

Introduction

Toulouse, Southern France based regional aircraft manufacturer ATR is the world leader in the 50 to 74-seat turboprop market. The ATR 42 and ATR 72 are the perfect solution on short-haul routes around the world.

ATR has become the leader in its category by offering reliable, easy-to-maintain, comfortable and environment-friendly aircraft to airlines operating on the regional transport market, at a cost well below that of its competitors.

History

ATR was established in November 1981 when Aerospaziale (EADS since July 2000) and Aeritalia (now Alenia Aeronautica) merged their two separate, but similar, regional aircraft designs into a single project. The two companies had been working on their respective aircraft concepts - the AIT 230 from Aeritalia and the AS35 from Aerospaziale- since 1978.

The ATR programme was officially launched on November 4th 1981 with the signature by both companies of the cooperation agreement. The ATR 42 and the ATR 72 made their first flight in 1984 and in 1988, respectively. The ATR 72 is directly derived from the ATR 42 with a fuselage stretched by 4.5 m, an enlarged outer wing made of carbon fiber, and a high degree of commonality with its smaller brother.

Some years later, ATR passed an important milestone with the manufacturing of a new generation of ATR aircraft, the -500 series. The ATR 42-500 and the ATR 72-500 made their first flight in 1994 and in 1998, respectively.

In October 2007, according to its principle of continuous improvement, ATR announced the launch of its newest aircraft version, the -600 series. The ATR 42-600 and the ATR 72-600 will be progressively introduced during 2010.

A prestigious heritage

ATR benefits from the experience and know-how of two of the major leading European aerospace industries, Alenia Aeronautica and EADS, who each have a 50% share in the ATR programme.

Alenia Aeronautica, a Finmeccanica Company, is the largest Italian aeronautic player which operates worldwide in the commercial and military aviation, unmanned aerial vehicles and aero structures. Alenia Aeronautica also coordinates the activities of Alenia Aermacchi and Alenia Aeronavali (wholly owned companies), and participates in the production of 19,5% of Eurofighter. The total workforce is 13.301.

The EADS Group includes in particular the aircraft manufacturer Airbus, the world's largest helicopter supplier Eurocopter and EADS Astrium, the European leader in space programmes from Ariane to Galileo. EADS is the major partner in the Eurofighter consortium, develops the A400M military transport aircraft, and holds a stake in the joint venture MBDA, the international leader in missile systems. EADS employs some 116,000 people worldwide.

Organization

ATR is organized around 4 Directorates under the responsibility of the CEO:

Commercial, Operations, Customer Services and Finance.

Workforce: 860

Headquarters: Toulouse

Sales offices abroad: Washington DC, Singapore, Beijing, Moscow, Bangkok, Sydney

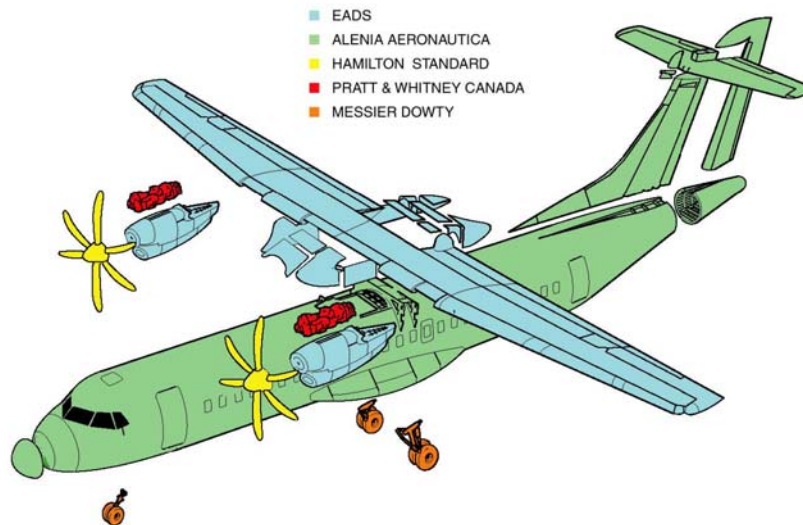
Training centres: Christchurch, Toulouse, Bangkok, Bangalore, Houston, Kuala Lumpur

Customer Services centres: Washington DC, Singapore, Bangalore

Spare parts centres: Paris, Miami, Auckland, New Delhi, Singapore.

Industrial sharing

Alenia Aeronautica's manufacturing facilities in Pomigliano near Naples (Italy) produce the ATR aircraft fuselage and tail sections, while the ATR wings are produced at EADS Sogerma, in Bordeaux (France). Final assembly, flight-testing, certification and deliveries are under the responsibility of ATR.



One programme, two aircraft models

The ATR family (ATR 42 and ATR 72) is built around the design of a high-wing, twin turboprop aircraft conceived from the start for efficiency and operational flexibility. The ATR aircraft benefit from the widest cabin in the regional market (seat width equivalent to the seats of the Boeing 737), thus providing maximum passenger space and setting new standards of comfort.

ATR is certified NF EN ISO 9001:2000 and AS 9100 revision B:2004 / JIS Q 9100:2004 / EN 9100:2003, the worldwide quality standard in the field of aeronautics.

The -500 series

With its ATR 42-500 and ATR 72-500, ATR manufactures reliable and state-of-the-art aircraft with unbeatable economics and the highest standards of comfort.

ATR 42-500: 48/50 seats

The ATR 42-500 entered into service in 1995 and is equipped with powerful Pratt & Whitney PW127E engines and the six-blade Hamilton Sundstrand Ratier propellers.

The structure of the ATR 42-500 has been optimized to reduce cabin noise and vibrations. The six-bladed propeller, benefiting from the latest developments in composite blades and an ultra accurate electronic control, plays a key role in the reduction of noise (internal / external) and vibrations.



The level of passenger comfort achieved on the ATR 42-500 is by all measures equivalent to that offered by the regional jets of a similar size.

The ATR 42-500 offers a cruise speed in excess of 300 kts (560 km/h).

ATR 72-500: 68/74 seats

The ATR 72-500 that entered into service in 1997 shares the same power plant, six-blade propellers, the same interior design and soundproofing techniques of the ATR 42-500, thus offering the same excellent comfort and passenger appeal.

The ATR 72-500 has the lowest seat mile costs, recognized as a benchmark for the regional market. The increased power and aerodynamic refinements provide excellent take-off and landing performance.



The cruise speed of the ATR 72-500 is 280 kts (520 km/h).

The -600 series: never-ending improvement



ATR is committed to a continuous process of improvement of its aircraft to meet the market needs and passenger appeal. According to this principle, ATR launched in 2007 the newest ATR -600 series aircraft, which will enter into service in 2011. Both the ATR 42-600 and the ATR 72-600 feature the latest technological enhancements while building upon the well-known advantages of the '-500 series' ATRs, namely their high efficiency, proven dispatch reliability and low fuel burn and operating cost.

Compared to the -500 series, the main developments of the -600 series ATRs comprise:

New Avionics Suite: the "-600 series" ATR aircraft will feature an enhanced cockpit, equipped with upgraded avionics instrumentation. This includes the latest and most accurate computing systems for navigation, recording, auto-pilot and communications. An outstanding flight deck - Glass Cockpit - with 5 wide LCD screens will replace the current EFIS (Electronic Flight Instrumental System). In addition, a multi purpose computer (MPC) will further enhance

flight safety and operational capabilities. The new avionics will also provide CAT III approach and RNP (Required Navigation Procedure) capabilities. All these main improvements will provide advantages and performance improvements in terms of weight reduction, reliability, energy consumption and durability. The new avionics suite is developed by Thales Avionics.

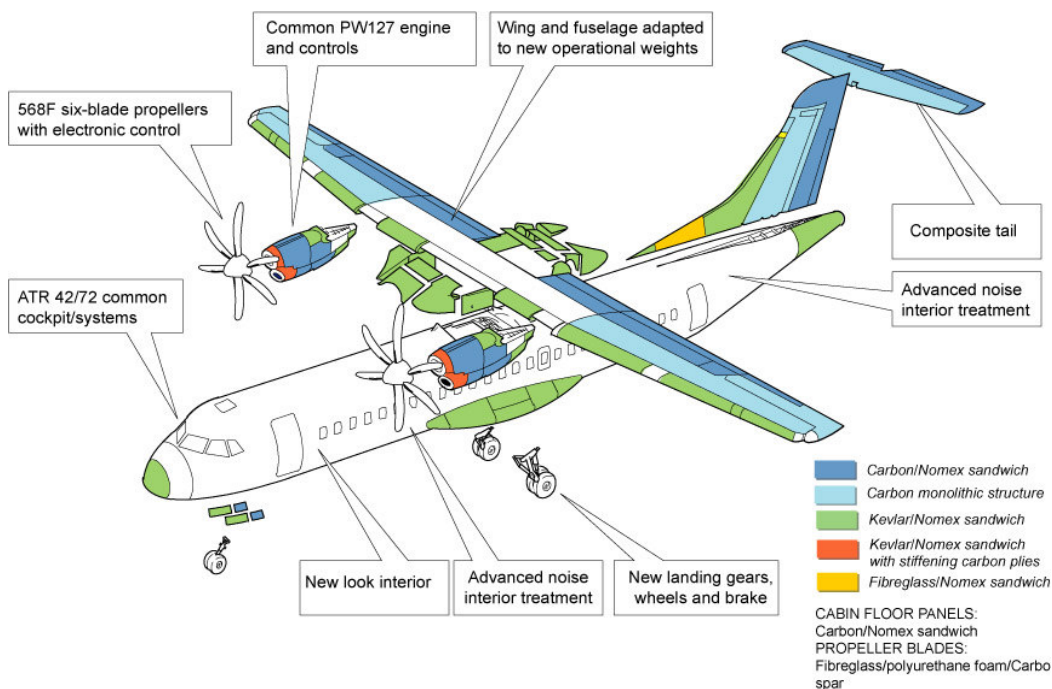
New engine: the ATR 42-600s and ATR 72-600s will include the new PW 127 M as standard engine. This enhanced version of the ATR engine will allow an increased power rating for the ATR 72-600 that will provide improved performance for hot and high conditions.

Additional weight increase: compared to the current optional Design Weights, the new ATR 72-600 will have as standard an additional weight increase of 300 Kg on MTOW (Maximum Take Off Weight, from 22,500 Kg to 22,800 Kg) and on MZFW (Maximum Zero Fuel Weight, from 20,500 Kg to 20,800 Kg), plus optional weight increases of an additional 200kg. This will improve the payload and performance to cope with increasing demands of passenger weights and baggage.

Improved cabin comfort: The –600 series will include all the current and future cabin improvements developed by ATR to provide the very high level of comfort and low interior noise and vibration for which the existing –500 series is recognized. A new cabin styling with totally renewed commercial furnishing specification will be available on the –600 series' "Elegance Cabin" version in order to provide enhanced comfort, space and appeal. As in the latest –500 series, the cabin interior will be fully equipped with Light Emitting Diode (LED) lightening, and, as an option, with In-Flight Entertainment (IFE).

Composite material

The ATR 42 and ATR 72 secondary structures are extensively made of composite material. In addition, the ATR 72 innovates by the use of carbon fiber for the outer wing boxes. Composite tails were introduced on the ATR 42-500 and ATR 72-500, thus reducing weight further. Composite represents about 15% and 20% of the total structure for the ATR 42-500 and ATR 72-500, respectively.



Versatility

The versatility of both the ATR 42 and ATR 72 has been put to good use with the development of several specialized versions:

ATR 42 Surveyor (Maritime Patrol)

Proven in revenue services under a wide range of operating conditions, ATR aircraft are also well adapted for missions such as Maritime Patrol and Coastal Surveillance. Alenia Aeronautica is responsible for the installation of associated systems and for structural modifications.

ATR Freighter

Thanks to its wide cross section, the ATR is ideal for cargo transportation. In order to further optimize this important feature, ATR launched two cargo conversion modules: the **ATR Bulk Freighter conversion and ATR Large Cargo Door conversion**.

Both programmes are available for pre-owned or new aircraft. The cargo conversion involves a complete stripping of all standard furnishings in the cabin and addition of specific cargo equipment.

The gross usable volume made available is 56 m³ for the ATR 42 and 75.5 m³ for the ATR 72. ATR's fuselage unique cross section also allows the accommodation of standard ULDs (such as LD3 containers or 88" x 108" pallets) providing a powerful competitive advantage to regional and feeder cargo operators. In order to maximize this advantage, ATR has also launched a Large Cargo Door conversion programme in order to accommodate such ULDs.

Aeronavali (part of Alenia Aeronautica) has been selected as ATR's exclusive outfitter for the large cargo door (LCD). The Large Cargo Door was certified in 2002 on the ATR 72, in 2003 on the ATR 42 with Farnair (Switzerland) and Northern Air Cargo (Alaska) respectively as launch customers.

A strong commonality

An important feature of the ATR family is the high degree of commonality between the ATR 42 and ATR 72. They have the same fuselage cross section, use the same basic systems, share the same engines and propellers as well as the same cockpit. The ATR cockpit is derived from the Airbus family flight deck and allows for common type rating (CTR) or cross crew qualification (CCQ). This result in major cost savings for operators of both types, thanks to an increase in crew productivity (reduced number of pilots required for one single pool). Common spare parts further represent a significant cost reduction in terms of maintenance particularly when operating a mixed fleet of ATR 42s and ATR 72s. For instance, there is 86% commonality in value for a fleet of 5 ATR 42-500s and 5 ATR 72-500s.

Benefiting from the resources of Alenia Aeronautica and EADS, ATR is able to apply the latest technologies. ATR aircraft are a combination of the best technical solutions, optimizing operating costs and passenger appeal.

Fuel-efficient and environmental friendly aircraft

ATR aircraft are labeled the most fuel efficient in their category, thanks to its high-tech engines and propeller efficiency. On a 200 Nm sector, the ATR 72 fuel consumption per passenger is 15% lower than that of a typical European car and 60% lower than that of a 70-seater jet.



All ATR models are largely compliant with existing noise regulations and have a large margin with regard to ICAO stage IV noise regulations, effective 1st January 2006. They also comply with the stage V noise regulations, expected to be effective in 2026.

The ATR aircraft emit about 60% less CO₂ per passenger-km than regional jets and about 30% less than other turboprop aircraft.

Operational flexibility

ATR's success amongst operators is also due to its flexibility to operate in any severe or restricted environment, such as on narrow and short runways, high airports, on semi-prepared airfields, in extreme cold and hot temperatures, allowing air services to remote locations with limited facilities.

The ATR is operated daily in adverse weather conditions like in the USA, Canada, Norway, Denmark, Finland, Colombia, India, etc.

Milestones

November 1981	Aerospatiale (now part of EADS - European Aeronautics Defense and Space Company) and Aeritalia (the predecessor to Alenia Aeronautica) merge their two separate, but similar, regional aircraft designs into a single effort. Both companies had been working on their respective aircraft concepts (the Aeritalia AIT 230 and Aerospatiale's AS 35) since 1978.
4 November 1981	The Cooperation Agreement launching the ATR program is signed in Paris, launching the ATR 42 by the Aeritalia and Aerospatiale chairmen (Renato Bonifacio and Jacques Mitterrand, respectively).
16 August 1984	The ATR 42 makes its first flight in Toulouse, France.
24 September 1985	The French DGAC (Direction Générale de l'Aviation Civile) and Italian RAI (Registro Aeronautico Italiano) airworthiness authorities certify the ATR 42.
3 December 1985	The French regional airline Air Littoral takes delivery of the first ATR 42.
January 1986	The ATR family grows with the launch of the stretched fuselage ATR 72 version.
22 August 1988	The 100th ATR is delivered to the American regional airline Trans World Express
27 October 1988	The ATR 72 takes to the air on its first flight.
July 1989	The ATR Training Centre is established in Toulouse, providing a modern and centralized facility for training of crews and personnel for the growing number of ATR airlines in the world.
25 September 1989	The ATR 72 is certified by the French DGAC airworthiness authority.
27 October 1989	The Finish airline Finnair takes delivery of the first ATR 72.
31 October 1989	Certification of the ATR 42 by the British CAA (Civil Aviation Authority).

15 November 1989	Certification of the ATR 72 by the U.S. FAA (Federal Aviation Administration).
13 September 1990	The 200th ATR is delivered to Thai Airways.
30 September 1992	The 300th ATR is delivered to Karair of Finland.
June 1993	Go-ahead of the ATR 42-500 at the Paris Air Show. This new-generation version of the ATR ensures the aircraft's competitiveness in the regional airlines' marketplace.
30 July 1993	Certification of the ATR 72 by the British CAA.
16 September 1994	First flight of the ATR 42-500.
28 July 1995	Certification of the ATR 42-500 by the British and French airworthiness authorities.
October / November 1995	ATR 42-500 first deliveries. The Italian regional airline Air Dolomiti in October followed by Mexican Transportes Aeromar in November.
19 January 1996	First flight of the ATR 72-500.
14 January 1997	ATR 72-500 certification (DGAC - France).
31 July 1997	Delivery of the first ATR 72-500 to American Eagle, affiliate of American Airlines.
5 September 1997	American Eagle takes delivery of the 500th ATR. This milestone distinguishes ATR by making it the first European program in its market segment to reach the 500 delivery mark in only 12 years.
28 April 2000	The Italian airline Air Dolomiti takes delivery of the 600th ATR, which is an ATR 72-500.
1 June 2001	ATR's Parent Companies reinforce their partnership on the regional market by regrouping all industrial activities of Alenia Aeronautica and EADS ATR into the existing ATR consortium.



July 2002	ATR presents the ATR 72 Full Freighter version at the Farnborough Air Show. The aircraft is equipped with the Large Cargo Door.
December 2002	ATR obtains the Design Organization Approval (DOA) from the French Civil Aviation Authority (DGAC).
February 2003	FedEx Express chooses the ATR 42 aircraft to support, supplement and enhance its U.S. domestic feeder operations
March 2003	The 42-500 Full Freighter version equipped with the large cargo door is delivered to NAC (Northern Air Cargo), launch customer.
June 2003	ATR presents its new look cabin « Elegance » at the Paris Air Show.
September 2003	ATR opens an office in Beijing.
October 2003	ATR is one of the first aircraft manufacturers to be certified ISO 9001-2000 and EN/AS/JISQ 9100, the worldwide quality standard in the field of aeronautics.
July 2004	ATR and Embraer announce a cooperation agreement in the e-Business area through the AERO Chain Portal (www.aerochain.com) to improve customer services.
September 2004	ATR obtains the Design Organization Approval (DOA) on the European level from the European Aviation Safety Agency (EASA).
November 2004	Delivery of the 300th ATR 72 to Air New Zealand (ANZ).
February 2005	While Kyoto Protocol has just entered into force, ATR emphasizes that it applies a green policy in the conception of its aircraft: low fuel consumption and low exhaust emissions.
June 2005	At Paris air show, ATR displayed an aircraft with the newest technological innovations available in the cabin: LED and IFE system with LCD video screens.
January 2006	ATR announces firm orders for 90 new aircraft plus 26 options in 2005. The best year ever since 1989.
8 September 2006	Air Deccan takes delivery of the 700th ATR aircraft, which is an ATR 72-500.



November 2006	ATR announces the opening of a sales office in Sydney.
December 2006	ATR acquires state-of-the-art Full-Flight Trainers (FFT) for the Toulouse-based training center.
January 2007	ATR delivers to the Indian carrier Kingfisher Airlines the world first turboprop aircraft ever equipped with In-Flight Entertainment system (IFE). This aircraft is also the first turboprop equipped with Light Emitting Diode (LED) in the whole cabin.
January 2007	ATR opens a spare parts distribution center in Auckland (New Zealand).
January 2007	ATR announces firm orders for 63 new aircraft plus 25 options in 2006 and an annual turnover of US \$ 700 million, a growth of about 30% compared to 2005.
February 2007	ATR opens in Bangalore a Customer Support Center and a joint training center with the Indian airline Air Deccan.
October 2007	ATR announces the launch of its –600 series aircraft. The ATR 42-600 and the ATR 72-600 will be introduced during 2011.
January 2008	ATR announced orders for 113 new ATR aircraft in 2007, the record sales for a single year since the beginning of the programme. This outstanding commercial success is coupled with a 2007 turnover of some US \$ 1.1 billion dollars, a growth of 56 % compared to 2006 (US \$ 700 million).
January 2009	ATR announced a record annual turnover of US \$ 1.3 billion.