AVIONICS
Airbus gets software for next FMS

Thales Avionics and Smiths Aerospace have delivered test software to Airbus for the start of formal validation of their delayed "New FM" flight management system (FMS) on the A330 and A340 widebodies.

The partners are aiming for certification and entry-in-service of the REV2 version of New FM on the A330/A340 by the first quarter of next year, having achieved certification of the REV1 standard on the Airbus A320 family in September last year. The team are aiming to challenge Honeywell's monopoly in the FMS market on the long-range Airbus aircraft.

The test software package, called L4A, adds A330/A340 compatibility, polar area navigation and automatic dependent surveillance (ADS) for future air navigation system A (FANS A), to the current REV1 functions. Mario Atias, Smiths Aerospace engineering programme manager for Airbus and New FM, says the L4A package is the first of three software packages due to be delivered to Airbus this year to enable full system validation. "Once validation is successful, Airbus will identify the first aircraft to receive New FM," adds Atias.

Thales and Smiths say New FM offers a liquid crystal multi-purpose control display unit, the largest navigation database capacity available on Airbus aircraft (5Mbytes), and flight planning flexibility including multi-revision temporary flight plan and an "undo" function.

The two companies had intended to certificate the A330/A340 FMS by mid-2000, but delays have forced customers to fit an interim Honeywell FMS. No orders have been cancelled.

Honeywell is currently the sole-source supplier of FMS on the A330/A340, with its Pegasus system, and the company last year was awarded sole-supplier status for the A380 FMS.

AVIONICS GUY NORRIS / LOS ANGELES
ACSS unveils surveillance and communications plan

Joint venture aims to offer wide range of systems for civil and military markets by 2007

ACSS has revealed ambitious plans to develop a wide range of new surveillance and communications systems for the air transport, regional airline, business aviation and military markets by 2007.

The Phoenix-based L-3 and Thales joint venture company is close to completing certification of its combined terrain and traffic collision avoidance system (T²CAS), and has embarked on the development of its next-generation traffic alert and collision avoidance system, the TCAS 3000, which will be completed by mid-2004.

TCAS 3000 will build on a common computing platform derived from T²CAS, adding a new radio frequency capability, re-using the unit's more advanced processor and rehosting TCAS software.

"With the advent of CNS/ATM [communications, navigation and surveillance/air traffic management], the industry changed from being box-driven to function-driven and this allows us to apply functions to multiple platforms," says ACSS president Joe Hoffman.

The strategy also supports ACSS's longer-term goal of branching out into new territory through new spin-off organic developments, alliances and acquisitions. "We are primarily into surveillance, but we'd like to grow more into communications," adds Hoffman.

The plan largely rests on the current TCAS products, 9,000 of which have been sold and delivered. Although most of these were built by Honeywell before the formation of ACSS almost three years ago, production of the TCAS 2000 will continue to support market needs, says Hoffman. "I fully expect to build TCAS units in quantity for the next several years," he adds.

The TCAS 2000 system, more than 6,000 of which are in service, can be replaced with the T²CAS, while the TCAS 3000, launched for Dassault's Falcon 7X project, "will also be backwards compatible", says Hoffman.

Based on the common computing platform-derived TCAS 3000, ACSS's next planned step in 2004 is expected to be a T²CAS 3000, combining the improved TCAS with the predictive terrain awareness warning system (TAWS) functionality being developed for T²CAS.

Within a year ACSS plans to host Mode S transponder functionality in the same unit and develop a new product dubbed T³CAS. Further developments, possibly timed for 2005-06, include a possible L-band feature with hosted distance measuring equipment, and an integrated hazard warning system with weather radar.

All products are expected to be offered with several new features, including runway incursion protection, surface area management, parallel runway approach capability, Mode 5 software and automatic dependent surveillance-broadcast (ADS-B). For military applications the new features will include the military airborne surveillance system, a form of enhanced TCAS, and identification friend or foe.

T²CAS 3000 is for applications such as China's ARJ21 regional jet and the US MC²A surveillance aircraft. The T³CAS is aimed at the Airbus Military A400M, maritime patrol aircraft and possible Bombardier and Embraer regional jet developments. The integrated hazard system is for projects such as Boeing's Super Efficient Airplane, the Airbus A380 and potential "next-generation" A320 and A340 family aircraft.

START-UP
No-frills carrier Jet2 to launch with 737-300s

New UK low-fare carrier Jet2 will start operations on 12 February with two Boeing 737-300s provided by its sister company, UK cargo airline Channel Express. Set up by Channel parent the Dart Group, the new airline will be based at Leeds/Bradford Airport. Its initial network will comprise seven destinations, in France, Italy, the Netherlands and Spain. Services will be gradually introduced through to mid-April, by which time four 737s are expected to be in service.