GTM-T2 AircraftParameters

See slso ./libs/AC_params_T2.m

MWS Variable	Value	Name	Units
S	5.9018	Wing Surface Area	ft^2
Cbar	0.9153	Mean Aerodynamic Chord	ft
b	6.8488	Wingspan	ft
mass	49.6/32.17405	Vehicle Mass	Slugs
CG	[-0.25Cbar, 0, 0]	Center of Gravity	ft
CP	[-0.25Cbar, 0, 0]	Aero Reference Point	ft
Ixx	1.327	Inertia X-axis	lbf·ft^2
Iyy	4.254	Inertia Y-axis	lbf·ft^2
Izz	5.454	Inertia Z-axis	lbf·ft^2
Ixz	0.120	Cross Inertia, XZ	lbf·ft^2
RtEng	$[-0.25Cbar, +1.1, 0.275]$	Right Engine Location	ft
LfEng	$[-0.25Cbar, -1.1, 0.275]$	Left Engine Location	ft
symmetric_aero_on	1	Symmetry Corrections	boolean
StatesInp	X_0	Initial Conditions,12x1	*various*
bias	*structure*	Trim Offsets	*various*
Aero	*structure*	Aerodynamic Database	*various*

MWS.Aero: Aerodynamic Tables

See slso ./libs/T2_polynomial_aerodatabase.mat

Variable	Continuous Dimensions	Output Dimensions
C6_bas	$\alpha \times \beta$	$[C_X, C_Y, C_Z, C_l, C_m, C_n]$
dC6_rud	$\alpha \times \beta \times$ rudder	$[C_X, C_Y, C_Z, C_l, C_m, C_n]$
dC6_ail	$\alpha \times \beta \times$ aileron	$[C_X, C_Y, C_Z, C_l, C_m, C_n]$
dC6_spo	$\alpha \times \beta \times$ spoiler	$[C_X, C_Y, C_Z, C_l, C_m, C_n]$
dC3_ele	$\alpha \times \beta \times$ stab $\times$ elevator	$[C_X, C_Z, C_m]$
dC3_flp	$\alpha \times$ flap	$[C_X, C_Z, C_m]$
dC3_lgr	$\alpha \times$ geardown	$[C_X, C_Z, C_m]$
dC3_p	$\alpha \times \hat{p_b}$	$[C_Y, C_l, C_n]$
dC3_q	$\alpha \times \hat{q_b}$	$[C_Y, C_l, C_n]$
dC3_r	$\alpha \times \hat{r_b}$	$[C_Y, C_l, C_n]$
dC6_w	$\alpha \times \hat{\omega} \times \beta$	$[C_X, C_Y, C_Z, C_l, C_m, C_n]$
dC3_sym	$\alpha \times \beta$	$[C_Y, C_l, C_n]$