



**National
Aeronautical
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Title : RECONFIGURABLE CONTROL LAW

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Keywords : Flight Control, Reconfigurable Control, Multivariable Control, Fault Tolerance, Self Repairing Flight Control Damage Tolerance.

Abstract : A reconfigurable control law for AFTI/F-16 aircraft with failed right half elevator, has been designed for one flight condition using Porter's P1 control technique and responses are simulated including actuator and controller for G-command and pitch pointing maneuvers. The reconfigured control law achieved responses comparable to that of healthy aircraft except for the obvious fact that it requires more control surface deflections which are also within limits.