CMC PilotView EFB installed on Global Express

CMC Electronics (Hall 4, C16a) announces today that Berlin-based Lufthansa Bombardier Aircraft Services (LBAS) has completed the first installation of its PilotView electronic flight bag (EFB) in the Bombardier Global Express business jet.

The side-mounted EFB gives the aircraft operators the ability to display Jeppesen electronic charts and other flight documents. It can also be used as an alternative display for enhanced vision system (EVS) images.

PilotView features a high-resolution 8.4in (215mm) LCD screen providing exceptional readability in all cockpit ambient light conditions. The user interface comprises FMS-style line-select keys, an integrated keyboard and a "film-on-glass" touch-sensitive screen.

Together they give pilots a choice of ways of accessing or navigating EFB applications.

A unique feature is a one-touch video key that enables the pilot to toggle between the current application and images from video surveillance systems.

Pentastar Aviation has Falcon 2000 and 2000EX business jets.

SIKORSKY LOOKS TO CHINA FOR AIRFRAMES

Paul Derby

A deal which would see Changhe Aviation Industry become the second source of airframes for the Sikorsky S-76 helicopter could be sealed during Farnborough.

This follows the signing of a memorandum of understanding (MoU) between the manufacturer and China Aviation Industry (AVIC) II in the run-up to the show. Jeff Pino, Sikorsky senior vice-president for corporate strategy and commercial programmes, says he hopes a deal can be reached soon. "We would like to see them become the second source for the S-76. As the country grows its infrastructure, there will be opportunities in a range of sectors, including policing, parapublic patrols and power line surveys."

Pino says Sikorsky is discussing the one-tonne class of helicopter with AVIC II, but has also spoken with the Chinese about a helicopter in the 10-tonne class, which could use some of the dynamics from the S-92.

Significant

He says the potential for after-market work in China, particularly in areas such as pilot training, is significant, adding that after-market revenues now account for 50% of Sikorsky's business.

The Stratford, Connecticut-based manufacturer has existing relationships in China through its joint venture company Shanghai Sikorsky, which was set up in 2003 with Little Eagle Science and Technology

Sikorsky's existing supplier of airframes for the S-76 is Aero Vodochody in the Czech Republic.

Buyers queue up for Embraer's all-new very light jet

Liz Moscrop

Brazilian airframer Embraer is doing a roaring trade with its new Phenom 100 very light jet (VLJ) programme even though first metal has only just been cut.

Embraer says next positions for the 100 are in 2010, even with increased production capacity. The aircraft enjoyed a "very successful" EBACE with Swiss air-taxi start-up JetBird snapping up 50.

The programme is on target with Embraer's published predictions.

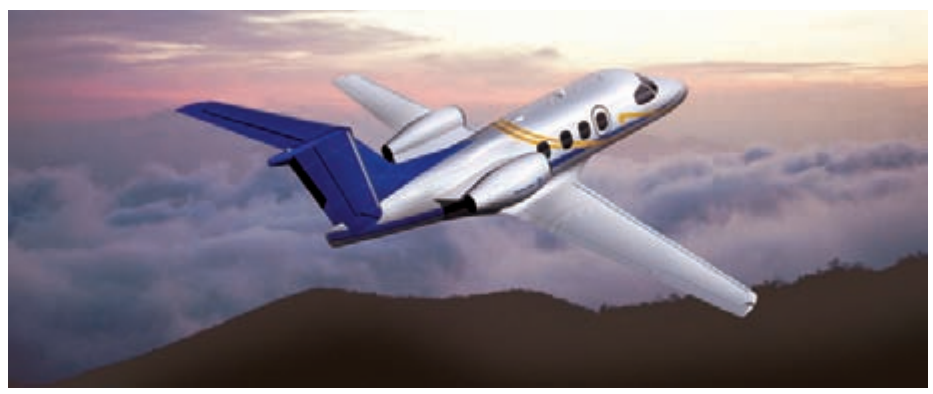
A month before Farnborough, first metal was cut at the airframer's main plant in São José dos Campos. The first part, a component of the fuselage that connects to the engine's pylon, will be incorporated into the pre-series aircraft, due to fly next year.

The company is looking at subassembly for the 100 late this year, final assembly in early 2007 followed by first flight half a year later.

Sucessful

The aircraft is slated for entry into service in mid 2008 and Embraer has just finished the second series of wind tunnel testing, which was "very successful", in the words of Rodrigo Fanton, senior programme manager executive aviation market.

Embraer has held several advisory meetings for the Man-Machine Interface (MMI) design, surveying more than 3,200 operators and says that customers place comfort, docile flying characteristics, next generation



Roaring trade: Business is booming for Embraer's very light jet.

engines, high utilisation and availability along with low operating costs top of their list of desirable attributes.

With operating costs of $440 per flight hour, Fanton says that it is cheaper to run the VLJ than a turboprop "once you get past the 2,500nm (4,600km) range".

The 100 will be powered by two 1,615lb (7kN) thrust PW617Fs, transport up to eight people and have an NBAA IFR range of 1,160nm (carrying four people). With a maximum cruise speed of Mach 0.70 and a ceiling of 41,000ft (12,500m), the jet is also equipped for short field take-off.

At $2.85 million, the 100 is pricier than its competitors, which the company attributes to its desire to own the 'best in class' market position. Cessna is asking $2.5 million for its Citation Mustang, and Adam Jet $2.8m for the Adam 700. By comparison the single prop Piper Meridian comes in at $1.9 million and a Beechcraft G58 Baron twin lists at just over $1.2 million.

Falcon 7X certification going swimmingly

Liz Moscrop

Dassault Aviation's ultra-long range Falcon 7X has successfully completed its "swimming pool" tests - as the company calls its contaminated runway and water ingestion trials.

The tests took place at UK's Cranfield test centre and Dassault says the aircraft reacted very well, with no infiltration problems and correct operation of the engines, APU, air-conditioning and anemometry. The tests fulfilled the requirements of the certification programme, Dassault says.

Test pilots Philippe Deleume and Jean Louis Dumas said they "particularly enjoyed" the qualities of the aircraft on a wet runway at high speed (up to 20 mm of water). The four aircraft in the 1,200h flight test programme, scheduled to end in November, have chalked up over 850h to date. European and US certification is scheduled for early 2007, three months later than originally planned, with first deliveries set for April.

The company is now two-thirds of the way towards certification. It does not want to interrupt the programme any further, especially in light of delays caused last year by its decision to increase the range to 6,000nm (11,100km), by installing drag-reducing winglets and a new fuel tank.

But visitors to Farnborough won't see the aircraft. Olivier Villa, senior vice president of Falcon aircraft, says: "It's been very hectic and we haven't had time to divert the aircraft to Farnborough, which would interrupt the tests. We want the aircraft to be certified in time to be delivered to our first customer."

The fourth Pratt & Whitney Canada PW307A-powered aircraft in the test programme will be used by Serge Dassault and as a demonstrator and is currently the only aircraft equipped with the extra fuel tank forward of the wing centre section. The first 15 production models will have to be retrofitted to accommodate the tank. Dassault is ramping up production of its $40 million fly-by-wire aircraft to three a month by the end of next year to cater for a backlog of 80 aircraft. Forty aircraft are on the production lines at the moment and Dassault plans to cut the build cycle from 80 to 60 days within six months.

Reliability

To support its 7X customer base Dassault is strengthening its servicing network and has increased the number of field service engineers, designed to assist Falcon operators, from 10 to 54."We expect to achieve a 99.8% dispatch reliability for the 7X within a year of service entry," the company says. Dassault plans to establish a distribution centre in China, which will house around $100 million of Falcon spare parts.

The 7X will start hot weather trials next month in Biarritz, south-west France, as certification reaches its final stages.

Gulfstream G150 a month away from service entry

Gulfstream's G150 mid size business jet should enter service "within a month of Farnborough", according to director of corporate communications Robert Baugniet.

In response to customer requests for a larger cabin size, Gulfstream made the G100 fuselage 2in higher and 12in wider, to increase cabin volume more than 25% to 465ft^3. The earlier-generation G100 will be phased out this year. "The G100 is an incredibly reliable aircraft. The only complaints we received were about cabin size. Our customers wanted more room. That is now solved and the response to the G150 has been great," says Baugniet.

Equipped with a four-screen Rockwell Collins Pro Line 21 integrated avionics system, the $13.5 million G100 successor comes with possible cabin configurations. The, G100 wing is retained, but the G150 has an extra 200lb of thrust via Honeywell's TFE 731-40R engines. Top speed is Mach 0.85. In May this year the aircraft attained its first city-pair speed record, flying 1,575nm between Tel Aviv, Israel, and Geneva, Switzerland, in 3h40m. At a take-off distance of 1,524m, the G150 gets airborne slightly ahead of a Learjet 60 at 1,661m and compares favourably with a Sovereign at 1,091m.

The G150 has a maximum range of 2,700nm. Assuming 85% annual winds and NBAA IFR reserves, it can take four passengers from Los Angeles to Honolulu or Gander, making Europe one stop from the US West Coast.

Honeywell engine breaks into kit plane market

Honeywell (Hall 1, A9) is expecting to see another surge in sales for its ever-popular TPE331 engines following its selection as the engine of choice for a pair of new aircraft types.

The two are turboprop kit aircraft from CompAir of Florida, the CompAir CA9 and CA12.

The company designs and builds composite kit aircraft and says it has selected the Honeywell engine because it gives them a good horse-power-to-range ratio. "We think this is a great engine that seems to have been greatly overlooked," says CompAir's Bill Fedorko.

The CA9 is an eight-seat, all-composite, pressurised, fixed-gear aircraft and is due to receive certification at the end of 2007. It will be powered by a single TPE331-10 providing 940shp (701kW) at sea level.

Powerful

The CA12 will be powered by a single TPE331-14 GR rated at a considerable 1,650shp. The CA12 is a 10-seat, all-composite, pressurised aircraft which with this powerful engine should cruise easily at 300kt (550km/h).

The TPE331-14 GR is a proven performer. It powers the BAE Systems Jetstream 41. Worldwide there are 183 units in service accumulating more than four million hours.

Fedorko says CompAir was also impressed with Honeywell's commitment to support and service. "This was a critical factor," he says. "EAM of Phoenix is helping us with certification and Honeywell's assistance has been of great value."

The CompAir CA9.

Bombardier predicts peak in bizjet market

Alan Peaford

Bombardier predicts the business jet market will peak in the next two years, after which the decline will be slight and the industry will sustain at least 600 deliveries a year.

The forecast is one that the Canadian company is making public for the first time.

"We have used this forecasting model for seven or eight years now," says James Hoblyn, Bombardier's vice-president business aircraft. "It has been accurate and helped us with our business planning."

Hoblyn says Bombardier's position as market leader in the business aviation field puts an onus of responsibility on the company, and as a result it decided to share its data.

Forecasting good things ahead: James Hoblyn.

"There have been too many cases of people asking the question about the market and others just putting their thumb in the air and giving a view without thought or reliable data. You have companies like Honeywell producing some excellent data and we thought it was appropriate for us as a manufacturer to add to that."

The forecast focuses on what Bombardier describes as its "traditional" market and excludes sales to fractional operators, the sales of corporate airliners and the new segment of VLJs (Very Light Jets), microjets or personal jets.

Gaetan Handfield, Bombardier's manager of market analysis and regional development, says this would add 80-120 aircraft for the fractionals, and 50-60 for the corporate airliner. For the air taxi/VLJ market, Handfield shares the Bombardier view that it is best to "sit back and wait".

Hoblyn agrees that the entry into the market of aircraft such as the Eclipse, the Mustang and others could expand the traditional market. "It should bring more people into wanting jets and there is natural progression. More than 80% of business jet buyers are existing owners; the growth comes from new demand which can be in other countries or as people move from chartering into owning aircraft."

Bombardier is seeing increasing demand from new international markets such as China and Russia. "We are now at the position where half our business is from North America and the other half from the rest of the world. The industry generally has 60% of sales in North America. We believe that the emerging economies will be creating a new call of potential buyers."

Bombardier believes the market will remain strong. Handfield says the annual 600 deliveries is a minimum figure. "There are risks and concerns," he says. In the USA these include the threat of user fees and added costs to business aircraft owners. "We also need to watch closely the inventory levels of the pre-owned market."

Bombardier unveils Challenger family's highest achiever

When Bombardier invited the media onto a green version of the new Challenger 605 at a pre-Farnborough briefing, there was no sign of the luxury interior yet although the company says it has "tweaked" the aircraft from front to back.

This latest incarnation of the Challenger family will launch in Europe in December 2007 when Swiss customer Comlux Aviation takes delivery of the model.

The 605 first flew in January, reaching 41,000ft (12,500m) and a maximum airspeed of 420kt (780km/h). The aircraft has now relocated to Bombardier's flight test centre in Wichita for a 200h testing programme, which should see it obtain FAA certification at the end of this year.

James Hoblyn, vice-president business aircraft, is confident the programme will run to schedule. "We only need one change to the avionics to get it STC'd," he says.

Listing at $26.7 million, the 605 has an increase of 200lb (90kg) to its payload, largely derived from replacing the heavyweight CRT screens in the cockpit with LCD displays. This offers operators the ability to carry an extra passenger or take on extra fuel to increase range.

Other improvements to the 604 include the Rockwell Collins Pro Line 21 avionics suite, which comes with four 10 x 12in (250 x 300mm) screens, increasing the cockpit display area by 55%.

Also fitted as standard is the Rockwell Collins Integrated Flight Information System (IFIS). The IFIS creates a paperless environment, allowing pilots to call up approach plates, airport diagrams and procedures, such as standard instrument departures onto multifunction display screens.

The new Challenger 605: this latest incarnation is set to launch in Europe in 2007.

Powered by two General Electric CF34-3B turbofans producing 8,730lb (39kN) of thrust, the 605 can carry five passengers for 7,500km (4,000nm) at Mach 0.74 with NBAA IFR reserves.

Bombardier also recently introduced an auxiliary power unit (APU) retrofit programme for the Challenger 601 and 604. The Honeywell GTCP36-150 APU, standard in new-production 604s since the third quarter of 2005 and in all 605s, offers an increase between hot-section inspections of 100-500h.

The new APU also provides higher operational limits on in-flight starting, bleed-air extraction and generator use. The retrofit is available at Bombardier's nine factory and 16 authorised service centres.