

**A320 Passenger to Freighter converted aircraft:
Setting new standards in the single aisle freighter market**

Background, June 2010

The A320 Family is the most popular aircraft family worldwide, with currently more than 4,200 aircraft delivered and almost 2,300 still on order. As the first of these aircraft are now 20 years old, it is time to enrich this successful family with a new member – the A320/A321P2F converted freighter by Airbus Freighter Conversion GmbH. Entry into service and start of serial production will be in 2012, when many of the world's current single aisle freighters will be up to 40 years old.

The A320/A321P2F is the first converted aircraft under the Airbus flag, including comprehensive customer services and fully integrated manuals. As a completely OEM (original equipment manufacturer) certified conversion, the operator will enjoy full Airbus support throughout the aircraft's lifetime – unique in this market sector.

These modern fly-by-wire freighters are aimed at replacing ageing Boeing 727Fs and DC9Fs currently in service. Thanks to their modern design, the A320/A321P2F will offer better economics (reduced fuel-burn, lower maintenance costs, lower operating costs) than their older or direct competitors. Another advantage is their capacity, based on initial design, to carry containerized and palletized freight in the belly holds, which is a unique feature in this freighter category, and which offers more loading flexibility for operators. The A320/A321P2F will also set new standards as the most environmental friendly freighter in his class with lowest emission and chapter 4 noise compliance.

Payload varies from up to 23t for the A320P2F and up to 28t for the A321P2F, usable volume from 5,900 ft³ (A320P2F) to 7,700 ft³ (A321P2F), with a range of up to 2,000nm and up to 2,100nm respectively. Payload, volume and range make these freighters bridge the gap between the Boeing 737 and 757, whilst the A320/A321P2F are suitable both for express and general freight.

In early 2007, the Airbus Freighter Conversion joint venture, headquartered in Dresden/Germany, has been established between EADS Elbe Flugzeugwerke, Airbus and the Russian companies UAC and Irkut. All shareholders are also exclusive subcontractors, contributing to the German and Russian converted aircraft. AFC is the interface to the customer and responsible for programme coordination, marketing and sales, customer contracts and the delivery of converted aircraft.

T2F

- 500 small ALC freighter
- demand next 20 years: 800
- 50% EADS, 50% UAC / Irkut
- AFC

E Airbus
E EFW
E Irkut / UAC

- Certification: EASA, FAA
TC Airbus über Service Bulletin
- keine drive units im upper deck
- Barrier wall:
 - 9g abfangen der container
 - smoke tight (to fulfill class E compartment)
- Smoke procedure: 60 min cabin altitude auf 20000ft. Piloten und crew versorgt mit O₂ (Sottle)
- Kern Frachter mit ACT
- Leertgewicht steigt (Barrier wall, cargo door, ...)
- 20 pro Jahr: 10 in Dresden, 10 auf Irkut
- CG ist kein Problem bei Beladung
- Tail wippen, weil Tail vorne zu schwer und CG zu weit vorn
- Ramp up: 5 Jahre
- Umrüstung dauert: 69 Tage (min.) für Wide Body, Single Aisle evtl. etwas kürzer
- Fußbodenrost umzuwälen ist sehr aufwendig.
- TC-Verkehr: Dokumente so wie beim neuen ALC
- Upperdeck: 18-25°C runter bis 50... 80°C für z.B. Blumen