

Checklist



Getting Around on the Ground

It had been a near perfect autumn night flight from my non-towered home airport to a larger, towered airport 150 nautical miles (NM) to the southwest. The new Wide Area Augmentation System (WAAS) enabled Garmin GNS 430 offered precise guidance, including an advisory glideslope that smoothly guided me down the final approach course. The tower frequency was quiet, with only a couple of aircraft sharing the skies. I was even happy with the landing. But the perfect flight wasn't over

yet, and its perfection was about to be marred by a minor misunderstanding about getting around on the ground.

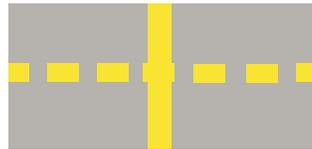
I had already advised the tower of my intent to land, pick up an Instrument Flight Rules (IFR) clearance, and head straight back home. With that in mind, I expected instructions to exit the runway, taxi back via the parallel taxiway, and advise when ready to copy



my clearance. After all, that's how it worked on my last trip to this airport. As the aircraft decelerated on the runway, the tower controller instructed me to take the next exit on the left and hold short of Golf (designation for the taxiway parallel to the landing runway). No sweat, or so I thought. As I have been taught, I "dashed across" the dashed lines on the runway holding position marking and turned to confirm that the entire aircraft was clear of the two solid lines, i.e., to verify that I was, in fact, completely clear of the runway. Before I could turn my head back to establish my position relative to taxiway Golf, the controller's raspy voice issued a rebuke: "Well, so much for hold-

ing short of Golf; now, you're on my taxiway. Turn left, taxi back via Golf, and stay with me."

My passenger—also a pilot—and I exchanged puzzled glances and shrugs: Where did we go wrong? There was no intermediate holding position marking on the short "stub" taxiway leading off the runway and, in the dark, it wasn't easy to see exactly where we were relative to taxiway Golf. The only



certain thing was that we were completely clear of the solid double lines of the runway holding position marking,

which we both believed was the correct and, indeed, the "obvious" thing to have done.

The story ended uneventfully: We taxied back, picked up our clearance, and headed for home. During the quiet return flight, we indulged in some admittedly self-righteous fulminating about how that grumpy controller didn't give us credit for clearing the runway, and (in our view) gave us hold-short instructions that we could not possibly obey without being legally still on the runway.

I was absolutely sure I was right to have fully crossed the runway holding position marking, but this blemish on my otherwise "perfect" flight bothered me enough to spur a search of the *Aeronautical Information Manual* (AIM) for information to confirm the righteousness of my position.

Oops.

Maybe my position wasn't so righteous after all. Here are the key elements of the guidance I found in AIM 4-3-20, which covers "Exiting the Runway after Landing:"

b. Taxi clear of the runway, *unless otherwise directed by ATC [emphasis added]*. An aircraft is considered clear of the runway when all

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parts of the aircraft are past the runway edge and there are no restrictions to its continued movement beyond the runway holding position markings. *In the absence of ATC instructions, the pilot is expected to taxi clear of the landing runway by taxiing beyond the runway holding position markings associated with the landing runway, even if that*

requires the aircraft to protrude into or cross another taxiway or ramp area. [emphasis added]. Once all parts of the aircraft have crossed the

runway holding position markings, the pilot must hold unless further instructions have been issued by ATC.

Even more sobering were the AIM notes associated with this section, which read as follows:

1. *The tower will issue the pilot instructions which will permit the aircraft to enter another taxiway, runway, or ramp area when required.*
2. *Guidance contained in subparagraphs a and b above is considered an integral part of the landing clearance and satisfies the requirement of 14 CFR section 91.129.*

What Else Am I Missing?

I was lucky, as this incident was a “no harm, no foul” situation that wounded nothing more than my pride. I was also lucky in that it provided the motivation for a much-needed and long overdue review of the many runway safety resources available to pilots nowadays. Most are as close as a click on the right URL. Let’s take a look.

FAA Office of Runway Safety One way to get the most from your hard-earned tax dollars is to take advantage of the many resources available on this part of the FAA’s Web site www.faa.gov/runwaysafety/ (see Figure 1). An interesting place to start is the link on the lower right, called “Situational Awareness Through Airfield Signs & Air Traffic Control



Figure 1: This Runway Safety Web site provides information, exercises, and links about runway safety issues.

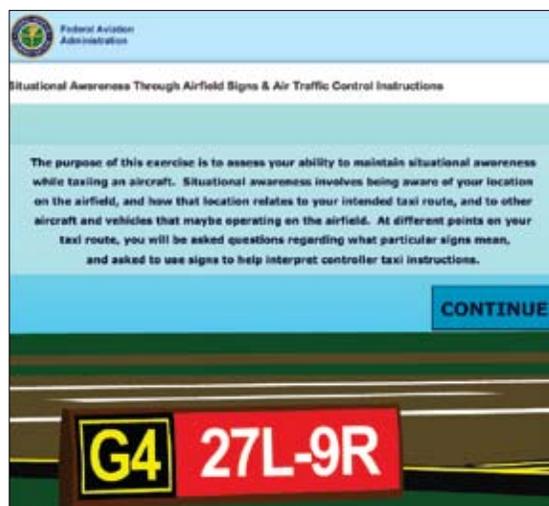


Figure 2: This is the continuation screen you will see after you download and start the exercise “Situational Awareness Through Airfield Signs & Air Traffic Control Instructions.” You can link to the exercise by clicking on the lower right icon of the Runway Safety page.

Instructions” (see Figure 2). This interactive exercise lets you test your ability to maintain situational awareness of your location on the field, how that location relates to your intended taxi route, and to other aircraft and vehicles operating on the field with you. You have the option to download a taxi diagram, and at different points on your taxi route, the program asks you questions about airport signage and interpreting ATC instructions. This exercise provides a fun way to review, as well as a safe way of finding where the gaps in your knowledge might be.

Clicking on the site’s “Test Your Knowledge” link, www.faa.gov/runwaysafety/knowledge.cfm,

Figure 3: This pilot's guide to safe surface operations should be in every pilot's flight bag. If you are planning on flying to an unfamiliar airport or to one more complex than your home airport, it can help prepare you for the flight.



brings up another set of interactive runway safety exercises. The "Airport Taxiway Marking Review" allows you to assess your understanding of some of the airfield markings you are likely to encounter while taxiing. The "Taxi Instruction Self-Assessment" exercise allows pilots to assess their understanding of "taxi to" instructions from air traffic control. There are also "Situational Awareness" sce-

narios, complete with explanations and hyperlinks to a number of documents and resources.

If it's text you're looking for, the FAA's Office of Runway Safety Web site offers that in abundance, too. There are links to a number of runway and ground safety publications. These include advisory circulars related to runway safety, a pilot's quick reference guide to airport signs and markings, links to relevant sections in the AIM, and even a downloadable video on airport signs, markings, and procedures.

This Web site is also a great source of new information, such as guidance on taxi-into-position-and-hold (TIPH) procedures, as well as a notice amending the required phraseology for issuing aircraft departure instructions. Did you know, for example, that controllers are now required to state the runway number first, followed by the takeoff clearance? Or, that if takeoff clearance is issued before the aircraft crosses all intervening runways, the number of the runway(s) to be crossed will be stated along with the takeoff clearance? Do you know about the FAA's Runway Incursion Information Evaluation Program (RIIEP)? Through RIIEP, the FAA seeks information on runway incursions by interviewing pilots involved in such events. Pilots who

cooperate are generally not subject to enforcement action. The goal, of course, is to use this information to help identify causal factors in runway incursions and develop better ways to avoid them. Finally, coming soon to this Web site is an updated version of the FAA's informational pamphlet called "Runway Safety: A Pilot's Guide to Safe Surface Operations" (see Figure 3).

FAASTeam The FAA Safety Team's Web site, www.faasafety.gov, has additional resources, including presentations and information on runway safety seminars, available to all pilots. The site's search function will help you locate events and documents based on keywords, and you'll want to check back often. New material is being added to the site all the time.

AOPA Air Safety Foundation One of the links on the FAA Office of Runway Safety Web site goes to an interactive runway safety course, developed jointly by the FAA Office of Runway Safety, the Aircraft Owners and Pilots Association (AOPA), Air Safety Foundation (ASF), and the Air Line Pilots Association (ALPA). The ASF site offers a number of other runway safety tools and resources as well. For example, check out the Runway Safety Flash Cards, which you can download from www.aopa.org/asf/publications/flashcards/index.html. The ASF's other ground safety-related publications include "Operations at Non-towered Airports," www.aopa.org/asf/publications/sa08.pdf, and "Operations at Towered Airports," www.aopa.org/asf/publications/sa07.pdf.

These are only a few of the many excellent resources at your fingertips. Check it out, and don't let problems getting around on the ground mar your otherwise "perfect" flights!

Susan Parson is a Special Assistant in Flight Standards Service's General Aviation and Commercial Division. She is also an Airline Transport Pilot, a Certificated Flight Instructor (CFI, CFI-I, MEI), and holds Master Flight Instructor and Master Ground Instructor designations from the National Association of Flight Instructors (NAFI).