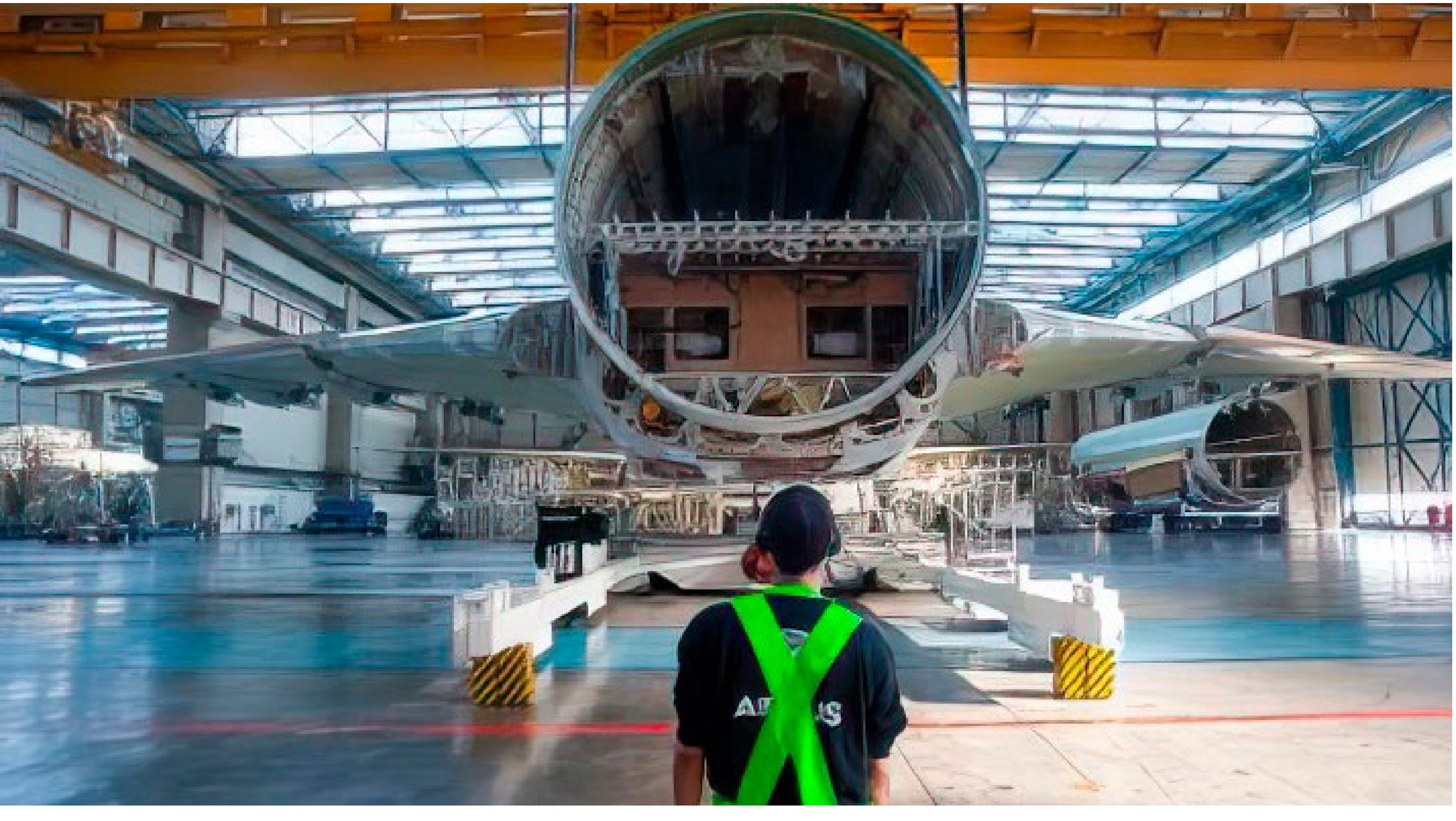
FOCUS ON ECO-EFFICIENCY: AN A319 "PERFECT FLIGHT"

EXPANDING PRODUCTION AND THE GLOBAL FOOTPRINT

CUSTOMERS CONFIRM AIRBUS' PRODUCT LINE STRATEGY

TIANJIN ASSEMBLY LINE COMPLETES 100TH A320 FAMILY AIRCRAFT

HIGHER PRODUCTION GOALS, NEW AIRCRAFT



With the momentum created by a "year of records" in 2011, Airbus set its sights in 2012 on goals that include further production ramp-up for the company's jetliner families, final assembly of the initial A350 XWB aircraft, and certification of the A320 product line's Sharklets fuel-saving wingtip devices – all of which will be supported by additional growth in its employee count.

The planned production acceleration will raise Airbus' output for its best-selling A320 Family in 2012 to an all-time high of approximately 42 aircraft monthly, with the A380 cadence moving toward three per month, and production of the A330 rising to meet a goal of 9.5 jetliners monthly.

To meet these increased production rates – while also securing major programme milestones for the new A350, A320neo and A400M military airlifter – Airbus is keeping a focus on expanding its workforce's size, skills and talent – adding at least 4,000 more employees in 2012, which follows the 4,500 new recruits hired the previous year.

Driven by its exceptional sales performance in 2011, Airbus entered 2012 with a backlog of 4,437 aircraft – representing a combined list price value estimated at $588 billion. This included 1,256 firm bookings for the A320neo Family by 23 customers, confirming its status as the fasting-selling jetliner ever, and bringing overall sales for the entire A320 Family to 8,292 aircraft as of 31 December 2011.

THE A350 XWB TAKES SHAPE

New programme milestones achieved in 2012 for Airbus' A350 XWB have brought this next-generation wide-body jetliner closer to its maiden flight.

Airbus officially unveiled the A350 XWB's final assembly line in Toulouse, France with a 23 October ceremony that spotlighted the first two airframes to be built: the no. 1 aircraft constructed for flight (designated MSN1 in the company's numbering system), along with an airframe for ground-based testing.

The new purpose-built industrial site incorporates 53,000 square metres of aircraft assembly halls and 19,000 square metres of annexes – including offices, workshops and logistics areas. It was constructed near Airbus' existing A330 production facilities to provide an optimisation of resources.

This production facility – named after Airbus visionary Roger Béteille – was built within 29 months, and is the greenest final assembly line ever constructed by Airbus. With a new lighting system, roof-mounted photovoltaic solar panels, translucent panels and glass arched roofs, it is capable of producing energy equivalent to 55% of its own needs.

A350 XWB MSN1 completed its overall structural assembly and system connections in late 2012, enabling its early December transfer from the final assembly line's main assembly hall (Station 40) to the adjacent indoor ground test station (Station 30). Assembly work performed while the aircraft was in Station 40 included the electrical power-on of its entire fuselage and wings.

Station 30 activity will start by testing the aircraft's hydraulic system, followed by the full electric and hydraulic power-on of the aircraft, marking the start of several weeks of comprehensive functional system testing.

MSN1 is an A350-900 version – the A350 XWB Family's intermediate-sized member.

Airbus' second aircraft to be assembled also is sized as an A350-900, and this airframe is to be used for ground-based testing to validate the jetliner's structural design. It was moved in November from the Roger Béteille Final Assembly Line to Airbus' L34 static test hall – situated across the airport in the Lagardère industrial zone. This clears the way for the airframe to be integrated into a test rig for nearly a year of evaluations, including limit load and ultimate load validations, along with residual strength and margin research.

In other programme developments during 2012, the A350 XWB's new Rolls-Royce Trent XWB engine went airborne in February, installed on the dedicated A380 flying testbed aircraft. From its first flight, this powerplant demonstrated its new-generation fuel efficiency and low noise levels.

With its start-up approximately one year prior to the A350 XWB's planned maiden takeoff, the engine flight test evaluations are to accumulate around 175 flight hours – some three times more airborne flying hours than on previous programmes. This will be accomplished over a seven-month period, and will include hot weather as well as icing condition testing campaigns, along with validation of the advanced nacelle and thrust reverser system.

THE 5,000TH A320 DELIVERY... AND MORE A320 ORDERS

Not surprisingly, many of Airbus' programme and commercial milestones in 2012 were related to the A320 Family, including delivery of the 5,000th aircraft to Middle East Airlines of Lebanon in January, as well as two historic bookings in December: an order for 100 additional A320 jetliners by AirAsia, and Pegasus Airlines' signing for up to 100 A320neo Family aircraft. As of December 18, the A320 Family logged 8,800 aircraft ordered and 5,300 jetliners delivered to over 380 customers and operators across the globe, making the A320 Family the world's best-selling single-aisle aircraft family.

Key bookings during the first six months included an acquisition of 100 A320neo jetliners by Norwegian – one of the largest low-cost airlines in Europe – positioning this carrier as a new customer for Airbus. Additionally, AviancaTaca firmed up an order for 51 A320s, making it the largest purchase agreement for a single customer in Latin America history.

The second half of 2012 also was highly successful thanks in part to AirAsia's new order in December for an additional 64 A320neo and 36 A320ceo aircraft, reaffirming the airline's position as the world's largest A320 Family customer. The company's current all-A320 fleet services some 70 destinations in 20 countries across Asia.

Later in December, Turkey's Pegasus Airlines – the country's second-largest carrier – became a new Airbus customer when it signed for as many as 100 A320neo Family aircraft (57 A320neo and 18 A321neo), of which 75 were firm orders. It marks the largest single commercial aircraft order ever placed by a Turkish carrier. Pegasus will use the jetliners to service the company's rapidly-expanding network from Istanbul to destinations in Turkey, Europe and the Middle East.

In the U.S., the A320neo's acceptance in the market was underscored in 2012 with Spirit Airlines' firming up of a 45-aircraft booking, along with an order for 30 A320s. These new aircraft will be used on Spirit's growing network of flights in the domestic United States, Caribbean and Latin America, and will join the A320 Family aircraft successfully operated by the airline for the past seven years.

FUEL-SAVING A320 FAMILY "SHARKLETS"

Airbus' application of its fuel-saving and performance-enhancing Sharklet large wingtip devices on the A318, A319, A320 and A321 jetliners marked numerous milestones in 2012, culminating in December with AirAsia becoming the first carrier to receive a Sharklets-equipped jetliner.

Achievements included a roll-out of the initial new-build A320 fitted with Sharklets in April as one of eight aircraft being used in the test campaign for these devices in their production-standard version.

It was accompanied in October 2012 by the initial Sharklets-equipped A321, and was joined one month later by the no. 1 A319 with these devices.

The Sharklets – which decrease aerodynamic drag by helping reduce the spiral-shaped vortices formed at aircraft wingtips during flight – are offered as an option on members of the in-production A320ceo (current engine option) A320 Family, and will be standard on Airbus' A320neo (new engine option) jetliners.

In December, Airbus announced certification of the first jetliner/engine combination with Sharklets approved by the European Aviation Safety Agency (EASA) airworthiness authority: the A320 powered by CFM International's CFM56 powerplant.

It was this A320 version that AirAsia, a major low-cost carrier and the largest A320 Family airline customer, received later in the same month – positioning it to become the world's first operator of a jetliner with Sharklets.

90-PLUS A380S DELIVERED

The popularity of Airbus' 21st century flagship aircraft – the A380 – continued to spread in 2012.

Worldwide to receive an A380. This 75th delivery overall was the first of six that Malaysia Airlines has on order, and it is to be used for operations on the Kuala Lumpur-London route. Delivered at Airbus' Toulouse headquarters location, it incorporates a new livery including a modern interpretation of the Malaysian "wau" moon-kite national symbol, as well as an updated logo for the carrier.

In June, Transaero Airlines became Airbus' first customer for the A380 in Russia, the Commonwealth of Independent States and Eastern Europe when it completed a purchase agreement for four aircraft. These jetliners will seat approximately 700 people in a three-class cabin layout and are expected to be used on the airline's higher density routes from Moscow.

Thai Airways International (THAI) became the ninth carrier worldwide to add Airbus' A380 to its fleet with the September handover of the airline's no. 1 aircraft – named Si Rattena, or "Majestic Jewel" – at a special ceremony in Toulouse, France.

THAI has ordered six aircraft in total, with each to accommodate 507 passengers in a premium three-class layout with a new cabin design. First class is equipped with 12 private suites while the Royal Silk Class contains 60 fully flat sleeper seats. All seats are equipped with the latest on-demand in-flight entertainment systems, communications outlets and individual power supplies.

This jetliner – which is powered by Rolls-Royce Trent 900 engines – began operations on the company's Bangkok-Hong Kong and Bangkok-Singapore routes when it entered service. THAI is expected to begin service using A380s to Frankfurt at the end of the year, as well as to Tokyo and Paris in early 2013 as more aircraft are delivered.

From the A380's October 2007 introduction through September 2012, more than 650,000 total revenue flight hours were logged by the jetliners during operations worldwide – representing a combined cumulative time aloft of nearly 75 years. The A380 fleet was performing one departure or landing every seven minutes, with an average daily utilisation of 13.4 hrs. per aircraft.

As of end-November 2012, Airbus had delivered more than 90 A380s to the nine airlines: Air France, China Southern, Emirates, Korean Air, Lufthansa, Malaysia Airlines, Qantas, Singapore Airlines and THAI.

HIGHER PRODUCTION GOALS, NEW AIRCRAFT (2012): Giving mature A330 jetliners a new career

GIVING MATURE A330 JETLINERS A NEW CAREER

The A330 Passenger-to-Freighter (P2F) conversion programme was given its start in 2012 through an agreement involving EADS EFW (a sister company in the EADS group) and Singapore's ST Aerospace.

The A330P2F programme offers a passenger-to-freighter conversion opportunity for A330s that have completed their useful operational service as passenger jetliners.

Both the A330-200 and A330-300 versions are eligible for the P2F conversion. With its longer fuselage, the A330-300P2F is particularly suited for integrators and express carriers, resulting from its high volumetric payload capability with lower-density cargo, while the A330-200P2F is optimised for higher-density freight and longer-range performance.

The A330 offers a highly capable platform for conversion into a freighter, with modern Airbus technologies that include fly-by-wire flight controls. Overall, more than 1,180 A330s have been ordered in the passenger, freighter, VIP, and military aerial tanker/transport versions, with over 800 delivered from the A330's service entry in 1994 through early 2012 – providing a large source of aircraft to support these conversions for many years.

A330P2F aircraft will be complementary to Airbus' new-production A330-200F freighters, as the converted jetliners address a different price-point and end-users, based on separate operational requirements.

FABRICE BRÉGIER NAMED PRESIDENT AND CEO

Airbus marked a key management change on 1 June as Fabrice Brégier became the company's President and Chief Executive Officer.

Brégier had served as Airbus Chief Operating Officer since 2006, and succeeds Tom Enders, who takes the duties as CEO of parent company EADS.

During his previous COO role, Brégier worked on the implementation of Airbus' company-wide restructuring and change program, while also overseeing Executive Committee actions involving operations, engineering and procurement.

With Brégier now "at the controls," the focus will be on increasing Airbus' global footprint while also ramping-up production.

Succeeding Brégier as the Airbus COO is Guenter Butschek, who is now in charge of operations, engineering, procurement, quality and lean, information technology and communications technology.

FOCUS ON ECO-EFFICIENCY: AN A319 "PERFECT FLIGHT"

Airbus and Air Canada joined to perform North America's first-ever commercial "Perfect Flight" on 18 June, using one of the airline's A319s flown from Toronto to Mexico City with the goal of cutting CO2 emissions by more than 40% compared to a regular trip.

This "Perfect Flight" combined the Airbus A320 Family's capabilities as a modern state-of-the-art airliner series, powered by a sustainable alternative 50 per cent sustainable aviation fuel blend made with used cooking oil, and employing streamlined air traffic management procedures – all facilitated through best practice operations to underpin the airline industry's strategy to tackle carbon emissions.

The cross-border activity follows the first "Perfect Flight" achieved in November 2011, which used an Air France A321 flying on a domestic French segment from Toulouse to Paris.

EXPANDING PRODUCTION AND THE GLOBAL FOOTPRINT

Airbus announced on 2 July that it will establish the company's first U.S.-based production facility in Mobile, Alabama.

This new A320 Family final assembly line – which is part of a strategy to enhance the company's global competitiveness as well as bring it closer to North American customers – will produce the single-aisle A319, A320 and A321 and is expected to start operation in 2015, with first deliveries beginning in 2016.

The strategy expands and enhances Airbus' U.S. presence, while adding another company facility in the state of Alabama, which currently is home to an engineering centre at the Mobile Aeroplex at Brookley, as well as an Airbus Military customer service operation that also is located in Mobile.

Airbus' new A320 Family final assembly line will involve an estimated investment of approximately $600 million, and is to consist of 53 acres of buildings, aprons and roadways contained within a 116 acre site.

CUSTOMERS CONFIRM AIRBUS' PRODUCT LINE STRATEGY

The 2012 Farnborough Airshow brought new airline industry backing for Airbus' commercial and industrial strategies, with additional single-aisle and wide-body jetliner orders announced and endorsements received for two of its enhanced aircraft.

During the week-long international event, Airbus announced the launch of an increased maximum takeoff weight for its twin-engine A330, further enhancing the operating range and payload capability of this long-popular jetliner. This takeoff weight boost to 240 metric tonnes includes the integration of aerodynamic technologies from the A350 XWB programme, along with enhancements to the aircraft's jet engines.

CIT Group Inc. placed the first order for this increased takeoff weight A330 version two days after the launch announcement was made, adding to the transportation finance company's already large portfolio of the jetliners available for lessors.

In November, Airbus announced a further improvement of the A330 takeoff weight, with an increase to 242 metric tonnes for both the A330-200 and A330-300 versions. This upgrade also provides an increased fuel capacity option for the larger A330-300, and builds on the enhancements announced during the Farnborough Airshow.

Another key development at the biennial Farnborough event was Cathay Pacific's choice to incorporate 26 A350-1000s into its fleet, validating Airbus' action in 2011 to improve the A350-1000 version of its A350 XWB wide-body jetliner family with a higher-thrust engine and an increased takeoff weight.

Overall, Airbus announced 115 new sales and commitments during the Farnborough Airshow, which also included 57 commitments for the A320ceo (current engine option) family – demonstrating this is still the industry's benchmark single-aisle aircraft product line, along with 29 bookings for the A320neo (new engine option).

TIANJIN ASSEMBLY LINE COMPLETES 100TH A320 FAMILY AIRCRAFT

The Airbus A320 Final Assembly Line China (FALC) achieved a production milestone in August with completion of the 100th single-aisle aircraft built at the Tianjin facility. German Chancellor Angela Merkel and Chinese Premier Wen Jiabao presided over a celebration of this accomplishment, which was attended by some 1,000 people.

One day prior to the event, a framework agreement was signed by Airbus, the Tianjin Free Trade Zone and the Aviation Industry Corporation of China to continue cooperation on this joint-venture assembly line beyond the current business plan – which is due to expire in 2016.

Opened in August 2008, the Tianjin site is the third A320 Family final assembly line worldwide, and is Airbus' first outside of Europe.

Aircraft delivered from the complex have been received by 11 Chinese operators, while more than 500 A320 Family jetliners have been ordered in China since the Tianjin project's original agreement was signed.

The milestone 100th Chinese-built Airbus jetliner was delivered to Air China in September, with this A320 planned for operation on domestic routes linking Shanghai to other cities in the country.

CONTINUING THE MOMENTUM (2013)

CONTINUING THE MOMENTUM

Airbus carried its high level of programme and commercial activity into 2013 – sustaining the momentum from last year by achieving new milestones that include the A350 XWB jetliner's first flight, a further ramp-up in A330 production and the 10,000th A320 Family order, as well as important deliveries of: the first A400M, 1,000th A330, 100th A380, and Airbus' 8,000th total aircraft.

2013 also confirmed Airbus market leadership as the company received 1,619 gross aircraft orders and 1,503 net bookings – both industry records in terms of units and value.

This maintained the momentum of 2012 – during which Airbus outperformed on its internal business goal by winning 914 gross orders for the company's jetliners (which was 40% above the internal target), and reaching a record number of annual new deliveries by providing 588 aircraft to customers during the year.

Building off 2012, and as a result of the success in 2013, Airbus' industry-record backlog totaled more than 5,500 aircraft by year's end.

A350 XWB: THE NEW SHAPE OF EFFICIENCY TAKES FLIGHT

The test and certification programme for Airbus' newest and most efficient jetliner – the A350 XWB – kicked into full gear in 2013.

On 14 June, the first aircraft to fly – designated MSN1 in Airbus' numbering system – conducted its highly successful maiden flight from Toulouse-Blagnac Airport. One week later, this jetliner had a brief starring role at the Paris Air Show, performing a high-profile flyby over Le Bourget Airport during its third test flight.

MSN3 joined the flight test campaign in October, with its successful first mission, which lasted approximately five hours. Like MSN1, the second of this next-generation wide-body to fly is an A350-900 version, which is equipped with heavy flight test installation. A total of five development aircraft will participate in the 2,500-flight-hour test and certification effort for this version, which will lead to an entry into airline service in the second half of 2014 with Qatar Airways as its first operator.

As the testing and certification programme continues, the A350 XWB continues to receive strong endorsements from some of the world's leading flag carriers. In September, Lufthansa ordered 25 A350-900s, with further option for 30 more, along with the flexibility to convert some aircraft to the larger A350-1000s; meanwhile, British Airways contracted in the same month for 18 A350 XWB, a choice announced earlier in the year by the U.K. operator and its International Airline Group parent company. Japan Airlines became the nation's first A350 XWB customer with its firm purchase order for 31 aircraft, covering A350-900 and A350-1000 variants.

Through 2013, Airbus' A350 XWB had logged more than 800 firm orders from 39 customers worldwide. With the use of advanced materials – including lighter-weight carbon-fibre composites – and highly efficient Rolls-Royce Trent XWB engines, the jetliner family will introduce a step change in efficiency when compared with existing aircraft in its size category, along with reductions in CO2 emissions.

THE ENDURING A330 SUCCESS STORY

The A330 maintained its popularity with airline customers and lessors around the world, highlighted by Airbus' milestone 1,000th delivery of an A330 Family aircraft, which was accepted by Cathay Pacific Airways in July.

The popularity of this wide-body family also was reflected in Airbus' new record output of 10 per month, which was reached earlier in 2013.

Current production includes the A330-200 and A330-300 passenger versions, the A330-200F freighter, and the military Multi Role Tanker Transport – which is based on the A330-200 airframe, equipped for aerial refueling missions along with troop and cargo airlift.

As of the 1,000th delivery in July, the aircraft type already had carried some 1.2 billion passengers during its operational career, with a takeoff or landing performed by the twin-engine jetliner somewhere in the world every 23 seconds.

In new business transactions, the A330-200F received an important vote of confidence from Qatar Airways, which placed a firm order for five more freighters. Announced at the 2013 Dubai Airshow in November, these additional aircraft will join the Gulf carrier's three A330-200Fs already in service – and positions the Airbus mid-sized freighter to become the backbone of Qatar Airways' cargo fleet.

A month later, Air Asia X signed for an additional 25 A330-300s to bolster its fleet, marking the largest A330 Family order received by Airbus in a single purchase agreement.

Airbus is keeping the A330 Family of aircraft highly competitive by investing in its continual evolution. During the 2003-2013 timeframe, Airbus committed one euro to improve the programme for every euro originally spent developing it, ensuring the latest technology is on board the A330. This ongoing "success story" is further bolstered by the increased 242 metric tonne maximum takeoff weight variant – launched by the company in 2012 – which will extend the jetliners' range by some 50% when compared to its original service entry.

THE A400M IS ACCEPTED FOR MILITARY SERVICE

Another highlight on Airbus' 2013 calendar was the first delivery of the Airbus Military-built A400M military airlifter – which provides a cost-effective, high-speed aircraft designed to meet the harmonised needs of European NATO nations, as well as the requirements of international air forces.

The A400M programme achieved this key milestone during August with the formal delivery to the French Air Force.

This step followed the aircraft's military standard acceptance in late July by the Organisation for Joint Armament Cooperation (OCCAR), representing the programme's seven European launch nations: Belgium, France, Germany, Luxembourg, Spain, Turkey and the United Kingdom.

Earlier in the year, the airlifter received full civil Type Certification, making it the world's first large military transport to meet both civil and military standards.

A380 HITS THE "CENTURY MARK"

The handover of a new A380 to Malaysia Airlines in March represented a new achievement for Airbus' 21st century flagship jetliner: the 100th delivery to international operators.

This landmark delivery underscored Airbus' continued global reach with the A380, which demonstrates daily the capability to increase capacity, enhance productivity, generate more revenue and improve profit for its operating airlines.

In another important milestone this year, the A380 expanded its global operator base as Airbus delivered British Airways no. 1 aircraft in July, which was followed by two more A380 deliveries to the British carrier in 2013.

Two strong endorsements also were received during the year: the first from one of the world's largest wide-body lessors, and the other from Airbus' largest customer for the A380. At the 2013 Paris Air Show, the Dublin, Ireland-based Doric Lease Corp. signed a Memorandum of Understanding for 20 of these double-deck aircraft, which will expand this 21st century flagship jetliner's profile in the lease market – making the A380 more accessible to new and existing customers with the flexibility of an operating lease.

Several months later, Emirates Airline signed a contract at the Dubai Airshow for 50 more A380s, providing additional jetliners to expand its route coverage and for aircraft replacement. This latest reorder brings the total number of A380s booked by the Dubai-based carrier to 140.

With the aircraft in its sixth year of service for worldwide operators, the global fleet of A380s undertakes more than 150 commercial flights per day and carries more than 1.5 million passengers each month as of December 2013.

SUPPORTING THE GLOBAL CUSTOMER BASE

With more than 7,600 aircraft in operation for its worldwide customer base, Airbus remained committed to growing the company's portfolio of support and services that help operators keep these jetliners flying safely and profitably.

Included in these offerings is Airbus' Flight Hour Services (FHS) programme, a cost-effective maintenance outsourcing option to secure aircraft technical performance with minimal risk and investment – delivering modular solutions that range from material supply and repair to full maintenance.

In addition to the more than 100 A330, A340 and A380 family jetliners covered by Airbus Flight Hour Services, the FHS solution was extended to Airbus' best-selling A320 Family in January 2013 with a 15-year Tailored Support Package contract inked with Thai Airways International (THAI), in support of its THAI Smile subsidiary.

THE A320 FAMILY MOVES FORWARD

Airbus' A320 Family continued its momentum in 2013, as the total backlog for the single-aisle family reached nearly 4,300 aircraft – including orders for 2,610 new engine option (NEO) variants.

Also during 2013, an increasing number of airlines took delivery of their first A320s equipped with Airbus' fuel-saving Sharklets as the company continues to expand the application for these wingtip devices. By October, some 180 aircraft with these devices have been delivered, including the initial A319 and A321 variants featuring Sharklets to American Airlines, and Finnair, respectively.

In October, Airbus announced the launch of its Sharklets retrofit programme for in-service A320 Family aircraft. The retrofit – initially for A319s and A320s – offers operators the cost-saving and performance-enhancing benefits of these devices, while extending aircraft service life. As of the announcement, Airbus had received airline commitments for around 200 shipsets, including from JetBlue.

To meet the growing worldwide demand for these devices, Sharklets production went global as Airbus' Final Assembly Line China delivered its first A320 featuring the fuel-saving devices to China Eastern Airlines in May. Through the first half of 2013, some 50 per cent of all A320s delivered by Airbus utilise Sharklets, and Airbus handed over more than 20 single-aisle aircraft with these devices in June alone.

The NEO programme also progressed toward its future service entry, as Airbus froze design on its A320neo and A319neo variants and production of components and subassemblies commenced for the first aircraft to fly. This highly-efficient aircraft family, providing two new engine choices along with standard Sharklets, will deliver a 15% fuel burn reduction to carriers and is planned to enter service from 2015.

10,000TH A320 FAMILY AIRCRAFT ORDERED

In October, JetBlue agreed to 35 new A320 jetliners – covering both current (CEO) and new engine option (NEO) variants – marking Airbus' historic 10,000th order for this single-aisle product line.

The deal covered 15 A321ceo and 20 A321neo jetliners to reach the 10,000 milestone, in addition to JetBlue's option to upsize 8 A320ceo and 10 A320neo aircraft on backlog to their respective A321 variants and the announcement of Airbus' Sharklet retrofit programme.

On top of the popular CEO versions, the NEO offerings have played a significant role in Airbus' A320 Family reaching the 10,000 order mark, with more than 2,600 aircraft sold since the programme's launch in December 2010.

AN EXPANDING AMERICAN PRESENCE

Airbus underscored its commitment to serving the United States marketplace – one of largest for single-aisle aircraft in the world – with the "game-changing" April groundbreaking for the company's first U.S.-based A320 Family final assembly line at Brookley Aeroplex in Mobile, Alabama. It will be the fourth worldwide final assembly line for the best-selling single-aisle product line and is a significant step in Airbus' global growth – in both the U.S. and Europe.

The facility marked a key milestone in September, when the first steel column was raised into a vertical position. This step followed the completion of ground work at the Brookley Aeroplex site.

With A320 Family aircraft assembly in Alabama scheduled to begin in 2015, the facility's first delivery is planned for 2016 to JetBlue – the U.S.-based carrier which operates a fleet of more than 100 Airbus single-aisle jetliners.

At full production, the $600 million facility will create as many as 1,000 highly-skilled jobs at the assembly line and at associated facilities. In addition, the U.S. is the largest single supplier to Airbus, making Airbus the largest export customer for the American aerospace industry.

CONTINUING THE MOMENTUM (2013): 8,000th delivery

8,000TH DELIVERY

As a sign of Airbus continued market leadership, the company handed over its 8,000th aircraft in August – a Sharklet-equipped A320 received by AirAsia.

The landmark delivery highlighted the continued strong demand for Airbus' highly efficient modern product line.

The company reached the 8,000th handover less than two years after its 7,000th delivery, continuing its trend of achieving each successive 1,000 milestone faster than the previous.

In addition to the more than 5,600 A320 Family jetliners Airbus has supplied to its global customer and operator base in reaching this milestone, the company also provided 816 A300/A310 aircraft during a successfully completed production run, 1,300-plus A330 and A340 wide-bodies, and over 100 A380 double-deck jetliners.

This global fleet had carried more than 10 billion passengers serving nearly 500 customers and operators as of the 8,000th handover.

MILESTONE AGREEMENT IN JAPAN

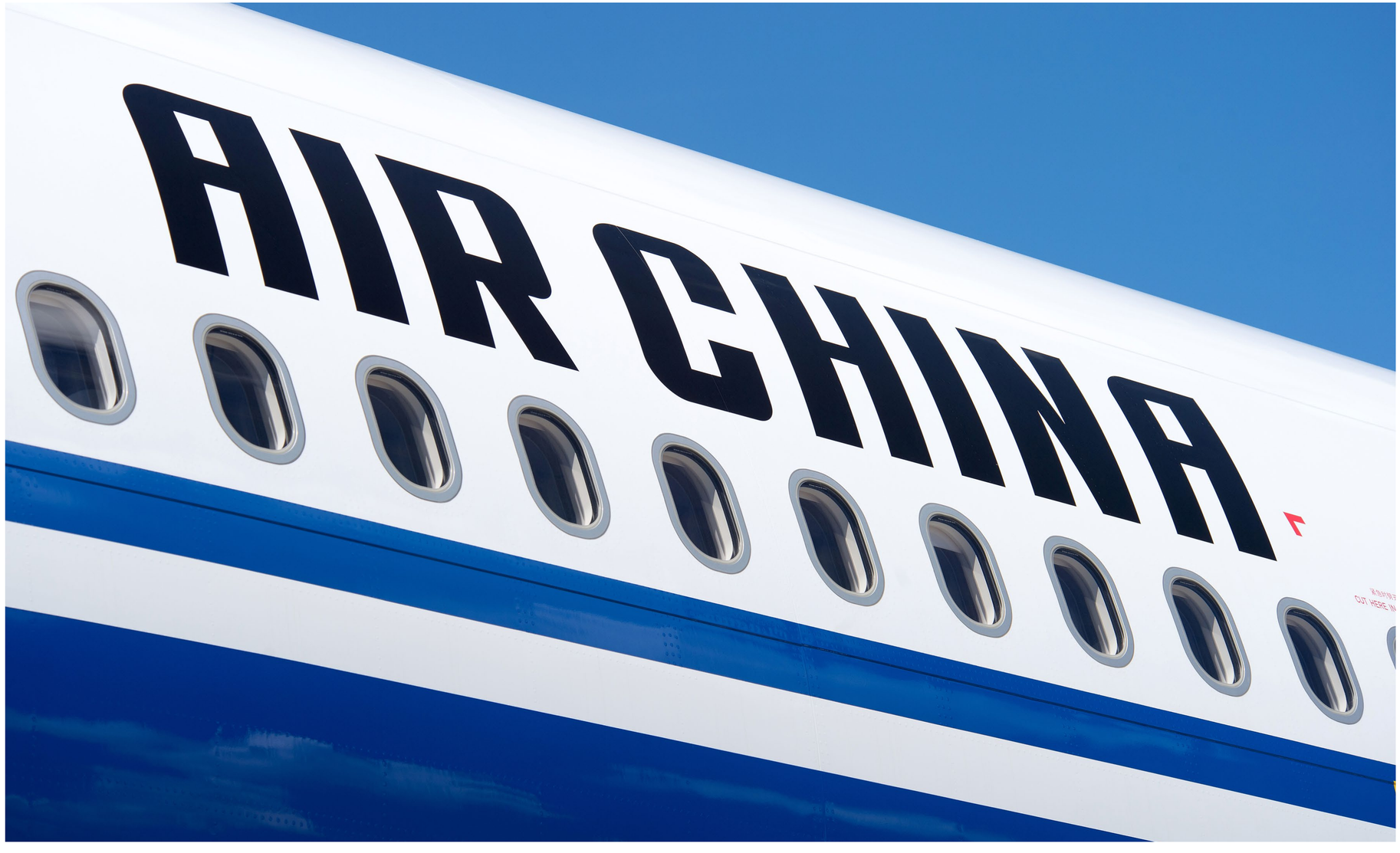
Airbus' presence in Japan has continued to grow in recent years, and the company took a major step forward with a landmark purchase agreement from Japan Airlines for 31 A350 XWB, announced in October.

The deal covered both the benchmark A350-900 and longer-fuselage A350-1000 variants, and marked the first direct Airbus order from Japan's flag carrier, which became the initial customer for the A350 XWB in the country.

Japanese customers have booked orders for the entire family of Airbus' modern, efficient aircraft – from the A330 and A350 XWB wide-body families to the single-aisle A320 and flagship A380 jetliners – as the number of Airbus aircraft operating in the country is scheduled to double in the next five years. The A320 Family has become particularly popular with Japan's emerging low-cost carriers, highlighted by March's delivery of the 100th aircraft for Japan, an A320 for operator Jetstar Japan.

Regional activity is coordinated through the Airbus Japan subsidiary, and the company also has developed strong industrial partnerships for its current production aircraft, as well as research and technology cooperation with the country, which draw on Japanese skills, reliability, technological leadership and quality standards.

A LANDMARK HANDOVER IN CHINA



December's delivery of an A320 to Air China marked the 1,000th Airbus aircraft in service for Chinese operators and underscored the company's growing presence in this Asian nation, which is becoming one of the world's largest aviation markets.

Chinese customers receive 20% of Airbus global aircraft production at the time of this milestone.

As a result, the fleet of Airbus-produced jetliners operating in China has expanded by 50 times during the period from 1995-2013, and covers a wide range of the company's airliners: from its cornerstone A300/A310 and single-aisle A320 product lines, to the A330 wide-body family and the 21st century flagship A380.

Airbus also has an increasing number of manufacturing and support operations in China, including the Tianjin A320 Family final assembly line, which was the company's first such facility outside of Europe.

The site has delivered more than 125 aircraft thru mid-2013, including its initial Sharklet-equipped A320, which was received by China Eastern Airlines in May.

BUILDING ON A RECORD YEAR (2014)

BUILDING ON A RECORD YEAR

Flying high from a record-breaking year.

Airbus is continuing its strong momentum from a record-breaking 2013, which confirmed the company's position as a global aviation leader and its capability to meet customer expectations across its complete product line of single-aisle and wide-body jetliners.

The company built upon a successful 2013 with several important programme milestones achieved in 2014.

Among the highlights were the delivery of the world's first A350 XWB aircraft to Qatar Airways and the maiden flight of Airbus' A320neo (new engine option) jetliner, as well as the launch of the A330neo (new engine option) version during July's Farnborough Airshow.

This expands upon Airbus' strong performance in 2013, during which the company set industry-wide records – both in terms of units and value – with new gross bookings for 1,619 aircraft (1,503 orders net, when cancellations are taken into account).

In addition, Airbus' 626 total jetliners delivered to 93 customers in 2013 marked a highest-ever company output.

A SINGLE-AISLE EVOLUTION TAKES FLIGHT

Airbus marked another aviation milestone with the 25 September first flight of its A320neo, the fastest-selling commercial airliner ever – which performed an approximately two-and-a-half-hour evaluation that began and concluded at France's Toulouse-Blagnac Airport.

This first flight activity officially kicked off the NEO flight test and certification programme, which is to include some 3,000 flight hours across eight aircraft: two A320neos, one A321neo and one A319neo for each of the two latest-generation engine types (Pratt & Whitney GTF™ and the CFM International LEAP-1A).

The NEO project's many innovations, including the two engine choices and standard Sharklet wingtip devices, result in up to 20% fuel savings – while sharing 95% commonality with A320ceo (current engine option) aircraft.

At the end of the year, the company had accumulated more than 11,514 orders for its best-selling single-aisle product line, including more than 3,621 A320neo aircraft from 70 customers worldwide.

A NEW ERA IN AIR TRAVEL WITH THE A350 XWB

Airbus' next-generation A350 XWB jetliner is now ready to shape efficiency for the future of flight – with delivery of the first A350-900 aircraft to global launch customer Qatar Airways in December. This historic handover was marked during a 22 December ceremony in Toulouse, France – which was attended by high-level management from Airbus, Airbus Group, Qatar Airways and Rolls-Royce, as well as international media.

With its no. 1 A350 XWB aircraft, Qatar Airways also becomes the world's first airline to have taken delivery of every member of Airbus' market-leading wide-body product line – which comprises A350 XWB, A380 and A330 jetliners.

In key steps leading up to the initial A350 XWB customer delivery, the A350-900 received its Type Certification from the European Aviation Safety Agency (EASA) on 30 September and subsequently from the U.S. Federal Aviation Administration on 12 November.

These approvals followed a fast-paced 14-month certification programme – during which Airbus performed over 2,600 flight hours with its five-aircraft test fleet.

The A350 XWB – which has accumulated 780 orders from 40 customers through December 2014 – incorporates the latest innovations in aerodynamics, lightweight materials and aircraft systems, along with an extra-wide cabin and new fuel-efficient and quiet Rolls-Royce Trent XWB engines to deliver unrivalled passenger comfort and superior operating economics.

INTRODUCING THE A330NEO

As one NEO programme counted down to its maiden flight, another began in 2014 with Airbus' launch of the A330neo – which builds upon the dependable A330 Family's proven economics, versatility and reliability, while reducing fuel consumption by a further 14% per seat.

Powered by latest-generation Rolls-Royce Trent 7000 engines, the A330neo is composed of two versions: the A330-800neo and A330-900neo, which have the same fuselage length of today's A330-200 and A330-300 current engine option jetliners, respectively.

In addition to the fuel burn reduction, these two NEO aircraft will expand operators' market opportunities with a range capability increase of approximately 400 nautical miles while carrying more payload.

The A330neo is the latest evolution of Airbus' A330 to meet requirements of a global customer base. In addition, the company has further enhanced its A330 product line by offering an increased takeoff weight of 242 tonnes – with the first such A330-300 variant entering final assembly in November – while a lower-weight A330-300 Regional version is being developed for use on domestic and regional routes in high growth markets.

Airbus unveiled the A330neo at the Farnborough Airshow in July, during which it announced new business for 496 aircraft across the product line – representing the company's best-ever performance at this biennial industry event.

In addition to the 121 A330neo commitments received, orders and commitments were confirmed for Airbus' A320, A330 and A350 XWB product lines.

THE EXPANDING A380 OPERATOR BASE

Now in its sixth year of commercial service, the Airbus A380 continues to exceed expectations as its global operator base grows, with Asiana Airlines, Qatar Airways and Etihad Airways receiving their first of these double-deck jetliners in 2014.

Etihad Airways became the latest customer to take delivery of an A380, with this Abu Dhabi-based carrier utilising the double-deck airliner's spacious interior to equip its aircraft with The Residence by Etihad™ three-room suite, which is the world's first private multi-room cabin on a commercial passenger airliner.

Its aircraft also have fully-private suites in its First Apartment section and the latest cabin advances for travellers in the new Business Studio and Economy Smart Seat classes. The initial A380 was delivered to Etihad Airways in December.

Qatar Airways joined the ranks of airlines with Airbus' 21st century flagship during a September handover ceremony at Airbus' Hamburg, Germany site. Citing the A380's "mighty wings," Qatar Airways Chief Executive, His Excellency Akbar Al Baker said the A380 – with its unrivalled efficiency and space – will support the carrier's expanding operations and signature service standard.

Asiana Airlines' no. 1 A380 aircraft was handed over during a ceremony held in Toulouse, France on 26 May. The South Korea-based carrier was the 11th worldwide operator to receive Airbus' 21st century flagship – a key element in Asiana Airlines' future vision and fleet modernisation strategy.

A FOCUS ON PASSENGER COMFORT

Airbus underscored its commitment to the well-being of passengers who fly on its aircraft with its focus on "comfort without compromise."

Highlighted during a worldwide campaign in 2014, this new messaging underscores Airbus' modern standard for comfort – 18-inch wide seats in full-service economy class – which provide superior comfort for travellers, while still offering airlines unrivalled operating economics and fuel efficiency.

The company's standard 18-inch wide seats for full-service economy travel provide an additional inch of room compared to the 17-inch 1950s-era norm, which is still used by other aircraft manufacturers today.

Airbus is also a leader in other aspects of cabin comfort, including innovative features such as LED mood lighting, connectivity and optimal air circulation.

SINGAPORE AIRSHOW: FOCUS ON ASIA-PACIFIC

Underscoring its commitment to the dynamic Asia-Pacific, Airbus' active presence at the 2014 Singapore Airshow brought new commercial announcements and partnership agreements – along with the "debut" of A350 XWB developmental jetliner MSN003 at Changi Exhibition Centre.

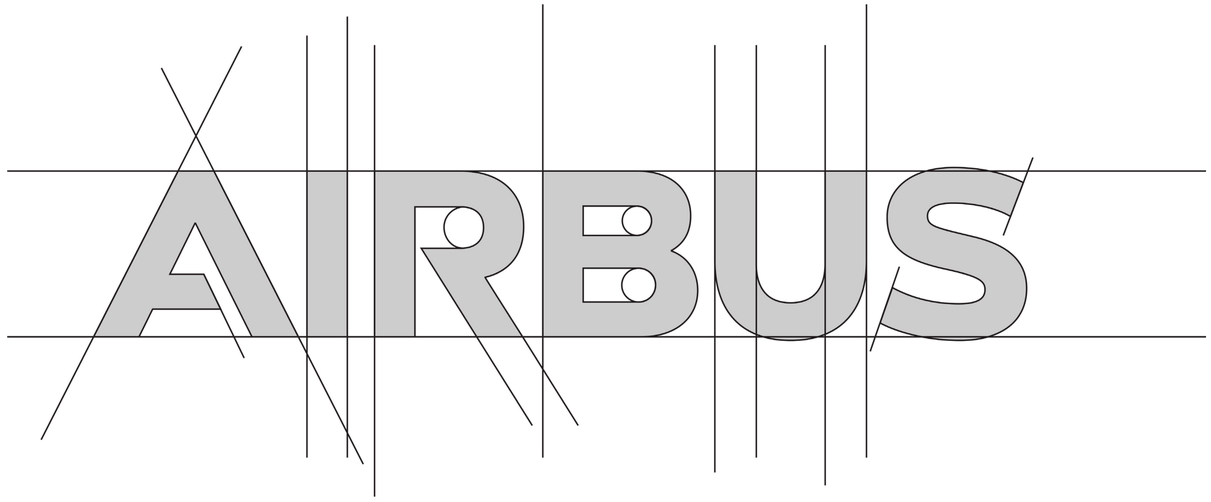
Airbus marked several key milestones during the show to support one of the world's fastest growing aviation markets, including the inauguration of the Satair Airbus Singapore Centre operation of the Satair Group: a wholly-owned Airbus subsidiary that merges its former Material and Logistics Management function with Satair, a Denmark-headquartered spares and aircraft maintenance company. Airbus and Singapore Airlines also signed a Memorandum of Understanding to create a flight-training joint venture in Asia, which will cover the complete scope of Airbus modern jetliners, along with a centre of excellence to focus on research and development of training methods and technologies.

TAKING THE AIRBUS NAME ONE STEP FURTHER

Airbus' proven commitment to excellence and innovation in the aviation industry as well as its globally-recognized name is the basis for its parent company's rebranding as the Airbus Group beginning in 2014.

Under the Airbus Group's new structure Airbus – which is the company's commercial aircraft division – will operate in close cooperation with Airbus Helicopters (formerly Eurocopter) and the new Airbus Defence and Space business unit (which integrates the former Astrium, Cassidian and Airbus Military).

Airbus completed the transfer-out of its military aircraft activities to Airbus Defence and Space during 2014, having successfully brought the A400M multi-role airlifter to delivery start-up phase in 2013.



U.S. A320 FINAL ASSEMBLY LINE TAKES SHAPE

Airbus' new U.S. A320 Family final assembly line in Mobile, Alabama – a significant element in growing the company's global industrial footprint – continued to progress towards the start of aircraft assembly operations, scheduled to begin in 2015.

Construction work neared completion in 2015, with hiring and training activities also underway.

Airbus' "game-changing" U.S. A320 Family facility underscores its commitment to the American marketplace – one of the largest for single-aisle aircraft in the world – and will be the company's fourth final assembly line worldwide for its single-aisle jetliner product line.

First aircraft deliveries from the Alabama site are targeted for 2016, with the facility anticipated to produce between 40 and 50 jetliners annually by 2018.

CONTINUING PARTNERSHIP WITH CHINA

Airbus achieved key milestones and further strengthened its mutually beneficial cooperation with China this year. In December, an event at the company's Airbus Tianjin Final Assembly Line (FALC) marked the site's 200th jetliner assembled – an A319 handed over to China Eastern Airlines.

The company also laid a foundation for its future cooperation with China by signing agreements during a March ceremony in Paris, witnessed by visiting Chinese President Xi Jinping and French President François Hollande.

As part of the agreements, Airbus and its Tianjin Free Trade Zone and Aviation Industry Corporation of China (AVIC) partners extended the successful joint venture to assemble Airbus single-aisle aircraft in China for an additional 10 years – covering the 2016-2025 timeframe, during which the final assembly line's capabilities will be further developed.

Airbus, the Tianjin Free Trade Zone and AVIC also took steps to establish the A330 Completion and Delivery Centre in Tianjin – which was reconfirmed with the signing of a letter of intent in October.

This new facility likely will cover activities such as cabin installation, aircraft painting, engine runs and aircraft delivery.

PREPARING FOR THE FUTURE (2015)

PREPARING FOR THE FUTURE

BOOSTING A320 FAMILY PRODUCTION

THE A350 XWB: BUILDING OPERATIONAL MOMENTUM

AWDVANCING A350 XWB PRODUCTION

A320NEO: CERTIFIED ON SCHEDULE

A330NEO: POWERING THE WAY FORWARD

PARIS AIR SHOW: CONTINUED COMMERCIAL MOMENTUM

FORMULATING THE FUTURE

9,000 DELIVERIES

BIZLAB: BRINGING INNOVATIVE IDEAS TO MARKET

EXPANDING A SUCCESSFUL PARTNERSHIP WITH CHINA

PREPARING FOR THE FUTURE

Airbus built on its reputation as a global aviation leader through its philosophy for incremental innovations in 2015, while further improving its competitiveness and agility in support of future production rate increases.

The A350 XWB programme was a major focus for Airbus in 2015 – with the aircraft officially entering commercial service in January for global launch customer Qatar Airways, followed by the initial deliveries to two additional operators – Vietnam Airlines and Finnair – so far this year.

Another key achievement for Airbus was September's official inauguration of operations of the Airbus U.S. Manufacturing Facility in Mobile, Alabama, which is assembling the industry-leading family of A319s, A320s and A321s.

The Mobile location is part of the global network of four final assembly lines that will allow Airbus to gradually ramp up production to the highest rate ever in civil aviation: 60 aircraft per month by mid-2019, a decision that was announced in October.

In addition, other milestones in 2015 included the company's 9,000th aircraft delivery in March, and May's handover of the first increased 242-tonne-takeoff weight A330 variant.

BOOSTING A320 FAMILY PRODUCTION

To meet the worldwide demand for its best-selling single-aisle aircraft, Airbus has marked several key milestones for the production of its A320 Family jetliners.

In October, the company announced its decision to gradually increase the A320 Family production rate to 60 aircraft built per month by mid-2019 across four worldwide final assembly lines.

Following a thorough study of ramp-up readiness at Airbus and throughout its supply chain, the rate increase will be enabled by the creation of an additional production line in Hamburg, Germany and integration of cabin furnishing activities into the A320 final assembly line in Toulouse, France, which harmonises activities at the four A320 Family production sites worldwide.

This decision follows the official startup of A320 Family aircraft production at Mobile, Alabama during the summer – a game-changer in the important United States marketplace.

The new Mobile facility joins existing the final assembly lines in Hamburg; Toulouse; and Tianjin, China.

Delivery of the first U.S.-made Airbus commercial aircraft – an A321 – is scheduled for next spring, and by 2018, the site will be producing between 40 and 50 single-aisle aircraft per year. According to Airbus' market forecast, the North American market is expected to require some 4,700 single-aisle aircraft over the next 20 years.

THE A350 XWB: BUILDING OPERATIONAL MOMENTUM

The next-generation A350 XWB jetliner became a key symbol for Airbus as the aircraft officially entered airline service in 2015 with a growing number of operators around the world.

Finnair – a long-standing Airbus customer – became the third airline to receive this newest member of Airbus' market-leading wide-body product line, and the jetliner type's first European operator. Handover of Finnair's initial A350 XWB aircraft was marked during a ceremony in Toulouse, France on 7 October.

This milestone comes some three months after Vietnam Airlines – the A350 XWB's second operator – received its initial A350-900. The landmark aircraft was delivered to global lessor AerCap, which is leasing it to Vietnam Airlines for use on the carrier's long-haul routes.

In addition to welcoming two new A350 XWB operators in 2015, the aircraft also performed its historic first commercial flight during the year – a 15 January service operated by global launch customer Qatar Airways from its hub at Hamad International Airport in Doha to Frankfurt, Germany.

As the A350 XWB operator base continues to expand, Airbus also applied its philosophy of continuous innovation to this highly efficient product line. In October, the company announced the launch of the A350-900ULR (Ultra Long Range), which features increased fuel carry capacity, a higher maximum takeoff weight and aerodynamic improvements to offer the capability for flights of up to 19 hours. The version was selected by Singapore Airlines, which plans to acquire seven A350-900ULRs for non-stop flights to the U.S.

ADVANCING A350 XWB PRODUCTION

Airbus delivered 14 A350-900 jetliners during 2015, ramping up the output with the goal of reaching 10 A350 XWB aircraft produced per month in 2018.

The A350-1000 version is also progressing well with this longer-fuselage version taking shape at sites across Airbus' production network.

Announced in September, assembly has commenced for the first major fuselage components – including forward and nose fuselage sections – at Airbus' plants in Hamburg, Germany and Saint-Nazaire, France.

Assembly activities for the first A350-1000's wings also kicked off this year – beginning at the company's Broughton, U.K. site during August.

Final assembly of the A350 XWB jetliner is planned to commence in Toulouse, France in early 2016, followed by a first flight in the second half of 2016.

A320NEO: CERTIFIED ON SCHEDULE

Airbus marked a major milestone on 24 November 2015 with the certification of the first A320neo (new engine option) Family variant: the Pratt & Whitney GTF™ engine-equipped A320neo. This aircraft version received its Type Certificate from both the European Aviation Safety Agency (EASA) and the U.S. Federal Aviation Administration (FAA).

Completing a rigorous 14-month flight test programme since the Pratt & Whitney-powered A320neo's maiden flight, the jetliner's airworthiness approval paves the way for the first delivery and subsequent entry into service. Certification of the A320neo powered by the other engine option – CFM International's LEAP-1A – is planned for the coming months, which will be followed by the A321neo and A319neo versions with each powerplant type.

During the year, Airbus also expanded the single-aisle NEO Family's offerings with the official announcements of an increased 97-tonne maximum takeoff weight A321neo variant for new long-haul markets of up to 4,000 nautical miles, and two new corporate jet members: the highly-capable ACJ319neo and ACJ320neo.

Underscoring the A320neo Family's continuing position as a market leader, Airbus signed a purchase agreement with India's IndiGo in August, which covers 250 new engine option single-aisle jetliners and is the company's largest-ever order in terms of number of aircraft booked. The deal helped bring the backlog for the A320neo Family to over 4,300 jetliners ordered by a global customer base through October.

A330NEO: POWERING THE WAY FORWARD

Approximately one year after the programme was launched, Airbus' A330neo (new engine option) "came to life" – with the company kicking off its production for this wide-body NEO programme during the summer of 2015. This activity included the machining of the first engine pylon in Airbus' Saint-Eloi location near Toulouse, France, as well as the start of production for the initial A330neo centre wing box at the company's plant in Nantes, France.

In 2015, Airbus also marked significant achievements for the enhanced CEO (current engine option) A330 Family aircraft that are serving as the platform for developing the NEO. In a key milestone that occurred during May, U.S.-based Delta Air Lines took delivery of the first 242-tonne maximum takeoff weight A330-300 variant, which provides more capabilities at lower operating costs. Air China and Scandinavian Airlines also welcomed this enhanced A330 into their fleets during the year.

As a result of the continuous innovation philosophy applied to the A330 Family, these jetliners continued to demonstrate their popularity in service for a global operator base. In June, Airbus signed a General Terms Agreement for 45 A330 Family aircraft and a Memorandum of Understanding covering options for 30 A330s with China Aviation Supplies Holding Company – a strong endorsement for this versatile wide-body product line in the world's fastest growing market, and another example of the A330's ongoing success.

PARIS AIR SHOW: CONTINUED COMMERCIAL MOMENTUM

Airbus' market-leading product line received a strong endorsement during the 2015 International Paris Air Show, with 421 new firm orders and commitments (worth more than $57 billion at list prices) announced by the company during this biennial industry event, which was held in June.

Among the milestone agreements were Wizz Air's Memorandum of Understanding (MoU) signed for 110 A321neo aircraft, which helped push total orders and commitments for Airbus' single-aisle NEO (new engine option) beyond 4,000.

Air Astana's seven-aircraft deal with Air Lease Corporation that includes four A321neo Long Range (LR) jetliners, making it the first airline to announce plans to operate the type; Saudi Arabian Airlines' decision to add 20 A330 Regionals to its fleet, becoming the launch customer; and more.

Also included with the commercial announcements was the agreement between Airbus and JAMCO for the development, manufacture, supply and support of a new aft galley and lavatory module option to increase cabin efficiency on the A350 XWB, while maintaining high levels passenger comfort.

FORMULATING THE FUTURE

As part of the high-profile Airbus presence at June's Paris Air Show, the company put a spotlight on aviation's future with release of its latest Global Market Forecast (GMF) – which projects a worldwide need for 32,585 new passenger aircraft between 2015 and 2034.

This forward-looking report factors in such key market drivers as demographics, trade, tourism flows, oil prices, environmental issues and competition; and explains how each will help shape the aviation sector's continued evolution and expansion in the years to come.

The 2015-2034 Global Market Forecast – entitled "Formulating the Future" – serves as a reference for airlines, airports, investors, governments, non-government agencies and others.

Learn more on the dedicated Global Market Forecast page.

9,000 DELIVERIES

Underscoring the ongoing demand for Airbus' comprehensive and modern product line from customers around the world, the company delivered its 9,000th aircraft in March – an A321 received by Vietnam's VietJetAir.

The landmark delivery came less than two years after Airbus' 8,000th handover, highlighting its sustained levels of high production, which are set to rise even further as demand grows.

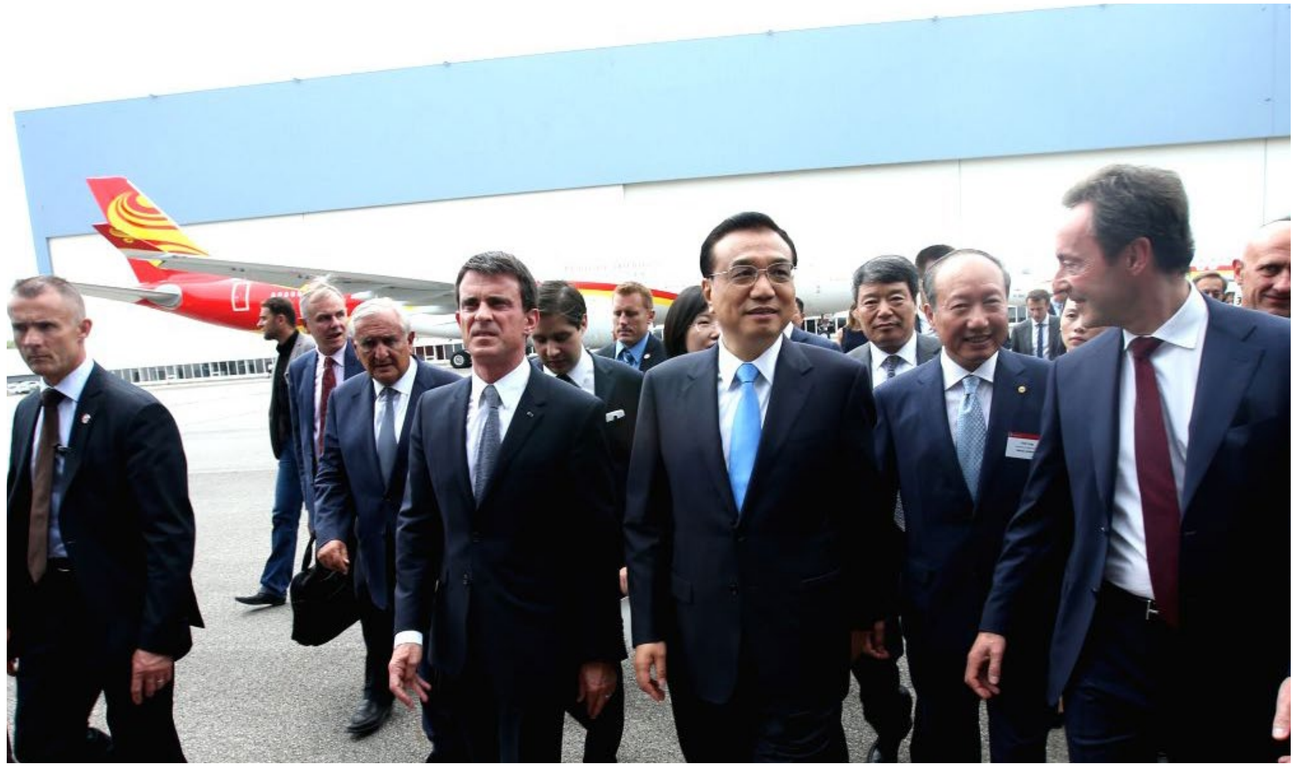
Deliveries allowing Airbus to reach this milestone include more than 800 of the cornerstone A300/A310 jetliners supplied during a successful production run; over 6,450 A320 Family aircraft provided; 1,500-plus long-range A330 and A340 aircraft; more than 150 A380s; and the initial next-generation A350 XWB aircraft.

BIZLAB: BRINGING INNOVATIVE IDEAS TO MARKET

As part of its strategy to stay at the forefront of the aviation sector by enhancing its agility, Airbus formally launched its first global aerospace business accelerator – located in Toulouse, France – during March, with a second site at Hamburg, Germany inaugurated in September.

Called Airbus BizLab, this initiative brings together start-ups and Airbus "intrapreneurs" (internal entrepreneurs) to speed up the transformation of innovative ideas into valuable businesses. The Airbus BizLab accepts applications for acceleration programmes from entrepreneurs, start-up businesses and Airbus employees – with a screening committee selecting the most promising ideas.

In September, the company launched its second round of applications for start-ups seeking support through this global Airbus initiative. This follows Airbus BizLab's first call, which selected the projects of five companies: Germany's 3d Trust, OBUU from Spain, the Hong Kong-based PaperClip Design; and France's SimSoft 3D and UWinLoc.



EXPANDING A SUCCESSFUL PARTNERSHIP WITH CHINA

Building on a successful partnership for the A320 Family final assembly line in China, Airbus and the Tianjin Free Trade Zone Investment Company Ltd. (TJFTZ) and the Aviation Industry Corporation of China (AVIC), signed a framework agreement to set up an A330 completion and delivery centre in Tianjin.

To be located near the existing final assembly line, the A330 completion and delivery centre in Tianjin will cover such activities as aircraft reception, cabin installation, painting, engine runs and flight testing, as well as aircraft delivery and customer acceptance. The Clément Ader Final Assembly Line in Toulouse, France will be responsible for structural of the assembly of the aircraft to be completed in Tianjin, before the jetliners are flown to China.

A signing ceremony for this agreement was held during July in Toulouse in the presence of visiting Chinese Premier Li Keqiang and French Prime Minister Manuel Valls. On the same occasion, Airbus also signed a Letter of Intent with AVIC on cabin development cooperation and a procurement framework contract with Zhejiang Xizi Aerospace Fastener Co., Ltd for design, development, manufacturing, and supply of standard fastener parts.

BOOSTING COMPETITIVENESS WITH EFFICIENCY, INNOVATION AND DIVERSITY (2016)

BOOSTING COMPETITIVENESS WITH EFFICIENCY, INNOVATION AND DIVERSITY

Airbus marked key milestones in 2016. Including service introductions of the A320neo (new engine option) jetliner; first deliveries of the latest A330 Family member tailored for regional routes; expansion of the A350 XWB operator base; start of final assembly for the A330neo; its 10,000th overall delivery and broadening of the company's customer services offering.

Accompanying these achievements were significant new commercial orders from around the world for Airbus' product line of single-aisle and wide-body aircraft.

This builds on achievements during the previous year – when the company attained a new annual company record of 635 aircraft deliveries. In terms of new business, Airbus received 1,080 net orders placed by 53 customers in 2015. These positive results positioned Airbus at the start of this year with a backlog of 6,831 aircraft, marking a new industry-wide record.

The company's solid 2015 performance provided a strong platform for its 2016 activities, as Airbus targeted additional improvements in competitiveness – with a particular focus on becoming even more efficient and innovative, while further increasing the diversity of its global operations.

A JOURNEY OF 10,000 AIRCRAFT

Highlighting Airbus' continued growth, the aircraft manufacturer marked its 10,000th jetliner delivery to global customers with the 14 October handover of an A350-900 jetliner to Singapore Airlines.

This major achievement spans more than four decades with every member of the Airbus airliner "family" contributing – from the cornerstone medium-haul A300 and A310 to the best-selling single-aisle A320 product line, long-range A330/340 Family, new-generation A350 XWB and double-deck A380.

As of the 10,000th handover, the global Airbus fleet had flown some 215 billion kilometres and carried more than 12 billion passengers – a number representing approximately twice the Earth's population.

FIRST DELIVERIES FOR THE U.S. FINAL ASSEMBLY LINE

History was made on 25 April with the first-ever delivery of a jetliner from the Airbus U.S. Manufacturing Facility in Mobile, Alabama – a single-aisle A321 for operation by U.S.-based carrier JetBlue.

Airbus' second handover from the final assembly line occurred less than one month later with the 17 May delivery of American Airlines' no. 1 U.S.-built Airbus aircraft – an A321.

Taking the Alabama site into account, Airbus now has operational final assembly lines for the best-selling A320 jetliner product line on three continents: North America, Europe (at Toulouse, France and Hamburg, Germany), and Asia (at Tianjin, China).

A350 XWB MOMENTUM: A FAMILY AFFAIR

Airbus has reached important production milestones for its A350 XWB Family's longest-fuselage member, the A350-1000 – for which Airbus is targeting a mid-2017 commercial service entry. The company has rolled out its the initial two aircraft, the first of which made its maiden flight in November.

These jetliners were built at Airbus' A350 XWB final assembly line in Toulouse, France concurrently with the baseline A350-900 version.

Underscoring the high degree of commonality between the A350-900 and A350-1000, all final assembly line stations can accommodate both aircraft types.

The A350-900 has made headlines of its own so this year with first deliveries of this "Xtra Wide Body" aircraft to Singapore Airlines (March), Cathay Pacific Airways (May), Ethiopian Airlines (June), Thai Airways International (August), China Airlines (September) and Lufthansa (December) – bringing the number of operators to 10.

A320NEO FAMILY: OPENING A NEW ERA

This year marks the start of commercial service for Airbus' A320neo (new engine option) Family, which offers airline operators unbeatable fuel efficiency by incorporating the very latest technologies, including two new-generation engine choices: Pratt & Whitney GTF™ and the LEAP-1A from CFM International.

On 20 January, the Lufthansa Group took delivery of the first NEO aircraft – with the historic handover of an A320neo powered by Pratt & Whitney engines. Airbus followed up this milestone some six months later with the initial handover of the LEAP-1A-powered A320neo version in July to Turkey's Pegasus Airlines.

The flight test campaign for other NEO versions continues as well, with the successful first flight of the A320neo Family's largest member – the A321neo – performed during February. Delivery of the first A321neo is scheduled at the end of 2016.

As new operators continue to take delivery of the A320neo, Airbus had booked more than 4,800 orders from over 80 customers for the NEO Family as of September 2016 – commercial figures which represent a 60 percent market share since the single-aisle jetliner family's launch.

THE NEXT CHAPTER FOR THE A330 FAMILY

Airbus has marked several important milestones that will continue the success story for the popular and versatile A330 Family.

In September, the company announced the start of final assembly for the no. 1 A330neo (new engine option) jetliner. Airbus' first wide-body NEO is a longer-fuselage A330-900 version, which alongside the A330-800 comprises this highly-efficient product line's two versions. The A330neo Family builds on the A330's proven economics – offering a further 14 percent reduction in fuel burn per seat.

Another significant development of 2016 was handover for the first A330-300 Regional jetliner, which was received by Saudi Arabian Airlines in August. Tailored for regional and domestic operations, this A330 version is optimised for routes up to 2,700 nm. – covering short- to medium-haul routes with up to five hours' flight time.

As the A330-300 Regional's launch operator, Saudi Arabian Airlines is to operate a fleet of 20 jetliners, deploying the aircraft to boost capacity on some of its most in-demand regional/ domestic routes.

COMFORT IN THE CABIN: AIRSPACE BY AIRBUS

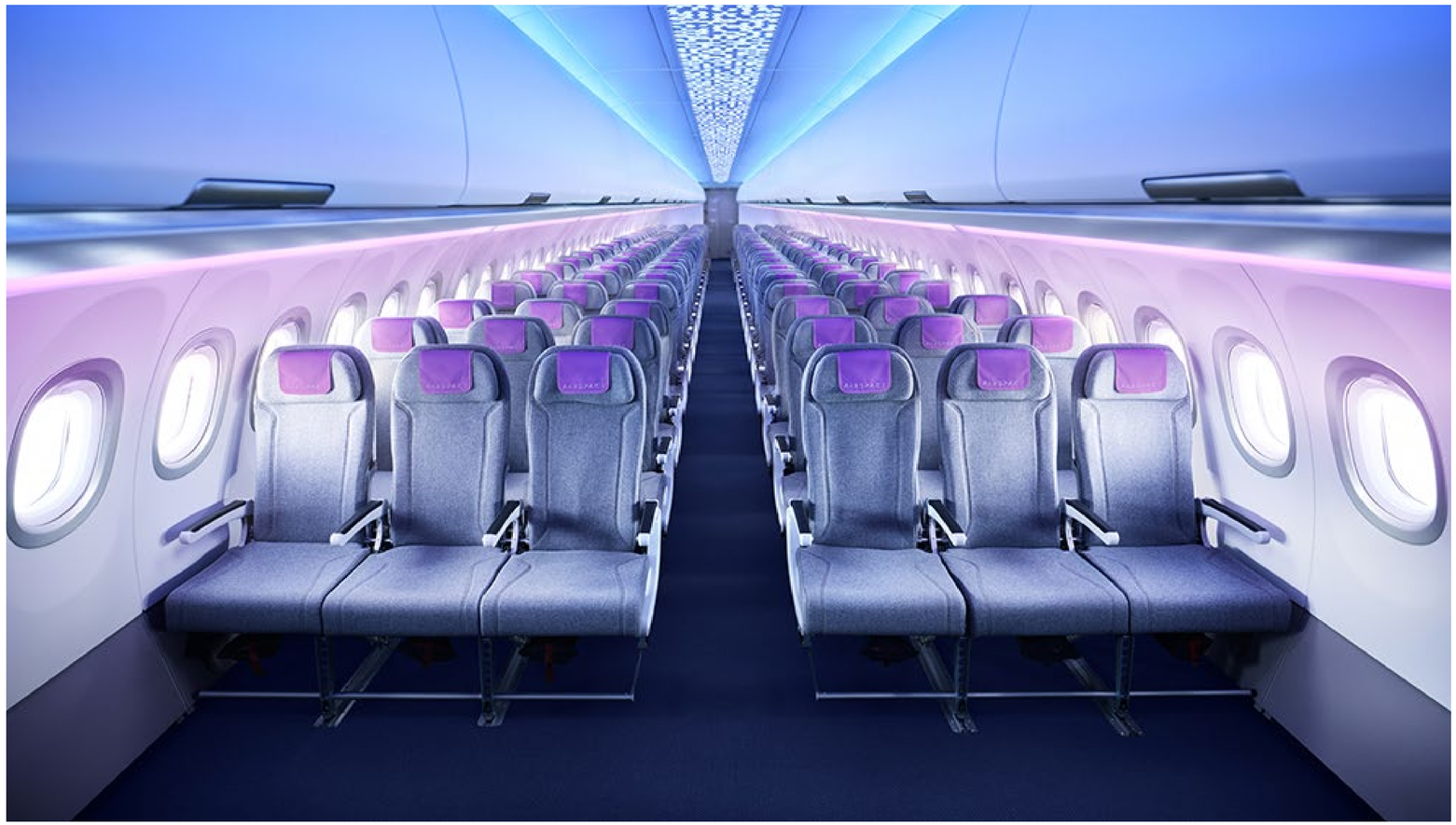
In March, Airbus formally launched its innovative new jetliner cabin concept – "Airspace by Airbus" – which connects the company's commitment to passenger well-being and airline operational performance.

Based on four key pillars – comfort, ambience, service and design – Airspace by Airbus cabins offer a more relaxing, inspiring, attractive and functional environment for travellers.

This sophisticated, flexible concept also will optimise cabin space for operators, while allowing them to project their brands – and create next-generation flying experiences for passengers.

The Airspace by Airbus cabin will be introduced with the wide-body A330neo (new engine option) and incorporated onto the A350 XWB Family – building on the best-in-class comfort of Airbus' modern, market-leading product line.

In addition, the company announced a new cabin concept for its corporate jet family in October. Called Melody, this interior for ACJ320neo business jets is inspired by the smooth curves of nature – while emphasising a high-quality sound environment – to provide an even better experience for customers.



FLYING HIGH AT FARNBOROUGH

Airbus had an active presence and added to its commercial order book during the Farnborough International Airshow this summer. In addition to displaying its market-leading aircraft and highlighting innovation, the company also won $35 billion worth of new business comprising firm orders for 197 aircraft and commitments for 82 jetliners from Airbus' single-aisle and wide-body families.

Farnborough also provided Airbus with the opportunity to unveil its latest global market forecast, titled "Mapping Demand." This forward-looking projection of the aviation industry's next 20 years forecasts an annual 4.5 percent growth rate in air traffic that will require some 33,000 new passenger and dedicated freighter aircraft.

AWESOME STARTS HERE: IFLYA380.COM

In July, Airbus launched its new "I fly A380" booking assistant – which is a unique website for connecting fans of the iconic double-deck A380 aircraft who want to experience a flight on-board this passenger favourite.

This booking assistant puts the A380 at the top of passengers' lists – so flying on it is a matter of choice, not chance. They can conveniently browse of all A380 flights, destinations and carriers – easily finding the desired flight based on their travel agenda, and then connecting them seamlessly to the operating airline's website for safe and secure booking at no extra cost. Choose. Fly. Love A380.

REACHING FOR THE SKIES: SERVICES BY AIRBUS

Highlighting the continued growth in commercial aviation aftermarket, Airbus is fully committed to delivering even more value-adding services on par with the quality of its market-leading jetliners. Underscoring this growing focus was the July announcement of the company's first-ever global services forecast – which projects $3 trillion in aftermarket services spending over the next 20 years.

Also in July, the company unveiled its new NAVBLUE flight operations and air traffic management company that combines the portfolios of Navtech (acquired by Airbus in March), Airbus ProSky and Airbus Flight Operations Services. NAVBLUE is reaching for the skies – fueled by the agility of Navtech and the pioneering spirit of Airbus.

GROWING SUCCESS IN JAPAN

Building on Airbus' increasing commercial and industrial ties in Japan, a milestone purchase agreement for three double-deck A380 jetliners from ANA Holdings was announced in January 2016.

ANA Group will take delivery of the A380 from 2019 – becoming the first Japanese airline to operate the type, which is ideally suited for supporting sustainable growth at the country's busy airports.

Japanese customers have ordered aircraft from Airbus' market-leading wide-body and single-aisle product lines.

The company also continues to actively developing its presence in Japan with a network of 20 industrial partners that contribute to all Airbus aircraft programmes.

EXPANDING AIRBUS' FOOTPRINT IN CHINA

As another demonstration of Airbus' growing presence in the dynamic Asia-Pacific region, the company in March began construction of its A330 Completion and Delivery Centre (C&DC) at Tianjin, China – where activities will include cabin installation, fuselage painting, engine run, production flights, as well as delivery to customers.

The Tianjin-based C&DC will benefit from its co-location with the existing A320 Family final assembly line in this northern Chinese city.

Aircraft processed at the Chinese Completion and Delivery Centre will be built at Airbus' A330 final assembly line in Toulouse, France, and then flown to Tianjin.

Customer deliveries of finished A330s from Tianjin are scheduled to begin in September 2017.

AIRBUS COMMERCIAL AIRCRAFT POSITIONED FOR THE FUTURE (2017)

AIRBUS COMMERCIAL AIRCRAFT POSITIONED FOR THE FUTURE

2017 marked new achievements and key milestones for Airbus' family of single-aisle and wide-body aircraft. Including the single largest commercial jetliner announcement in the company's history.

Wide-body jetliner achievements included delivery of the 100th A350 XWB – an A350-900 variant; the Type Certification of the longer-fuselage A350-1000, clearing the way for the initial customer delivery by year-end; and the first flight of the A330neo, kicking off some 1,400 hours of airborne flight evaluations.

For the single-aisle product line, the A319neo new engine version made its maiden flight equipped with CFM International LEAP-1A engines; the first-ever A321neo was provided to an operator; and a U.S.-produced A321 became the 1,500th Airbus commercial aircraft in North American service.

THE A350 XWB: NEW OPERATORS AND A MILESTONE DELIVERY

The A350 XWB operator base increased in 2017 with several airlines adding the latest member of Airbus' wide-body product line to their fleets.

Among the carriers taking delivery of the new-generation jetliner this year were Singapore Airlines, Qatar Airways, Cathay Pacific, Delta Air Lines and Lufthansa. By the end of October, 58 A350 XWB aircraft had been delivered during the year.

Airbus celebrated a major programme achievement in July with delivery of the 100th A350 XWB to long-time customer China Airlines.

The carrier received their milestone aircraft some 30 months after the first A350 XWB delivery – showcasing the fastest wide-body production ramp-up in Airbus' history.

In November, Malaysia Airlines became the 17th and latest operator to receive the efficient twin-engine wide-body airliner when it took delivery of its first A350-900 version on lease from Air Lease Corporation.

This was part of an order placed by the U.S.-based leasing company for 29 A350 XWB Family aircraft.

THE A350-1000 IS CLEARED FOR SERVICE

The A350-1000 stretched-fuselage version of Airbus' A350 XWB Family aircraft received Type Certifications from the European Aviation Safety Agency (EASA) and the U.S. Federal Aviation Administration (FAA) in November. Every new type of aircraft needs to obtain a type certificate before it enters service, and EASA and FAA are the world's two principal airworthiness authorities. Delivery of the first A350-1000 will be made to Qatar Airways by year-end.

The jetliner's certification followed a rigorous testing campaign of more than 1,600 flight hours over nearly a year, and had three test aircraft travelling the world to complete the necessary trials. Tests spanned the range from extreme cold weather testing in Iqaluit, Canada to hot-and-high testing in La Paz, Bolivia at 4,050 metres above sea level. Along the way, Airbus performed a variety of other tests that measured, among other parameters, the aircraft's ability to safely handle a rejected take-off, its performance landing on runways with standing water, its reliability and noise output.

Designed for upsized efficiency, the A350-1000 variant is seven metres longer than the A350-900 version, which began airline service in 2015. With its stretched fuselage, the A350-1000 accommodates 40-plus more seats in a typical three-class configuration. It features a modified wing trailing-edge, new six-wheel main landing gears and more powerful Rolls-Royce Trent XWB-97 engines. The two aircraft feature a high level of commonality with 95% common systems between them and the extensive use of carbon fibre in the airframe.

THE A330NEO TAKES TO THE SKIES

One aircraft in two sizes, the A330neo (new engine option) comes in two variants: the shorter A330-800 and the longer A330-900. Airbus developed a fast-paced development programme to bring the A330neo from launch to delivery.

Airborne flight tests began in October with the four-hour maiden flight of an A330-900, and the first A330-800 began final assembly in November, on track for its planned initial flight in mid-2018.

The A330neo is the latest generation in Airbus' market-leading A330 product line. Both variants are powered by a pair of Rolls-Royce Trent 7000 turbofan engines, feature optimised aerodynamic refinements along the wing profile, and Airspace by Airbus cabins.

The most visible new features of the A330neo are the wing span extensions that bring the aircraft to 64 meters tip-to-tip – almost four meters longer than the current generation of A330 aircraft – and the specially developed curved wingtip Sharklets that draw on A350 XWB technology and improve fuel efficiency in flight.

The larger A330-900 will accommodate up to 287 seats in a typical three-class layout, while the A330-800 typically will seat 257 passengers in three classes.

MAJOR ACHIEVEMENTS FOR AIRBUS' A320 FAMILY

In March, Airbus performed the first flight of the A320 Family's shortest-fuselage member in the NEO configuration, the A319neo, equipped with CFM International LEAP-1A engines (one of the two powerplants available for the NEO jetliners).

April saw the handover of the first-ever A321neo – the longest-fuselage member of the A320 Family – to Virgin America during a ceremony in Hamburg, Germany; this U.S.-based airline received the version equipped with CFM International's LEAP-1A engines. Cathay Pacific Airways, meanwhile, finalised an order for 32 A321neo aircraft.

Taking delivery of its first A321neo, Japan's All Nippon Airways became the launch operator of the aircraft's version powered by Pratt & Whitney GTF™ engines.

Canadian airline Air Transat announced in July that it would become the first North American operator of the long-range version of the A321, denoted A321LR, starting in early 2019 with 10 aircraft leased from AerCap. The A321LR builds on the A321neo's continued success, having captured over 80% of the market share with more than 1,400 orders to date. The LR option extends the aircraft's range to a maximum of 4,000 nautical miles and brings with it a 30% reduction in operating cost compared to its nearest competitor.

At the Dubai Airshow in November, Airbus announced a historic Memorandum of Understanding for 430 A320neo Family jetliners negotiated by private equity firm Indigo Partners for operation by four ultra-low-cost airlines in its portfolio. The aircraft, destined for the fleets of Frontier Airlines of the U.S., JetSMART of Chile, Mexico's Volaris, and Wizz Air of Hungary represent Airbus' largest commercial jetliner announcement by aircraft numbers, while setting a company record of $49.5 billion value at list prices. A signed purchase agreement to finalise the deal followed in the closing days of the year.

AIRBUS COMMERCIAL AIRCRAFT POSITIONED FOR THE FUTURE (2017): Airbus A320 production and North America

AIRBUS A320 PRODUCTION AND NORTH AMERICA

With the third-quarter 2017 delivery of an A321 to American Airlines – the world's largest operator of Airbus passenger aircraft – there were a record 1,500 in-service Airbus commercial aircraft in North America.

This milestone jetliner was produced at the Airbus U.S. Manufacturing Facility in Mobile, Alabama – which is one of four production centres worldwide for Airbus single-aisle aircraft (joining Toulouse, France; Hamburg, Germany; and Tianjin, China).

Located on the U.S. Gulf Coast, the Airbus U.S. Manufacturing Facility is able to build three members of the A320 Family: the A319, A320 and A321.

TIANJIN: AIRBUS' FIRST WIDE-BODY CENTRE OUTSIDE EUROPE

Airbus inaugurated its A330 Completion and Delivery Centre, or C&DC, in Tianjin, China in September – the first wide-body centre outside of Europe.

Located at the same site as the Tianjin A320 Family Final Assembly Line and the Airbus Tianjin Delivery Centre, the C&DC was created to process twin-engine A330s, performing aircraft completion activities including cabin installation, aircraft painting and production flight test, as well as customer flight acceptance and aircraft delivery.

The Airbus A330 is the most popular wide-body aircraft in China and was flown by nine airlines in the country as of September. Coinciding with the CD&C's formal opening, the first A330 to be delivered from the facility, an A330-200 version, was handed over to Tianjin Airlines.

COMMITMENT TO ECO-EFFICIENCY: SUSTAINABLE BIO-FUELS

Reflecting its strong commitment to eco-efficiency, Airbus offers customers the option to have aircraft assembled at its Toulouse, France site delivered to them powered by a blend of both traditional fuel and sustainable biofuels.

In order to stock the eco-friendly product, the first-ever biofuel station was installed adjacent to the Airbus delivery centre in Toulouse by Air Total, Airbus' partner in the sustainable fuel option for delivery flights.

A total of 21 bio-fueled aircraft have so far been delivered by Airbus since the facility was inaugurated in mid-2016, a clear demonstration of the commercial viability of sustainable fuel blends.

In addition to Toulouse, Airbus is working toward offering bio-fueled delivery flights from its facilities in Hamburg, Germany and Mobile, U.S.

The first deliveries from these sites are set to begin in 2018 and will subsequently become available from the company's facility in Tianjin, China.

A "DYNAMIC" BUSINESS ATMOSPHERE AT THE PARIS AIR SHOW

Airbus' market-leading product line received a strong endorsement during the Paris Air Show in June, with the company securing $39.7 billion of new orders – composed of firm bookings for 144 aircraft valued at $18.5 billion in catalogue prices, and Memoranda of Understanding for an additional 182 aircraft worth $21.2 billion.

With these transactions, Airbus' backlog increased to a new industry record of more than 6,800 aircraft.

In addition, Airbus underscored its commitment to the continuous evolution of the company's jetliner product line with improvements for airline operators and the passengers they fly.

A developmental study for an enhanced A380 with even better economics and improved operational performance was unveiled at the biennial industry event, where Airbus also announced the extension of its "Airspace" cabin brand to the A320 Family.

BLADE: LAMINAR FLOW RESEARCH TAKES FLIGHT

In September, Airbus initiated the latest research for further reducing the fuel consumption of airliners to keep the company and Europe at the forefront of enhancing air transportation's ecological footprint.

This research uses the Airbus A340 Flight Lab testbed aircraft, with its outer wing sections designed for highly smooth airflow over their surfaces. Known as natural laminar flow, such smoothed passage of air creates less drag than the airflow on traditional wings, potentially reducing fuel burn by as much 4.6% on an 800-nautical mile trip.

Designated as project BLADE – an acronym for Breakthrough Laminar Aircraft Demonstrator in Europe – this research effort utilises the first-ever A340 jetliner produced by Airbus, with its outboard wings replaced with approximately 10-meter-long laminar wing panels. These panels represent about two-thirds of the wing size on a short- or medium-range airliner, for which the laminar flow technology is deemed best suited.

BLADE is organised through Europe's Clean Sky aeronautical research programme and involves 21 European partners with 500 contributors. During some 150 flight test hours, the BLADE testbed aircraft will collect an estimated 2,000 parameters.

MAINTAINING COMMERCIAL AIRCRAFT MARKET LEADERSHIP (2018)

MAINTAINING COMMERCIAL AIRCRAFT MARKET LEADERSHIP (2018):
Maintaining commercial aircraft market leadership

MAINTAINING COMMERCIAL AIRCRAFT MARKET LEADERSHIP

Airbus is maintaining its commercial aircraft market leadership in 2018. Building on the company-record 718 jetliners delivered in 2017, the 1,109 net orders logged during the preceding 12 months, and an industry-record 7,265 aircraft on its order books at year-end. Key achievements so far this year include milestone first deliveries (A350-1000, Ultra Long Range A350 XWB and A330-900); introduction of the A220 into Airbus' single-aisle aircraft family; maiden flight of the BelugaXL super airlifter; and more.

A380 DEVELOPMENTS FOR CUSTOMERS AROUND THE WORLD

Emirates, already the largest airline customer of the double-deck Airbus A380, recommitted itself to the iconic jetliner with the January signing of a memorandum of understanding for the acquisition of 20 A380s and an option for 16 more. Deliveries are to start in 2020.

From this carrier's first A380 delivery through late 2017, Emirates had received 100 of the flagship jetliners.

In another development, Portugal's Hi Fly began offering an A380 for 'wet lease' beginning in mid-year 2018 under arrangements that provide the aircraft with its crew, maintenance and insurance. The A380 offered for lease by Hi Fly is a second-hand aircraft previously flown by a scheduled airline, and is from the inventory of Doric GmbH as the asset-owner and lessor to Hi Fly.

All Nippon Airways (ANA) will be the first Japanese customer for the world's largest passenger aircraft, and the carrier's first of three A380s rolled out of the Airbus paint shop in Hamburg, Germany during December. This jetliner features the airline's distinctive Hawaiian sea turtle livery – one of the most elaborate painted by Airbus. ANA is to take delivery of its first A380 in 2019.

Capitalising on the popularity of the iflyA380 website, Airbus released a mobile iOS app version in January. Making flying aboard the spacious A380 a matter of choice rather than chance, both the website and app allow users to browse all available A380 flights and select one of the 53 worldwide destinations served by the flagship jetliner. With the desired departure city, destination and travel dates chosen, booking is finalised through the selected airline at no additional cost. The app further enhances the onboard experience, immersing travellers in Apple's augmented and virtual reality functionalities.

TEN YEARS OF THE A380 AT HEATHROW AIRPORT

In March, Airbus celebrated 10 years of A380 operations at Heathrow Airport – which is the world's busiest in terms of the number of operators flying the flagship aircraft to and from this major international destination.

Singapore Airlines, the first carrier to fly an A380 into Heathrow in 2008, has since been joined by eight other airlines that operate some 50 A380 daily flights.

Heathrow serves 78 million passengers a year, of which 10 percent travel on the A380.

FIRST DELIVERY OF THE A350-1000

Following joint certification in November 2017 by both the European and American airworthiness authorities (EASA and FAA), the first A350-1000 was delivered to launch operator Qatar Airways in February – the same airline that received the first A350-900 variant in 2014.

The delivery followed a tour across the Middle East and Asia-Pacific region performed by a demonstration aircraft that visited 12 cities and spanned some 64,000 kilometres.

Cathay Pacific expanded its A350 XWB fleet with the A350-1000, becoming the second operator of this longer-fuselage version in June.

As the latest member of Airbus' A350 XWB Family, the A350-1000 shares a high level of commonality with the shorter-fuselage A350-900 – allowing airlines to economically operate both variants.

Designed for upsized efficiency, maximum reliability and unique passenger comfort in its Airspace cabin, the A350-1000's fuselage is seven metres longer than the A350-900, providing greater capacity (40 more seats in a typical three-class cabin configuration) that perfectly matches airlines' needs on their busiest long-haul routes while giving the flexibility to provide a larger premium seating area.

THE ULTRA LONG RANGE A350 XWB ENTERS SERVICE

Airbus' Ultra Long Range A350 XWB version, which is able to fly farther than any other commercial airliner, completed its first commercial flight with launch customer Singapore Airlines in October.

The aircraft – an A350-900ULR version – was delivered the previous month.

With a maximum takeoff weight (MTOW) of 280 tonnes, this variant of the best-selling A350 XWB is capable of flying over 20 hours non-stop.

In October, Singapore Airlines initiated flights with the aircraft between Singapore and the U.S. – including the world's longest commercial route: Singapore-New York.

The Ultra Long Range A350 XWB performed its maiden flight in April, initiating a short flight test programme to certify changes over the standard A350-900 that will extend its range capability to 9,700 nautical miles.

This activity used one of the seven aircraft ordered by Singapore Airlines, all of which are in various stages of assembly.

AN EXPANDING A330NEO FAMILY

The year 2018 has brought important milestones for both members of Airbus' A330neo Family.

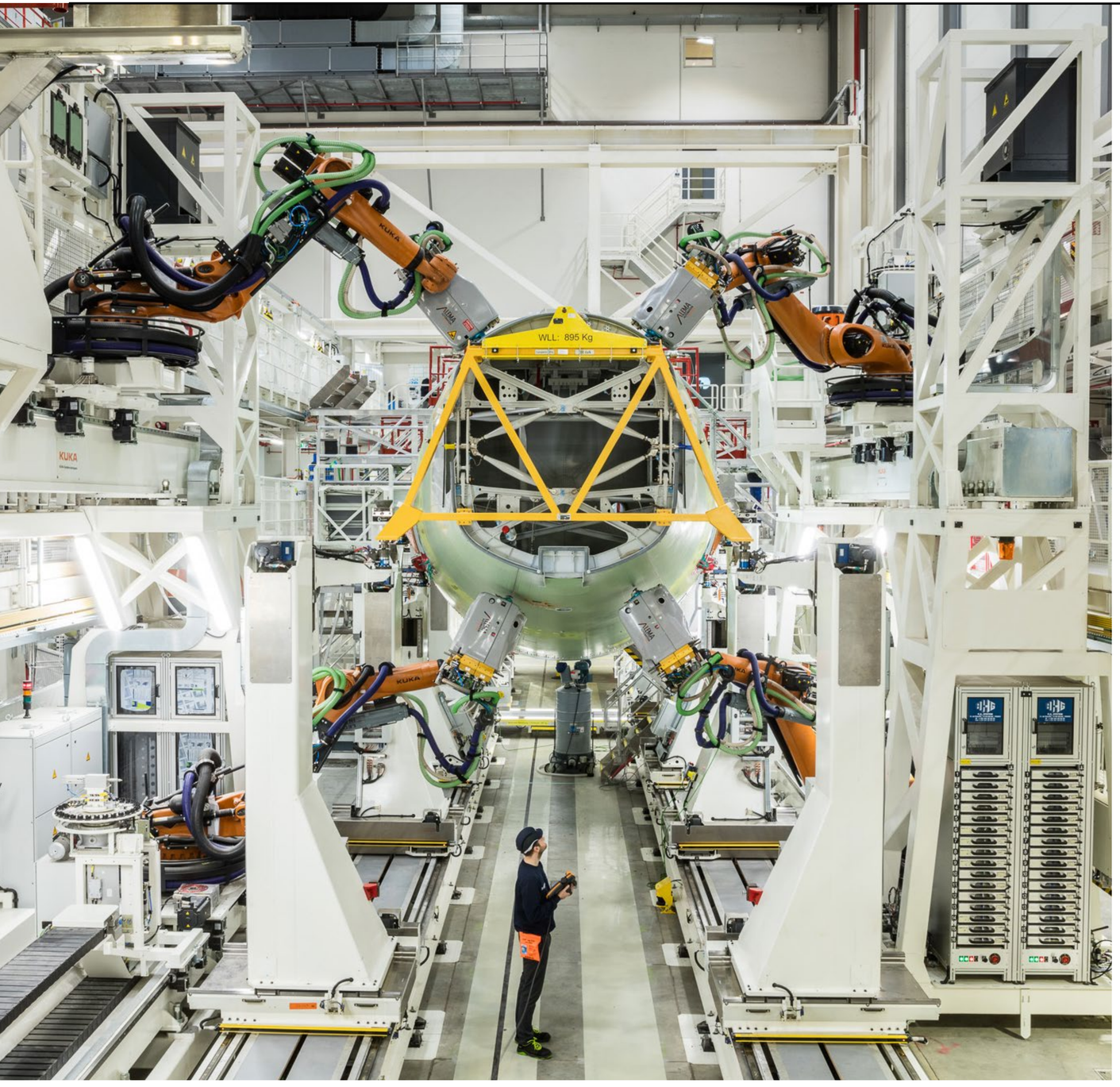
In September, the A330-900 version received its Type Certification from the European Aviation Safety Agency, following a fast-paced campaign that involved around 1,400 flight test hours.

This cleared the way for a high-profile first delivery to launch customer TAP Air Portugal, which received its no. 1 aircraft on lease from Avolon during a ceremony in November.

The A330neo Family's newest member, the A330-800, completed its first flight in November, initiating this aircraft's certification campaign.

Building on the success of the A330-200 – more than 600 of which are in operation – the A330-800 brings new-generation economics and comfort along with unprecedented range to the 250-seat airliner market.

Together with the larger 300-seat A330-900, the aircraft share 99 percent commonality, having the same airframe, engines and cross-crew training.



MAINTAINING COMMERCIAL AIRCRAFT MARKET LEADERSHIP (2018):
The A320 production milestones worldwide

THE A320 PRODUCTION MILESTONES WORLDWIDE

Airbus and its Chinese partners signed a framework agreement in January to ramp up the production rate of A320 Family aircraft at its final assembly line in Tianjin, China to six aircraft per month by early 2020. The agreement, signed in the presence of visiting French President Emmanuel Macron and Chinese President Xi Jinping, also included a memorandum of understanding to enhance Airbus' industrial partnership in Tianjin and strengthen cooperation with regards to technical innovation, engineering capabilities and supply chain expansion.

Airbus' industrial footprint in China dates back to 1985, when the first product subcontracting agreement was signed with Xi'an Aircraft Company. In 2017, the total value of industrial cooperation between Airbus and the Chinese aviation industry amounted to nearly $600 million. In December 2018, the 400th A320 Family aircraft produced at the Tianjin facility was delivered to Air China.

During June, Airbus inaugurated a new A320 Family production line in Hamburg, Germany, making it the fourth final assembly line collocated at Airbus' Hamburg-Finkenwerder industrial site for the best-selling single-aisle product line.

Hamburg's newest production line is a state-of-the-art facility incorporating the latest standards in assembly technology and contributes to Airbus' sustained high-rate production for the A320 Family. It is paired with a new delivery centre from which Airbus customers receive their completed aircraft at Hamburg-Finkenwerder.

In December, Airbus' U.S. Manufacturing Facility in Mobile, Alabama delivered the landmark 100th A320 Family aircraft produced in the United States. This milestone A320neo jetliner was delivered to Frontier Airlines. As of late 2018, the Mobile production facility was delivering four A320 Family aircraft per month to customers in the U.S.

Airbus has A320 Family assembly sites around the world: in Hamburg, Germany; Tianjin, China; Toulouse, France; and in the United States' city of Mobile, Alabama.

MAINTAINING COMMERCIAL AIRCRAFT MARKET LEADERSHIP (2018): A320 Family additions: A321LR & A321neo Cabin Flex

It's been a busy 2018 for Airbus' growing A320 Family, with major achievements for two of this single-aisle product line's latest variants: the extended-range A321LR and the A321neo Cabin Flex, which has expanded seating capacity thanks to optimised use of cabin space.

A320 FAMILY ADDITIONS: A321LR & A321NEO CABIN FLEX

Airbus' longer-range A321LR variant marked several key milestones this year leading up to its first delivery to launch customer Arkia Israeli Airlines, which occurred in November.

The A321LR allows operators the flexibility to fly long-range (LR) operations of up to 4,000nm (7,400km) and to tap into new long-haul markets, which were not previously accessible with single-aisle aircraft. In late March, the A321LR underscored its impressive range with a record-breaking flight from Mahé in the Seychelles islands to Toulouse, France – covering a total distance of 4,750 nautical miles in 11 hours.

Airbus delivered the first A321neo with the Cabin Flex configuration to Turkish Airlines in July. By applying modifications to the fuselage, it enables flexible cabin configurations for up to 240 passengers.

Compared to the previous A321 variant, the most visible modifications in the Cabin Flex configuration are a new rear section and a modified passenger door configuration, where the door located forward of the wing is removed and new overwing emergency exits in the centre section are introduced. The A321neo in Cabin Flex configuration is an option today and will become standard for all A321neos around 2020.

CERTIFICATION MILESTONE FOR THE A320 "NEW ENGINE OPTION" FAMILY

In December 2018, the A319neo "new engine option" – powered by CFM International's LEAP-1A engine – achieved joint Type Certification from US FAA and European EASA airworthiness authorities. It follows certifications of the previous variants powered by this engine option (the A320neo in May 2016, and A321neo in March 2017). Thus, all three new engine option members of the A320 Family are certified by the international authorities to operate with the LEAP-1A powerplant.

With deliveries beginning in 2016, the A320neo Family incorporates many innovations. It offers a choice of two new-generation engine options – the LEAP-1A and Pratt & Whitney GTF™ – and integrates large fuel-saving Sharklet wingtip devices.

The A320neo Family is the world's best-selling single-aisle product line, with over 6,200 aircraft ordered from over 100 customers by the end of 2018. The A320neo accommodates 165 passengers in two classes, or up to 194 in a high-density configuration. The shorter-fuselage A319neo seats 140 passengers in two classes or up to 160 in a high-density layout, while the longest-fuselage A321neo's maximum certified capacity was expanded to 244 seats – all while offering unmatched comfort in each class of cabin service.

A EUROPEAN-CANADIAN PARTNERSHIP FOR THE A220

A milestone partnership between Airbus and Canada's Bombardier took effect in July with Airbus acquiring a majority stake in the C Series Aircraft Limited Partnership (CSALP). This entity manufactures and sells Bombardier's single-aisle C Series jets: the CS100 and CS300, which are renamed the A220-100 and A220-300 as new members of Airbus' single-aisle aircraft family.

By combining the global reach and scale of Airbus with the state-of-the-art aircraft from Bombardier, Airbus aims to unlock the potential of the A220 Family, creating significant new value for customers, suppliers, employees and shareholders. The partnership brings together two complementary product lines – the A220 Family and the A320 Family – in the 100-150 seat market segment, which is projected to require 7,000 new aircraft over the next 20 years.

A220 Family jets destined for all local and worldwide customers outside of the U.S. will be produced at the Mirabel final assembly line in Quebec, Canada, while A220 Family aircraft for U.S. markets will be produced at Airbus' facility in Mobile, Alabama (currently home to an A320 production line). Delta Air Lines became the first U.S. carrier to take delivery of an A220 aircraft in October. In December, Air Tanzania became the first African operator – and the fifth airline globally – with an A220 Family aircraft.

BELUGAXL TAKES TO THE SKIES

The first BelugaXL – Airbus' next-generation super airlifter – performed its maiden flight on 19 July, initiating a flight test campaign of some 600 hours during 10 months to achieve Type Certification and entry into service in 2019.

Airbus will operate a fleet of five BelugaXLs to transport completed sections of Airbus aircraft among the company's European production sites and to its final assembly lines in France, Germany and Spain.

As one of the largest aircraft in existence, the new-generation transporters are six metres longer and one metre wider than the five A300-600 ST Super Transporters they will replace, with a payload lifting capacity six tonnes greater.

BelugaXL will be able to carry both wings of the A350 XWB jetliner at once, instead of the single wing currently accommodated on the Beluga ST.

BUILDING ON SUCCESS (2019)

BUILDING ON SUCCESS

Airbus entered 2019 with new company records, building on the success of the previous several years.

In 2018, Airbus delivered a total of 800 commercial aircraft to 93 customers worldwide – meeting its full year delivery guidance and setting a new company record. The number of deliveries has continued to increase annually for 16 years in a row.

In terms of sales, Airbus achieved 747 net orders during 2018 compared with 1,109 net orders in 2017.

Airbus began 2019 with a commercial aircraft backlog of 7,577 jetliners, setting a new record for the industry.

This includes 480 A220s – the result of a European-Canadian partnership with Bombardier that saw two of the Canadian manufacturer's jetliners brought into the Airbus commercial aircraft product line.

Designated A220-100 and A220-300, these aircraft have been designed and purpose-built for the 100-150 seat market.

AIRBUS DELIVERY MILESTONES IN THE THOUSANDS

On 20 May, Airbus celebrated the delivery of its 12,000th commercial jetliner in the company's 50-year history. The milestone aircraft – an A220-100 – was assembled in Mirabel, Canada and handed over to U.S.-based Delta Air Lines, highlighting the growing presence of Airbus in North America.

As the smallest jetliner in Airbus' in-production product line, the A220-100 is a member of the A220 Family – purpose-built for the 100-150 seat market, with unbeatable fuel efficiency and comfort.

Airbus delivered its very first aircraft (an A300B2 widebody twin-engine jetliner) to Air France in 1974; in 2010, the company handed over its 6,000th jetliner. The pace continued to accelerate, taking Airbus just nine years to double that number, reaching the milestone 12,000th Airbus aircraft delivery in May 2019.

In September, Airbus surpassed the 9,000th overall delivery mark for its best-selling A320 Family, while the following month saw the handover of the 1,000th A320-series jetliner in the NEO version.

CHINA’S AGREEMENT FOR 300 JETLINERS

In March, Airbus expanded its civil aviation partnership with China, signing a General Terms Agreement (GTA) covering the purchase of 300 aircraft by Chinese airlines.

The GTA comprises 290 A320 Family jetliners and 10 A350 XWBs, reflecting the strong demand in all market segments by Chinese carriers – including domestic, low-cost, regional and international long haul.

Signing the GTA in Paris, France were Guillaume Faury, President of Airbus Commercial Aircraft and future Airbus CEO; and Jia Baojun, Chairman of the China Aviation Supplies Holding Company (CAS). This occurred in the presence of visiting Chinese President Xi Jinping and French President Emmanuel Macron.

Airbus reaffirmed its commitment to China’s aviation industry in September, signing a new agreement with China Aviation Industry Corporation (AVIC) to enhance single-aisle fuselage equipping at the A320 Family final assembly line in Tianjin.

MAJOR A320NEO FAMILY BOOKINGS

The continued popularity of Airbus' single-aisle A320neo Family was underscored in 2019 with bookings that ranged from several aircraft to several hundred, bringing total firm NEO orders well above the 7,000 mark as of November.

Among the year's largest agreements involved IndiGo – India's largest passenger airline – which placed a firm order for 300 A320neo-series aircraft, marking one of the largest bookings Airbus has ever received from a single airline operator. IndiGo's acquisition involves a mix of A320neo, A321neo and extra-long-range A321XLR versions. This brought the total number of A320neo Family aircraft ordered by IndiGo to 730.

In the U.S., Airbus and Spirit Airlines agreed to a Memorandum of Understanding for the fast growing ultra-low-cost carrier to acquire up to 100 A320neo Family aircraft, covering the intention for a mix of A319neo, A320neo, and A321neo versions. This will help Spirit Airlines meet future fleet requirements, as well as support growth as the carrier expands its network across the U.S., Latin America and the Caribbean.

Also in 2019, Air Arabia (the Middle East and North Africa's first and largest low cost carrier) signed a firm order for 120 A320neo Family aircraft, comprising 73 A320neo, 27 A321neo and 20 A321XLR versions.

A321XLR: EFFICIENCY AND EXTRA-LONG RANGE

After its official launch at the 2019 Paris Air Show, Airbus' extra-long-range single-aisle A321XLR steadily built up a strong base of orders and commitments from customers around the world.

In December, United Airlines placed a firm order for 50 Airbus A321XLR aircraft as it begins to phase out older models and launches an expansion of transatlantic routes.

With this booking, the U.S. carrier joined a customer base that also includes Air Arabia, Air Lease Corporation, AirAsia X, American Airlines, Cebu Pacific, flynas, GE Capital Aviation Services, IndiGo, Indigo Partners, International Airlines Group, JetBlue Airways, Middle East Airlines, Qantas, Saudi Arabian Airlines and Vietjet.

The A321XLR is the newest member of the A320neo Family and the next evolutionary step for Airbus' single-aisle product line, responding to market needs for even more range and payload, generating more value for operators – while offering an enhanced passenger experience with Airbus' Airspace cabin.

KEY ENDORSEMENTS FOR THE A350 XWB AND A330NEO

New orders for the A350 XWB and A330neo in 2019 underscored the continued popularity of Airbus' widebody jetliner product line.

At the Dubai Airshow, Emirates Airline signed a purchase agreement for 50 A350-900 versions of the A350 XWB after a thorough review of various aircraft options and of its fleet plans.

Also during the year, Lufthansa Group – the biggest Airbus operator – signed for 20 additional A350-900s, bringing its total orders for the A350 XWB to 45. In announcing its decision, Lufthansa Group cited the A350 XWB's reliability and the excellent feedback from passengers.

STARLUX Airlines of Taiwan placed a firm order for 12 A350-1000s and five A350-900s – benefitting from the capabilities offered by both A350 XWB aircraft types on the carrier's premier long-haul services from Taipei to Europe and North America, as well as selected destinations within the Asia-Pacific region.

New business for the A330neo in 2019 included AirAsia X's finalisation of its firm order for an additional 12 A330-900 versions; along with Virgin Atlantic's selection of 14 A330-900s to replace its A330ceos from 2021, with options to further expand the fleet of highly-efficient widebody aircraft.

Cebu Pacific (CEB), the Philippines-based low-cost carrier, signed a Memorandum of Understanding for 31 Airbus aircraft, including 16 A330neo jetliners in a higher-capacity version of the A330-900 (with 460 seats in single-class configuration), while Uganda Airlines firmed up its order for two A330-800s.

ANA JOINS THE WORLD'S A380 OPERATORS

In March, Japan's All Nippon Airways (ANA) became the 15th operator of the largest passenger aircraft: the A380. It has ordered three of the double-deck airliners from Airbus for operation on the popular route between Tokyo's Narita International Airport and Honolulu in the U.S. Hawaiian Islands.

Each ANA A380 will feature a special livery depicting the Hawaiian Green Sea Turtle, also known as the Honu. The first-delivered aircraft is painted in blue, while the second will be green and the third orange.

"Airbus is proud to deliver this beautiful aircraft to ANA," said Airbus CEO Tom Enders during the delivery ceremony at Airbus' industrial site in the Toulouse, France region. "Offering unrivalled levels of passenger comfort, the A380 will enable ANA to increase its capacity on the busy route to Hawaii with maximum efficiency. We are confident that the aircraft will be highly successful in service with ANA and are committed to providing full support to the airline all along the way."

After the 20 March handover to ANA, there were 232 A380s in service with 15 operators worldwide, flying on 120 routes across the globe.

GOING THE DISTANCE WITH ETOPS APPROVALS

In January, Airbus announced that its A330-900, the longer-fuselage variant of the A330neo widebody jetliner, received the approval for ETOPS (Extended-range Twin engine aircraft Operations) "beyond 180 minutes" diversion time. This authorisation, granted by the European Aviation Safety Agency (EASA), means that operators of the A330neo – which is powered by Rolls-Royce Trent 7000 engines – will benefit from the most efficient, reliable and direct long-range routings. The approval also includes the option for "ETOPS 285 minutes," which extends the potential air diversion distance to around 2,000 nm.

Also in January, the single-aisle A220's approval for 180-minute extended operations (ETOPS) was confirmed from Transport Canada (the Canadian civil aviation authority), becoming the first commercial airliner to obtain domestic ETOPS certification from Canada's airworthiness agency. With this capability, operators of A220-100 and A220-300 jetliners have the ability to fly for up to 180 minutes from the nearest diversion airport.

ETOPS initially was introduced by the International Civil Aviation Organisation (ICAO), and comprises a set of rules that allow commercial operations with twin-engine aircraft on routes beyond 60 minutes flying time from the nearest airport – approval which previously was granted only for aircraft with more than two engines.

AIRBUS CORPORATE JETS MILESTONES

In 2019, Airbus Corporate Jets marked major milestones that ranged from the first government order for widebody ACJ350 XWBs to the single-aisle A319neo's maiden flight and a key delivery for the ACJ320neo version.

Airbus Corporate Jets' first ACJ320neo was delivered to Acropolis Aviation of the UK in January. The ACJ320neo Family aircraft has the widest and tallest cabins of any business jet, without costing more to operate or taking up additional ramp space.

The shortest-fuselage member of the Airbus Corporate Jets' product line, the ACJ319neo, successfully completed its first flight on 24 April, beginning a fast-paced flight test programme to verify its corporate jet features – such as extra fuel tanks in the cargo-hold that enable intercontinental range. On 26 April, the ACJ319neo set a new record for the longest A320 Family flight by an Airbus crew – completing a 16-hour and 10-minute test flight: travelling from Toulouse, France to northern Greenland and back, the jetliner's trajectory included a simulated diversion in the framework of 180-minute Extended Range Twin-Engine Operations (ETOPS).

In May, the German government placed a firm order for three ACJ350 XWBs – becoming the initial government customer for the A350 XWB's corporate version. The ACJ350 XWB is Airbus' latest addition to its ACJ family of widebody VIP aircraft – with Germany acquiring the ACJ350-900 version. This aircraft can fly 25 passengers a distance of 11,100 nm (20,550 km). In its ultra-long-range version, the flight duration is more than 22 hours.

NEW A220 FAMILY U.S. PRODUCTION FACILITY

As of August 2019, more than 510 orders were placed for A220 aircraft, including 90 booked by Delta Air Lines. Expanding an earlier order, this U.S.-based carrier increased its number of the larger A220-300 version booked to 50 jetliners. Other U.S. customers – JetBlue, Moxy and Republic Airways Holdings – also have placed orders for the A220.

With the A220's sales success, Airbus opened a new assembly line for the aircraft at its U.S. manufacturing facility in Mobile, Alabama – which will build jetliners for U.S. customers. Construction of the new facility – located at the Brookley Aeroplex in Mobile, adjacent to Airbus' existing A320 Family production line – began in January 2019, with production activity commencing eight months later in August.

In new business activity during 2019 on the international scene, Air Vanuatu – the national flag carrier of the Pacific island nation of Vanuatu – signed a firm order with Airbus for four A220s (two A220-100s and two A220-300s). Air Vanuatu's first ever order with Airbus makes it the A220 launch customer in the Pacific region.

THE BELUGAXL AIRLIFTER: READY FOR SERVICE

To support the A350 XWB jetliner's ramp-up and other aircraft production rate increases, Airbus is replacing its fleet of five A300-600ST airlifters (BelugaST) with six BelugaXL aircraft, derived from the company's versatile A330 widebody product line.

In November, the BelugaXL received its Type Certificate from the European Aviation Safety Agency (EASA) airworthiness authority, paving the way for the BelugaXL's entry-into-service by early 2020 – progressively replacing the BelugaST fleet.

In addition to the significant use of existing components and equipment, Airbus' A330-based BelugaXLs will incorporate newly developed elements including its lowered cockpit, a highly-enlarged cargo bay structure, and modified rear and tail section.

Sized at seven metres longer and one metre wider than its BelugaST predecessor, the BelugaXL provides 30 percent extra transport capacity. As an example, the BelugaXL can carry two wings of an A350 XWB jetliner, while the BelugaST can only accommodate one. With a maximum payload of 51 tonnes, the BelugaXL has a range of 4,000 km (2,200 nm).

As with the BelugaST, the BelugaXLs will operate from 11 destinations in Europe, continuing to strengthen Airbus' industrial capabilities and enabling the company to meet its production and delivery commitments.

RISING TO THE CHALLENGE
(2020-Today)

RISING TO THE CHALLENGE

CONTINUED GLOBAL DEMAND FOR A320NEO

NEW DELIVERY BENCHMARKS FOR AIRBUS' A320 FAMILY

FIRST CONVERTED A321P2F GETS TO WORK WITH QANTAS

EXPANSION OF PRODUCTION RESOURCES

BRINGING A "SMILE" TO AIRBUS PRODUCTION

COMMITTED TO THE A220

ENHANCING AIRBUS' U.S. FOOTPRINT

A330-800: CERTIFIED FOR FLIGHT

EASA APPROVES THE A330-900
WITH INCREASED TAKE-OFF WEIGHT

INTRODUCING THE ACJ TWOTWENTY

AIRBUS A321XLR TAKES OFF FOR THE FIRST TIME

RISING TO THE CHALLENGE

Airbus began the new decade bolstered by the company's strong commercial performance in 2019 – including a record-setting 863 deliveries and the logging of 1,131 new orders – as well as the continued evolution of its comprehensive aircraft product line.

RISING TO THE CHALLENGE (2020-TODAY): Continued global demand for A320neo

CONTINUED GLOBAL DEMAND FOR A320NEO

New commercial announcements in the first month of 2020 reinforced the popularity of Airbus' single-aisle A320neo Family.

Announced in January, Spirit Airlines finalised a purchase agreement with Airbus for 100 A320neo Family aircraft – including a mix of A319neo, A320neo and A321neo versions – to meet this U.S. operator's future fleet requirements.

Spirit is based in South Florida and is the fastest-growing airline in the United States, with flights throughout the U.S., Latin America and the Caribbean.

Later in January, Singapore-based lessor BOC Aviation Limited placed a firm order for 20 A320neo aircraft – with as many as 12 of them to be operated on lease by Colombia's Avianca Airlines.

NEW DELIVERY BENCHMARKS FOR AIRBUS' A320 FAMILY

Underscoring the continued popularity of its single-aisle product line, Airbus delivered the A320 Family aircraft with manufacturer serial number (MSN) 10,000 in October 2020 – with this milestone A321neo received by Middle East Airlines.

The achievement came just eight years after Airbus' handover of the A320 Family aircraft with manufacturer serial number 5,000.

To underscore Airbus' industrial advancement over the decades, it took the company nearly three-times as long to reach the first 5,000-mark.

Another product line milestone occurred in October 2020 with handover of the 500th A320 Family aircraft produced at Airbus' final assembly line in Tianjin, China: an A320neo version delivered for operation by China Southern Airlines.

FIRST CONVERTED A321P2F GETS TO WORK WITH QANTAS

The first converted aircraft in Airbus' A321 passenger-to-freighter programme entered service with Australian operator Qantas in October 2020 following delivery by Elbe Flugzeugwerke (EFW) – the joint venture created by Airbus and ST Engineering.

It will be operated on behalf of Australia Post, which provides mail services across the country.

Airbus' A321P2F freighter is the first in its size category to offer containerised loading in both the main (up to 14 full container positions) and lower deck (up to 10 container positions).

Including a generous payload-range capability that can carry 28 metric tonnes over 2,300 nautical miles, the A321P2F is the ideal single-aisle freighter aircraft for express domestic and regional operations.

It is to be complemented in the future by a A320P2F version based on Airbus' A320.

EXPANSION OF PRODUCTION RESOURCES

As part of its strategy to step up – and reinforce – production resources for the best-selling A320 Family, Airbus announced two developments in January 2020. These steps will enable Airbus to increase flexibility, while also ensuring that production capacity for the longest-fuselage A321 version meets market demand.

At the company's U.S. Manufacturing Facility in Mobile, Alabama, Airbus will increase the A320 Family production rate to seven aircraft per month by the beginning of 2021. This increase – along with continued recruiting for the manufacturing team that supports production of the smaller single-aisle A220 jetliner at Mobile – will result in a further 275 jobs added at the Alabama-based facility during 2020.

In Europe, Airbus has decided to create new production capabilities at its site in Toulouse, France, providing more flexibility for the production of A321 versions – driven in part by the popularity of the Long Range (LR) and Xtra Long Range (XLR) derivatives. This involved the establishment of a digitally-enabled A321 final assembly line in the Lagardère facility at Toulouse (which served as the site for assembly of double-deck A380s) that started production in 2022

Toulouse is home to the original A320 Family final assembly line, with aircraft built at this location in southwest France since the 1980s. In response to the A320 product line's global success, additional final assembly lines were subsequently established by Airbus at Hamburg, Germany; Tianjin, China; and in the U.S. at Mobile, Alabama. Currently, A321 versions are built at Hamburg and Mobile.

BRINGING A "SMILE" TO AIRBUS PRODUCTION

The January 2020 service entry of Airbus' first operational BelugaXL brought a significant boost to the company's production network.

Today, six Beluga XLs (derived from the twin-engine A330 jetliner) operate since 2023, from 11 destinations in Europe – providing additional transport capacity as they replaced five previous-generation Beluga ST versions (which were modified from the earlier A300 aircraft).

Managed by the Airbus Transport International (ATI) subsidiary, the BelugaXLs support Airbus' ongoing production across its commercial aircraft programmes.

COMMITTED TO THE A220

In February 2020, Airbus and the Government of Québec became sole owners of the A220 programme as Bombardier completed its strategic exit from the commercial aviation sector.

The new agreement brought shareholdings in the Airbus Canada Limited Partnership – responsible for A220 aircraft production – to 75% for Airbus and 25% for the Government of Québec. It also underscored the partners' continued commitment to the single-aisle programme, which includes A220-100 and A220-300 versions.

As part of the transaction, Airbus – via its wholly-owned subsidiary STELIA Aerospace –also acquired the A220 and A330 work package production capabilities from Bombardier in Saint-Laurent, Québec.

February also brought a significant A220 commercial announcement with Nigeria-based Green Africa Airways' memorandum of understanding for 50 A220-300 aircraft – marking one of the A220 programme's major orders to be placed globally.

October marked a major industrial milestone with delivery of the first U.S.-assembled A220 – an A220-300 version – to Delta Air Lines from Airbus' facility in Mobile, Alabama.

This U.S.-based carrier is the largest A220 customer and will be the first A220 operator in the Americas to operate both the A220-100 and A220-300 aircraft types.

ENHANCING AIRBUS' U.S. FOOTPRINT

In May 2020, the A220 programme gained further momentum with inauguration of this aircraft's 270,000-square-foot production facility at the company's U.S. industrial site. Located at Mobile, Alabama, the new final assembly line can build both A220-100 and A220-300 versions of Airbus' newest addition to its single-aisle product line.

The Mobile industrial location – which officially is called the Airbus U.S. Manufacturing Facility – became the A220's second assembly site, complementing the primary assembly facility and programme headquarters located in Mirabel, Canada.

With this inauguration, Airbus' production "footprint" in the U.S. state of Alabama officially doubled in size, expanding the Airbus U.S. Manufacturing Facility, which has been building A320 Family aircraft since 2015.

Airbus celebrated five years of production at Mobile in September 2020. During this period, the facility has grown from an initial workforce of around 250 staff. With the Airbus U.S. Manufacturing Facility, Airbus has become a major economic driver in creating an aerospace hub on the U.S. Gulf – injecting some $1.2 billion into the economy and supporting more than 15,000 jobs overall.

A330-800: CERTIFIED FOR FLIGHT

Airbus' A330-800 – the most efficient and longest-range entry-level widebody aircraft in the world – received joint Type Certification from the European Aviation Safety Agency (EASA) and the Federal Aviation Administration (FAA) in February 2020.

This achievement came after the conclusion of a rigorous test programme that involved 370 flight hours in total.

Certified initially with a maximum take-off weight (MTOW) of 242 tonnes for a range capability of up to 7,500 nautical miles, the A330-800 will typically seat 220 to 260 passengers in three classes, or up to 406 travellers in a single-class high-density configuration.

The A330-800 is part of Airbus' new-generation A330neo family.

EASA APPROVES THE A330-900 WITH INCREASED TAKE-OFF WEIGHT

In October 2020, Airbus announced the European Union Aviation Safety Agency (EASA) certification of the A330-900's 251-metric tonne Maximum Take-Off Weight (MTOW) variant – which responds to evolving market needs by enabling airlines to benefit from the A330neo's unique economics on even longer flights.

This new A330neo variant offers a significant 650-nautical mile boost in range – or six tonnes more payload – when compared with the A330-900's 242-tonne version.

In achieving the 251 metric tonne capability, Airbus retained 99% spares commonality, as this MTOW increase was facilitated through a combination of weight-neutral structural reinforcements and landing gear adaptations.

INTRODUCING THE ACJ TWOTWENTY

The month of October 2020 marked Airbus Corporate Jets' launch of its ACJ TwoTwenty with the announcement of six orders for this game-changing business jet – which combines intercontinental range, unparalleled personal space and maximum comfort for everyone on board.

Based on Airbus' A220-100 commercial aircraft, the ACJ TwoTwenty has an increased range for trips of up to 5,650 nm/10,500 km (the equivalent of more than 12 flight hours) while delivering unbeatable economics and unrivalled reliability. It offers three-times more cabin space than competing business jets, with a one-third reduction in operating costs.

AIRBUS A321XLR TAKES OFF FOR THE FIRST TIME

Airbus' first A321XLR (Xtra Long Range) successfully accomplished its first flight in June 2022.. The aircraft, MSN 11000, took off from Hamburg-Finkenwerder for a test flight which lasted approximately four hours and 35 minutes.

The aircraft's crew consisted of experimental test pilots Thierry Diez and Gabriel Diaz de Villegas Giron, as well as test engineers Frank Hohmeister, Philippe Pupin and Mehdi Zeddoun. During the flight, the crew tested the aircraft's flight controls, engines and main systems, including flight envelope protections, both at high and low speed.

The A321XLR opens new routes with unbeatable economics and environmental performance. The A321XLR is the next evolutionary step in the A320neo single-aisle Family of aircraft, meeting market requirements for increased range and payload, creating more value for airlines by enabling economically viable services on longer routes than any comparable aircraft model.

The A321XLR delivers an unprecedented single-aisle aircraft range of up to 4,700nm (8700 km), with 30% lower fuel consumption per seat compared to previous-generation aircraft, as well as reduced NOx emissions and noise.

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