

## Learning Center Library Contents

	How to Avoid a Mid Air Collision - P-8740-51 <b>Author:</b> Federal Aviation Administration <b>Date:</b> Unknown
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## ***Introduction***

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By definition and function, the human eye is one of the most important and complex systems in the world. Basically, its job is to accept images from the outside world and transmit them to the brain for recognition and storage. In other words, the organ of vision is our prime means of identifying and relating to what is going on around us.

It has been estimated that 80 percent of our total information intake is through the eyes. In the air, we depend on our eyes to provide most of the basic input necessary for performing during a flight: attitude, speed, direction, and proximity to things (like the ground), and opposing air traffic that may constitute a danger of in-flight collision. As air traffic density and aircraft closing speeds increase, the problems of in-flight collision grows proportionately, and so does the importance of the "eyeball system." A basic understanding of the eyes' limitation in target detection is probably the best insurance a pilot can have against running into another airplane - something that can spoil your whole day.

## ***Profile of Midair Collisions***

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Studies of midair collisions reveal certain definite warning patterns. It may be surprising to learn that nearly all midair collisions occur during daylight hours and in VFR conditions. Perhaps not so surprising is that the majority happen within five miles of an airport, in the areas of greatest traffic concentration, and usually on warm weekend afternoons when more pilots are doing more flying.

### **Not What You Might Expect**

Also surprising, perhaps, is the fact that the closing speed (rate at which two aircraft come together) is relatively slow, usually much slower than the airspeed of either aircraft. In fact, the majority of in-flight collisions are the result of a faster aircraft overtaking and hitting a slower plane.