Higher Living

I started at EFTS about 10 years ago when we operated solely from the Harnett County Airport. Over time it because apparent that our most logical expansion would be to go to KTTA. About that time, Dan Clark, who was running EFTS was called away by the military. When he left EFTS I was appointed President and I have continued in that position since then. I have seen us grow from 1 airplane to the fleet we now fly and from a handful of students to the large population we now serve. While I have enjoyed the challenge it has slowly consumed the time that I must devote to being a flight instructor. As the company has grown the administrative workload of running it continues to expand.

To allow myself to return to flight instruction full time it became apparent to me that I needed a change. So, at the beginning of June, I gave up my position and transferred my work to others. Beginning at that point Carson Willis took over as the Managing Director of EFTS. He has been with EFTS nearly as long as I have and brings his own experiences to the table. I have known Carson for a long time, and I trust that the future of EFTS is in good hands as we go forward.

I look forward to continuing my tenure as a flight instructor for EFTS and continuing to meet with my students as before.

Lastly please make a note of our new company phone number of 919-897-8882. It has extensions to allow you to reach us all.

Come fly with us.

- David Williams, Editor

Contact Us

Phone: 919-897-8882

Schedule your next aviation adventure at www.ExecFT.com

Located in the FBO at 700 Rod Sullivan Road, Sanford, NC.

Airplane & Instructor Rates

Prices reflect fuel cost increase as of April 1. Tax is included.

Cessna 182 N1303S	$205/hr
Warrior N41669, N9626C	$175/hr
Cherokee N720FL	$160/hr
Cherokees N515DH, N711FL	$150/hr
Cessna 172 N3816Q	$150/hr
Instructor time	$50/hr
Redbird TD2	$40/hr

Take Your Students on a Field Trip

-by Dawn Hamel

Ever so often, the Harnett County airport gets a temporary tower. The tower is setup by the Army with divisions from different parts of North Carolina. The last tower was set up by the Army division out of Salisbury, NC. They are training for possible deployment to airfields all around the world that do not have traffic advisory ability. The practice of setting up and interacting with pilots at Harnett County is a great way to train. Although not technically a true tower, they certainly get the job done on helping pilots learn ATC language and assisting with typical tower operations.

I've seen this tower at Harnett several times but never really thought about asking for a tower tour. If you look at it, there is not much to tour. But it was a good day to take my students on a field trip. Unfortunately, I did not get the names of the wonderful soldiers that helped me set this up, but they were very nice in accommodating this field trip.

We had it scheduled for 10:15. This would allow two of my students to take a trip between flights. They came and picked us up in their air-conditioned van, which was a welcome change on a very hot day. The temporary tower is placed in a field on the opposite side of the FBO.

I wanted to take pictured of the equipment located in the tower but because of security reason, felt that I should not. The students and I got to learn about the different equipment and how they operate. This temporary tower does not have the ability to give out flight following from their site, but they can call directly into Fayetteville approach to get discreet squawk code for flight following or IFR clearances for those wanting to depart IFR.

Typical operation for the tower is for planes departing to state they are ready to taxi to operational runway. Once ready for departure, contact tower for departure instructions. They will most likely ask your intentions prior to take off. They are more than happy to accommodate closed traffic pattern and usually ask you to call when on the base leg. They are happy to clear you for a full stop or for a touch-n-go. Many other organizations, such as CAP, take advantage of this temporary tower for training students on tower operations in a smaller, less busy airport. And in return, these soldiers get to hone their ATC skills.

If you see a temporary tower setup at Harnett, make sure to ask for a tour or fly into the airspace so these folks can get exposed to different flight operations.

Blue Skies and Tail winds!

Aerophobia

Aerophobia is a long word which means fear of flying. According to Wikipedia about 25 million people in the U.S. suffer from it and most appear to be in the 17-to-34-year age range. One of these was a one-time flight student of mine who went immobile and nearly speechless on takeoff. I didn't charge them for the very short flight. Most persons who fear flying in airliners have a lower level of adverse reaction and will grip their seats or stare at the flight attendants hoping to catch any nuance in their voice that something is wrong. Some will attempt to use alcohol to "calm their nerves" but this has

been shown to be a bad idea and often makes the fear worse. Caffeine, drugs, and alcohol should be avoided because they can each enhance anxiety.

We all probably have some degree of a phobia in some area. Whether it is heights (mine), or water or circus clowns. For some persons the fear of a flight begins as anxiety in the days before the flight. Some of the anxiety doesn't just come from the flight itself but the environment accompanying it such as anticipation of problems at the airport, long lines or long delays.

Flying also conjures up some other associated fears which may contribute to the overall problem. These include a fear of heights, a fear of closed spaces, a fear of being trapped and unable to escape, or even a fear of crowds. You can also be affected by news stories about plane crashes or severe weather.

The recommendation for persons with mild aerophobia is to concentrate on why you are afraid and try to reason that your concerns are exaggerated. Try to breath evenly and try to not concentrate on every bump or unusual sound while in the air. Bring a book to read or music to listen to. If you must fly and the fear is debilitating, then professional assistance may be needed and is usually successful.

Use of Checklists

Every airplane you will fly has a set of checklists covering the different phases of flight, usually some special configurations and a set for emergency use. Do you always use them? Do you feel like you don't need to anymore?

According to Wikipedia the concept of a pre-flight checklist was first introduced by Boeing Aircraft company test pilots in 1935. This followed a crash of the prototype Boeing B-17, later known as the Flying Fortress, at Wright Field in Dayton, Ohio, killing both pilots. The investigation into the crash showed that the gust locks were still in place. The newspaper account called the airplane "too much plane for one man to fly".

Usually, the pilots who forget a checklist item are those who have been flying for a while and feel they have the lists memorized and just don't need to read them anymore. They are wrong. We all forget things on the list at times if we don't read through it.

I think astronaut Michael Collins on Apollo 11 got it right when, after spending nearly 100 hours studying them, he referred to the many space flight checklists as "the fourth crew member".

Don't stop using the checklists available in all our aircraft, even when you are in a hurry, even when you have done them so many times you couldn't possibly forget anything.

V Speeds

One of the first things you should have memorized are the list of speeds which are important to the airplane/s you fly. They are there to both protect you and the airplane in different phases of flight. First, why are they called V speeds anyway, well it actually comes from the French word Vitesse, meaning speed.

While researching this article I came across a total of 45 of them. All with a nice, short abbreviation that sometimes makes sense and sometimes not. For this article we will look at the ones that are importance to us in small, single engine, non-retractable gear, airplanes.

We wil review Va, Vfe, Vg, Vne, Vno, Vr, Vref, Vs1, Vs0, Vx and Vy.

If you can't already recite these speeds for the planes you fly it's time for you to do a bit of research of your own. All these speeds are listed in the airplane POH and on checklists. Be sure to make the proper conversions between knots and MPH if needed. Let's get started.

Va – This is called "design maneuvering speed". That means that due to the design and structural construction of an airplane this is the highest safe airspeed for both abrupt control movement or for flying in turbulence or severe gusts. In rough conditions above this speed your airplane could be bent or broken. If you only see a single speed published for Va, then it will refer to flight at the maximum landing weight. If you weigh less than the speed decreases.

Vfe – This is the maximum speed allowed when you have flaps lowered. Going faster can damage the flaps or flap hinges. You can see it on your airspeed indicator as the high-speed end of the white arc.

Vg – Best glide speed. Normally the published number is for a plane at maximum weight. As weight decreases so does Vg. This is the speed that will allow you to travel a maximum distance if you happen to have an engine failure. Going faster, or slower, will both cause you to reach the ground quicker. This speed is not shown on the airspeed indicator, and you should know it for any airplane you fly.

Vne – The red line at the high-speed end of the airspeed indicator. Never ever exceed this speed. Damage or destruction of the airplane becomes possible at this point.

Vno – This is the maximum structural cruising speed and is located at the point where the green line on the airspeed indicator turns yellow. Damage to the airplane is possible in anything other than calm air. Avoid flying at this speed…stay in the green.

Vr – Known as rotation speed. At this speed on takeoff, you should begin applying back pressure on the yoke. Your airplane should lift off shortly following that.

Vref – This is a calculated speed that you can use on final approach if the POH does not provide a recommended number. Normally it will be 1.3 x Vs0 or about 30% faster than the low end of the white arc. Are you floating several hundred feet after flaring on landing? If so, you aren't flying close enough to Vref.

Vs0 – The stall speed of your airplane when in landing configuration. Usually that means engine at idle with full flaps and at maximum weight. On the airspeed indicator it is the slow end of the white arc.

Vs1 – The stall speed of your airplane when flaps are up. Generally, this is the slow end of the green arc. Vs1 can refer to other configurations at times so confirm the POH if you have questions.

Vx – On a climb this is the speed that will get you highest in the shortest horizontal distance. Are there hills or trees at the end of the runway? If so this is the speed to use to have the best chance of clearing them.

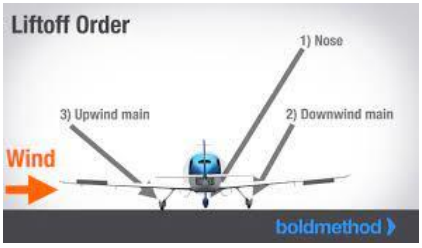
Vy – On a climb this is the speed that will get you highest in the shortest amount of time. If the air traffic controller asks for your best rate of climb, then this is the speed to use. It is also a desirable speed to climb at any time because it does the best job of putting some altitude below you quickly should you have an engine problem.

Crosswind Takeoffs

Mastering the crosswind takeoff is just as important as the crosswind landing. The limit on maximum crosswind for landing applies to takeoff as well. You don't want to be blown uncontrollably sideways as you lift off.

First thing to do is to check the AWOS and make sure that the wind is not too strong that you can't takeoff and then land safely. When lined up on the runway centerline ready to accelerate be sure to turn your yoke towards the wind. The amount you need to move the yoke will depend on the strength of the wind. If you don't do this then as you accelerate the upwind wing will likely lift and you will find yourself headed across the runway.

As you accelerate down the runway make sure to use rudder to maintain the center line and don't allow yourself to drift offline. At liftoff you may feel a push downwind and you should adjust for this using aileron to maintain the centerline and rudder to stay straight. If the crosswind is significant you may want to delay liftoff just a bit and gain more speed than usual then lift off a bit more abruptly than you usually do.



The proper order for a crosswind takeoff is nose wheel first, downwind wing wheel second and upwind wing wheel third.

As you accelerate you will need less and less aileron input to counter the wind drift.

As with all phases of flight you need to practice this technique when it is safe to do so.

Flying With Passengers

Once you get your pilot certificate you are now able to bring your first passengers onboard with you. Part of safe flying is performing a passenger safety briefing before each flight. Here's some things to keep in mind when you do so. Remember that everyone you have flown with during your flight training already knows how to do certain things that you first passengers may not.

For a proper passenger briefing you will need to explain or demonstrate how to do all the following.

- How to climb into the airplane using the exterior step, handles and wing walk area. No walking outwards onto the wing.
- How to open the door using both the upper and lower latch from the inside. Remember that your passenger is sitting next to the door so they may be the one getting you out in an emergency.
- How to adjust the seat and perhaps bring a cushion to allow shorter folks to be able to see out comfortably.
- Show how to buckle and unbuckle the seatbelts. They don't latch exactly the same as those in a car.
- Show how to attach the shoulder belts if available.
- Show where the fire extinguisher is located.
- Explain what they can touch and what you would rather that they leave alone. Passengers don't know what all the switches do and curious ones should keep hands off.
- Explain that they shouldn't rest their feet on the rudder pedals or brakes. Leave feet flat on floor.
- To keep your distractions to a minimum, ask your passengers to not disturb you with

questions during takeoff or while you are using the radio.
- Demonstrate how to use the headphones and how to set the volume.
- Ask them to help you watch for traffic and say something if they see an airplane in the area.

There are probably many more things you could do. Try making your own list that becomes part of your pre-flight. Doing these things will both make your passengers more comfortable and make it safer for all of you.

Question of the Quarter

Qantas Airlines has an unusual spelling. Why is there no "u" in the name?

Answer:

Qantas is an acronym for Queensland and Northern Territory Aerial Service. The name quickly became Q.A.N.T.A.S. and soon after QANTAS. The company in time made the name "Qantas", one of the few words of English origin where there is a "Q" but no "u" following.

You just learned something new.

The “Higher Living” newsletter editor can be reached at david@execft.com Your feedback and article subject suggestions are welcome.