

Characteristic Matrix Faults for Flight Control System

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Abstract : A major issue in air transportation is in flight safety. Recent developments in control engineering have an attractive potential for resolving new issues related to guidance, navigation, and control of flying vehicles. Many future atmospheric missions will require increased on board autonomy including fault diagnosis and the subsequent control and guidance recovery actions. To improve designing system diagnostic, an efficient FDI- fault detection and identification- methodology is necessary to achieve. Contribute to characteristic of different faults in sensor and actuator in the view of mathematics brings a lot of profit in some condition changes in the system. This research finds some profit to reduce a trade-off to achieve between fault detection and performance of the closed loop system and cost and calculated in simulation.

Keywords : fault detection and identification, sensor faults, actuator faults, flight control system

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