

1.3 WIND FACTORS

Winds are reported by direction and speed. A “steady state” wind is the constant speed and a “gusting” wind has variable speed. A “gust factor” is the difference between the steady state and peak gust. For example, if the wind is reported as 5 knots gusting to 20, the gust factor is 15. When winds are gusting, **the maximum gust will be used to evaluate flight conditions.** A “direct headwind” is reported as any wind blowing directly at the “nose” of the aircraft. As the angle of the wind changes, it becomes a crosswind. When the wind is reported as blowing directly from the side of the aircraft, it becomes a “direct crosswind.” Winds reported as “variable” change direction resulting in a variable crosswind. A crosswind component is the angle between the runway in use and the direction and speed of the wind.

NOTE: All flights, excluding stage 2 Pilot, will use the “maximum demonstrated” crosswind in the aircraft POH/AFM as the maximum allowable crosswind *takeoff* limit.

C152	12 knots
C172R	15 knots
C172RG	15 knots
PA44	17 knots

1.4 SOLO WIND LIMITATIONS

When *official* wind reports are available, they must be used. When reports are not available, pilots must evaluate wind indicators (such as windsocks) and exercise sound judgment. When another runway offers more favorable wind conditions, it must be used if possible.

- 1.4.1 Current and forecast surface winds are not to exceed:
 - 1.4.1.1 20 knots Steady State or Maximum Gusts—For stage 2 of Private Pilot Course.
 - 1.4.1.2 25 knots Steady State or Maximum Gusts – For all other stages and courses.
 - 1.4.1.3 A maximum of 15 knot Gust Factor for all courses (regardless of steady state wind conditions).

- 1.4.2 Solo students for First Solo (Stage 2) of Private Pilot Course shall not take off when crosswind components exceed 50% of the maximum demonstrated crosswind component value stated in the Aircraft Pilot’s Operating Handbook (POH) or Approved Flight Manual (AFM). See 1.3 for **Maximum Demonstrated Crosswind Component for each aircraft.** All other students are restricted to the values stated in the aircraft POH. **When calculating any speeds and angles, pilots must use the strongest reported gust and the maximum reported angle (for variable winds).**

NOTE: In evaluating wind conditions at destination airports (while airborne), pilots must make every effort to minimize crosswinds during landing. If other runways offer more favorable landing conditions, pilots should consider requesting and/or choosing a different runway.

NOTE: *Runway 13/31 will not be used on any solo flight, unless authorization was received from Chief or Assistant Chief Instructor.*