

ATR: the green turboprop of tomorrow

The ATR fuel efficiency: adapted powerplant

The proven level of low fuel consumption is a primary concern for airlines eager to lower cash operating cost and wishing to be environment friendly.

ATR aircraft are recognized as the most fuel efficient aircraft in their category, thanks also to high-tech engines and propeller efficiency. *Just for reference, an ATR 42 uses only as much fuel on a typical 200 Nm trip as a B747 uses in 10 minutes of taxiing!*

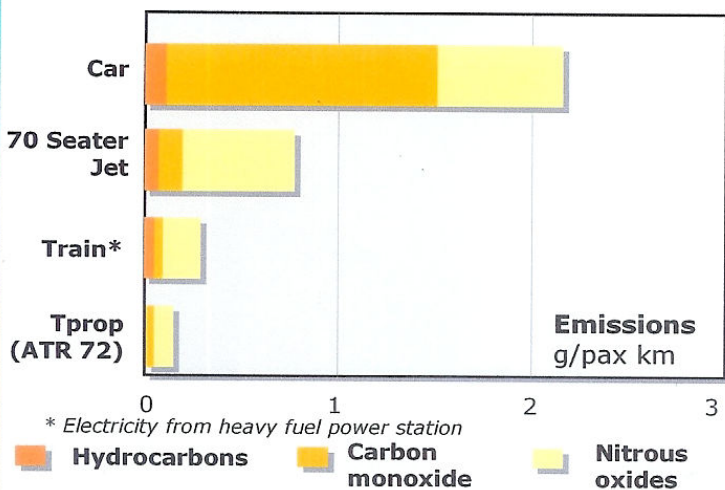
It appears evident that low levels of engine emissions are essentially driven by low fuel consumption.

On a 200 Nm sector, the ATR72-500 fuel consumption per passenger is up to 11% lower than a typical European car; the associated ATR gaseous emissions per pax in terms of CO (Carbon Monoxide) are 15 times less than a car and comparable to the train.

As far as the nitrous oxides are concerned, the ATR is 3 times less pollutant than a car and 40% less than a train. Moreover emissions of NOx (Nitrogen oxides) by new generation turboprops are at low altitude, well below the levels at which ozone depletion is a major concern.

Gaseous Emission Spectrum

200 NM (370 km) typical sector - 65% load factor

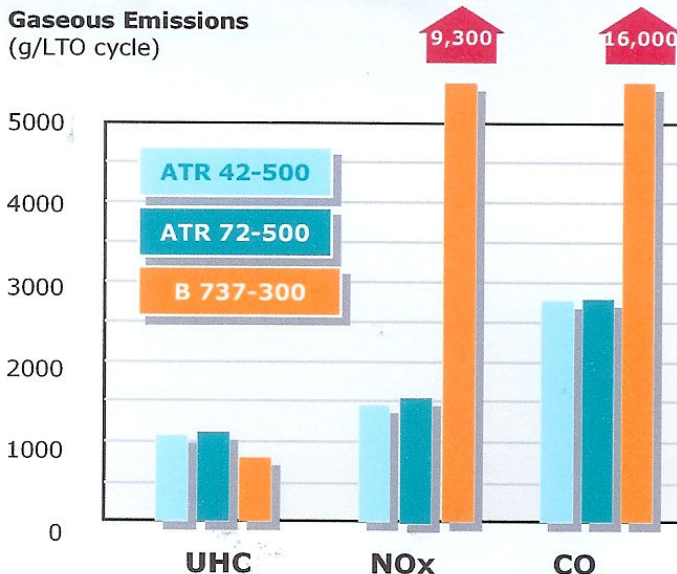


Turboprops: unmatched airfield performance 3,829 airports in the OAG data

Turboprops can access to 744 airports with a runway length between 1,000 and 1,500m
 98 in the US - 93 in Latin America - 76 in Canada -
 70 in Europe - 110 in Africa and Middle East -
 116 in Asia - 181 in Australasia
 Regional jets typically need runways of 1,600m.

Landing, take-off cycle Regional turboprops vs large jets

Gaseous Emissions
(g/LTO cycle)



LTO cycle = ICAO reference

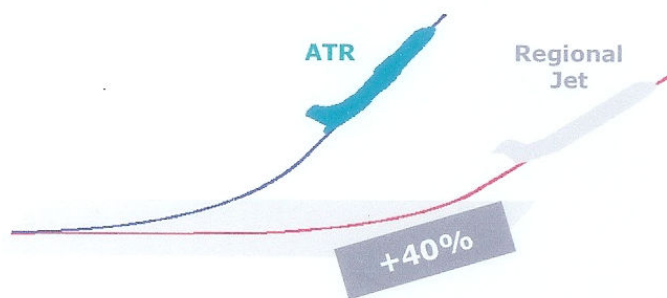
Sources : Pratt & Whitney Canada - ICAO

ATR: shortfield capability

- ▶ ATR is easily manoeuvrable and features short take-off and landing capability to meet operational requirements for unrestricted passenger loading.
- ▶ On a given standard mission, a 50-seater jet requires about 40% more take-off field length than the ATR on a typical mission with a full passenger payload.

Short Field Capability

50-Seater jet vs ATR take-off field length



- ▶ Thanks to their excellent landing and take-off performance, ATR aircraft are able to use the shorter runways set aside for commuter operations at many airport hubs.
- ▶ They contribute in this way to reduce air traffic congestion, decrease Airline fuel consumption and to reduce environmental impact.

GIE Avions de Transport Régional
 1, allée Pierre Nadot - 31712 Blagnac Cedex
 33 (0)5 62 21 62 21 - <http://www.atraircraft.com> - May 2001

