

PARTNER'S PERSPECTIVE

» *A View from the Right Seat*



Clear Skies Ahead: How Passengers Can Assist in Spotting Traffic

by Laurie Einstein Koszuta



LAURIE EINSTEIN KOSZUTA has been a freelance writer for many years and along with her husband, John, now owns a Cirrus SR22. With John as the pilot-in-command and Laurie as the partner, they regularly travel to see family, visit friends and enjoy our beautiful country. You can read more of Laurie's work on her website: www.laurieeinsteinkoszuta.com.

We were about 5 miles from landing at Perot Field, Fort Worth Alliance Airport (KAFW), when my husband, John, tapped me on the shoulder to awaken me. I sat upright in my seat, stretched slightly, and glanced out the right window. At that exact moment, I spotted a large jet at the same altitude, which appeared to be turning in our direction. Instantly wide awake, I alerted John to what I was seeing. He calmly reassured me that that aircraft was lining up for its final approach to a parallel runway.

From my vantage point, though, I couldn't see the airport or the other runway, so watching the jet turn and descend was initially unnerving. In reality, the distance between our plane and that jet was safe, and we had nothing to worry about. However, just like being versed in the operation of the Cirrus Airframe Parachute System (CAPS), I felt like there was a lot to know and understand about traffic separation and spotting aircraft for passengers.



Understanding IFR vs. VFR and Its Impact on Traffic Awareness

Pilots flying under instrument flight rules (IFR) routinely receive traffic advisories from air traffic controllers who monitor nearby aircraft and provide alerts. They generally call out all traffic within a certain distance radius as they are responsible for aircraft separation. Pilots will search for traffic and, when they see it, notify air traffic control (ATC) that the traffic is in sight. However, the controllers may point out traffic the pilot and passengers cannot locate. Regardless, ATC will continue to monitor separation and usually lets the pilot know that the traffic is “no factor,” meaning that there is no potential conflict between the planes any longer.

Under visual flight rules (VFR), pilots are responsible for their own traffic separation. ATC does not provide traffic monitoring unless the pilot requests flight following, and even then, assistance depends on controller availability and workload.

“IFR flights provide an added layer of support because the controllers notify pilots of conflicting traffic,” Turrisi said. “However, as you approach a non-towered airport under IFR, that guidance ends and you’re on your own to spot VFR aircraft landing on the same runway. I teach pilots that within 3 to 5 miles of the airport, they must be looking outside the airplane 90 percent of the time instead of buried inside the cockpit. That is how you avoid collisions and where passenger assistance can be particularly valuable.”

Passenger Awareness Matters

Situational awareness doesn’t start in the sky; it begins on the ground even before taxiing. Situational awareness simply refers to knowing your present position and what possible dangers are around you. In aviation, situational awareness is something that pilots must constantly be cognizant of to avoid potential hazards that could impact their plane on the ground and in the air.

Hazards on the ground include the movement of other aircraft, maintenance crews, fuel trucks and ground personnel anywhere near the plane. On the ground, the pilot should avoid programming the avionics and focus on aircraft control to avoid hitting other planes while taxiing. Passengers can be a big help in looking left and right to make sure that the tips of the wings are clear from other stationary planes.

Once airborne, the pilot is responsible for maintaining awareness of the aircraft’s position, terrain, weather, surrounding traffic and many other critical factors. Partners and passengers can greatly assist pilots if willing and if they can communicate effectively. Encouraging passengers to stay engaged during flight can make them feel less anxious and more comfortable as active participants.

“Watching for traffic helps lessen the pilot’s workload,” explained Brian Turrisi, a Platinum CSIP and owner of Turrisi Flight Training in Hilton Head, South Carolina. “Two sets of eyes are better than one. Even if a passenger isn’t a pilot, their observations outside the window can enhance safety.”

Understanding Blind Spots

Spotting aircraft while airborne can be challenging because, like cars, aircraft also have blind spots. Turrisi notes that various factors can cause these blind spots, including windshield posts and sun visors within the cockpit. External elements outside the window, such as clouds, haze, sun glare and poor lighting conditions, can make even large aircraft challenging to see.

"The Cirrus has large forward and side windows that enhance visibility," Turrisi explained. "Passengers have unique sightlines that can complement a pilot's view. For example, a right-seat passenger has a much better view of the right side than a pilot seated on the left."

Turrisi further explained that the biggest blind spot is directly below. Other aircraft at a similar altitude or climbing from below may remain unseen until they move into a clearer line of sight.

How To Scan for Traffic

Turrisi advises that scanning the entire sky to spot traffic isn't necessary, but it does require more than a glance out the window. Avionics displays that identify the general location of nearby aircraft are something that Cirrus pilots regularly use.

"The traffic may not be exactly where the screen indicates, but it significantly narrows the search," Turrisi said. "Focus only on traffic within a reasonable range and proximity. Aircraft 5 or more miles away aren't a concern unless they're heading directly toward you."

He added: "I often hear people say they never realized how bad their eyesight is because they're missing half the traffic. But when they show me what they're missing, it's miles away and was never a threat. Pilots primarily focus on traffic within 500 feet above or below their altitude and within 90 degrees to either side. This helps narrow the search area and makes spotting potential conflicts more manageable."

How To Spot Aircraft Effectively

Not everyone may be familiar with how to read an analog clock in our digital age. Digital displays, rather than the hands of a traditional clock, have been the norm for many young pilots and passengers. Since aviation relies on the clock face method for situational awareness, understanding how to use it is essential.

Traditional clocks feature a face with numbers from one to 12. In aviation, the clock system uses references relative to the nose of the aircraft. For example, 12 o'clock indicates a position directly in front of the plane, 3 o'clock is to the right, 6 o'clock is directly behind and 9 o'clock is to the left.

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Turrisi advises using a structured approach to improve visibility is best. Instead of staring at one spot or making broad, sweeping glances, try dividing the sky into sections. Focus on one small section at a time, allowing your eyes to adjust to each area. Pause for about three seconds, then shift your focus five to 10 degrees and repeat. Fixating on one spot can reduce the ability to detect movement, so it is best to methodically move your eyes to distinguish aircraft at different altitudes. Also, scanning for moving shadows, contrails or flashing lights is another trick to help spot other aircraft.

1. **Visualize the Clock Face:** Familiarize yourself with how numbers are arranged on a clock. If needed, draw a clock face and the corresponding numbers on an index card and keep it in the seat pocket for quick reference when spotting traffic.
2. **Verbalize What You See:** When calling out traffic to the pilot, be brief, clear and concise. Use the clock face method and altitude relative to your position. For example, saying, "Traffic at 2 o'clock and slightly above," means a plane is positioned slightly above your altitude and to the right.
3. **Communicate With the Pilot:** A gentle tap on the arm is an easy way to alert the pilot without disrupting their focus. Once acknowledged, calmly point out the position of what is observed.
4. **Call Out Relative Altitude:** Estimate whether the traffic is at the same altitude, above or below your position, especially in mountainous terrain where visibility might be obstructed. If an aircraft is climbing or descending, share that information. For example, saying, "Traffic 10 o'clock, level, moving right to left."
5. **Minimize Distractions:** Passengers should also minimize distractions, such as phone use, to stay focused when spotting traffic.
6. **Wear the Right Sunglasses:** Sunglasses with good contrast enhance visibility, especially in bright conditions, which can be very helpful.