V-speeds



A series of designators used by the FAA and listed in 14 CFR 1 to describe certain flight conditions.

V_A Design maneuvering speed

V_B Design speed for maximum gust intensity

V_C Design cruising speed

V_D Design diving speed

 $V_{DF/MDF}$ Demonstrated flight diving speed

V_F Design flap speed

 $V_{FC/MFC}$ Maximum speed for stability characteristics

V_{FE} Maximum flaps extended speed

 V_H Maximum speed in level flight with maximum continuous power

V_{LE} Maximum landing gear extended speed

V_{LO} Maximum landing gear operating speed

V_{LOF} Lift-off speed

 V_{MC} Minimum control speed with the critical engine inoperative

V_{MO/MMO} Maximum operating limit speed

 V_{MU} Minimum unstick speed

V_{NE} Never-exceed speed

V_{NO} Maximum structural cruising speed

V_R Rotation speed

V_S Stalling speed or minimum steady flight speed at which the aircraft is controllable

V_{SO} Stalling speed or minimum steady flight speed in the landing configuration

 V_{s_1} Stalling speed or minimum steady flight speed obtained in a specific configuration

 V_{TOSS} Take-off safety speed for Category A rotorcraft

V_X Speed for best angle of climb

V_Y Speed for best rate of climb

 V_1 Take-off decision speed (formerly denoted as critical engine failure speed)

V₂ Take-off safety speed

 V_{2min} Minimum take-off safety speed