International Airline Industry Faced With Billion Dollar Loss—Liability And Insurance Questions Arise

by Albrecht Birke

1. The Airbus A380

The Airbus A380 is the world’s largest passenger airliner actually in production. This so-called superjumbo seats between 400 and 800 passengers. Airlines operate this type since 2007. The price per unit lies in the area of USD 350m and USD 400m.

With the decision to build the A380 Airbus intended to break Boeing’s monopoly in the production of ultra-large passenger airliners.

The introduction of the A380 into the world aviation market cost Airbus dearly due to delayed development and delivery. Now Airbus is threatened by serious losses deriving from serial product defects in the wings of the airliners.

2. The Technical Issue

On November 4, 2010 one A380 of the Australian airline Quantas suffered an in-flight uncontained engine failure that caused extended damages to the right-side wing and the side of the fuselage.

During the repair works the wing had to be opened and the repair crew found in addition to the damage caused by the engine explosion a wing-rib bracket cracking problem. Extensive investigation was undertaken resulting in the confirmation of a general defect and the necessity to fix it on all delivered airliners of the type.

This implies opening of all wings and extensive repair work on the wing-ribs and the rib brackets including the replacement of parts made from type 7449 aluminium with a more robust grade, type 7010 (Flight Intern of May 29, 2012, page 9).

The technical repair process has still to be certified by the European Aviation Safety Agency (EASA) expected towards the end of 2012.

It will take until 2014 to introduce the necessary technical changes into the serial production of new airliners.

All those built and delivered until 2014 will still be affected so that the wing structure problem is not limited to the 76 A380s delivered until September 2012 but also to those produced until 2014, in total about 135 airliners.

It is important to underline that the "defective" airliners continue to fly safely and that there is no threat of a catastrophic in-flight failure of the wing. The safe operational lifespan of the wings may be shortened by the detected beginning cracks but the manufacturer’s experts and the supervisory authorities confirm that actually and for a longer period—and with shortened inspection intervals—there is no safety issue at all.

3. Costs Of Repair

Details of the calculation of the costs to fix the wing-rib crack problem per airliner are not yet known. The obvious technical facts and the estimation that the repair will take 8 weeks of downtime (Flight Intern of June 19, 2012, page 7) indicate repair costs per unit of at least USD 10m.

Because of the duration of repair the airlines have to expect serious losses of use of the airliners. The losses will have to be calculated on the basis of two long distance flights with about 400 passengers per day. Due to the general situation of delay regarding the delivery of new long distance airliners (A380, Boeing 787, Boeing 747/8, A350), the airlines will not be able to compensate the downtime of their A380s by other airlines.

4. Liabilities And Issues

Without detailed knowledge of the contracts regarding warranties and liabilities between the involved parties and of their insurance contracts a realistic estimation of the liabilities is not yet feasible. However, a rough sketch of the main tiers is possible:

- claims of damages:
  - compensation for the downtime
  - compensation for additional inspections before the repair of the wings
  - higher fuel consumption from use of older airliners
  - decreased value of the airliners (after extensive wing repair)

Claims will probably also be made by parties involved in the financing of airliners.

It will be interesting to see if airlines may try to cancel orders for the A380 based upon the product’s known defect. Will those who ordered the aircraft be justified to refuse the delivery and acceptance of the defective products and claim for a product without defect plus damages for the delayed delivery? Several airline companies appear to reflect this way (British Airways, Qatar).

For all A380 airliners delivered to airlines after the Quantas incident there is the particular situation that both the seller and the buyer know about the product’s defect and that the acceptance of a defective product might exclude contractual warranties or liabilities. However, when the airliners were ordered years ago, both parties had no idea that the wings might be defective.

There is the legally interesting question of how far the knowledge (about the defect) of the buyers will influence the warranties and liabilities of the manufacturer. This will probably give rise to special contractual clauses between Airbus and their clients.

Insurance companies will probably be affected by valid claims in this loss context. The extent of their involvement will depend on the special clauses conceived for the particular situation.

There is also the possibility of recovery claims of Airbus against the manufacturer of the wings. A British company in Filton near Bristol (UK) that used to be but is no longer an affiliate company of EADS group.

5. Large Loss And High Potential Of Litigation

It is probable that the costs of repair and the loss of use will have to be valued at at least USD 10m per defective airliner. Applied on 135 airliners this will add up to USD 1,35 billion.

It is interesting to note that EADS has posted a charge of EUR 158m for the wing problem in the first quarter of 2012 and intends to increase the charge towards year end to EUR 270m (Flight Intern May 22, 2012, page 12). Against the background of first loss estimations, this charge appears insufficient.

Learning Point: This unusual loss complex and the resulting liability and insurance issues will probably keep the international airline industry busy.