

AVIONICS GRAHAM WARWICK / WASHINGTON DC

FedEx first to fit EVS in its aircraft

Cargo carrier chooses Kollsman system to equip Airbus A300/A310 and Boeing MD-10/MD-11 freighters from 2007

FedEx Express will be the first airline to equip its aircraft with an enhanced vision system (EVS), having selected the Kollsman infrared (IR) sensor and Honeywell head-up display (HUD) for its \$35 million Magic Window programme. The US package carrier will equip 200 Airbus A300/A310 and Boeing MD-10/MD-11 freighters from 2007.

The EVS will be certificated on the MD-10 in the fourth quarter of 2006. Certification of the other types will follow at six- to nine-month intervals. FedEx anticipates its Airbus A380 freighters will be

delivered with HUD and EVS fitted.

The principal benefit will be enhanced situational awareness in darkness or poor visibility on approach and during taxiing, says Joel Murdock, FedEx manager, strategic projects. The EVS advanced IR sensor presents an image projected on to any raster video-capable HUD or delivered to a head-down display (HDD), providing the pilot with a picture overlaying the outside view. Once it gains experience with EVS, FedEx will work with the US Federal Aviation Administration on reducing landing minima, he

says. A question still remains as to whether a HDD for the copilot will also be required.

FedEx has selected Kollsman's EVS-II, a derivative of the 1-5micron cooled IR sensor. The company – a subsidiary of Israel's Elbit Systems – gained the first-ever EVS certification in 2001 in Gulfstream's GV. The carrier has selected a new digital HUD from Honeywell, which uses a projection liquid-crystal display (LCD) instead of the traditional cathode-ray tube.

Digital HUDs offer much improved projection reliability, and

LCDs are better able to present high-resolution IR imagery, says Kevin Young, Honeywell director, air transport display systems.

The FAA is close to releasing a notice of proposed rulemaking on EVS that is expected to boost the market by allowing lower landing minima for EVS/HUD-equipped aircraft. Draft proposals suggest crews may be cleared to descend through decision height as low as 100ft (30m) above ground level, provided the runway is visible with EVS.

ADDITIONAL REPORTING BY ARIE EGOZI IN TEL AVIV

STRATEGY

UPS in Paris court threat

Express package carrier United Parcel Service may alter its European hub strategy and take the Paris airports authority to court over increased night flight restrictions at Paris Charles de Gaulle (CDG) airport.

The company flies 55 aircraft on its European network, and has been working on a system of sub hubs at East Midlands airport in the UK and Bergamo, Italy, in addition to Paris, to work alongside its main European hub at Cologne-Bonn airport. CDG has told cargo operators slots cannot be retimed and no new ones will be issued – severely reducing the airport's effectiveness as a sub hub, says Morgan Foulkes, UPS manager for international public affairs.

UPS believes the airport is in breach of the European Commission noise management directive which requires all solutions to be examined, not just operating restrictions. With airports in Germany and Portugal planning changes to night time operations, Foulkes says UPS may take airport authorities to the European Court of Justice if a breach can be proved. He adds that such bans would violate any open skies agreement.

DELIVERY

Finncomm expands with arrival of first ERJ-145

Finnish regional carrier Finncomm Airlines has begun a major expansion effort with the delivery of its first jet, an ex-Swiss International Air Lines Embraer ERJ-145. The aircraft is the first of a planned fleet of five ERJ-145s, and will be operated between Helsinki and Stuttgart in Germany in co-operation with Finnair

and Golden Air of Sweden. Until now, Finncomm has mainly operated Saab 340s and 2000s for Golden Air on domestic services in southern Finland from Helsinki. In addition, it operates two Mitsubishi Mu-2s under the West Bird Aviation brand for charter flights.



AIRCRAFT DEVELOPMENT MICHAEL PHELAN / TOULOUSE

Airbus defines growth A340-600

Airbus is finalising the design of its next A340 development, the high gross weight (HGW) A340-600, which will become the standard version of the long-range airliner after it enters service in mid-2006.

Launched at the Paris air show in June, the aircraft features an 8,000kg (17,620lb) increase in maximum take-off weight over the current model, to 376,000kg. The aircraft features airframe, landing gear and engine pylon reinforcements. Maximum landing and zero fuel weights have increased by

1,000kg each to 260,000kg and 246,000kg respectively. Although the 56,000lb thrust (249kN) Rolls-Royce Trent 556 will be the standard engine, a 60,000lb thrust rating will be available as an option.

Airbus marketing director A330/A340 Alan Pardoe says the aircraft will offer 650km (350nm) more range with maximum passengers, or 5,500kg more payload on an 11,100km sector.

Assembly of the first HGW aircraft will start in June 2005, with first flight planned for November

that year and deliveries to Qatar Airways to begin in mid-2006. "We expect it will become the standard A340-600 with time," says Pardoe.

Meanwhile, the 15 A340-600s in service achieved an operational reliability of 98% during the month of August, says Pardoe. We're confident of [achieving] 99% reliability on the fleet," he adds.

Pardoe says that US Federal Aviation Administration certification of the Kevlar liner modification on the -500 is due by early 2004 (*Flight International* 12-18 August).