Cowtown Flying Club

V-speeds

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

NOTE: USE AIRCRAFT POH TO ADD CORRECT SPEEDS TO THIS CHART.....

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_{S1} 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)

V_2 ..... Take-off safety speed

V_{2min} ..... Minimum take-off safety speed