

## AIRCRAFT SECURITY

## MAS sets its sights on IFE equipment for security

In-flight entertainment (IFE) system manufacturer Matsushita Avionics Systems (MAS) is using the video and broadcast technology expertise of its parent Panasonic to extend its business to in-flight security products.

The move comes as revenues in MAS' core IFE hardware business are expected to fall as airlines defer and cancel aircraft deliveries after the US terrorist attacks.

MAS plans to field an On-board Video Surveillance System within the next four months, while an Integrated Digital Alert and Surveillance System is expected to be available within 18 months, says the manufacturer.

Panasonic produces a range of security products, including iris-recognition systems and video cameras.

The Onboard Video Surveillance System comprises up to four Panasonic surveillance cameras, a monitor that supports up to four video inputs and power supplies.

The system would allow flight crew to monitor video inputs from several sections of the aircraft and is able to switch from audio sequencing to a manual display.

An alert notification feature will allow flight attendants to trigger a discreet wireless panic button, which will transmit a silent alarm to the cockpit.

The Integrated Digital Alert and Surveillance System, meanwhile, will feature multiple-camera options including pinhole cameras, wireless cameras and a 180° camera.

It will be designed to provide extensive cabin coverage and will be able to digitally store surveillance and alert the ground via satellite.

## AIRCRAFT SECURITY KIERAN DALY / PARIS

## Ground control of hijacked aircraft gets thumbs down

Thales says idea "feasible" but "inadvisable" as it develops a range of anti-terror measures

Thales has come down firmly against the concept of controlling aircraft from the ground in the event of a hijacking, calling it "feasible" but "inadvisable".

The notion has gained momentum in the wake of 11 September's US terror attacks, but Paris-based Thales is not enthusiastic.

Senior vice president of aerospace Francois Lureau suggests passengers would be reluctant to fly on aircraft if they knew they could be controlled from the ground.

"I feel that it is totally feasible, but there is a question whether it is advisable or acceptable. I do not think customers would easily accept that situation," he says. "I think introducing those systems might add some additional vulnerabilities because if you are giving

orders from the ground then it is possible for someone else from the ground to give orders."

Lureau says secure communications or frequency hopping might mitigate the risks, but concludes: "We don't see it as a solution. Technically it is possible, but when you look at the benefits and issues then the case is not convincing."

Thales is offering its existing on-board camera system to address a Boeing request to industry for ways of monitoring the passenger cabin from the cockpit. It is also supporting a software-based solution to the issue of preventing transponders being switched off by hijackers.

But most of its response to the new emphasis on security comes from its information technology and services (ITS) division which

believes, for example, that in "18 to 24 months" it will have a viable face recognition system to help detect known suspects trying to board aircraft.

Meanwhile, it is promoting its secure documentation solutions, although stressing that better intelligence is crucial to improving safety.

Executive vice president of ITS John Hughes says: "Documentation is the business area of interest for airlines – better verification of who is travelling. And, hopefully, as the intelligence improves then face recognition technology will help match someone's identity to a known terrorist."

"I think it is reasonable to assume that the aviation and regulatory authorities will improve intelligence," he adds.

## COMMUNICATIONS SECURITY GRAHAM WARWICK / WASHINGTON DC

## ARINC unveils secure messaging system for hijacks

Communications provider ARINC has demonstrated a security messaging system based on its ACARS airline datalink.

The Security Messenger is an autonomous ACARS-capable VHF transceiver which can advise of an airborne threat and transmit aircraft situation data.

The low-cost transceiver includes a global positioning system receiver and would be placed in an inaccessible location on the aircraft, with battery back-up power to make it tamper-proof. The device can be activated by wireless "panic buttons" carried by the crew, or by input from a sensor such as a smoke detector.

Once triggered, the Security Messenger would transmit via ACARS an alert message, plus the aircraft's identity, position, speed, course and altitude.

ARINC's ground infrastructure would decode the message and route it to the airline, air traffic control and other authorities,

allowing them to track the aircraft.

The Annapolis, Maryland-based company demonstrated the end-to-end system in flight earlier this month, including the device, panic buttons, and ground-based software enabling users to receive panic messages and observe an aircraft's position. The company is proposing the system as an alternative to secure transponders.

The Security Messenger is based

on a low-cost ACARS transceiver already under development for the general aviation market, and ARINC could deliver units within 90 days of an order – "enough to equip aircraft operating into Washington National", says Rolf Stefani, director business development, aviation air traffic services. The hardware will cost "in the \$10,000 range, versus \$100,000 for a normal ACARS unit", he adds.



ARINC wants to give pilots "panic buttons" to warn the ground of threats