V1.0 to be modified

Limits on Control Surfaces Deflection

the control surface angles to be received on an Analog Channel from 0-5V on our 10bit ADC

"Control Surface Deflection"	"min"	"max"
δ_e	−30 °	+30 °
δ_r	−30 °	+30 °
δ_a	−30 °	+30 °

Ranges for the output Channels from 0-5V

"OutputChannel"	"min"	"max"
a_x	−5 g	+5 g
a_y	−5 g	+5 g
a_z	−5 g	+5 g
p	−50 ° / s	+50 ° / s
q	−50 ° / s	+50 ° / s
r	−50 ° / s	+50 ° / s
ϕ	−90 °	+90 °
Θ	−90 °	+90 °
ψ	−180 °	+180 °
ΔV_T	−0.25 U_o	+0.25 U_o
α	−30 °	+30 °
β	−30 °	+30 °
Δh	−60 m	+60 m

Note:

1- for $\triangle V_T$, change in speed not anticipated to change ± 25% from the trim speed (Linearization point)

2- for Δh -> resolution of typical sensor ~= 50 cm for 1 bit, so 255 bits ~= +-60m