Grass Field Training

by Larry Bothe, MCFI, 11/12/2005

As an FAA Designated Pilot Examiner based at a small airport in southern Indiana, I do mostly Private Pilot checkrides. The one thing that nearly all Private applicants have in common is that a vast majority have never landed on a grass runway. While not a requirement for the Private Pilot certificate, I think this lack of grass field experience is a significant gap in basic pilot skill and knowledge.

FAA airport statistics gleaned from the AOPA website indicate that in the US there are just over 5000 public use "landing facilities", and over 14,000 private ones. The public landing facilities are nearly all hard-surface runways, whereas many of the private ones are "unimproved" (unpaved/grass) fields (and some water landing areas). What that means is that in this country unimproved fields outnumber paved runways by nearly 3 to 1. It seems to me that most pilots are, sooner or later, going to encounter a grass field. So far this year I have been invited to 3 cookouts at grass fields, and I also flew off the grass at the EAA Pioneer Airport in Oshkosh. The point is that there are a lot of grass fields and opportunities to land on them. My feeling is that all pilots should have at least some basic training on grass landings, hopefully with real obstacles.

The way the FAA currently addresses this is to require that Private applicants be able to demonstrate short field and soft field takeoffs and landings. However, demonstrating the proper technique on 5000 feet of pavement and a simulated obstacle is a far cry from 2800 feet usable with trees on one end. When I teach people to fly, I do the short field and soft field training at just such a grass runway. It's long enough that there is room for a bit of error, but short enough that you have to make an effort to get it right. I never start out with a really short runway because I want the student to succeed. Failure doesn't foster learning.

The reason I most often hear for not having any unimproved (grass) field experience is that the flight school or FBO does not have insurance for operations off anything but paved runways. I discussed this with Mike Collins, the editor of *Flight Training* magazine. He says the insurance thing is pretty much what he hears from around the country. In some areas though, the FBO's/flight schools allow unpaved/grass field landings with an instructor aboard. This makes some sense, as the student can at least get the training and experience even if they can't go back solo until they buy their own plane. But in my area grass field landings are banned, period.

One fairly substantial flight school has a professional pilot program in conjunction with a local university. Their curriculum requires that all graduates have a tailwheel endorsement. To that end they have a Texas Taildragger in which to do the instruction. Guess what? They fly the entire transition course off pavement. How ridiculous is that?

In my experience, landing and taking off from grass is not inherently more difficult, or more dangerous, that using a paved surface. I suppose the short length of some grass runways could cause a problem on a hot day, but all pilots are taught to know the effect of high density altitude on performance. A little common sense, along with appropriate training and performance calculations, makes grass field operations no more difficult than hard surface. In my view all Private Pilot applicants (and now Sport Pilot too) should be required to have logged 3 takeoffs and landings to a full stop on a grass surface. This would be just like the 3 control tower landings requirement, except it would be dual instead of solo.

So, I would encourage you to check with your operator (or the insurance of your student's airplane) and find out what their limitations are. And, if unimproved airport operations are allowed, even if only when dual, make sure that your student is exposed to them for the fullest level of training.

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