

CONFLICT FREE FLIGHT PATH: A DESIGN STUDY FOR AUTOMATION

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Abstract

A number of future air traffic management concepts are being studied to enhance efficiency and flight safety. Conflict Detection and Resolution (CDR) is one such initiative for operation much beyond the capability of the conventional Traffic Collision Avoidance System where the resolutions are generally in terms of changing speed or heading depending upon the situation. The design studies presented in this paper investigate possibility of generating heading change commands and integrating with Autopilot for closed loop operation for conflict resolution as well as for recovering the flight path to the original flight leg. Simulation results for open loop and closed loop operation are presented to validate the approach. Topics requiring further studies are highlighted.