

Title (en)
METHOD FOR ASSISTING LOW ALTITUDE NAVIGATION OF AN AIRCRAFT

Title (de)
VERFAHREN ZUR UNTERSTÜTZUNG DER NAVIGATION AUF NIEDRIGER HÖHE EINES FLUGZEUGS

Title (fr)
PROCEDE D'AIDE A LA NAVIGATION A BASSE ALTITUDE D'UN AERONEF

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Application
EP 04804792 A 20041213

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Abstract (en)
[origin: US2007150170A1] The invention relates to a method for assisting low-altitude navigation of an aircraft equipped with a system suited to determining a flight-plan ground trajectory based on intermediate points P at an altitude alt(P), and the aircraft's performance. It comprises the following steps: for each point P, calculating a safe altitude, alt safe, to obtain a point P_{safe}, calculating a safe profile formed from segments joining the points P_{safe}, extracting summits S from among the points P_{safe}, determining the aircraft's weight at these points S as a function of the distance between the aircraft and S and of its consumption over this distance, where the consumption is one aspect of its performance, for each point S, determining the maximum climb slope MaxClimbFPA and the maximum descent slope MaxDescFPA as a function of the performance and the weight, defining two performance segments which have slopes MaxClimbFPA and MaxDescFPA on either side of the point S and calculating a performance profile formed from performance segments and which makes it possible to associate at each point P of the safe profile a performance altitude, alt perf (P).

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