

AIR TRANSPORT GRAHAM WARWICK / WASHINGTON DC

Embraer 170 hit by yet another delay

More time is needed to complete software verification

Full type certification of the Embraer 170 regional jet, expected this month, has been delayed until the first quarter of next year to allow more time to complete software verification for the Honeywell-developed fly-by-wire flight-control system.

The slippage means that deliveries will start more than a year later than the original December 2002 target set when the first aircraft flew in February last year. Since then the programme has suffered several slips, including a delay in the development of the aircraft's Honeywell Primus Epic avionics that pushed back full certification by three months to November from the revised target of June. The latest setback is unrelated to this.

Embraer received provisional type certification for the 170 from Brazilian airworthiness authority CTA on 13 November. While the manufacturer says this allows delivery of aircraft to airlines to begin crew training and route testing, Alitalia Express has opted to reschedule delivery of its aircraft to next year. Embraer says it is in discussions with US Airways aimed at

defining initial deliveries of the 170. Because of the delay, the company has removed all eight 170s scheduled for delivery this year from its forecast, and is projecting deliveries of 102 aircraft for the year instead of the 110 previously announced.

Embraer says tests were completed with "good results in terms of performance, comfort and reliability", but that talks between the aircraft and avionics manufacturers, and the Brazilian, European and US airworthiness authorities, resulted in an understanding that additional flight-control system software certification documentation is needed before granting definitive type certification.

Honeywell says the flight-control software has been completely tested at the system level, and has performed to the certification requirements. The remaining work involves software verification tasks required for DO-178B certification. "Documentation is taking longer than expected," the company says. The complexity involved in certifying partitioned software in the Primus Epic integrated avionics was responsible for previous delays.

BUSINESS JUSTIN WASTNAGE / PRETORIA & JOHANNESBURG

Denel to split aviation division

South African defence group Denel is to split the aerostructures and component manufacturing operations of its aviation division as part of a wider restructuring plan to return the company to profitability.

Denel Aviation was the only division not to make a surplus last year within its aerospace portfolio, which also includes optical supplier Eloptra, avionics unit Kentron and the Overberg test range outside Cape Town.

New Denel chief executive Victor Mosche is set to unveil plans for a restructuring of the entire group, including armaments and commercial activities, before year-end, to be in place by April. Under the plans, Denel Aviation will be split into two companies, provisionally called Denel Aerospace Manufacturing and Denel Logistics. "We have two extremes of aerospace manufacturing, with high-volume, low-margin work operating in the same plant as the low-volume, high-margin work," says Knox Msebenzi, Denel group executive director for aerospace.

Denel is preparing to produce over 4,000 aluminium and sheet metal parts a month for the Boeing 737 and 747 under a nine-year deal with the Seattle airframer, and is near to signing a deal for around 80,000 components a month for Airbus as part of a joint venture with Pretoria-based composites specialist Aerosud.

The company is also preparing for final assembly of the Agusta A109 Power and A119 Koala helicopters.

Briefing

Ryanair could ditch Charleroi

COMPETITION Ryanair chief executive Michael O'Leary has threatened to stop flying from Brussels South Charleroi airport if the European Commission decides the financial agreement between the airport and Ryanair is a hidden subsidy. The EC is due to decide this month whether Charleroi and the Walloon regional government offer Ryanair unfair subsidies, as alleged by Ryanair's competitor at Charleroi, Virgin Express, and the operators of Brussels Zaventem airport. Charleroi is Ryanair's European hub and accounts for 10% of the airline's turnover. O'Leary says he already has two unnamed airports he can move to, although he has ruled out Liège Bierset, Belgium; Lille, France; and Maastricht, the Netherlands. The EC may suggest that the Walloon government privatise Charleroi, making any deal between the airport and Ryanair a purely commercial arrangement.

Tahiti considers A340-600s

PLANNING French Polynesia's Air Tahiti Nui is considering adding two Airbus A340-600s, as it seeks board approval to acquire its fifth A340-300 in May 2005. The airline is looking at future orders for the larger -600 as early as 2007, possibly to coincide with the return of a -300, which could be followed by a second -600 12-18 months later. The airline had considered the ultra-long-range A340-500 for non-stop services to Paris but this was deemed unviable.

International changes for JSF

DEVELOPMENT Lockheed Martin is to study air vehicle changes on the F-35 Joint Strike Fighter (JSF) sought by international customers, as part of a \$602 million contract announced on 10 November. The USA and UK will lead a team of eight international partners including Australia, Canada, Denmark, Italy, the Netherlands, Norway, and Turkey. An international compatibility analysis conducted last year compiled the design changes proposed by international customers, and led to a research and development plan during the system design and development (SDD) phase. The project will be funded from the \$4.5 billion that the eight partners have committed to the SDD phase.

Chinese boost for Boeing orderbook

SALES China has firmed up an expected order for 30 Boeing 737s for five carriers. The aircraft will be delivered in 2005 and 2006. Air China will be allocated five 737-700s; Hainan Airlines eight 737-800s; Shandong Airlines three 737-700s and four -800s; Shenzhen Airlines five 737-900s; and Xiamen Airlines five 737-700s. The 737-900 order represents Boeing's first for the model from China. The bulk order precedes Chinese premier Wen Jiabao's visit to Washington, under US pressure over China's trade surplus with the USA.

Fleet decision for low-cost Qantas

LAUNCH Qantas is expected to select an aircraft type for its new low-cost subsidiary this week. The airline has been discussing proposals with Airbus, Boeing and lessors concerning Airbus A320s and Boeing 737-800s. The low-cost carrier will operate a minimum of 23 aircraft by mid-2005. The carrier's name and identity will also be decided and a home base may be selected. Qantas is negotiating with Australian state governments. Adelaide, South Australia, and Brisbane, Queensland, are believed to be favourites.

Ireland extends control of Atlantic

NAVIGATION The Irish Aviation Authority (IAA) is to control an additional 95,000km² (36,700 miles²) of North Atlantic airspace, following an agreement with the UK National Air Traffic Services (NATS). The IAA will acquire control of the Northern Oceanic Transition Area from 1 January 2005, while NATS will continue to control the Shanwick area further west for another 25 years. The deal, which increases the IAA's control area to 450,000km², means that 90% of all transatlantic flights will pass through the three Irish air traffic control zones – the Shannon Flight Information Region and southern and northern transition areas. Last year the IAA earned 85% of its revenue from overflying transatlantic traffic.