

Spanish CAA launches latest stage of ADS-SSR programme

THE Spanish civil aviation authority – Espanoles y Navegacion Aerea (AENA) – has launched the latest stage in its automatic dependent surveillance-secondary surveillance radar (ADS-SSR) air traffic control evaluation programme.

The system development stage of the programme, which started earlier this summer, is set to continue for two years, said David Diez of AENA's navigation and surveillance division.

Once developed, the system will be used to evaluate aeronautical mobile satellite service and the ability to support ADS. It will also be used to evaluate ADS and ADS-SSR algorithms in a real traffic environment.

"The study will evaluate operational procedures as well as display requirements in airspace with ADS and ADS-SSR coverage, with the intention of gaining experience rel-

evant to future surveillance systems based on ADS," said Diez.

AENA's first ADS-SSR integration study, which was in conjunction with air traffic control system contractor CESELSA and the Polytechnic University of Madrid, was conducted from December 1993 to October 1994. The aim was to develop and test two adaptable tracking algorithms – one for ADS data and one for the integration of ADS data with data from up to four radar stations.

"When ADS is based on GPS and the Inmarsat system is used for ADS data transmission, ADS meets the even more demanding requirements than those met by mono-pulse or Mode-S radars," said Diez. The study showed that ADS-SSR integration in a common tracking adaptable algorithm can overcome the limitations of SSR, improve data accuracy and availability and provide redundancy in a cost-effective way.

CNS/ATM for Classics

ARINC Incorporated is concluding an agreement with a major airline to launch a programme to provide CNS/ATM avionics integration solutions for older transport aircraft.

The ARINC programme comprises a FANS-compliant suite of avionics for Supplemental Type Certifications (STCs) for wide-bodied transports. Separate STCs will be obtained for satcoms, electronic flight instrument system

(EFIS), inertial navigation system (INS), VHF/HF data link, flight management systems/global positioning system (FMS/GPS) and various other optional avionics upgrades. Suitable aircraft types include McDonnell Douglas DC-10s, Lockheed TriStars and Boeing 747 Classics.

The project follows a successful programme to install satcom, FMS, INS, EFIS and GPS equipment in military variants of commercial aircraft operated by the USAir Force.

Europe studies ATN

FIVE European companies have launched a six-month economic and technical assessment of the Aeronautical Telecommunications Network (ATN) for the European Commission.

Thomson-CSF Airsys will head the COPICAT programme which involves Lufthansa, the Spanish civil aviation authority (AENA), Roke Manor Research of the UK and Sofreavia of France. The project, which will complement existing European Commission and Eurocontrol-funded ATN programmes, will demonstrate the operational benefits of the ATN in Europe. COPICAT aims to validate the economic basis of the ATN and study the technical and institutional feasibility of an initial deployment in the next three to four years.

The ATN will play a crucial role in the communications, navigation, surveillance/air traffic management system (CNS/ATM). It will provide the data links required to support the air traffic control, airport operational communications, aeronautical administrative communications and aeronautical public correspondence

data services across the various interconnected networks involved. The ATN will be capable of establishing a data link at any time between an aircraft and the ground.

Lufthansa will be responsible for establishing and liaising with an advisory group comprising potential ATN users – airlines, airports, civil aviation authorities and ATS service providers – to identify applications and determine the economic and operational benefits.

Sofreavia, Roke Manor Research and Thomson-CSF Airsys will define the ground and aircraft architecture and determine the cost of the ATN components and the deployment.

Thomson-CSF will perform a cost/benefit analysis encompassing the cost of the infrastructure and equipment investments and the benefits for airlines, passengers and air traffic authorities.

AENA will be responsible for identifying the issues of concern relating to the implementation and operation of ATN and clarifying the positions, policies and requirements of the different institutions involved.



Global Navcom urges co-ordination

TO achieve the goal of a seamless global air traffic management system, a regular exchange of information between regional communications, navigation and surveillance/air traffic management (CNS/ATM) implementation groups is essential, delegates at the recent Global Navcom '96 agreed.

Co-ordination and harmonisation is important to ensure the successful introduction of a global CNS/ATM system, the meeting concluded. The

co-operation of airspace users, air traffic services providers and suppliers is the most effective way of assuring inter-operability, said the International Air Transport Association (IATA), the organiser of Global Navcom.

A number of issues were highlighted at this year's event, which took place in June in Singapore. Global Navcom is intended to promote the timely and cost-effective implementation of FANS CNS/ATM.

After many years of international planning, the transition from obso-

lescent ground-based systems to the FANS environment has taken its first steps, said IATA. The initial steps have been rewarding for the pioneering airlines and air traffic services providers.

This year's Global Navcom focused on the many regional implementation achievements to date. The lessons learned in the South Pacific can benefit implementation activities beyond the Asia/Pacific region, said IATA. However, inter-regional co-operation is essential to ensure such continued expansion and to alleviate the knock-on effect

of congestion to other regions. The growing scope of operational trials and the increased availability of CNS equipment tools are positive signs of the increasing momentum towards implementation, said IATA.

The meeting also highlighted the need for identifying training requirements. This is a high priority to ensure successful implementation of a global CNS/ATM system. Financing continues to be an area of concern, said IATA. Ways and means need to be found to finance the transition to FANS CNS/ATM, the association added.