

Information on Airbus Activities

1.1 Presentation of the Company

A key part of the Airbus engineering organisation is the architect and integration centre, which ensures, together with a team of senior aircraft architects and the programme chief engineers, that a consistent and multi-disciplinary approach is applied during aircraft development.

Research & Technology activities continue to deliver incremental innovations for existing aircraft, matured breakthrough

technologies, with reinforced focus on industrial aspects. Airbus Engineering is a major contributor to numerous international initiatives dedicated to the preservation of the environment and the reduction of noise and CO₂ emissions. Fully integrated change projects are also implemented to continuously implement innovative and efficient ways of working.

Regional Aircraft, Aerostructures, Seats and Aircraft Conversion

ATR

ATR (*Avions de Transport Régional*) is a world leader in the 30 to 78 seat regional turboprop aircraft market. Its aircraft are currently operated by more than 200 airlines in over 100 countries. ATR is an equal partnership between Airbus and Leonardo, with Airbus' 50% share managed by Airbus Commercial Aircraft. Headquartered in Toulouse, ATR employs more than 1,300 people. Since the start of the programme in 1981, ATR has registered net orders for 1,671 aircraft (465 ATR 42s and 1,206 ATR 72s).

In 2017, ATR delivered 78 new aircraft (compared to 80 in 2016) and recorded net firm orders for 103 new aircraft (compared to 32 in 2016), including significant orders from Indigo and Iran Air, and an order from Fedex for the new ATR-72 F (freighter). As of 31 December 2017, ATR had a backlog of 235 aircraft (compared to 212 in 2016).

Products and Services

ATR 42 and ATR 72. ATR has developed a family of high-wing, twin turboprop aircraft in the 30- to 78-seat market which comprises the ATR 42 and ATR 72, designed for optimal efficiency, operational flexibility and comfort. Like Airbus Commercial Aircraft, the ATR range is based on the family concept, which provides for savings in training, maintenance operations, spare parts supply and cross-crew qualification. By the end of 2017, ATR had delivered 1,436 aircraft.

Customer service. ATR has established a worldwide customer support organisation committed to supporting aircraft over their service life. Service centres and spare parts stocks are located in Toulouse, Paris, Miami, Singapore, Bangalore, Auckland and Johannesburg. ATR worldwide presence also includes a representative office in Beijing.

ATR Asset Management addresses the market for second-hand aircraft by assisting in the placement and financing of used and end-of-lease aircraft. ATR Asset Management activity is marginal today as the leasing market has strongly developed since 2007.

Production

The ATR fuselage is produced in Naples, Italy, and ATR wings are manufactured in Merignac near Bordeaux, France. Final assembly takes place in Saint Martin near Toulouse on the Airbus

Commercial Aircraft production site. Flight-testing, certification and deliveries also occur in Toulouse. ATR outsources certain areas of responsibility to Airbus Commercial Aircraft, such as wing design and manufacturing, flight-testing and information technology.

STELIA Aerospace

STELIA Aerospace is a wholly-owned subsidiary of Airbus. Following the merger of Sogerma and Aerolia in 2015, it now offers global solutions for aeronautical manufacturers and airlines supported by its aerostructure, cabin interior and pilot seats business lines.

As one of the world leading tier-1 aerostructure suppliers, STELIA Aerospace designs and manufactures fully integrated aircraft sections for civil and military programs.

From full aircraft wings and fuselage sections, to fully equipped "plug and fly" structures, STELIA Aerospace is a global partner for major aeronautical players worldwide, such as Airbus, ATR, Bombardier or Boeing.

With more than 6,900 employees worldwide, working within 11 Centres of Excellence based in France, Canada, Morocco and Tunisia, STELIA Aerospace has the capability to offer both Build-to-Print and Design & Build solutions.

Other specialisms include mechanical milling of rolled and stretched panels, and tubes & pipes covering all ATA systems.

STELIA Aerospace also designs and manufactures luxury First Class and Business Seats for key partners in the world including Etihad Airways, Singapore Airlines or Thai Airways.

By combining innovative materials and technology with a drive to improve the passenger experience, STELIA Aerospace has created an outstanding range of seats used in civil aircraft globally.

STELIA Aerospace – a joint world leader Pilot seats manufacturer – provides cockpit and pilot seats for all kinds of aircraft, and offers support from design to production, including after-sales service.

As part of its development strategy, STELIA Aerospace is actively seeking new commercial and strategic opportunities.

Premium AEROTEC

Premium AEROTEC is a wholly owned subsidiary of the Company (consolidated within Airbus Commercial Aircraft), is one of the world's leading tier-1 suppliers of commercial and military aircraft structures and is a partner in the major European international aerospace programmes.

Its core business is the development and production of large aircraft components from aluminum, titanium and carbon fiber composites (CFRP). Premium AEROTEC is Europe's no. 1 in this segment with roughly 10,000 employees at various sites in Germany and Romania. Premium AEROTEC is represented by its products in all Airbus Commercial Aircraft programmes. The current military programmes include the Eurofighter "Typhoon" and the new military transport aircraft A400M.

Besides main customer Airbus, Premium AEROTEC will further intensify business with other customers and actively approach other aircraft or structural manufacturers. The Company is also striving to expand its maintenance, repair and spare parts business.

In order to contribute successfully to the shaping of the future of aviation, the engineers and developers at Premium AEROTEC are continuously working on the new and further development of lightweight and highly durable aircraft structures. They

cooperate closely with universities and research institutes in the process. Premium AEROTEC plays a significant role in the design of new concepts in such fields as carbon composite technologies (incl. thermoplastic processes) or 3D-printing of aircraft components made of titanium or aluminum.

Elbe Flugzeugwerke GmbH – EFW

EFW combines various aviation and technology activities under a single roof: development and manufacturing of flat fibre-reinforced composite components for structures and interiors, the conversion of passenger aircraft into freighter configuration, maintenance and repair of Airbus Commercial Aircraft aircraft as well as engineering services in the context of certification and approval.

On 17 June 2015, Airbus Commercial Aircraft signed an agreement with Singapore-based ST Aerospace Ltd. (STA) to offer passenger-to-freighter (P2F) conversion solutions for its A320 and A321 aircraft. STA acquired an additional 20% of the shares of EFW, Dresden (Germany) by way of a contribution in kind and a capital increase to EFW. The transaction closed on 4 January 2016. Consequently, 45% of the shares of EFW were retained and Airbus effectively lost its control over EFW (previously reported in Airbus Commercial Aircraft).

1.1.3 Helicopters

Airbus Helicopters is a global leader in the civil and military rotorcraft market, offering one of the most complete and modern ranges of helicopters and related services. This product range currently includes light single-engine, light twin-engine, medium and medium-heavy rotorcraft, which are adaptable to all kinds of mission types based on customer needs. See "— 1.1.1 Overview" for an introduction to Airbus Helicopters.

Strategy

Airbus Helicopters' strategy is to continue driving improvement initiatives via its company-wide digital transformation plan, which places customer satisfaction, quality and safety at the core of its operations, along with increasing industrial competitiveness.

A Commitment to Innovation

Development of the next-generation H160 medium helicopter – the first of the "H Generation" – is ongoing at a steady pace. Flight-test activities were carried out throughout 2017. The third H160 prototype has been introduced in early October enabling flight tests to accelerate with the final assembly line in Marignane being in the final stages of preparation. In 2017, products and services continued to be enhanced, with several initiatives such as the ongoing development of the H175 Public Services version for delivery in 2018 and the first fire campaign of the H145 equipped with H-Force suite for German Special Operation Forces.

Airbus Helicopters is investigating future unmanned VTOL (Vertical Take-off and Landing) systems. In that frame, Airbus Helicopters is currently working on the design and development of the VSR700 unmanned aerial vehicle. The French DGA (*Direction Générale de l'Armement*) has awarded a contract to the Naval Group and Airbus Helicopters consortium to identify, deploy and test the necessary technologies for the integration of a tactical drone-system capacity within a heavily armed vessel.

Airbus Helicopters is also exploring Urban Air Mobility (UAM) via the CityAirbus project, which is an electrically operated platform concept for multiple passengers. As part of Clean Sky 2 European Research programme, Airbus Helicopters has unveiled at the Le Bourget airshow the aerodynamic configuration of the high speed demonstrator codenamed Racer. This demonstrator will incorporate a host of innovative features and will be optimised for a cruise speed of more than 400 km/h. Beyond the platform Airbus Helicopters wants to play a leading role in UAM services like on-demand helicopter booking platforms. Voom, now operational in Sao Paulo, will be the entity that will provide this new service to be deployed to other locations notably in the Americas and Asia-Pacific.