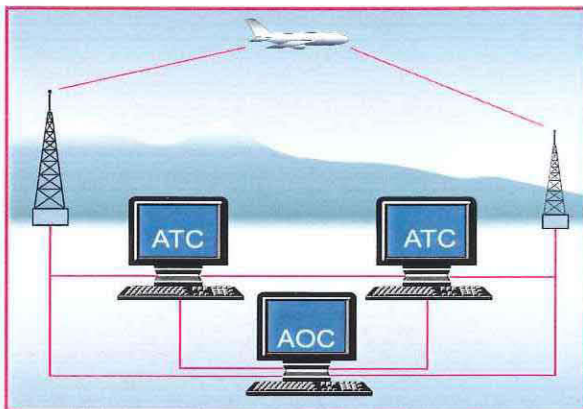




MA-AFAS: MORE AUTONOMOUS-AIRCRAFT IN THE FUTURE AIR TRAFFIC MANAGEMENT SYSTEM

BAE SYSTEMS Avionics (UK) (Co-ordinator), Airtel-ATN (IRL), AMS (I), DLR (D), ENAV (I), Euro Telematik (D), Eurocontrol Experimental Centre (F), Frequentis (A), Galileo Avionica (I), Indra (E), NATS (UK), NLR (NL), QinetiQ (UK), Saab Transponder Tech (S), Skysoft (P), Sofreavia (F), Stasys (UK), Swedish CAA (S), Thales ATM (F)

03/00 - 02/03



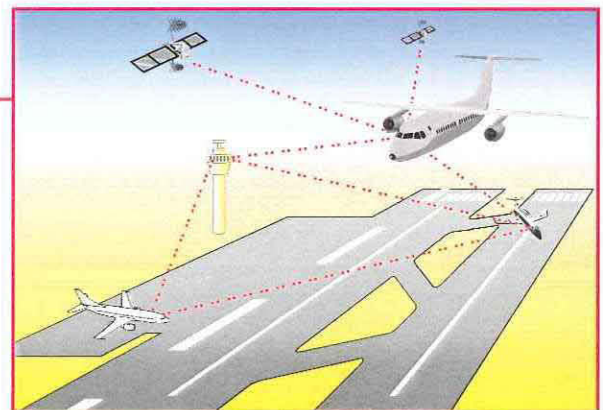
4D flight path generation, negotiation, guidance

Areas to be addressed include:

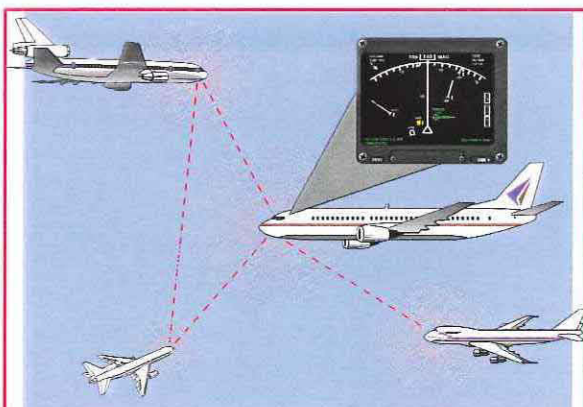
- ★ Evaluation of airborne 4D flight path generation, for integration with ground-based flight path planning.
- ★ Validation of GNSS (with ground and space-based augmentation) procedures for approach using 4D flight path control.
- ★ Integration of airborne taxiway map and data-linked clearances.
- ★ Validation of ADS-B with airborne display of traffic (CDTI) and airborne separation assurance algorithms (ASAS).

These key themes will be supported by:

- ★ An evaluation of flight deck HMI to support operation in a more autonomous environment.
- ★ Integration of the airborne communication functions to support AOC and ATC communications using ODIAC-defined standards.



Taxiway management



Enhance surveillance and separation assurance

Expected results include:

- ★ Validation by avionics package definition and trials.
- ★ Verification of communication loop using operational procedures defined by MA-AFAS.
- ★ Verification that ground infrastructure can support mixed-capability aircraft.
- ★ Establishment of a safe implementation strategy, based on economic benefits, international standards, and world-wide agreement.
- ★ Development of User Buy-In.

