

## INTERIM REPORT PUBLISHED ON 2 JULY 2009

This Interim Report has been written based on the initial evidence gathered in the course of the investigation, without any analysis and - given the continuing absence of wreckage, the flight recorders, radar tracks and direct testimony - without any description of the circumstances of the accident. Some of the points covered may evolve with time. Nothing in the presentation of this interim report or in the points that are raised therein should be interpreted as an indication of the orientation or conclusions of the investigation.

At this stage of the investigation, the following facts have been established:

- the crew possessed the licenses and ratings required to undertake the flight,
- the airplane possessed a valid Certificate of Airworthiness, and had been maintained in accordance with the regulations,
- the airplane had taken off from Rio de Janeiro without any known technical problems, except on one of the three radio handling panels,
- no problems were indicated by the crew to Air France or during contacts with the Brazilian controllers,
- no distress messages were received by the control centres or by other airplanes,
- there were no satellite telephone communications between the airplane and the ground,
- the last radio exchange between the crew and Brazilian ATC occurred at 1 h 35 min 15 s. The airplane arrived at the edge of radar range of the Brazilian control centres,
- at 2 h 01, the crew tried, without success for the third time, to connect to the Dakar ATC ADS-C system,
- up to the last automatic position point, received at 2 h 10 min 35 s, the flight had followed the route indicated in the flight plan,
- the meteorological situation was typical of that encountered in the month of June in the inter-tropical convergence zone,
- there were powerful cumulonimbus clusters on the route of AF447. Some of them could have been the centre of some notable turbulence,
- several airplanes that were flying before and after AF 447, at about the same altitude, altered their routes in order to avoid cloud masses,
- twenty-four automatic maintenance messages were received between 2 h 10 and 2 h 15 via the ACARS system. These

messages show inconsistency between the measured speeds as well as the associated consequences,

- before 2 h 10, no maintenance messages had been received from AF 447, with the exception of two messages relating to the configuration of the toilets,
- the operator's and the manufacturer's procedures mention actions to be undertaken by the crew when they have doubts as to the speed indications,
- the last ACARS message was received towards 2 h 14 min 28 s,
- the flight was not transferred between the Brazilian and Senegalese control centres,
- between 8 h and 8 h 30, the first emergency alert messages were sent by the Madrid and Brest control centres,
- the first bodies and airplane parts were found on 6 June,
- the elements identified came from all areas of the airplane,
- visual examination showed that the airplane was not destroyed in flight ; it appears to have struck the surface of the sea in a straight line with high vertical acceleration.

In accordance with Annex 13 to the Convention on International Civil Aviation, with EC directive 94/56 and with the French Civil Aviation Code, the investigation is not conducted in such a way as to apportion blame or to assess individual or collective responsibility. The sole objective is to draw lessons from this occurrence which may help to prevent future accidents or incidents