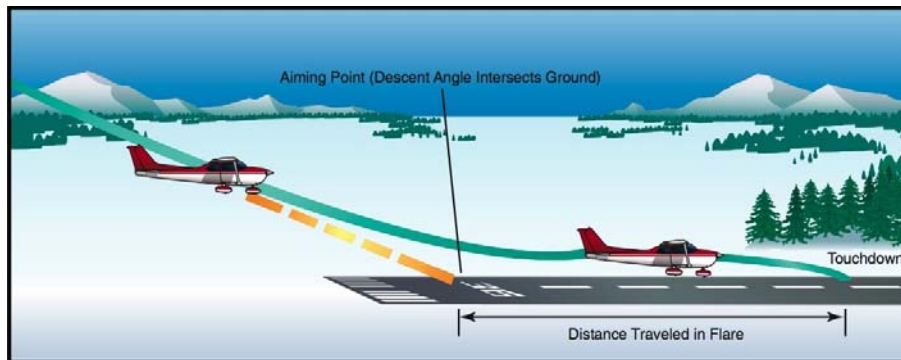


Stabilized Approach Concept

A stabilized approach is one in which the pilot establishes and maintains a constant angle glide-path towards a predetermined point on the landing runway.

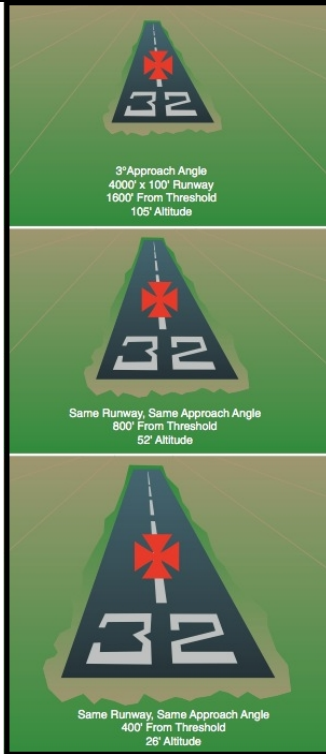
An airplane descending on final approach at a constant rate and airspeed travel in a straight line toward a spot on the ground ahead. This spot – called the “aiming point” -- will not be the spot on which the airplane will touch down, because some float will inevitably occur during the roundout (flare). The aiming point is the point at which the airplane would strike the ground if it maintains a constant glidepath without being flared for landing. Since an object or point appears to be stationary when you are moving straight toward it, the aiming point will appear to be stationary.



Aiming point and touchdown point.

One of the most important skills you must acquire is how to use visual cues to accurately determine the true aiming point from any distance on final approach.

The shape of the runway offers clues on maintaining a stabilized approach. A runway is an elongated rectangle. Viewed from the air during approach, the runway shape appears to be a trapezoid, with the far end looking more narrow than the approach end. If the airplane continues down the glidepath at a constant angle (stabilized), the image you see will still be trapezoidal, but of proportionately larger dimensions. In other words, during a stabilized approach the runway shape does not change.



Runway shape during stabilized approach.



Change in runway shape if approach becomes narrow or steep.

If the approach becomes more shallow, the runway will appear to shorten and become wider. Conversely, if the approach is steepened, the runway will appear to become longer and narrower.

The objective of a stabilized approach is to select an appropriate touchdown point on the runway, and adjust the glidepath so that the true aiming point and the desired touchdown point basically coincide.