

PARIS AIR SHOW: Streaming flight data back to base 'is possible and affordable'

By **David Learmount**

Since **Air France 447** went missing over the Atlantic on 1 June, the subject of why detailed flight data is not streamed to base in real time has been resurrected.

Calgary, Canada-based AeroMechanical Services (hall 3, F49) says datastreaming is possible and affordable right now. The argument for datastreaming is that, if comprehensive data of the type available from a digital flight data recorder were available in real time, the causes of the loss of an aircraft would be available much sooner. Also the results of failure to recover a recorder, or to retrieve the information from it, would be alleviated.

When the Air France **Airbus A330** went missing with all 228 people on board, one of the unusual aspects of the early statements by the air accident investigator, France's BEA, was that it was able to quote some technical data from the aircraft, sent just before the accident.



© Sipa Press/Rex Features

It had been linked to the airline's engineering base by the aircraft's airborne communicating, reporting and addressing system. But the chief investigator Paul-Louis Arslanian has since made clear that although the ACARS data would prove useful in the investigation when more is known, it did not provide any causes, merely a few symptoms.

AMS, however, supplies what it calls an automated flight information reporting system, and provides a total service to users by receiving the data and instantly passing to the operator data that contains exceedences in any category the customer specifies.

The data, processed by a "smart box" developed by AMS, is transmitted via the Iridium satellite network to a ground station and then via the internet. It is sent in compressed batches every 5min, but it contains all the data since the last batch and can be streamed like information from a flight data recorder. If the system recognised exceedences, real-time streaming is triggered. AMS markets the service under the name of FLYHT.

If the pilots see systems information of any kind that they wish to notify to base, they just push a button and the AFIRS streams the data immediately. It also provides them with a two-way voice link. AMS president Richard Hayden says compressing the data keeps the service affordable, and transmitting it via Iridium means there are no global transmission black holes.