

# Do We Really Need An Airplane To Train?

Many probably assume skills like stalls, slow flight, steep turns and other standard maneuvers must be taught in an actual airplane. Not according to John King, co-founder with Martha King of King Schools, with whom I spoke while preparing this article. He maintains the current state of flight training devices has advanced to the point where typical training maneuvers like stalls can initially be taught in devices other than an airplane. He also believes exposure to stalls and other maneuvers in an appropriate flight training device will give the student more confidence, correlate the training to known safety issues so as to avoid risks—for example, avoiding a steep turn on base to final approach—and reduce the time required in the airplane to master the maneuver.

John acknowledged that most flight training devices have not advanced to the point where they can replace the airplane for maneuvers like landings, but he still asserts they can do the job for some aspects of traffic pattern work, such as compensating for crosswinds. The technology of flight training devices is rapidly changing, however, and they may soon be able to do a more complete job of introducing students to typical flight maneuvers in the practical test standards.

Other than a few flight maneuvers beyond the current state of simulation technology, what other critical skills could be taught on the ground through online or other knowledge training media, partial task trainers, and flight training devices? I posed this question to John King and he was blunt: Virtually all the skills pilots need to avoid fatal accidents are best introduced in other than an airplane. He went on to say that the total hours a student accumulates in an actual airplane are almost irrelevant to a student's future safety success. What matters most, he stated, is the student's mastery of such higher-order pilot skills as risk management.

It should come as no surprise that my own thoughts on this



*Increased, more-focused use of flight simulator technologies like that employed in the Redbird full-motion devices pictured above holds promise both to shorten the time required to turn out fresh private pilots and improve the quality of their training.*

subject parallel John's and those of many others in the flight training community. Skills such as risk management need to be the bedrock of flight training and should be introduced on day one of a student's flight-training experience. John agreed these skills need to move progressively from mastery of the knowledge requirements using online or other media, to practice of concepts and full scenarios in a flight training device, to final application in the actual airplane. In a sense, the airplane phase is merely the "graduation" element in the mastery and application of key safety skills.

While it could be controversial among some in the training community, John King also advocates introducing students to the consequence of poor risk management during training. This can be done in the safe environment of the flight training device rather than an airplane. For example, the consequences of continued visual flight rules (VFR) into instrument meteorological conditions (IMC) can be easily simulated in many flight training devices. So can a skidded turn on to final approach with a cross-control stall as the final event in that fatal-accident scenario.