Symbols (1/2)

P_o	Power input from original energy source
P_{ref}	Sizing reference power

C_D	Coefficient of clean configuration drag
C_{D_o}	Zero lift drag coefficient
C_{DR}	Coefficient of additional drag
D	Basic configuration drag
E	Amount of stored onboard energy
E_{CE}	Amount of consumable onboard energy
E_{NE}	Amount of non-consumable onboard energy
g_o	Gravity constant
h	Altitude
k	Ratio of the time rate of aircraft weight change to the time rate of consumable energy weight change
K_1	Drag polar coefficient for 2nd order term
K_2	Drag polar coefficient for 1st order term
m	Number of total mission segments
n	Load factor
n_T	Number of total power paths
n_{CE}	Number of consumable power paths
n_{NE}	Number of non-consumable power paths
n_{PD}	Number of power devices

q	Dynamic pressure
R	Additional drag to D
s	Travel distance
S	Wing area
S_G	Ground roll
t	Time
T	Thrust
u	Drag to thrust ratio
V	Free stream velocity
V_{stall}	Stall speed
V_{TO}	Take-off speed
W	Instantaneous aircraft weight
W_{CE}	Consumable energy weight
W_{energy}	Total stored energy weight
W_E	Empty weight
W_F	Fuel weight
W_{NE}	Non-consumable energy weight
W_P	Payload weight
W_{PS}	Propulsion system weight
W_{TO}	Take-off gross weight
z_e	Energy height

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Symbols (2/2)

α	Power lapse ratio
β	Weight fraction
Δ	Weight correction factor
ϵ_{CE}	Consumable energy allowance ratio
ϵ_{NE}	Non-consumable energy allowance ratio
η	Component efficiency
η_p	Propulsor efficiency
Γ	Empty weight fraction
$\acute{\Gamma}$	Fraction of empty weight excluding propulsion system weight
μ	Stored product to fuel ratio
ν_{CE}	Specific energy of consumable energy
ν_{NE}	Specific energy of non-consumable energy
ν_{PD}	Specific power of power devices

Ω_{CE}	Consumable energy weight fraction
Ω_{NE}	Non-consumable energy weight fraction
Φ	Power devices weight fraction
Π_η	Overall efficiency of individual power path
ρ	Free-stream air density
τ	Power fraction of individual power path
Υ	Weight-specific mechanical energy of aircraft
Ξ_{CE}	Overall power specific fuel consumption
Superscript	
$\langle i \rangle$	ID number of a power path powered by consumable energy sources
$\langle j \rangle$	ID number of a power path powered by non-consumable energy sources
(s)	Mission segment number

$\Pi_\eta^{+\langle i \rangle}$ **Product of efficiencies from sizing reference point to propulsor**

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