



# **Airfreddy's Flying Stories**

## **Stories That *All Pilots* Can Learn From**

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## Story #1 Airfreddy's Interview

**AIRFREDDY'S INTERVIEW:** This was a long time ago when I was trying to get on with a major airline as an instructor, not a pilot. I thought being a simulator instructor would be a pretty cool job, even though I hate the thought of working for someone. But I had an interview with this airline. I was about an hour early and brought the first version of my private pilot syllabus. I met one of the gentlemen that was interviewing me and ended up talking to him for my entire wait. I showed him my syllabus and told him how I loved teaching pilots and that I was an instructor and didn't want to sleep in hotels. We waited and waited. Soon another gentleman came in the room and said to the gentleman I was talking to that it was just them. They were the two people from the flight training department who were interviewing me. There were supposed to be two more from human resources but they didn't show up.

So we went thru the interview and I ended up talking to the gentleman (What gentleman) again for about an hour after the interview. Then I waited and waited and waited. Then the dreaded day came. I opened the mail and there it was Dear Fred: Thank you for taking part in our interview process bla bla bla. We are sorry bla bla bla. What a bummer!

Finally I called one of my friends and told him the story. He said just call the guy up and find out what happened. So I did and believe it or not he invited me down to the airline training center to sit in on two days of training. I had a family member at the time who was a retired Pan Am Pilot and I told him the story and He said "They Don't Do that, you grabbed their attention somehow".

I went down to the training center got my two day temporary pass and went to class. The class was the two day recurrent ground training for the Airbus A-320. I heard so many stories about that plane in two days; I think I can write another book just on my experience. Anyhow I learned a lot about the Airbus and if I ever have to get in the cockpit I know who I am going to call on the radio!!

At the end of the second day the gentleman invited me to chat in his office. He stated that human resources just took over the flight training department. That is why I was only interviewed by two people and not four as it was supposed to be. He said if he had my application about two weeks before he would have hired me on the spot. Then he said that the human resources department wanted astronauts and he wanted someone who could teach. He said they are hiring them and I am firing them. Yes this was a major airline!

I didn't have any jet time so I didn't get the job and this is kind of funny as I had more flight instructor time than some of the line pilots had total time. They were also going to pay to train anyone they hired, type rating and everything. But while the human resources department didn't like me; the flight training department loved me.

So the moral of the story is you may come across the best pilot in the world but if he/she can't get the point across to you, you are not going to learn anything. Most airline pilots get to the magic hiring number, get a job and that is the end of flight instructing. They will keep their flight instructor certificate current just because they don't want to take the flight instructor flight test again. (Yes it is that bad)

On the other hand there are airline pilots out there that are actively flight instructing and stay in the general aviation community though most don't. General aviation and the Airlines are two completely different ballgames. So don't get glossy eyed when you meet someone who says they are an airline pilot and an instructor. Remember almost all of them are. That is the time to

start asking questions. Are you actively teaching? How long have you been actively teaching? Get some recent references.

Bottom line in choosing a flight instructor, make sure you find someone who enjoys teaching and has been around for a while and will commit to finishing your training. You don't want to lose your instructor half way thru your training.

## Story #2 Student / Instructor Happy Hours and More

**HAPPY HOURS AND MORE:** Ok, you go to the flight school and meet your instructor and schedule your intro flight. You leave the flight school and have that little fuzzy feeling; time for another story.

Years ago it happened to me. Anyhow, I received a call from a woman and scheduled a meeting to discuss her flight training. She showed up and Tingle, Tingle, she had the most beautiful big brown eyes I had ever seen (up until that point in my life) she paid for her entire Private Pilot Certificate up front, scheduled her first flight and then left.

Initially I knew my job was to be her flight instructor and to give her the best training possible. That I did. She also paid for all her flight training and she stated she wanted to fly as much as possible. I just thought no problem she paid for it all, she wants to get it done fast so let's just knock the rating out and go from there.

We flew about three times a week. Somehow her last flight of the week ended up being on Fridays at 4.00. That then turned to "well lets go to happy hour and have a beer ". I was always pretty good at fighting this and never dated any students till they were done. This one was different though. She soloed and the happy hours became a weekly thing. The slight flirting was there and I kept saying to her "you are almost done, lets just knock this out and we can have you licensed within two weeks".

She was just about ready to do her solo cross counties. We did the second dual cross country on Friday afternoon to Sedona Arizona. After that, yup off to happy hour we went. The flirting continued and I kept saying "lets just finish your rating, we can be done by next week" Finally it dawned on her why I wanted to finish her training. Those big beautiful brown eyes grew to about the size of

quarters "Freddy you do like me" then she laid one on me. The line had been crossed.

The next flight was lost procedures. This is the lesson where I purposely get students off track and hopefully in a little bit of a pickle. I didn't do anything different with her than I do with all of my other students. So yes she got lost - and I was a jerk?

We worked it out and she got her pilot certificate within about 2 weeks. Phew...After she got her private pilot certificate she wanted to get her tail wheel endorsement. The first few flights went by with no problem. One morning we were out doing touch and go's. She got herself into a little trouble and started heading off the runway. One thing I try not to do is grab the plane from the student until I absolutely have to so I kept saying " keep it straight, keep it straight, go around, go around " The runway we were using is nice and safe. The dirt is nice and smooth up to the blacktop and there is plenty of room without ditches or anything else. Finally I ended up punching the power and started a go around, but we were heading at one of the runway lights with the nose pointed off the runway. So I got very quickly on my feet and around the light we went; not a big deal. We got on downwind and I noticed a nice cloud of dust down there. My buddy was in the control tower, so I keyed the mike and just said "sorry about that" He came back on and said " what" I said " take a look" , "Ohhhhh that" he replied, Then came one of his laughs and comments. Suddenly the volume in my headsets went up about 50DB. "Freddy you are such a jerk..... you are supposed to keep the plane straight for me!!" So we landed and ended that.

Once again I didn't do anything different with her than I did with any other student. The way you, the student, will learn is from your mistakes. You are not going to become a safe tail wheel pilot if I keep the plane nice and straight on the centerline every landing. The plane was built for dirt so it wasn't going to hurt anyone or anything. My attitude in situations like this, (I think I have had 3 or 4) if I am not fearing for my life and can make it home or to happy hour safely( and you are not about to total my airplane)is you got your self into this, you are going to get yourself out of this. That is how you learn. Yes after that I started taking tail wheel students over to an airport where the runway was 200

feet wide so I could avoid this happening again. But once that relationship line is crossed things can get pretty tense. She didn't see that I was trying to help her. She just thought I was a jerk and did it on purpose.

Now I know plenty of people who met their spouses this way. It happens all the time. This is probably a 50 -50 split on the opinions of people. I will never do that again; it is just too tense and I will stick to that.

So my advice is if you meet your instructor and have the fuzzy's, do one of two things. First choice is to make sure the line is not crossed. Don't do anything alone together. If you are with a group happy hour, that is fine. Make sure you stay away from each other until you are finished with your flight training. On the day you pass your flight test, go celebrate and go from there.

Second choice is if you have no self control – Just get a different instructor quickly. It is in your best interest. I have had to break apart students and instructors for this reason. I would be going thru student accounts and notice someone has way too much flight time, spent far too much money and doesn't have a certificate. Come to find out they are just joyriding.. The student is not at the upset stage yet but will when they notice how much they have spent.

So we had a wonderful two years together after that. **DON'T DO IT!!!!!!!!!!!! WAIT UNTIL YOU ARE FINISHED WITH YOUR TRAINING!!!**

### Story #3 I Wasn't Qualified to Sign off A Student

**I WASN'T QUALIFIED:** Back in about 1994 when I was flight instructing I had a student come to me and ask me to finish his flight training and that he was ready to take the flight test. I went up with him and did an evaluation flight and he was ready for the flight test. So I called up the pilot examiner and scheduled the flight test a few days later. I did a few hours of ground with the student and then signed him off for his flight test.

Flight test day the student was there early. We double checked the paper work and waited for the examiner to show up. The examiner showed up and started to go thru the paperwork and the student's logbook. I was out in the office getting some coffee or something when I hear the door open up and the examiner comes out. "Fred we have a problem here" I went into the room thinking it was some standard FAA paperwork mistake.

The examiner looked at me and said" You are not qualified to sign this student off" I had a puzzled look on my face and wondered what was going on. This examiner, by the way, I knew pretty well so I knew he wasn't out to get me or my student. As most examiners do when there is a problem they will make the instructor pull out the regulations and read them.

So I read the regulations in part 61.and didn't find anything wrong at all except that I didn't pay attention to the word Competent. The examiner pointed out to me that how can I sign off someone as competent at something when I never went over it with the student in the airplane. At that point in time I was younger (I think I was 29) I had been flight instructing for a while but still I had an answer like "he flew fine the other day ".

The examiner looked at me and said you never flew with the student at night and you never gave the student any cross country instruction. My answer back at that time was "So I think he is ready for the flight test" The point was, I never checked the student in every area of operation that was listed in the qualifications for private pilots. So the examiner walked out and the student was not very happy.

So you as the student need to make sure your instructor logged everything that is listed in the regulations. That means you have to do everything on that list with your instructor. So you may think that you are ready for your flight test but if you switch instructors at this time in your training it is going to cost you.

If you insist on switching flight instructors make sure you do it before you solo or at least around that time frame. Don't go thru all the required training and then switch. It will cost you!

## Story #4 The Day I Met My Buddy

**THE DAY I MET MY BUDDY:** Back in my first days of flight instructing, I was flying Cessna 150's for primary flight training. There are two big differences between the 152 and the 150; first the 150 has about 15 hours power less, second the older Cessna's have 40 degrees of flaps and not 30 like the 152's I was trained in.

Back in flight school we were trained to bring in full flaps on final approach once the runway could be made without power. While training students in the Cessna 150 I taught the same thing. One thing about the older planes is the flap lever. On the newer 152's and 172's there are notches on the flap switch so you can feel when you are at 10, 20 and 30 degrees flaps. In the older 150's and 172's the switch is different. You have to hold the switch to bring the flaps down and when you push the flap lever up to retract the flaps, they will go up all the way if you don't stop them.

One thing I drill into students heads is, that you NEVER bring the flaps up at once if you are close to the ground. If you are going around, you bring the nose to climb attitude then bring the first 10 degrees up, fly the plane, get it trimmed and set, then bring the rest of the flaps up 10 degrees at a time.

I was out with a student one day in August and we were flying about 2 o'clock in the afternoon and we were out in the traffic pattern doing touch and goes. The density altitude was probably about 6,000 feet or more. We were doing fine for a while. Then the surprise came. We landed a little long (not too bad but enough) and the student added power to go. He forgot to retract the flaps so they stayed at 40 degrees. The plane got in the air and in ground effect. The takeoff was turning into a soft field takeoff without the student knowing it. A little time went by and we were still flying in ground effect about 20 feet off the ground "With full Flaps". We were then approaching the end of the runway. After the runway there is about 400 feet of dirt and then a 15 foot fence at the airport boundary, then there is a road and on the other side is the Boeing helicopter plant parking lot with light poles that are about 30 feet high.

As we approached the end of the runway the student finally realized the flaps were down and hit the flap switch to bring the flaps up. I was waiting for him to do this and at the time was focusing on the fence that was quickly approaching. The plane started to sink and we were past the end of the runway. I grabbed the flap switch and stopped the flaps from retracting. By now we were at about 10 degrees flaps and we had a problem. The plane stopped sinking but I was stuck because it wasn't climbing either.

We were still in ground effect headed for the fence. We had to get over the fence. If we aborted the takeoff and pulled the power we would have met the fence very quickly. I only had two split second options; one was either pitch the nose up some more and pray, second was to add just a few degrees flaps and pray. I acted on instinct and nudged the flaps down. We cleared the fence but were headed for the light poles. I slowly worked the flaps up and down and made it past the light poles. Now the third factor was the desert rises up at that end of the runway and the ground was getting smaller.

At this point in time there was a bunch of stuff going on over the radios. I don't remember exactly what it was or even if the controller was trying to get us on the radio. I immediately turned the radios off. My job was to fly the plane. Now at the time I was acting as cool as I could and I didn't think the student knew we were in a potentially "VERY BAD SITUATION ". I know he knew we were close to the ground and figured the flight instructor had it under control. I milked the plane to a safe altitude and then turned crosswind and continued on for another touch and go. We finally turned and realized that the radios were off, so I called the tower and told the controller I turned the radio down to talk to the student and forgot to bring it back up. The controller came back on and said "ok, cleared for touch and go runway 4 left, "Roger that. I was still shaking and trying to hide it from the student. We did a few more touch and go's and then went in. One thing I was not in the habit of was leaning the engine for takeoff either so we were running full rich just as the checklist said.

On the taxi, in the controller came back on the radio; "Cessna ABC can you write this phone number down"? Great, my first real life conflict with the FAA—boy, am I in trouble. This was a long time ago when there were no control tower restrictions. Since I was Airfreddy the friendly flight instructor, I just replied "can I come up"? The voice turned very friendly all of a sudden" SURE COME ON UP" just ring the buzzer outside.

I finished signing the student's logbook and I think I was still shaking. I did tell the student the controller was mad because I turned the radio off. So I hopped in my car and headed to the control tower. I got in and up the elevator I went. After the elevator there is a set of stairs and my heart started pumping a little bit as I got to the top. I was a little surprised, as I was expecting a bunch of guys in stiff white shirts. They were all in shorts, Hawaiian shirts and cool shades.

I sat down with the one controller who said" you are new here" "Yup". "Where have you been flying"? I explained that I trained in California and did a lot of flying in New York. He gave me that funny look and just said "AH SEA LEVEL-- IT IS A LITTLE DIFFERERENT HERE". Come to find out he was a pilot and also an instructor. Then he pointed over to the red phone sitting there and said "my hand was on that phone until you turned crosswind". I think I just said "thank you" and then we went over a few things and talked for a while.

At one point in the conversation he said," you are one of the very few instructors that will even talk to us. Everyone has this big fear of us and we just want to work with you guys". From that day on I brought every student up into the tower to meet the controllers. To this day I have a beer once in a while with my buddy.

Now back to the lesson. Once again I was trained on density altitude at school. The light bulb didn't go on until that day. Sometimes I will tell people some of my stories and they will look at me as though I am an idiot and say "how did you let that happen"? I always just look at them and say, "when you have 10,000 hours of flight experience, you will know exactly what I am talking about".

The Main factor was not leaning the engine. The standard checklist states mixture – rich below 3000 feet. So we were below 3000 feet MSL but not density altitude. Now I have everyone lean the engine for takeoff in the run-up checklist ALWAYS-EVERY FLIGHT- NO EXCEPTIONS.

Here is my simple thinking and hopefully it makes sense to you:

If you are at sea level and lean the engine every time it isn't going to hurt anything. If you are in flagstaff Arizona and forget it, it will kill you. So part of flight training is getting you into habits. Get into the habit of leaning the engine for max takeoff power EVERY FLIGHT. I can guarantee you if you are not in this habit, you will forget it when you need it most. Yes you may have also had training on this, but until a scary light bulb comes on it is not going to be set into your brain as habit.

If you are used to flying at sea level and go somewhere that is 2500 feet and it is 80 degrees you are going to have a high density altitude. Depending on the atmospheric pressure it could be between 4,000 feet and 7,000 feet. If you have the wife and kids and a fully loaded plane, I guarantee you it will grab your attention when you takeoff even when you lean for max power.

Another factor is the 40 degrees flaps and the flap lever. Unless we are in a plane that has a lot of extra power such as a C-182, I tell students not to go 40 Degrees flaps unless you absolutely have to. The newer Planes only have 30 degrees flaps therefore it will depend on the plane you are flying. Next habit you want embedded in your brain is FLAPS UP 10 DEGREES AT A TIME. In the event above, the student just retracted them. Now I always call this out to students so hopefully when they are out with the wife and kids my ghost is sitting next to the student tapping him/her on the shoulder "ten degrees at a time". I still hear my old instructor when I am on any instrument approach.

## Story #5: The Day I learned / Crosswind Landings

**THE DAY I LEARNED ABOUT CROSSWIND LANDINGS:** I am going to tell you this story because you need to get it in your mind that you are not going to really start learning to fly until you have at least a few hundred hours. Things will not get into your subconscious for this long.

Following is a simple but perfect example of this:

I was done with all of my ratings with the exception of my multi engine flight instructor rating. My old roommate and I used to come down to Phoenix on the weekends. I had some friends from New York that were going to Arizona State University. This one time we decided to fly. We were hotshot pilots right? We ended up renting a Turbo 182 RG and went down to Phoenix for the weekend. On Saturday we flew some friends up to the Grand Canyon and Sedona and returned early that afternoon. Later we met two lady friends that we had been meeting with the past few times we were in Phoenix and headed up to Las Vegas for the rest of the weekend.

The trip went fine and we ended back up in Phoenix on Monday morning and then headed back to the bay area in California. After about a three hour flight we finally contacted the airport in Palo Alto where we were landing. There was a strong direct crosswind, probably at about 25 knots. We came in and got to the touchdown point. The wheels got on the ground and the nose of the plane was trying to turn to the left and the left wing was coming up. I thought I had the plane under control, but it just kept getting worse. My buddy who was a flight instructor was in the right seat. The plane kept going out of control and my buddy finally just gave the control column a little whack turning the wheel to the left. The plane straightened out and that was it. He made some comment to me but I don't remember what it was. If I was in the right seat I would have done the same thing, so what was going on?

Yes it was my brain. My brain was still trying to drive a car. The nose of the plane was going left so my natural instinct was to turn to the right. As a result things were getting worse. My brain had not turned on the light bulb yet. After that it went on but up until that point it didn't. I had about 350 hours at the time and I was flying every day. This is one of the reasons why I tell people you are really not going to know how to fly until you have 400 to 500 hours as it takes time for your brain to feel at home. This is a perfect example of why you need that many hours. If my buddy hadn't been there, I may have gone off the runway. Yes, I knew better than that. In fact I just passed a flight test to teach people this exact same thing.

Flying is unnatural especially if you have been driving for 10 years. This is funny but when I get a 16 year old student who does not know how to drive yet it is not a problem because their brain picks up how to fly first. I am not sure, but I wouldn't be surprised if they had problems learning to drive after flying.

Now I use the line;" Stop driving the car, you are in a plane ".That is everyone's first reaction and it takes a long time to break that habit, A lot longer than you will think, especially if you don't fly that much after you get your certificate.

## Story #6: New Engine Not To Worry?

**NEW ENGINE NOT TO WORRY?:** I will make this one pretty short, but I am telling you because sometimes we get comfortable and have no worries. You want to remember, with flying you have to be in a mindset to expect a problem.. Though flying is very much safer than driving, you can't just pull off the road when something happens.

I had a C-152 Aerobat and the engine was due to be overhauled, so I pulled it off the flight line and we started working on it. We went thru the entire plane. I replaced the plastic inside, replaced a bunch of the instruments, painted the front end and yes rebuilt the engine.

When the plane got back on the flight line she was the best looking plane in the fleet. The first month it flew with no problems.

One day one of my instructors had a student going on a long cross country-- Yuma Blythe and back to Falcon Field and he took the newly rebuilt plane. I always had a habit of calling the flight service station to check up on students. About the time I was about to call the flight service station, the phone rang. It was the flight service station. The briefer told me the student had to do an emergency landing on a road because of an engine failure.

I ended up getting into one of my other planes with one of our other students and headed off to Yuma to get the student and take a look at the plane. When we got there I pulled the cowling off and found that one of the new cylinders had come apart in flight.

The student said that it started to run rough, so he called flight service and then it quit so he landed on the road. I eventually got the tapes of the incident. The student did everything right. The only thing I would have done differently would be to land sooner. He did pass an airport off his left side a few miles before. The engine was running rough for about 15 minutes before it quit. If I were a student I probably wouldn't have done anything differently.

In all of my time flying and flight training this was the second time I had seen an engine all out quit. We all hear the stuff on the news but I am just saying in my circle of flight schools and experience this was the second time I had seen it. (This in 20 years). While this doesn't happen very often it could happen at any time and it is something you should expect to happen.

So just don't get comfy if you are in a plane with a brand new engine. You might want to be a little more ready. If the engine has over 250 hours chances are it will not have any problems.

## Story #7: Runway ITIS

This is a real story of an accident which took place on my home Airport of Falcon Field in Mesa. This is not my story but an accident that happened. One Saturday I was on my way into the airport and my cell phone rang and it was one of my students calling and asking about the plane that crashed. The student didn't know whose plane it was so like any other flight school owner I checked my schedule. None of my planes were flying at the time. In a small community such as this the word gets out pretty fast, so I called around and found out that an experimental Glassair III had crashed on the golf course at the end of the runway. I did know the mechanic on board who rented the space next to me when I first started out.

After calling around and talking to a bunch of people we found out that the plane had taken off, got about a half mile out and the engine quit. The pilot tried to do a 180 and crashed into some trees off the golf course. The pilot and mechanic didn't make it to happy hour that day.

This is a perfect example why you don't do try and make it back to the runway you just took off on. I have had some pretty heated arguments with other flight instructors and commercial pilots that just say "the runway is right there why not go for it" The FAA Stresses this also over and over again also.

I would say if you are a very experienced and proficient aerobatic pilot, you might make it. Even most of them would opt to go straight ahead. In this case there was a highway and golf course straight ahead of them.

I don't know why the pilot chose to try and make it back especially in a high performance / high wing loaded aircraft.

So once again if you can't see it in your windshield, don't try and land there. GO STRAIGHT AHEAD

## Story #8: A Bad Day In The Runup Area

**BAD DAY IN THE RUNNUP AREA:** This was an accident that happened a long time ago on my Home Airport. I was out in the run-up area with a student and we were going thru our checklist when the controller came over the radio. "Cessna ----- we just closed the airport, a plane just crashed at the end of 04R". This was the opposite runway than the one in use, but the pilot had declared an emergency and decided to use the opposite runway. No problem with that.

I looked toward the end of the runway and there it was nose straight down in the dirt. My student wasn't up for flying and the airport was closed, so we went back to the hanger. As usual I called my buddy in the tower to find out what happened.

The pilot had an engine failure in the pattern and declared an emergency. He chose the runway and set up an approach. He came in a little high but would have made it, but about the time the pilot was leveling off, the engine started to sputter. So the pilot tried to do a go around and the engine quit again. This time the plane was at a very high nose up attitude and the plane stalled right off the end of the runway, nose first into the ground. Luckily the pilot and his four year old daughter did make it.

So this is a perfect example of why you **COMMIT TO LAND**. When you commit to land you shut everything off and fly the plane.

## Story#9: My Worst Day As A Flight School Owner

**MY WORST DAY AS A FLIGHT SCHOOL OWNER:** This is another example of a day where everything was going fine and in an instant it turned to a nightmare. Everyone in the hanger was in a great mood as usual. I had one flight instructor who was an older gentleman in his 50's with a new student. They went out on one of the student's pre solo flights up to the north practice area. At that time I was not flying that much and pretty much doing phase checks with students. It was about lunch time and every one in the hanger had gone out to lunch. I stayed in the office to catch up on the 100 things I had to do.

About 15 minutes after the student and instructor taxied out. I received probably the worst phone call any flight school owner would want to receive. The call was from someone in the group, I don't remember who it was, but he just said "Fred your plane just burned at the end of the runway, you probably want to go out there". My heart sank and my blood pressure probably went to a level that is not very healthy. Of course the first question going thru my mind what was "what happened, this can't be happening"!

I drove out to the runway and there were quite a few people and police there so I couldn't even go out to the plane. The plane had gone off the end of the runway and caught fire. From what I could see there was nothing left. I remembered that we had just fueled that plane before the flight so it had 40 gallons of fuel when it took off.

The instructor and student were talking with the FAA and fire fighters. A few of the other flight school owners and representatives were out there and gave me their apologies. Something like this had happened to them all. This was my first time.

At this point In time I felt pretty helpless and I couldn't talk to anyone or go out and find out what happened. The only thing I knew was that the instructor and student were alive at this point. The only thing I could do was go back to the office and wait.

The first thing I did was call the control tower and see what they knew. The tower said they didn't know but the instructor aborted the takeoff and landed straight ahead. The controllers said they didn't even know anything was wrong for a few minutes until they saw the smoke at the end of the runway. It was a busy day. There were about 3 planes in line for takeoff after my plane was cleared to take off and the airspace was pretty busy. The instructor didn't even call them on the radios and let the tower know "HE WAS FLYING THE PLANE"!!

Finally the instructor and student walked into my office and the first thing out of my mouth was "Are both of you ok" ? They said yes and that was the only thing that mattered at that point. The plane could be replaced.

They said they got on takeoff roll and just rotated and the student noticed smoke coming from under the dash board. The instructor immediately took control of the plane and landed straight ahead, shut everything off and they got out of the plane. At this point in time they started waiving to the control tower but no one saw them until the plane was completely on fire. With 40 gallons of fuel on board it went very fast. The fire trucks came about 5 minutes later but there was nothing left of the plane at that point.

Finally the FAA called. I knew this person pretty well as he had inspected my planes before and was the maintenance inspector for the air carrier who owned the hanger my office was in. He said I could go out and look. I went out there and met the two FAA people at the scene.

I have never seen anything like it. There was nothing left of the plane. There was a section of each wing from the fuel tanks to the wing tips. The tail section of the plane was there and the engine was still on the firewall. Other than that there was nothing. What was left of the wings were on the ground. There was no cockpit left at all. There were no wings above the cockpit.

The FAA inspector said as bad as it was, no one got hurt. It could have been much worse.

The official Report is here [LINK](#) if you want to read it. They never found out what happened. I had several meetings with the FAA and Cessna Aircraft Company. This was one of those freak things that can happen. Things like this don't happen very often but when they do, you want to be prepared to "Fly the plane" don't let the plane fly you. Fred: I don't get the last part of the sentence. As I read it you mean stay with the plane, but that is not correct, So the good thing is that I had a great instructor in the plane and he landed straight ahead as he was supposed to.

So out of this I guess this just reinforces my rule with fires "GET ON THE GROUND NOW"!! If they had tried to make it back around the traffic pattern; they probably wouldn't have made it.

I think I had a little extra help that day. My mom sent me a bunch of Saint Christopher Medallions and told me to make sure there was one in every one of my planes. They were. I still carry one on every flight I go on.

## Story #10: Fred I Need Some Spin Training

A little story to think about: Back in about 1992, after I had been instructing for a few years, I was in the office of the local FBO which I was working for. I was waiting for one of my students to come back from a solo flight and a little while later my student came in and he looked as though he had just seen a ghost. He was shaking and sweating and you name it. He flat out didn't look good. I asked him what happened. The answer that I got was one that most flight instructors would not want to hear; "I was practicing stalls in the practice area and all of a sudden I was upside down and then just spinning towards the ground". I didn't know what to do but I heard your voice tell me to pull the power back and just let go of the control column and the plane will stabilize."

If you know anything about small Cessna's they tend to have a forward CG and will recover if you just let go of the controls for a second; that is if you are not in a fully developed spin. So that is what the student did. The even more upsetting part to me was the fact that he stated once the plane stopped spinning and the nose started to come up, he looked at the altimeter. He said it was reading about 1800 – 1900 Feet.

If you fly in the phoenix area you know that the ground elevation is approximately 1500 FEET MSL. So my student recovered about 300 to 400 Feet about the ground. This is far below normal traffic patterns. So my question to you is would you like this to happen to you?. Because it can happen to you. Or would you rather have an instructor go over spin entries and recoveries with you?

I was taking aerobatic flight lessons at the time and had practiced plenty of 3 to 4 turn spins, so I got the parachutes on and up we went. I started demonstrating spins and spin entries and he just kept saying "nope that is not what happened". It finally dawned on me what had happened and I said to him is this what happened and sure enough I had hit the nail on the head.

The spin my student got himself into was one of the worse cases you could imagine. He was practicing power off stalls. So the normal recovery is to lower the nose and add full power and start retracting flaps 10 degrees at a time.

Little did my student know that the plane had started to enter the spin when he added full power. The result was a torque roll that placed the plane upside down at first, then continued to spin with the help of the full power setting. I didn't think that a 152 was capable of that but sure enough it was. So he pulled the power and let go of it recovering about 400 feet above the ground.

I think every pilot out there should have done some type of spin training. Now that I don't have an aerobatic airplane I do a flight that shows the students how to enter and recover from the spin. This is not a full spin lesson but it shows the student what to expect. If the student does get himself in trouble I will let them go as long as I can.

When I had my aerobat I would do spins and basic aerobatics with every student that wouldn't put the plane over weight. Most students would be a little scared but after the first of two flights they couldn't wait to do the second one.

If you can get up and do this before you solo, one thing I can suggest is not to do it in an extra 300. Yes, it will be a fun time but you won't get the feel of the plane you are normally flying. If you can't do it in an aerobat, try and get in a Citabria or Super Decathlon. You want something that will be a little sluggish to simulate the plane you are training in.

## Story #11: I Can Do Aileron Rolls Can You?

**I CAN DO AILERON ROLLS CAN YOU?** Now I will introduce you to the first story about a husband and wife that did their flight training together. I will not give their real names so I will just use Barbie and Ken. That is the first thing that came to my mind so I will go with it. They had this competition going on and it was really good for them.

I am going to make a statement about women student pilots here and ladies, I don't want you to get ticked at me. In general I have found that you ladies are a little timid when it comes to flying an airplane. This is not always the case as I have had female students that out did the guys. I am saying that out of all the women pilots I have taught the ones who were timid out -weighed the ones that weren't. That is all in most cases the lady pilots didn't have the TIM TAYLOR attitude toward airplanes. Yes Patty Wagstaff would kick my butt in an airplane (maybe not in teaching but in aerobatics- she would hurt me) so I have found that I needed to do a little extra work to build confidence in Female pilots.

A perfect place for this was my aerobatic lesson. At the time I required all of my students to do, if we did not go over the gross weight of the airplane. Barbie was flying fine but she was just not taking control of the lesson as I wanted her to do. She knew what to do but she was just a little unsure of herself.

There were two purposes to this lesson; First to learn spin recoveries and unusual attitude recoveries, second is the most important part that maybe a lot of people don't think about, doing aerobatics shows the student you can really get on the plane. Not only does it show you, the student, that you can get on the plane but to actually get on the plane when you need to. I have another little saying" you fly the plane don't let the plane fly you"

So it was aerobatic flight day and Barbie was a little bit nervous as most students are at first. We got the parachutes on and went over the emergency exit procedures and up we went into the east practice area and climbed to 6500 feet. "I don't know if I want to do this" she said. I just sat there and probably made a little comment like "RELAX GIRL ". We cleared the area and it was time for the first maneuver, a nice gentle loop. I explained the maneuver that she read about the night before in her homework. She gave me the look "you do the first one ""nope you are paying for the plane you are going to fly it". Anyhow I got her set up and we started the first loop. Up we went and the horizon came thru the windshield; we were pointed at the ground and finally finished the maneuver. "That wasn't that bad"!! "I kind of laughed "lets do it again". So we did "again"

After we did about four or five loops this girl was having a blast and on top of that she was finally taking control of the plane, so we went to Aileron Rolls. The first couple were a little rough but Barbie was getting that light bulb that told her she could make the plane go exactly where she wanted. We practiced a bunch of rolls, then she wanted to do loops again. We did combos of a loop right into a roll. This girl was having a blast, but we needed to go back since I planned fuel for about 1.2 hours. Most students can't take more than that.

Now this girl impressed me. I just said "take me back to the airport" and then shut up. From the practice area back to the airport she nailed everything. She didn't miss an altitude, a radio call nothing on top of which she finally did a perfect landing also. My Controller buddy was on the radio. Barbie had met him about a week before (the next story). We were about 2 miles out when my buddy cleared us to land. All of a sudden over the radio Barbie called him back on the radio "hey \_\_\_\_\_ I can do an aileron roll can you"?? A puzzled "no" came back over the radio. "I can do an aileron roll, I can do an aileron roll" and then my buddy came back over the radio" sounds like you had a good flight". Barbie came back "yup".

Another quick point here, The controllers are human also, if you get stumped or stressed out about something, just talk to them EG " hey dude I am having a problem" or " have a great day". Once that light bulb comes on you will be a lot more relaxed over the radios.

We landed and got back to the hanger. Barbie walked thru the hanger and just kept repeating to everyone," I can do an aileron roll" .A one hour flight totally changed this girl's attitude about flying. Not only was she now having fun, but she was in total control of the airplane for the first time and she knew it.

So, yes, this is something that every student pilot should do. Over the years I have never got anyone sick either. So go and do it. You will be amazed at your confidence once you get done with that flight.

## Story #12: Bad Weather On A Second Solo

**UNEXPECTED WEATHER ON A SECOND SOLO:** Now it is time to introduce Ken, Barbie's other half, who was slightly ahead of Barbie at this point in time. He did his first solo and showed up on a morning for his second solo. Barbie was with him since she was going flying with me right after he got back.

It was during the summer time out here and yes it was during monsoon season. This day I think everyone in the hanger learned a little about monsoons. We went outside and looked at the clouds. There was a layer of normal clouds at about 10,000 feet. The clouds were light grey, so no one was worried. We called flight service to double check and storms weren't forecast for about another 4 hours. I specifically asked the briefer what the radar was showing and he told me nothing. Winds were calm. Ken was ready to go, so I told him to go up to the checkpoint for the practice area and then turn around and come back. I do this on every second solo just to make sure the student can find their way back to the airport without a problem.

So off went Ken. Barbie was in the other room at the office reading up on her lesson and I was in my office. All of a sudden BOOM!! This thunder was loud and right on top of the airport. Within about 30 seconds it started pouring. Barbie came running into my office "Frederick" (Oh I hated that) "there is a thunderstorm going on outside and Ken is out there soloing". We walked outside and it was not looking good.

I quickly grabbed the phone and called my buddy in the tower. I told him to radio Ken and tell him to stay in the practice area. Then Barbie and I went up to the tower. We got there and found this storm caught everyone by surprise. Ken was up in the practice area and now the winds were picking up. Coming back home was not an option. We were looking out across the Phoenix valley and it was getting dark fast.

We had to get him back on the ground and fast. Luckily the winds were calm over at nearby Scottsdale airport. So we called Ken up and told him to start heading that way. Ken came back over the radio” Um Fred you haven’t signed me off for that airport”. My buddy replied back to him, “Don’t worry about that, just go to Scottsdale and contact them on this frequency and they will talk you in”. In this case I told the controller to send him there and this was definitely an emergency, a logbook endorsement was the last of my worries. I try and get my students up in winds up to 20 knots if I can before they solo in order to prepare for something such as this.

We were on the phone with Scottsdale airport and the winds were starting to pick up. . The east side of the valley was starting to turn into one big microburst. About this time my buddy in the control tower put the phone on speaker so we could hear everything. Ken was cleared to go direct to the numbers and land. There was a plane in front of him and yup here came the call over the radio” Scottsdale tower Cessna ABC we just lost 10 knots on final”. Great! I slowly turned around and got that look” Frederick”. (oh how I hate that) I just said “relax” .Then Ken came back over the radio “Cessna 7609A I heard that I am going to come in fast” and I quick gave Barbie the Thumbs up.

Ken got on the ground, got the plane tied down and had to wait it out. About an hour later everything cleared out and the sun was shining again. So I called him and gave him the thumbs up to come back home.

Now before Ken got to Scottsdale the controller over at that airport gave him a transponder code and walked him right to the airport. Yes the controllers will be your friends.

If you start getting into trouble call them and tell them what is going on. Once again if you get stressed out, don’t worry about the radio phraseology, just talk to them. Now remember my density altitude lesson. This was a different case and I was close to the ground so talking on the radios was the last thing I wanted to do. I wanted to fly the plane first.

In Ken's case he was at a safe altitude in the practice area and got unexpected weather. Of course, fly the plane first but in this situation you will be able to talk to the controller and get some help. Don't be afraid to get help.

The next thing you want to remember is "DON'T TRUST THE WEATHER MAN". Yes, get your reports and forecasts and check weather but always expect the worst.

If they tell you everything is all clear expect the worst. If it is a calm time of the year (weather wise) when things are pretty constant you will be ok. Here in Phoenix most of the year it is clear, blue and 202 miles visibility. There is not a lot to worry about, it is pretty much good flying weather here most time. If a weather system comes in you can see it coming you just don't fly, but when you get into an unpredictable monsoon season all bets are off.

Once you get into storm season wherever you are don't trust the forecasts. You just get it in your mind that it is storm season period and expect the worse at any moment and have a plan to get on the ground. Many times I have been on cross countries, the forecast had no storms expected for hours and all off a sudden right in front of us there it was. Wherever you are, there is a time known as "storm season" and it is usually in the summer, but depending on where you are it can be any time. Plan for the worst!!!. When in doubt go have a beer and stay on the ground

## Story #13: I Didn't Need the Airspeed Indicator

**FRED I DIDN'T NEED THE AIRSPEED INDICATOR:** One morning I was in the office when one of my students came in to rent an airplane for the morning. He got the keys and went on his way. About three hours later he came back in and said he had a great flight. As he walked out the door he said” by the way the airspeed indicator went out just after I left Sedona . I then asked him” ok what did you do”? He said” I just flew the plane as you taught me to and no problem at all”. That was it!!

I was pretty happy since this little instrument failure didn't even bother him. This is the reason why I teach students attitude flying instead of focusing on the instruments inside. Once again I will state, ” if you are trained with nothing, when you lose everything you are right at home”. This was a perfect example. This happens in all aircraft. The little critters like to build homes in the pitot tube so they become blocked sometimes.

I have had this happen to me probably about 20 times. If I am up with a student, this is a perfect time for some real world training. Most instructors would put the plane on the ground; I will keep the student in the traffic pattern and do a series of landings. Usually they are looking outside, so there is no panic.

Every time I get into an airplane that I have never flown I use this system and once the light bulb goes on it is a piece of cake to fly any plane. That is why I teach flying this way.

We will use the Cessna 152 for an example. No matter what plane you are in, ask your instructor to go over this with you and you will get my drift. Just do it when you are coming into the traffic pattern the next time you are up. Remember the following in your head:

## ATTITUDES

**Climb Attitude** – nose just above the horizon. If you can't see outside you have the nose too high.

**Level attitude**- Nose level with the horizon. In some planes you will have to use the wing to find the nose level attitude

**Descent Attitude**- Nose just below the Horizon – Same amount as climb but nose down instead of nose up.

## POWER SETTINGS

**Cruise Power**- Normally 2400 – 2500 Rpm- It can vary depending on the plane.

**Descent Power** – Normally 1900 – 2100 Rpm – This is also your traffic pattern power.

**Descent to land power** – 1500 – 1700 rpm.

Remember if you have a higher density altitude these will be a little higher, but don't worry about that for now. Start at normal cruise flight coming into the airport. Note your cruise speed. In the 152 you will be about 90 -95 Knots. Most training aircraft are going to be close to this +/- 10 knots or so. Ok, we are cruising at 95 knots; when you are ready to start your descent bring the power back to your descent power setting, (Better yet do it without looking at the tachometer listen to the engine), you will notice that the plane will pitch to descent attitude. You can do this the opposite way and bring the power back until the nose gets to descent attitude. You will notice your airspeed will not change if you had the plane properly trimmed in level flight. You are now in what

is called a cruise descent. Now pick the point to which you want to enter the traffic pattern. If you are going to get to traffic pattern altitude a little quick, you are descending a little too quickly, so just add 100 Rpm or so. You don't even need to look at the Tach to do this- just inch the power in or out slightly.

When you reach the traffic pattern bring the nose of the airplane to nose level attitude and don't touch the power. Now, after you trim the plane for level attitude, check your airspeed. You should be at the downwind airspeed you desire. In the case of the 152 you will be at about 80 knots.

When you are abeam the numbers ready for your final descent, once again bring the power back until the nose of the plane goes to descent attitude. Now you will be at descend to land power. Your airspeed shouldn't change. Now add 10 degrees flaps (don't let the nose come up maintain descent attitude). You will notice you will lose about 5 knots with each 10 degrees of flaps, therefore at this point in time you will be around 75 knots. Turn base and add the next 10 degrees flaps (Maintain descent attitude). Now your airspeed will be about 70 knots. Turn final and now change your focus to the numbers as I mentioned in the landing section. Adjust power slightly if needed. When the runway is made bring in the last 10 degrees of flaps. You will note your airspeed is about 65 knots right, which is where you should be.

So let's go over this again: you are cruising along and notice your airspeed indicator goes to zero and you are at nose level attitude and cruise power setting. We know we are at about 95 Knots. You start getting close to your home airport. You bring the power back until the nose of the airplane goes to descent attitude. You know the aircraft is in a cruise descent so we are still going about 95 knots.

Upon reaching traffic pattern altitude you bring the nose level and leave the power set. You know that in this configuration the airplane is at about 80 knots since you will loose that extra airspeed when you level off. Abeam the numbers you bring the power back to "descent to land power setting" and set the nose of the plane at descent attitude. (Bring the power back until the nose goes to

descent attitude). Since we know the 152 will pitch for airspeed, our airspeed is still about 80 knots.

We now add the first 10 degrees flaps and maintain descent attitude. The airplane loses about 5 knots for each ten degrees flaps we add, so the airspeed is now 75 knots. The base turn is made and you add the next 10 degrees flaps. You maintain descent attitude and power setting so the airspeed will drop another 5 knots where your airspeed now is 70 knots.

You turn final, maintain pitch and power setting. Your airspeed is still 70 knots. When the runway is made you add the last 10 degrees flaps. Maintaining power and descent attitude the airspeed will decrease another 5 knots dropping the airspeed to 65 knots.

You now focus on the runway and land. Pretty simple? You can get into any small piston powered airplane and fly it this way. It will take you a little while to do this especially if you are used to staring at the airspeed indicator.

This is the way I fly. When I get into an airplane I have never flown, I use this attitude system to fly all the time. It makes flying very simple. Yes, you want to verify your airspeed but you don't want to stare at it. Flying outside the plane makes flying a lot easier than flying inside the plane.

## Story #14: Engine Failure On Flight Test

**ENGINE FAILURE ON FLIGHT TEST:** This is another engine failure story. This day it happened on a flight test. This is the second engine failure I have seen within my circle of aviation (in 20 years) this time it was partial and not total. In all of my flight time I have never had one. I have had valves get stuck, lost cylinder compression, got carburetor ice and had cylinder mounting studs break. I never had an engine quit on me. (In the second sentence you say you had engine failure. I am confused on what engine failures you experienced.

One of my students was out on a flight test that lasted about 10 minutes. The student and the examiner taxied out and ten minutes later they came back, got out of the plane and were a little shook up. At the same time my phone rang and it was my buddy in the control tower. "Fred just to let you know your plane had a hard landing" They came inside and the examiner discontinued the flight test.

The examiner said that his biggest fear had just come true: Engine failure on a short field takeoff. The student and the examiner got lined up on the runway and the student brought in the power and accelerated down the runway. About a second after the student pulled the nose up they lost most of their power. The examiner nosed the plane over and the plane bounced on the runway. They only got about 20 feet above the ground but at slow airspeed they didn't have much controllability.

The engine ran fine after that? Go figure!! We checked the plane and pulled the sparkplugs and found some lead on the bottom plugs, but not more than was normal. The only conclusion we could come up with was that the lead in two of the sparkplugs heated up and when they pitched the nose up for that second, it grounded out two of the bottom plugs at the same time. In that case you would lose about 30% of your power. That is really the only thing that made sense to the mechanic, the examiner and myself.

As far as the plane was concerned it was fine and had no damage. The Cessna training aircraft are built for abuse; you really have to slam them in to hurt the landing gear.

Anyhow, the moral of this is once again be prepared. This was one of those freak things and I would say that the probability of me seeing it again is Zero, but you never know.

If you ever start loosing power, get that nose over and fast and get the nose of the aircraft to descent attitude. If you are close to the ground get it at least level.

## Story #15: From I Can't To I Am An Ace

**I AM AN ACE:** This brings me to another story I have about Barbie who at one point in time tried to quit but I didn't allow her to. This is a great inspirational story about someone who thought she was a failure and did everything wrong. The truth is she did everything right as she was supposed to but didn't figure it out until later on.

As a result of this I did come up with a short map reading / pilotage and dead reckoning lesson for some students who have a problem with maps. Since this story I have incorporated some of it into my cross country flight training but have done this lesson many times by itself.

As you already know I am totally against using new state of the art Gps units until after you have completed your instrument rating with nothing. They distract you from your number one job "FLYING THE AIRPLANE" You should have confidence in your flying and be able to get from point A to point B with a compass and a watch no problem.

Yes they are nice to have but as my little saying goes again "if you are trained to fly with nothing, when you lose everything you are going to be right at home" when you are trained with this stuff you become dependant on it; I don't care what anyone says. Remember my story about my crosswind landings? It took me over 300 Hours until my brain registered what I was supposed to do in the plane.

This same thing is true for all this high tech navigation stuff. If you are on your first and second dual cross country and the Gps is on, are you really focusing on your map reading skills and pilotage skills? You may look at your map from time to time and say; "yeah I am here", then your eyes automatically go back to

the GPS. See your brain will work like water sometimes. It will follow the path of least resistance. The Gps is the path of least resistance because it makes things so simple.

Unless it is off all the time you are not going to really get the map light bulbs coming on, and until you go out and get a little lost on your own it is really not going to register. Pilots have been trained without this stuff for 80 years and they all turned out fine.

Back to Barbie, Barbie was scheduled to do her first solo cross country from Falcon Field in Mesa Arizona to Wickenburg Arizona. She met with me and we went over here flight plan. Her flight plan was filed with flight service and she had pre- flighted the plane. She was ready to go.

First of all we will talk about the cross country itself. As with all my cross countries with my students, I have a reason to send them to different places. For the first solo cross country I try to keep it easy but allow some difficulty. Remember this is a learning process so it is my job to make sure you learn everything from real life experiences. In this book I am giving you real stories from real students so you can learn.

This cross country is pretty simple, but this story can prove that things can go wrong and you don't even realize it. Wickenburg is west of Phoenix and the route of flight from Falcon Field is that you takeoff from Falcon and turn to the west, then you catch one of the canals just northwest of the field and follow it to Scottsdale, Arizona and then up to Deer Valley airport. After Deer Valley you head on out to Wickenburg. This sounds pretty easy ha?

Ok, so Barbie was ready to go. I signed her logbook, medical and went over everything with her and off she went. After she took off I went off on another flight as I usually do and got back to the office. She was not due to be back for about another hour and a half so I went to lunch or something.

When I got back I called flight service to check on her. The briefer said "she had a little problem, she just landed at Wickenburg". So I talked to the briefer about it. He said "oh she was great, she got a little lost, flew past Wickenburg about 20 miles and then got in touch with us and she asked for help so we located her and vectored her back to Wickenburg. She just landed there to get fuel. Good job teaching her".

So I didn't think much of it and called the Wickenburg airport. The person there said she just took off. I just said ok and expected her back in an hour at most. The hour went by and she wasn't back, so I called flight service again. I think I got the same briefer. He said "she got lost again, she is on with Phoenix approach now and just a few miles from home" I told the briefer I would call him back and go thru everything with him after I talked to her.

She got back and I went out to meet her. The only words she said to me were "DON'T TALK TO ME, I AM NEVER FLYING AGAIN". I tried to say something and she said "FREDERICK I AM GOING HOME LEAVE ME ALONE". I knew this was a time not to argue with a woman. So I let her go.

She didn't even let me tell her how flight service said she did exactly what she was supposed to do. I let her go and then it was time to figure out exactly what happened.

So I called flight service back and talked to the briefer and they tracked here entire flight. The problem started about two minutes after takeoff. Remember this was a long time ago, about 1994 or so, and I was also learning. Barbie knew to follow the canal and it didn't even dawn on me that there were two canals. I knew there were two but didn't think about the other one.

The canal on the west side of Falcon Field splits by the river on the west side of the airport. She took off runway 22, so she was headed basically southwest. The wrong canal was on her right side right after she took off, so she just followed it, right into Phoenix Sky Harbor airport.

She took off and started to follow the wrong canal and then tried to contact Scottsdale airport. The controllers there figured out she was not where she thought she was, so they asked her to identify and then told her to contact Phoenix. She then told the controller she was a student pilot and was a little lost and asked for help. The controller cleared his frequency and only talked to her.

The controller vectored her back out to where she was supposed to be. Then she was a little flustered and ended up flying past Wickenburg. When she realized she was lost, she called flight service and they located her and got her back on track. She then landed at Wickenburg and got fuel.

On the way back the exact same thing happened, instead of following the wrong canal, she followed the wrong road. Back into Phoenix airspace she went. Scottsdale tower handed her off to Phoenix where the controller cleared the frequency again and got her back to Falcon Field.

So you are probably wondering what happened with Barbie ha? I waited until my instincts said the time was right. About a week later I called her house. I just left a message and said "Are you ready to learn from your mistakes? "

I knew she was sitting there listening to the answering machine and about 2 minutes later she called me back and said "I was just so scared". I told her what the briefer from flight service said and she said "really"?. So we scheduled a flight the next day or so and I started putting a new supplemental lesson together.

I didn't let her plan anything at all. I didn't let her use a plotter or an e6b. This lesson was as basic as it could be. She came in and I sat on the ground with her just for a few minutes. I pointed out two things; the grid lines on the map are: North, South, East and West, then I went over simply calculating time and distance in her head. The only other thing I pointed out was a VOR compass Rose, the diameter of which is about 10 miles. So I had her put her fingers up against the compass rose for the VOR. The natural distance between her thumb and pointer finger is about 10 miles. The only other things she was allowed to use was a watch, hobbs meter and the compass.

Remember when I scared you with mentioning math a while back well here it is....

If you are going 60 knots, how many miles are you going to go in one minute? Yes the answer is one mile. Now if you are going 120 knots how far are you going to go in one minute? Yes you are going to go two miles. And if you are going 90 knots how far are you going to go in one minute? Yes about 1 ½ miles.

The 152 cruises at about 95, so I told her to just use 90 in her head. So, if you had to go 10 miles how long is it going to take you? About 7 minutes. So I had her base everything on 10 miles and 7 minutes.

Up we went and she had no idea where we were going and neither did I. I figured we would go around the entire Phoenix valley using the compass, watch and a map. One thing I try and get in students brain is the fact that the maps are extremely accurate, everything is there you just have to look for it.

I started randomly pointing out places on the map. What direction do you need to fly and how long is it going to take us? The first two points or so she was a little shaky but once she started getting the hang of it she just said, "this is pretty easy".

At one point she was over her checkpoint and couldn't see it and she said "I know it is here I just can't see it". OK "so what do you do, slow down and circle". "Yup" This is such a simple thing that so many people miss. You are on the left side of the airplane. If you are even slightly left of course you will not see your spot, you know it is there so just do a quick 360 and you will probably find it.

Barbie started getting every point I gave her. I then scheduled a solo flight for her. When she arrived at the airport, I just marked a bunch of points on the map and said "go to all these spots".

Off she went and about an hour later she came back after she found them all with no problem. So it was time for the long solo cross country. I asked her if she was ready to go for it, she was and we scheduled the cross country.

That morning she showed up early checked everything, filed her flight plan and off she went. This time she went from Mesa to Yuma, Blithe and back to Falcon Field. I still send every one of my students on this flight. This is relatively easy

cross country but it has a lot of different features and it is a great confidence builder for the student. It has just about everything you can think of and there are nice roads to follow. I send people on this cross country because it has a great combination of different stuff. Yuma is a military base and there is restricted airspace on both sides of you going there. The flight service station is different than the one used for the other flights. Blithe is an uncontrolled airport and can get a little on the cross wind side. For the trip back you would follow I 10, but it is a long enough leg so you can learn about yourself getting tired and then you have to go around Phoenix class B airspace to get back home.

This flight is the student's first real world flight. Everything is unfamiliar but not so different that it would fluster her. So off she went. About two hours later I contacted flight service. She had made it to Yuma, closed the first flight plan and opened the second leg. I called back later and she had just left Blythe.

I don't remember if it was my day off or I just didn't have any other flights but I was home and I called Flight Service one more time and she had made it back to Falcon Field. I waited a little while to give her time to get the plane tied down.

It was now time to call her. I dialed the number and she answered "ACE FLYING" and I just started laughing. She had not one problem and the cross country was a piece of cake for her. She thanked me for not letting her quit!

Now I am sure that she could get in a plane 10 years from now with a map and a watch and get wherever she wants.

Now I want to flip this situation around a little bit so you can think and I am going to go full state of the art here. Let's just say that Barbie was doing her training in a new Cirrus with the G-1000 cockpit. She was allowed to use the GPS for all

her solo cross countries and she completed them with absolutely no problems. She got her certificate.

About a month later she decides to go meet Ken in San Diego. She loads the three kids in the plane and off they go. I am putting the kids in here because this will turn out to be a HUGE distraction. She gets out about 100 miles out over the desert when without any warning the entire G-1000 Panel goes off and the circuit breaker pops. She has a serious problem; the G-1000 Panel won't come back on. She has lost everything.

Now I am not going to speculate here because we don't know how she was trained and how much she was trained without all of this stuff. I have one answer for this "I am sure it was not enough"!

The other thing I want you to think about is how much of a distraction will the children be when this happens? Those of you who are parents can probably guess.

So, I will just ask you and you can think about it; which Barbie would you rather be in this situation? We can say that both of them are in the brand new Cirrus.

**1:** Barbie who was trained to fly and navigate with nothing and learned from some Huge Mistakes during her training?

**2:** Barbie who did every thing perfectly during her training using the GPS systems?

Believe it or not I have seen and been flying with people who have nice state of the art stuff and they don't even carry maps with them. They say "I don't need it.

## Story #16: Almost Upside Down At Night

**ALMOST UPSIDE DOWN AT NIGHT:** With all of your flight training there will be points in time where you, the student, get the notion that "my instructor is mean or doesn't know what they are talking about". Perhaps not in such a bold way but it will happen. This brings me to a story I have of a night cross country with a student.

The flight itself is a pretty simple one and is safe for night flights. The flight itself goes from Mesa Falcon field to Wickenburg Arizona. I have personally put this flight in my syllabus for many reasons. I have gotten into many arguments with instructors that worked for me about this flight. Several of them refused to do the flight and instead ended up taking the student down to Tucson. As far as I am concerned this defeats the purpose of the night cross country. Following a big lit up Highway in between Two Bright Major Cities does not expose you to the real situations that can happen on a night cross country.

You don't want your instructor to take you to an easy to find destination that is lit up like New York City. You want to go somewhere that is pretty difficult to find at least for you (Not your instructor). Yes you want to make sure the instructor knows where he is going to land in the event of an engine failure; but you need to be on a flight that can get you into a little bit of trouble if you aren't paying attention.

Back to my story

I will give the student the name of John. You know from the other chapters in the book that I am totally against using all these high tech things for private pilot training and even instrument ratings. Remember what job one of the pilot is

????? Answers please..... Yes “FLY THE AIRPLANE”! I have also stated that it will take you about 500 Hours before you have this second sense stuck in you inner memory. Even then a difficult situation will be a battle between many parts of your brain at the same time.

So, John called me in the afternoon about his night flight. We verified the time and at the end of the call John stated that he had just got his new Garmin 95 latest and greatest GPS device and asked if he could bring it along. You probably know me pretty well by now and know exactly what my answer was “””” NO””””!!.

John showed up at the airport with his cross country planned, flight plan filed and ready to go. Before we walked out of the office, out came that shiny new Garmin box. “Fred, you need to check this out.. this is the new Garmin 95 top of the line latest and greatest.....”. Remember this was back in about 1996. Garmin was a no name back then and was just getting into the market.

“Please, please, please can we take it with us?” After all the begging I finally gave in. Deep in my mind somewhere I had a little smile and a voice just said “OK”

So before John even started his preflight he had set up his new Garmin 95 on the Control Column. I knew right then we were in for a good time!! !!! I told John that he couldn't turn it on until we got out of the Phoenix airspace (Right where it starts to get nice and dark) he said Ok, no problem.

We took off and headed west as planned. John was right on the money with all of his checkpoints and times. Flight plan opened at the right time. He was just getting an A+ at this stage of the ball game. We got about 5 miles west of Deer Valley airport where it starts to get nice and dark.(By the way, don't do a night

cross country when there is a full moon!! It is nice to see the big bright moon from 4500 above the ground but it makes your night cross country easier. If you are doing your first night flight as a licensed pilot with your girlfriend/ boyfriend go for it that is the safe thing to do)

So we were about 5 miles west of Phoenix Deer Valley airport and John looked at me with those Puppy eyes asked, "can I turn it on"? At this point in time I just looked at him and said "yes ". The little voice in my head spoke to me again "now it is time for the real lesson to begin".

John turned on the new greatest thing to man. The screen came on and he said, "look Fred isn't this great it tells you everything"? The little voice in my head said "Yeah Right it tells you everything except what your #1 job in an airplane is".

So John kept playing with his new toy. I learned way back in 1989 that there are times when the flight instructor's job is to shut up and let the student go, this was definitely one of those times.

At first John had it under control and he was following his line on the screen and he was ok, but I knew that sooner or later it was going to distract him from his #1 Job..... Yes "Fly the Airplane"!

A little while passed and John decided to start playing with the screen options. I knew now that the BIG lesson had begun and I just sat there. Slowly his altitude started to go up and down, not very much at first, but I knew it was just going to get worse.

I looked at John and his head was down looking right at the GPS. By the way, the time frame of this entire lesson was probably less than a minute.

John continued to look down and said “HM I can’t find the screen I am looking for “. I just sat there.... Slowly he started a right turn (only a few degrees bank) heading right into the mountains. The plane began to slowly loose altitude as the right turn started to get steeper. There was no horizon at all so John had no clue of what was going on. Luckily he was one of the students that took my aerobatic option before solo. So he was familiar with extreme unusual attitude (but not at night).

Slowly but surely the plane had entered the dreaded graveyard spiral at cruise power setting. I waited and waited hoping that the sound of the wind howling across the airplane would give him a clue, but NOPE. He had been trained for this many times but he didn’t pick it up.

The plane kept going into a steeper bank (if it was daytime I would have let him get upside down but not at night) Finally it was time to open my mouth. I don’t remember exactly what I said but was along the lines of “anything wrong?”

John looked up and the string of four letter words began to flow. He got the plane under control. Power back wings level and nose level. He was still however heading on the quickest path to meet God, right into the mountains a few miles north of the very dim lit highway I plan as my emergency landing spot.

I said to him; “what can you see in front of you “he replied with “nothing “and I said “so that means?” I got the reply, “I am flying right into the ground “.That answer was pretty much correct, with his new heading he was flying straight into the hills. Since we lost about 1500 feet our altitude was perfect for the big smack.

I remember raising my voice slightly and saying” if you can’t see anything you are in trouble”. Find some light, start climbing and head in that direction.

John got the plane under control, turned the GPS off and we had an uneventful flight to Wickenburg and back home to Falcon Field.

When we got back on the ground John said “I think I am going to learn to fly before I worry about that GPS. He also requested some night unusual attitude training. I also highly recommend this.

So the little lesson is again “FLY THE PLANE”! John got distracted from that job with his little GPS. If you insist on using this stuff, make sure you know how to use it and don’t try and learn it in the plane, especially at night!

As far as disorientation goes, it can happen very quickly. And when it does it is not going to be pretty. It has happened to me in actual instrument conditions, I had all my ratings and it still took me a few minutes before the blood pressure went down.

So just remember this short little unusual attitude check that you should be able to repeat at the bar when you are about to fall on the floor.

**Airspeed High:** Or I hear the wind howling outside the plane.

**1: Power back:**

**2: Wings level:**

**3: Nose of the airplane level**

**4: “ONCE YOU HAVE THE PLANE UNDER CONTROL”** then bring the power back in, get back to your altitude and heading.

**Airspeed Low:**

**1: Nose Forward**

**2: Wings Level**

**3: Once you have the nose at descent attitude,** then add power, Why?  
If you don't remember go back to the – To Spin or not to Spin that is the Question chapter

If you are out on a dark night you are going to be fighting that attitude indicator. Get some training on night unusual attitudes. Then come back a few weeks later and do it again until you automatically react especially after some time has going by.

Make sure you go somewhere that is not easy, and make sure it is on a dark night.

## Story #17: Late For The Flight Test

**LATE FOR THE FLIGHT TEST:** This is one thing that I always tell students: "make sure you are here before the examiner! ", and be ready to go!! One other thing I will tell you is that you have a very high chance of passing the first time around! If you get on the wrong side of the examiner he/she can and may bust you "legally"

We even went thru this at the Pilot Examiner seminar in Oklahoma City. A story inside a story here: It was the last day of the week long initial pilot standardization seminar. The entire class of about 25 was broken up into groups of 5. We had to give each other simulated oral exams- not long just for about 10 minutes or so. Of course in anything like this the joke is going to be on someone. Yes, it was me. I don't know about you but if you are sitting there watching people give simulated flight tests all day long, somewhere along the line you are going to need a joke.

Anyhow, it was my turn to be the examiner. The instructor got with my simulated student when I took a trip in the bathroom. Me, being a nice guy and a pretty diplomat went as long as I could. The simulated student was just being a total wise guy. Finally I said "that's it come back when you are serious". The instructor just laughed and said "I would have busted him a lot sooner than that"

So my point here is; respect the examiner. By the way, the guys in Oklahoma City were the greatest / funniest FAA people I know with the possible exception of my long time buddy in the control tower and one of my other friends who is a maintenance inspector at Scottsdale FSDO who also happens to be a student.

So back to the first story, the flight test was scheduled for 8.00 am or so. At 7.30 I called the student and got his voice mail (at that time I think it was an answering machine/ it was quite a few years ago). I figured he was just about to

the airport. About 7.50 the examiner shows up and I haven't seen or heard from the student. The examiner just sat and waited. About 7.55 my phone rings and it is the student; he was still home and had a half an hour drive. I could not believe this. I have had last minute problems and had to cancel the night before. Things do happen and we are all human. But this was the first time I ever had a student know he had a flight test at a certain time and knowingly be late.

The examiner started pacing and I knew there was a problem. The student finally showed up about 45 minutes late. In the office they went. Within 10 minutes the examiner walked out, "Fred he doesn't know all of his procedure, call me when he does". Great just what I needed.

The student was not very happy since he just paid the examiner \$250 for the flight test and it was over in 10 minutes. Yes the examiner made \$1500 per hour that day. The student knew I was mad at him, so the next time around he was an hour early and passed.

You have to understand this was done "legally". The student was questioned on areas in the Practical Test Standards and found unsatisfactory. If you get on the wrong side of the examiner they will bust you "legally".

I might add that I went to a seminar for pilot examiners with the FAA for a week. It was actually one of the funniest weeks I have ever had in my life. They gave us enough examples there to write another book.

You are a student pilot and they have been flying for years. They know they can ask you a few questions in a row and there is no way you are going to answer correctly. As a result you are not up to the practical test standards and get a pink slip.

Now this doesn't happen very often but if you do have an attitude, this is the day to get rid of it and be humble. The examiner will always come in with the attitude that you have to prove to them that you are not unsafe. They went over this a lot in Oklahoma with us. They always stressed that the examiner was supposed to do their best to get you the student, thru.

They are all down to earth friendly guys / girls who were in your shoes at one time. So bottom line is be early, prepared and humble and you will probably pass.

## Story # 18: The Day She Passed Her Flight Test

**THE DAY SHE PASSED HER FLIGHT TEST:** So it is time for the last Barbie story. From the title of the story you can probably guess what the story is about. This is another inspirational story for you ladies out there. If Barbie did it, so can you. I did have this happen with one other lady student of mine, but unfortunately she decided to stop flying.

We will go back to the beginning; Barbie and Ken both started flying together. The entire process for Barbie to get her certificate was about 10 months.

They started flying. About a month later, I had flights scheduled with both of them. Barbie was flying with me first and Ken was scheduled to fly right after her.

She told me that they weren't going to be able to fly the next week because it was their anniversary and they were going out of town. My little voice in my head went "GREAT ". I immediately said "you two stay off of each other"! "Frederick (OH I HATED THAT) it is our anniversary"! So we went and flew and afterwards I went up with Ken. I told him the same thing "you stay off of each other next week" Ken just laughed.

So they went away and started flying about two weeks later. The next week, here it came. Barbie walked in and wasn't looking too good. " Frederick " she said, "I am not feeling very good" and I responded and said no problem. Then she gave me that look " Frederick we are going to have another baby". There it was and I thought I lost a student for about a year. Then she just said she was going to fly when she felt up to it and she still wanted to get her certificate as quickly as possible. I am pretty sure this is not the only time in aviation that this has happened and I can guess that there are probably very many Others.

The biggest challenge in my life (to that point) was tossed upon me, so on her good days we flew and on her bad days we didn't. Towards the end I remember a few of the airline pilots I knew saying "Boy if that baby decided to come out you're going to have real problems". I think at times I was more nervous about the situation than she was. I brought it up one day and I got " Frederick I have had a baby before and I know what I am doing". I think this was the first time in my flight training career that a student looked at me and said" Frederick don't you worry" .That was my line and I was not about to argue with a woman about this subject, NO WAY!!!

Yes the other stories in this book happened during this time. So if any of you ladies out there are having any trouble building confidence in yourself, read the stories about Barbie again. During her training she had great flights ("I can do aileron Rolls can you") to very bad flights ("From I can't do this anymore to I am an ace"). She even got sick in the plane with me. But she never quit (She did try to once but I didn't let her / I knew she just needed a little time). She had mood swings, but she was determined to get it done.

She had another problem that most of you probably would avoid at all cost during flight training. I scheduled her flight test with the examiner and told him about it and he said he had seen it years back, so I had a bit of relief hearing that I was not the only flight instructor on the planet who had trained an expecting mother.

She showed up the morning of the flight test. If I remember correctly she was due in only two or three weeks, I don't remember exactly but I can tell you she could sit in the plane and fly it easier than she could walk. Yes, she was that close. It was right before the flight test that she gave me the " Frederick I have had a baby before" line. Then she would go out solo and practice.

She finally went off for her flight test and she and her examiner finally came back. They were both still out on the ramp and I was the one pacing not Ken. The examiner finally walked in and gave me the thumbs up. " Mission accomplished "!!!!!!!

I just wish I could have had a beer with her on the day of her flight test.

So all of you out there, you can do it. You will have ups and downs throughout your training but you will get thru it.