Position and Attitude Response of Model B.1 Compared to PID $\sigma_{\zeta} = 0.25 [\mathrm{m}] \quad \sigma_{\nu} = \frac{\pi}{5} [\mathrm{rad}]$ 1.00 $1.00 \, \mathrm{I}$ 0.750.75 z_{PID} x_{PID} 0.50 x_{RL} 0.50 7.5 z_{RL} x Position [m] z Position [m] y Position [m] 0.25 0.250.00 0.00 -0.25-0.256.0 -0.50-0.505.5 y_{ref} y_{PID} -0.75-0.755.0 y_{RL} -1.00-1.004.510 20 30 40 50 60 10 20 30 40 50 60 10 20 30 40 50 60 $15 \, {\rm f}$ 15 $heta_{PID}$ ϕ_{PID} 50 ϕ_{RL} θ_{RL} 10 10 40 ϕ Angle [degree] θ Angle [degree] Angle [degree] 30 20 10 -5-10-10 ψ_{PID} -10 ψ_{RL} -20-15-1550 50 30 50 0 10 20 30 40 60 10 20 30 40 60 10 20 40 60 Time [s] Time [s] Time [s]