



CREDIT: MEGAN VANDE VOORT



**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](http://www.laurieeinsteinkoszuta.com).

# Putting It into Words

by Laurie Einstein Koszuta

*NOTAMs and ATIS and squawks, oh my  
And UNICOMs and avgas just make me sigh  
So many terms I hear quite a bit  
From the right seat where I usually sit  
So when the Cirrus is up in the sky  
It seems like complex words help make it fly.*

**Aviation jargon – there is so much of it.** As a partner, I hear it at home, at the FBO, during flight and on the ramp. Every hobby, endeavor, industry and profession rely on specialized words and acronyms to simplify and streamline communications. However, for partners and passengers who are not pilots, the terms we hear can sound like the sing-song poem or even something that Captain Kirk and Mr. Spock might utter on the Starship Enterprise. It can be both confusing and even worrisome for the uninitiated.

Aviation is complex and needs shorthand to avoid pilot misunderstandings, increase safety and facilitate precise ground and flight communications.

Austin Payne, a Cirrus Standardized Instructor Pilot (CSIP) and partner of AirNoss Flight Training in Guthrie, Oklahoma, agrees. “Pilots often need to convey a lot of information in a

condensed form quickly. The terminology that we use can seem like a mouthful at times. Because aviation utilizes many advanced systems, it becomes essential for pilots to use acronyms to communicate. The words we speak are just as critical to flying as mastering the controls of an aircraft.”

He continued, “We define those acronyms and terms in ground school and then use them once we get in the airplane. And we emphasize to our students that understanding those terms is critical when communicating with a co-pilot or crew member. The same is true with air traffic control (ATC). Pilots must be able to rapidly convey information to ATC and keep the acronyms and ambiguity to a minimum.”

The first step to learning the language of flight is to take a few minutes to understand its meaning.

Aviation Terms That You Might Hear or Encounter:

**AGL:** An acronym meaning Above Ground Level. The AGL describes the height above the ground at which the aircraft is flying.

**Avionics:** Avionics combines the words “aviation” and “electronics” and refers to installed components that control and monitor flight, engine performance, weather radar and radio communication equipment.

**Altimeter:** A cockpit instrument that measures the aircraft’s altitude based on the current air pressure.

**ATIS (Automatic Terminal Information Service):** A continuous, recorded audio broadcast that provides essential information such as weather, active runways, state of the runways and any other information that pilots may need to ensure a safe landing.

**Avgas:** An acronym for aviation gasoline. Avgas is a type of aviation fuel specifically manufactured for piston-engine aircraft. The most common avgas is 100 octane, low lead (100LL), and can be identified by its tinted light blue color, which is clearly labeled as such on the fuel trucks.

**Barometric Pressure:** A determinant of air density that impacts lift and engine performance. Pilots use pressure readings to calculate altitude and set altimeters for accurate navigation. Changes in pressure also influence weather patterns, turbulence and aircraft handling.

**Bearing:** When observing an aircraft, the location can be stated to the nearest clock numeral. Pilots commonly use this method to indicate the direction of their view (relative bearing): 12 o’clock signifies directly ahead; 3 o’clock indicates 90 degrees to the right, 6 o’clock means directly behind and 9 o’clock means directly to the left.

**Ceiling:** The height of the bottom of the cloud deck, as measured above ground level.

**Cirrus Airframe Parachute System (CAPS):** A whole-plane ballistic parachute recovery system specifically designed and installed on all Cirrus aircraft as a safety system for pilots and passengers.

**Emergency Locator Transmitter (ELT):** A device that broadcasts distinctive signals on designated frequencies and depending on the application, may be manually or automatically activated on impact.

*“Aviation is complex and needs shorthand to avoid pilot misunderstandings, increase safety and facilitate precise ground and flight communications.”*

**Ident:** A feature incorporated in a transponder that allows ATC to easily identify the plane’s signal return and location on a radarscope.

**Fixed-base Operator (FBO):** Located at an airport and analogous to a gas station on the road. In addition to providing fuel services, FBOs offer waiting areas, pilot facilities, hangars, parking and occasionally offices.

**Flight Deck:** Another name for the cockpit located at the front of the aircraft and where the pilot controls and instrument panel are located.

**Flight plan:** Detailed trip information, including flight duration, route and destination. The flight plan is filed with the Federal Aviation Administration (FAA) and referenced by ATC to work with the pilot to ensure safe navigation.

**Mean Sea Level (MSL):** A reference point for measuring altitude that represents the true average height above the surface of the sea.

**Multi-function display (MFD):** A glass cockpit display that manages and shows graphics for navigation routes, moving maps, weather radar and other flight operations on a single screen.

**Notice to Airmen or Notice to Air Mission (NOTAMs):** A notice readily available on pilot applications that provides the most current and essential information regarding aeronautical facilities, services, procedures, and hazards to pilots and others concerning flight or airport operations.

**Pitot tube:** A tube named after Henri Pitot, a French hydraulic engineer that is used to determine the airspeed of an aircraft. Pitot tubes are generally mounted on the edge of the wings or the fuselage.

**Rotating beacon:** A set of rotating lights installed near an airport to assist pilots in locating the airport at night. For civil airports, the lights alternate between green and white.

**Runway End Identifier Lights (REIL):** Two synchronized flashing lights located on each side of the runway thresholds that provide rapid identification of the approach end of a specific runway.

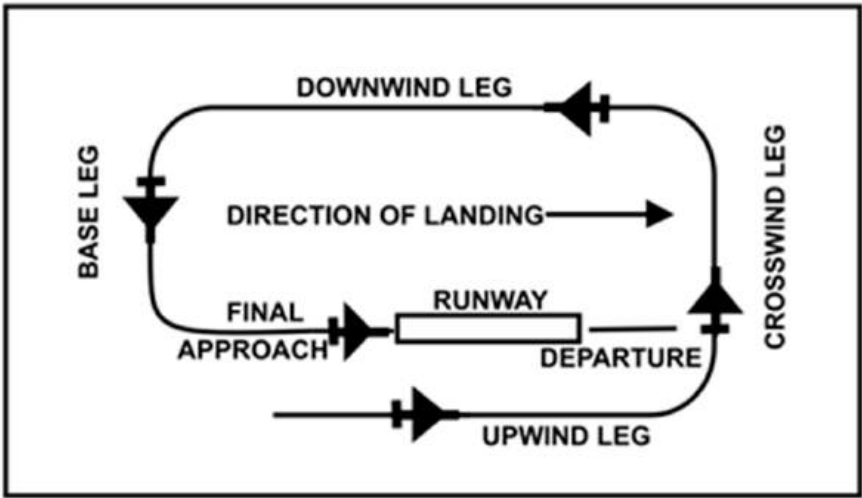
**Squawk:** A unique four-digit code (from 0000 to 7777) assigned to an aircraft by air traffic control during flight. Pilots set their transponder to the specific assigned code so that their aircraft can communicate with the ATC radar system on the ground. Different squawk codes have reserved meanings, such as 7700 for mayday (emergency) and 7600 for radio problems and an inability to communicate.

**Transponder:** An avionics device that creates a unique, coded pattern that only air traffic control radar systems can detect.

**UNICOM (Universal Communications):** A privately owned radio communications system typically used in small airports for air-to-ground communication. Advisory services and information can be arranged and exchanged on these channels but are not used for air traffic control.

**Very High-Frequency (VHF) Omni-Directional Range (VOR):** A short-range radio navigation system pilots use for navigation. Radio beacons emit very high-frequency radio waves received by aircraft within a range of approximately 200 miles.

*“As a partner and non-pilot ... having some knowledge of the jargon I hear offers me peace of mind ...”*



⏏ Traffic Pattern Illustration (SOURCE: FAA AIM, COMPONENTS OF A TRAFFIC PATTERN, FIG. 4-3-1)

Names of Flight Paths or Legs Used When Landing

**Upwind leg:** A flight path heading into the wind parallel to the runway and in the same direction as landing traffic.

**Crosswind:** A flight path at a 90-degree angle to the departure end of the runway and “crosses” the wind.

**Downwind leg:** A flight path parallel and directly opposite the direction of the landing runway heading in the direction of the wind.

**Base leg:** A short flight path at a 90-degree angle to the approaching end of the runway and part of the landing approach.

**Final Approach:** A descending flight path in the direction of landing and where the plane makes the final adjustments to land.

As a partner and non-pilot, I know I am not responsible for using or understanding aviation terminology. No one is giving me a quiz to see how much I know. However, having some knowledge of the jargon I hear offers me peace of mind and comfort in following conversations in the FBO, on the ramp and during flights without feeling like an outsider. I also believe it helps the pilot feel more comfortable, knowing that the right seater and any passengers can understand some of what is happening. ☺