

## Estimating Height and Movement

During the approach, roundout, and touchdown, your head should be in a natural, straight-ahead position. Visual focus should be changing slowly from a point just over the airplane's nose to the desired touchdown zone and back again, while maintaining awareness of distance from either side of the runway with peripheral vision.

Speed blurs objects at close range. Nearby objects seem to merge together in a blur, while objects farther away stand out clearly. When you fly, you should focus your vision at a distance proportionate to the speed at which the airplane is traveling over the ground.

If you attempt to focus on a reference that is too close or look directly down, the reference will become blurred, and your reaction will be either too abrupt or too late. In this case, the tendency will be to over-control, round out high, and make full-stall, drop-in landings.



**Focusing too close blurs vision.**

When you focus too far ahead, accuracy in judging the closeness of the ground is lost and the consequent reaction will be too slow since there will not appear to be a need for action. In this instance, the airplane will fly into the ground nose first.

Your focus should change gradually, becoming progressively closer as speed is reduced