SUSAN PARSON

# Editor's Runway

## L-phabet Soup

Most of my friends and FAA colleagues know me as a flying fanatic, and I freely plead guilty to that charge. In addition to being a lot of fun, flying always challenges me to work harder, do better, and learn more in order to be prepared for whatever surprises the sky has in store.

A recent single-engine, single-pilot flight I made in Instrument Meteorological Conditions (IMC) highlighted the importance of keeping current in terms of both skill (proficiency) and knowledge—a point also made in several articles in this issue of *FAA Aviation News*. I regularly practice Instrument Flight Rules (IFR) procedures, but for many reasons, I try to avoid single-pilot IFR, especially in planes that lack an autopilot to help with basic aircraft control chores. In this case, however, a careful risk analysis convinced me that the weather hazards were well within the capabilities of my airplane and the comfort zone (personal minimums) of its pilot.

### Aircraft Control

Since almost all of the 1.2-hour flight took place in IMC, the importance of proficiency in aircraft control, especially basic attitude instrument flying, was obvious. It really became clear when an unexpected traffic conflict led to the controller's unusually urgent instruction for a "HARD left turn NOW." Without having to think about it, I rolled into a coordinated level left turn to the newly-assigned heading. I was very grateful right then for all the practice, as well as for flight instructors who pushed for precision rather than letting me stop at "good enough to pass" Practical Test Standards (PTS) muster.

### The Knowledge Component

This flight also underscored the vital importance of current knowledge, especially in this era of rapidly changing technology. When I got my instrument rating in 1994 (not *that* long ago), the menu of minimums was derived from a panoply of pretty standard procedures: ILS (Instrument Landing System), LOC (localizer), VOR (Very High Frequency Omnidirectional Range), and NDB (Non-Directional Beacon). The traditional alphabet soup has now morphed into what I call "L-phabet" soup, cooked up from GPS (Global Positioning Satellite) technology that is increasingly seasoned by the WAAS (Wide Area Augmentation System).

When I leafed through the available instrument approach procedures for my departure and destination airports, I found choices ranging from an ILS approach with LOC minimums, a RNAV (Area Navigation) (GPS) stand-alone approach with LNAV (Lateral Navigation) and circling minimums, and an RNAV (GPS) approach that offered LPV (Localizer Performance with Vertical Guidance), LNAV/VNAV (Vertical Navigation), LNAV, and circling minimums. When I loaded the assigned RNAV(GPS) approach into my airplane's moving map GPS/WAAS navigator, I saw that it included the notation "LNAV + V"—not something listed on the instrument approach chart, and emphatically not the same as the "LNAV/VNAV" minimums offered on some RNAV(GPS) charts.

In fact, LNAV + V is just one manufacturer's way of coding an RNAV(GPS) approach that includes a WAAS-derived *advisory* glide path. Alone in the meteorological soup, I was grateful that study and practice have provided enough servings of GPS/WAAS L-phabet soup to teach me the difference between a "real" glide path and advisory vertical guidance. If you haven't yet had the opportunity to try L-phabet soup, fear not: Future feature articles in the *FAA Aviation News* will give you a chance to sample the various flavors.

In the meantime, you can learn more from reading Chapter 5 of the FAA's *Instrument Procedures Handbook* (FAA-H-8261-1A), available online at www.faa.gov/library/manuals/aviation/instrument_procedures_handbook/. Another valuable resource is www.gps.faa.gov/.

Until next time, safe flights and happy landings!

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