

Although Aviakor suspended production of the An-140 at its Samara plant in 2000 due to lack of financing, series production has commenced in Ukraine at Kharkov Aircraft Production Organisation (KhaPO). Ukrainian carrier Icar Airlines was the first to take delivery of an An-140 in December 2000, but this operation was short lived and the aircraft was subsequently returned. Odessa Airlines became the first regular An-140 operator when it introduced the first of seven aircraft into revenue service in March. KhaPO is due to deliver a total of eight An-140s by the end of the year, mostly to Ukrainian airlines.

The plant signed an option in October for the delivery of six An-140s worth up to \$51 million, to Kazakhstan's regional carrier Air Berkut.

In 1998 Antonov signed a contract with the Iranian government for the licensed production of An-140s, dubbed the Iran-140. Following a first flight early last year, the Iranian Shakir factory is looking at manufacturing up to 80 examples for domestic carriers.

In total, six An-140s are in service as of October, with 34 more on firm order, including 20 for Iran Aseman Airlines. Letters of intent are held for 96 more of the type, including 50 for Aeroflot.

Production

The An-140 is produced in three plants – Aviakor in Samara, Russia; Kharkov Aircraft Production Organisation (KhAPO) in Kharkov, Ukraine; and Isfahan, Iran, by Iranian Aviation. Antonov and KhAPO worked together to set up the Iranian line, and so far three have been completed in Isfahan.

An-74

The Antonov An-74 started life as a derivative of the high-wing, twin-engined short-field An-72, with engines mounted over the wing leading edge in a blown-wing type configuration. Conceived as an Arctic operations version of the military An-72, first flight was in 1989, with certification of the first An-74TK-100 following in 1995. The Ivchenko Progress/Zaporozhye D-36 powered TK version can carry 52 passengers with a crew of four. The latest TK-300 version, certificated in September, features a two-crew cockpit and conventionally mounted Series 4A engines underslung beneath the wing. Fuel consumption is reduced by 19%, while cruise speed is increased by 27kt, although short-field performance is sacrificed. The prototype TK-300 can carry 52 passengers, although a version featuring a stretched 68-passenger fuselage is also being offered.

The TK-300 is being built by KhAPO in Ukraine. It claims an initial order for two An-74TK-300s from undisclosed CIS airlines, as well as an MoU from Aeroflot for 30 aircraft signed in June. This MoU is part of Aeroflot's competition for a new regional type to be in service by 2006, and the airline also has MoUs for Tupolev Tu-334s and the Russian

ANTONOV				
	An-32	An-38-100	An-74TK-300	An-140
Length (m)	23.68	15.67	28.07	22.43
Wingspan (m)	29.2	22.06	31.89	24.25
Height (m)	8.75	4.3	8.65	8.03
Wing area (m ²)	74.98	-	98.50	-
Cabin width (m)	2.78	1.87	2.5	2.6
Max take-off weight (kg)	27,000	9,500	36,500	19,150
Max landing weight (kg)	25,000	-	-	19,100
Op empty weight (kg)	16,900	5,300	20,200	-
Max zero fuel weight (kg)	-	-	-	17,800
Max payload (kg)	6,700	2,500	10,000	6,000
Powerplant	2 x 3,860kW Ivchenko Progress ZMKB AI-20D-4/-5	2 x 1,118kW Honeywell -TPE33114GR	2 x 14,330lb Progress D-36-4A	2 x Progress TV3-117VMA-02 or 2 x 2,050kW P&WC PW127 turbofans
Standard fuel capacity (litres)	-	2,860	16,250	-
Normal operating speed (kt)	-	205	374	-
Max cruise speed (kt)	286	219	381	310
Max operating altitude (ft)	31,000	14,000	38,715	23,620
Take-off field length (m)	760	350	-	-
Landing field length (m)	470	270	-	-
Accommodation (typical)	50	27	52	52
Design range with pax/payload	1,200km/6,000kg	1,450km/17	-	2,100km/52*

Note: *range data for P&WC-powered version

Regional Jet (RRJ) family. Having signed the MoU with leasing company Ilyushin Finance for 25 An-74s, Aeroflot has specified that, for the deal to go ahead, at least 50% of the Ukrainian-designed and built aircraft will have to be produced in Russia. It is understood that progress has been made on the construction of at least 10 aircraft.

Production

The An-74TK-300 is produced by KhAPO in Kharkov, Ukraine. Antonov has signed a deal to supply two aircraft to China and it is likely these will be produced in China.

An-148

The twin-engined 70-seat An-148 is being developed from the An-74. With a longer fuselage and a redesigned wing, it has improved range and performance. The first example is under construction at Kharkov, Ukraine, by KhAPO, and is to make its first flight late next year with certification to follow in 2004. It will be powered by a variant of the Russian-built ZMKB Progress D-36-5A turbofan developed for the An-74, but will feature a variety of Western systems. The initial 70-seat aircraft is to be followed by 40-seat and 100-seat versions.

The aircraft is intended to replace passenger versions of Antonov's An-74TK series, offering a higher cruise speed of 440kt, and improved fuel consumption and passenger comfort. Range of the basic model will be 2,800km, with 70 passengers. A 4,000km-range "ER" version is planned, as well as cargo, VIP and military variants.

Several CIS carriers including Aeroflot and Sibir Airlines have signed protocols for up to 180 An-148s.

Production

The prototype is being assembled at KhAPO in Kharkov, Ukraine.

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The former ATR (Avions de Transport Regional) consortium between EADS (formerly Aerospatiale) and Italy's Finmeccanica Alenia Aerospazio became ATR Integrated in 2001 and operates as a single company for marketing and sales of a family of turboprops.

ATR 42/72

The 48-seat ATR 42 first flew in 1984 and entered service in 1985. The ATR 72 – a stretched 64- to 74-seat version – flew in 1988 and was certificated in 1989.

The baseline PW120/121-powered ATR 42-310/320 was joined by the PW127E-powered ATR 42-500 in 1995. The -500 offers a higher cruising speed and an improved passenger cabin. After the initial PW124-powered ATR 72-200, ATR introduced the improved -210 with PW127s. The current ATR 72-500 features six-bladed propellers, increased weights and a new interior. It was certificated in January 1997.

In 2000, DHL Aviation became the launch customer for the ATR 42 freighter conversion, which has a 5,800kg payload. Last year Swiss express cargo and charter airline Farnair Europe launched the large cargo-door freighter conversion of the ATR 42, but later switched to the ATR 72. The large cargo-door version of the ATR 72-200 was certificated this year and delivered to Farnair in October. Conversions are performed by Aeronavali. The ATR 72 has a payload capability of around 8,500kg. ATR sees a market for over 100 conversions, 40% of which will feature the large cargo door.

The ATR 42 freighter is believed to have been selected by FedEx Express for its new regional freighter, and the US packages carrier is expected to acquire at least 30 examples for operation by its partner airlines.