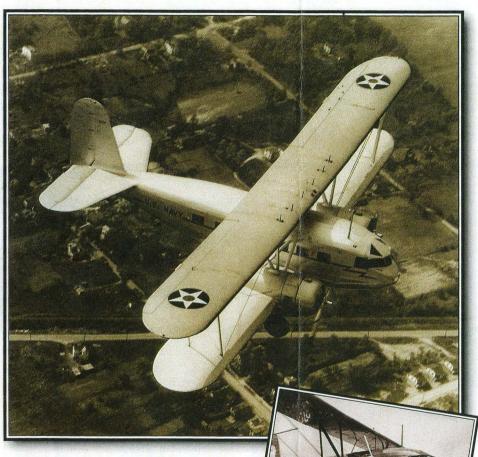
CURTISS

CONDOR II

● 1930s biplane airliner ● Overseas service ● Antarctic pioneer



t first sight the T-32 Condor II appeared to be an anachronism – a new biplane transport at a time, in the early-1930s, when the all-metal monoplane was the way of the future. Curtiss-Wright, however, had seen a niche in the market for a 'stop-gap' aircraft that offered performance improvements over contemporary designs, pending the arrival of the truly advanced Boeing 247 and Douglas DC-2, then under development.

▲ Condor IIs
were destined to have a very short
history in US airline service. However,
overseas airlines and Antarctic explorers
soon put the aircraft to work elsewhere.

PHOTO FILE

CURTISS CONDOR II

▼ On floats in Colombia

Seen here on floats prior to delivery, this BT-32 operated as a transport from rivers in Colombia and flew Atlantic anti-submarine patrols during World War II.



▲ Design advances

Although cheap to produce the Condor II introduced new features, including zip-fastened panels for easy maintenance. The batteries could also be changed in less than a minute.

▼ Military sales

There were just four T-32s in US military service. Overseas sales, however, were made in Colombia (below) and Argentina.



▲ Chinese bomber

This, the first military Condor II, flew in 1934 and was immediately demonstrated to the Chinese. After repairs following a landing accident it became the personal transport of Chiang Kai-shek (the head of Chinese central government).



Airline service in America

The Condor II's use as an airliner in the US was shortlived as more advanced types like the Douglas

FACTS AND FIGURES

- In all, only 45 Condor IIs were built, including a prototype, 28 airliners, 15 military aircraft and one survey machine.
- ➤ Swissair's sole AT-32 was the first airliner in Europe to carry a stewardess.
- ➤ The three Condor IIs used in the Antarctic were fitted with floats or skis.
- In the late 1930s a Canadian railroad company used a Condor based in Alask to reach isolated Yukon communities.
- ➤ The last operational Condor II was used by the Peruvian air force until 1956.
- ➤ Four ex-Eastern Air Transport T-32s serve as cargo aircraft in England in 1937/38.

PROFILE

Last of the US biplane airliners

Turtiss-Wright's St Louis factory had been closed I for two years by the great depression and the company needed an aircraft with which to resume production. It had to be developed cheaply and quickly.

The result was the XT-32 (Experimental Transport to carry a payload of 7055 kg (3,200 lb.)), the first of which flew on 30 January 1933. The name Condor II was adopted to cash in on

wo Wright SGR-1820 Cyclone

leared radial engines powered

used a supercharged variant

T-32s. The improved AT-32

diving a variable-pitch propeller.

From the Americas to Antarctica

ANTARCTIC PIONEER: The first Condor II

the southern continent accompanied

dmiral Byrd's second expedition.

the solid reputation of the earlier Model 18 Condor, which it resembled in basic layout.

Among the T-32's innovative features was an electricallyretracted undercarriage, flexible engine mounts (to reduce vibration) and even hot and cold running water in the toilet.

Eastern Air Transport and American Airways placed orders. By the end of 1935, however, the Condor II was

The T-32's simple design and Curtiss-Wright's efficient management allowed the company to offer the aircraft to US airlines at a comparatively

cheap price, quoted as 'less than \$60,000'.

Two Condor IIs were purchased by the US Navy in 1934 for transport duties. Both were lost in the Antarctic.

being replaced with DC-2s. Ultimately, Condor IIs saw a great deal more service overseas. Bomber (BT-32) and transport (CT-32) versions were sold in South America and US civil and Navy examples made pioneering survey flights over the Antarctic.

The AT-32-A was a convertible

capacity for 12 passengers. The

AT-32-C carried 15 passengers

in a dayplane-only configuration;

dayplane/sleeper aircraft with

other models had engines of

varying horsepower ratings.

American Airlines was the

A-model with 10 examples.

biggest customer for the



AT-32-B CONDOR II

American Airways bought Condor IIs to replace the smaller Ford Trimotor. However, the Trimotor was to outlive the Condor IIs, the last of which was retired by AA in 1937. NC12394 was destroyed in a hangar fire in July 1937.

> The engines were mounted on rubber bushes to reduce vibration. To ease maintenance Condor IIs had no less than

> > NC12394

125 access panels, closed

with zip fasteners.

Passenger comfort was an important selling point for the T-32. The cabin was soundproofed and each seat was provided with individual hot and cold air outlets. Cabin furnishings were composed of a combination of fabric and leather.

AMERICAN AIRLINES

The electrically-retracted undercarriage was the first to be used on a twin-engined airliner and was among a number of innovations that set the Condor apart from other airliners of the period. The airframe, however, retained a metal structure and fabric skin

AT-32-A Condor II

Type: twin-engined biplane airliner

Powerplant: two 529-kW (710-hp.) Wright SGR-1820-F3 Cyclone radial engines

Maximum speed: 306 km/h (190 m.p.h.) at 2438 m (8.000 ft.)

Cruising speed: 245 km/h (152 m.p.h.) at 2438 m (8,000 ft.)

Climb rate: 366 m/min (1,200 f.p.m.)

Range: 1152 km (715 mi.) at 2438 m (8,000 ft.)

Service ceiling: 7010 m (23,000 ft.)

Weights: empty 5550 kg (12,210 lb.); loaded

7938 kg (17,464 lb.)

Accommodation: 12 passengers

Dimensions: span 24.99 m (82 ft.)

lenath 14.81 m (48 ft. 7 in.) height 4.98 m (16 ft. 4 in.) wing area 112.2 m² (1,207 sq. ft.)

ACTION DATA

CRUISING SPEED

Despite being a twin-engined biplane, the AT-32 had almost a 50-km/h advantage over the three-engined Trimotor monoplane. The DC-2 showed an even better turn of speed, setting new standards in airliner performance.

AT-32-A CONDOR II

245 km/h (152 m.p.h.)

TRIMOTOR 198 km/h (123 m.p.

RANGE

The Condor II's range was also an improvement over that of the Trimotor. despite being considerably heavier This was largely due to its twin engines, which used less fuel than the Ford's three powerplants. Once again, the DC-2 set new standards



ACCOMMODATION

Early model Condor IIs carried fewer passengers than the Trimotor, but could be flown in a sleeper/dayplane configuration. Later AT-32 variants could carry 15 passengers, more than the first DC-2s.

MODEL 5-AT-B TRIMOTOR

MODEL 5-AT-B TRIMOTOR

SWISSAIR'S SOLE EXAMPLE: A few T-32s saw service in Europe. Swissair's was the last civil Condor II built, but it crashed after four months.

BT-32 BOMBER IN CHINA: The turretand bomb rack-equipped BT-32 appeared in February 1934. This, the first, went to China.

ARMY TRANSPORT: There were just two

USAAC Condor IIs. Designated YC-30 and fitted

out as VIP transports, they were retired in 1938.