

Constants	Units	Description
$C_{L_{ht,max}}$	[-]	Max horizontal tail lift coefficient
$C_{L_{w,max}}$	[-]	Max lift coefficient, wing
$C_{m_{ac}}$	[-]	Moment coefficient about aerodynamic centre (wing)
$S.M._{min}$	[-]	Minimum allowed stability margin
V_{ne}	$[\frac{m}{s}]$	Never exceed velocity
Δx_{CG}	[m]	CG travel range
$\alpha_{ht,max}$	[-]	Max angle of attack, htail
η_{ht}	[-]	Tail efficiency
$\lambda_{ht_{min}}$	[-]	Minimum horizontal tail taper ratio
ρ_0	$[\frac{kg}{m^3}]$	Air density (0 ft)
$\tan(\Lambda_{ht})$	[-]	tangent of horizontal tail sweep
g	$[\frac{m}{s^2}]$	Gravitational acceleration