

METHOD FOR PREDICTING AN OPERATIONAL MALFUNCTION IN THE EQUIPMENT OF AN AIRCRAFT OR AIRCRAFT FLEET

ABSTRACT

The invention relates to a method for predicting an operational malfunction in the equipment of an aircraft, the parameters of the equipment being monitored and recorded during flights by means of measurements, also known as signals, and the aircraft further comprising an equipment breakdown detection means, said breakdown also being recorded in the memory of the aircraft. During maintenance phases between flights, the measurements and breakdowns are retrieved on a programmable computer in order to form a database, and (a) during a maintenance phase between flights, a data analysis program is executed, at least a first time, in order to determine a set of pairs of parameter pairs of which the signals of the pair develop positively over time in a correlated manner and in the absence of a breakdown, and (b) during a maintenance phase between flights, once the set of pairs of parameters has been determined, a first detection program is executed in order to calculate the correlations for the pairs in the determined set of pairs and, when the calculated correlation value of one pair for a given flight falls below a predetermined positive detection threshold, a first type of malfunction is reported.

FIGURE 5