

New airplane? - It's hot! - Class B again

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Several different topics this month. First of all, since the last two columns centered on learning new skills, I thought I would share some thoughts on checking out in new aircraft.

I had the privilege this past month of flying with three different pilots who were transitioning into new (for them) aircraft. One was moving from a Cessna 152 to a 172. One was moving from a Cessna 172 to a 182. And one was moving from a Mooney Ovation to a Mooney Acclaim. And in all three cases, the conclusion was the same- a big grin to accompany some new-found skills

For any airplane that I fly for the first time, I first read the POH to get an understanding of systems – fuel, flaps, gear, prop etc. Therefore, when I get going I will have a good feel of what lever or handle moves what and when. I spend some time in the plane, putting my hand on levers and knobs and switches and dials. Secondly, I really want to know three things - power settings, aircraft attitudes (outside picture) and airspeeds. Where should each of those be in the climb, in level flight, on downwind, on final? Get these questions answered and you will be well on your way to that big smile that tells the world you have moved up to something bigger and faster, or maybe something that is just more fun.

IT IS HOT !! Those of you who live in the great southwestern part of the

country are accustomed to day after day of 100-plus degree days. Here in the Midwest, we expect a few days like that in July and August, but not two weeks straight in June and July. So, beside the discomfort, what are the effects? First of all, let's talk about the discomfort.

Just as winter cold tends to make us hurry and rush our pre-flight planning, so too does hot weather. That same discomfort makes us hurry, and leads to say things like, "Oh, I don't want to walk all the way over the hangar to get a ladder to check the fuel tanks. It's too hot." Or, "It's too hot to crawl under the wing to check the wheel wells". Well, get the ladder and check the tanks. And get down and look in the wheel wells. Don't skimp the pre-flight inspection.

Additionally when taxiing out, the heat inside the plane tends to make us split our attention as we try to placate our sweating passengers, rush through a before-takeoff checklist, and write down a clearance. Do I hear "runway incursion coming up?" Slow down.

After the discomfort, there is that density altitude thing. For those of us whose field elevation is 1,000 or lower, DA is just a concept on the private pilot written exam. But today my local asos tells me that I have an outside temperature of 39° Centigrade and my field, with an elevation of 1,000 ft., is enjoying a density altitude of 3,800 feet. Hmm,

that's about the altitude that I normally level off at in my 172. What affect am I going to see on takeoff? First of all, a much longer ground roll. The airplane will still lift off at the same indicated airspeed as before. Whether you rotate at 55, 65 or 75, that number will not change. However, you are going to have a lot more runway behind you before you see the airspeed needle reach the desired mark.

Secondly, the climb capability is just not there. It's gone. You can mentally add a couple thousand feet to the altitude you are seeing on the altimeter, because that is the altitude the plane thinks it is at (yes, now is the time to wish you could afford that turbocharger) And as you climb, the sun is warming the ground and the air is rising at different rates all around. Can you say "thermals and bumps?" But eventually you will get to altitude and cooler temps.

But the story is not complete, of course. There is still a landing to consider. Just as the airplane took off and climbed at the normal indicated airspeeds, it needs to be landed at the normal indicated airspeeds. But now we get into the situation of too much of a good thing. Recall that our true airspeed is always greater than our indicated airspeed. And recall that the more altitude we put below us, the greater the spread. That rule has not changed. But let's look at how that affects us in the landing. That touchdown speed of 75 knots indicated is pretty close to a true airspeed of 75 knots in the winter and spring. But increase the density

altitude from 1,000 ft to 3,900 ft and we have just added another 5 knots to the true airspeed, and therefore another 5 knots to our ground speed. And that means that it we are going to use a bit more runway to slow down.

So, this is all great theoretical information. How big effect does it really have on me? I don't know. Pull out the Pilot's Operating Handbook for your own aircraft and look the answers up in the performance charts.

Class B incursions - Last month my fellow columnist Charles Morgenstein addressed a question in this magazine from Matt concerning an inadvertent, unauthorized entry into Class B airspace. Since I happen to know Matt, I can share the rest of the story.

Backing up briefly - Matt first knew that he had done something to invite Approach Control interest when Tower informed him upon landing that Approach Control would appreciate a phone call. Matt made the phone call and learned that he had been tracked entering Class B airspace, and then that the plane was then tracked to the point of landing. Since tower knew the tail number of the plane, the only fact in question was the name of the pilot.

Charles advised the pilot to consult a knowledgeable attorney before responding to the request, and to file a NASA report within the period stipulated (asrs.arc.nasa.gov). And Charles went on to outline the possible steps the FAA , starting the

local FSDO, could take as well as the steps that could be taken by our friend Matt. (See the July issue of AircraftOwner.com for the full story.)

In Matt's case, there was a happier ending than could have occurred. First of all, Matt did consult an aviation attorney, who gave him exactly the same advice. Secondly, he filed a NASA report.

When Matt received the phone call from an Operations Inspector at his local FSDO, he knew what to expect. He was told that he would receive a questionnaire, asking him to state what happened and also asking him to list his pilot qualifications including ratings and recent and total experience. But there was one section on the questionnaire that Matt did not expect. Matt was asked to list all of the training he had received recently. Did he attend any AOPA or FAA seminars? Did he receive any flight instruction? Had he completed any on-line classes?

And, was he currently enrolled in the FAA Wings Program (faasafety.gov)?

Matt filled out the questionnaire, and was happy to include an extensive list of recent education, including his Wings participation. His lawyer reviewed the submission, reminding him to just state the facts. Don't answer questions that have not been asked. And don't embellish anything. It's too easy to check up.

Matt did just that, and received a letter back within 10 days or so stating that a notice of the alleged transgression would remain on file for two years, and that no further action would be taken,

Matt was happy, and I was reminded once again of the side benefits of recurrent training.

*Don't just practice until you get right.
Practice until you don't get it wrong*

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