2006-11-18 – Ankeny, IA to Winnsboro, SC

Thursday, November 16th, 2006
The purpose of trip was to take Peter James, Matt Smith and Rodney Kubik to Winnsboro, SC to look at a Thorp T18 (www.t18.net) that they were interested in purchasing. They are looking for something they can fly now while they all work on their respective projects.

Matt and I got to the airport a little early and went to look at the two hangars that were available to lease. As we drove to the hangars I noticed a Bonanza take off without turning on the runway lights, I remarked that that was odd.

Once we were done looking at the hangars we went over to my hangar so I could plug in the engine heater and set a heater in the cabin to keep the interior warm. As we approached my hangar I noticed a high wing plane make a pass down the unlit runway, I again though that was odd. The plane made another pass and I remarked that evidently this person was not smart enough to turn on the runway lights; maybe I should go into my hangar and do it for them, I was a bit sarcastic in my remarks. The next day I learned that this pilot (a 75 year old woman) was attempting to turn on the lights but failed and landed on the darkened runway and ran off the side and collapsed the nose gear and did some damage to the front of the plane and bent the prop. She then walked the mile back to the FBO to get help. Had I clicked the lights on there would have been a different outcome to that landing. We later learned that she was on the wrong frequency. I am puzzled as to why she didn't radio Des Moines Approach and ask for help, so many pilots seem to be uncomfortable with talking to ATC but they can sure "save the day" in some situations.

While all this was going on and unbeknownst to us, we were up stairs at the FBO to do some flight planning, Rodney showed up a little later. I started to lay out the "L" charts and noticed that from chart to chart things did not line up properly. It took a little time but we realized that the charts were in different scales. I thought this was pretty stupid and I still don't know why the FAA does this. It makes it almost impossible to flight plan from one map to the next. I later learned that the FAA has a chart called the "IFR/VFR LOW ALTITUDE PLANNING CHART" that covers the entire US on one map, once we were back from the trip I discovered I had one of these in my office, it was out of date but it sure would have helped.

We planned out first stop at CGI because there was a pilot and a Thorp on the field that Rodney could fly in and get some time to get familiar with the aircraft. The original plan was to get some time in the Thorp in Winnsboro but that pilot all of a sudden could not fly with us on Saturday, in fact he was unavailable until the next weekend.

Our next stop would be Winnsboro, we would either go direct or divert south around the mountains and cross through the Atlanta class bravo airspace. The "L" chart referred to an "IFR AREA CHART" for Atlanta's airspace that would have some information for transitioning the airspace. I was unable to find one at any FBO close to me; I again learned when we got back from our trip that I also had one of these in my office.

The reason for the two routes was to deal with any winds. If the surface winds were strong then there was a good chance that the ride over the mountains would be very

rough and uncomfortable, I would decide on which route to take once we got to CGI and I could check the winds.

Saturday, November 18th, 2006

Ankeny, IA (IKV) to Cape Girardeau, MO (CGI)
2.8 hours, 386 statute miles, 138 miles per hour

I got up at 5:00am to start getting ready for our 7:30am departure. I got a good weather brief and I asked twice about the possibility of ice for I knew I'd be in some clouds until we got close to St. Louis, there was no ice in the forecast and there were no pireps (pilot reports) of ice yet today.

I taxied the plane from my hangar to the FBO so we could get loaded up and depart. We were airborne at 7:40am and climbed to 4000' for the trip.

As we crossed the Iowa border into Missouri we encountered some light ice in the clouds, I knew we could get about the tops so I asked center for 6000' and we climbed. The little ice that accumulated melted off.

As we neared CGI I was unable to find the airport until we were directly on top of it at 3000' because of the haze, once I told Memphis Center that I had the field in site they handed me off to the tower (its class D airspace) I pulled the power and dropped the plane in for a nice landing.

On the ground at Cape Girardeau, MO

Once we got out of the plane and went into the FBO I was greeted by Cindi from studentpilot.com, it was nice to see her again. I'm sure the guys with me wondered why I was talking to this seemingly unknown woman. She offered us a ride over the hangar where the Thorp was at; Matt was so excited he had already walked over there while Pete, Rodney and I rode over in the car.

We spent a couple of hours on the ground. Rodney was going to get some dual time in a Thorp so he would have an idea of the flying characteristics. He is going to be flying the one home from South Carolina if they buy it. Once we got past the introductions with the local pilots we went outside so Rodney could get his ride. As we exited the hangar we saw a Gyrocopter, Rodney and I went over to check it out. The next thing I know Rodney is getting in it to go for a ride, I asked him if he shouldn't be in the "other" plane instead and he pointed in the planes direction, Pete was getting into it.

I saw an interesting plane in the hangar that was under construction, I started asking questions to an older gentleman working on a plane and he told me it is his own design. It's designed for quadriplegics.

After both aircraft took off Cindi and I went back to the FBO and talked for a while. The online pilot community is nice, I feel like I can go to just about any state and meet up with someone I've met online.

Cape Girardeau, MO (CGI) to Winnsboro, SC (FDW)
3.5 hours, 537 statute miles, 153 miles per hour

I started up the 182 and got ready for the leg to Winnsboro, I called for my IFR clearance and as I taxied to the runway but before switching to the tower; ground informed me that I had a flat right tire. I knew it was low, it had been low and I'm sure with the full load we had in the plane it was a bit flat. I asked Pete to look at it and he gave me the green light that it was no worse that it was when we left Ankeny. I told ground that I was aware and it would be fine.

I contacted the tower and they again mentioned the tire and again I told them it would be fine. Once we took off we turned and headed for South Carolina we climbed to 9000'.

As we approached the mountains I was a bit nervous about flying over them, I had never flown over anything like this before. I made some postings on various websites looking for advice; the guys from Colorado seem to think these are just small hills, after flying over them I would disagree. They deserve all the respect that their big brethren in the west get. Since the surface winds were calm and the winds aloft were minimal I elected to take the direct course over the mountains; we had a very smooth flight. While flying over them I realized just how inhospitable they are to planes.

I was constantly looking for landing sites just in case we had engine problems. At one point of the guys asked me where I would land. I pointed to a small lake at our 9 o'clock position and said "over there, in the lake". This started a discussion on why I would do that. I responded that if I have to land in the trees it's not going to be pretty plus the terrain is not very level. The lake is level and if the water landing is done properly there is a chance we may not flip over. There was also a shore line that looked pretty good that I could have aimed for as well.

Once we got to Winnsboro the sun had set, I clicked on the runway lights and only managed to bounce once when I landed.

On the ground at Winnsboro, SC

We had access to the hangar where the Thorp was stored so we went to look at it, the lineman also loaned us his wife's car for the evening.

As we looked at the Thorp many problems with it became evident.
1. All of the fiberglass parts were broken and cracked.
2. The paint was peeling off of the plane in spots.
3. The left landing gear had been bent. It had been straightened but the fuselage skin was buckled.
4. There was an oil film on the engine, possibly the propeller hub was leaking.
5. The fuel cap would not close all the way; it also appeared to be leaking. It appeared that the prior owner used expanding foam (like you'd use to seal cracks in the

foundation of your house) around the fuel cap assembly to keep the leaking fuel from getting all over.
6. All of the cables and linkages under the cowling were loose and vibrated all over the place.
7. With the seat cushions in none of the guys could close the canopy. It wasn't until the seat cushion was taken out that they sat low enough that it would close.
8. The canopy frame was pretty bent; it looked like someone had been pushing down on it when they got in and out of the plane.
9. The rudder pedals were too close so your knees were bent up and hit the throttle quadrant. They claimed a six foot tall person had been flying it but that appears unlikely.

Some of the problems were disclosed before we got there but quite a few were not, thoroughly aggravated with what was found and the long trip to get here we decided it was dinner time. We went to the Captains Galley, a sea food restaurant. I do not like sea food but I figured they would have some form of beef or chicken that I would like. The guys ordered some platter dinners that contained an enormous amount of food, more than I could eat! I had the Cajun chicken breast and hush puppies, they were very good. The waitress was very nice and she did a good job.

After dinner we went to Days Inn where Matt had made reservations. We stopped by a gas station to fill the vehicle up with gas as a thank you for letting us use it overnight. When we got to the motel there they did not have any reservations for us but they had plenty of rooms so we were OK. We learned the next day that Matt had made the reservations for the wrong day. Pete wanted to draw straws on who would get stuck with him. He evidently likes to wake up in the middle of the night and watch TV. I told him that I sleep like the dead and it would not bother me.

We all went up to mine and Pete's room and after some debate on what to do about the Thorp and what to do next, Matt and Rodney went to their room to get some sleep. I was pretty tired by this time and I fell asleep pretty quickly. Pete was going to watch some TV when he discovered he could not change the volume. Whenever he tried a message came on the TV that said "Function Disabled". He called the front desk but they were no help, they could have offered us a different TV but they did not.

Sunday, November 19th, 2006

Around 1:00am Pete work up because of my snoring, he said it was so loud that I'd wake myself up and stop for a few minutes. I did not realize I still had a problem. I used to snore loudly; to the point it would drive my wife to the living room couch. When I lost all the weight a couple of years ago it subsided but then I put some of the weight back on and I started up again. I have again lost some weight and my wife no longer complains about it so I figured I had stopped again. Pete said it was so loud that he went and got another room.

When I awoke that morning I noticed he wasn't there, I sat up in my bed wondering where he was and a knock came at the door. I looked and it was Pete, he told me what had happened. I have a new nickname, Sir Snores Allot.

Before we left the room I got a weather briefing and found relatively calm winds so I planned on crossing the mountains again. I picked Warren County, TN because it was just past the mountain range and they had cheap fuel and several instrument approaches and it looked like I might need to shoot the GPS approach to get in.

Winnsboro, SC (FDW) to Warren County, TN (RNC)
2.6 hours, 290 statute miles, 112 miles per hour

We departed around 9:40am for the LONG trip home; we would be fighting head winds all the way home. Flying over the mountains was very beautiful with the low clouds engulfing them. The ride was pretty smooth; we did hit a few small bumps every now and then but nothing serious. Rodney and I noticed that the tops of the clouds steadily got closer to us at 8000'.

As we were flying along at one point I was playing CD's through the audio panel in the plane and I had played a Don McLean CD, he wrote American Pie which was the song about the deaths of Buddy Holly, Ritchie Valens, J.P. Richards (the Big Bopper) and the pilot Roger Peterson who cashed on a snowy winter while flying out of Clear Lake, IA. I would soon learn how ironic this would be.

After that CD I put in Abba and as soon as Dancing Queen came on the plane started to yaw back and forth, I looked in the back and Pete and Matt were swaying side to side with the music, I told them to knock it off or I'd come back there.

When we got to RNC we shoot the GPS23 approach.

Warren County, TN (RNC) to Cahokia, IL (CPS)
3.2 hours, 340 statue miles, 106 miles per hour

This was perhaps the most exciting part of the trip and not for good reasons. Somewhere over Nashville at 8000' we started to skim the tops of the clouds and then we were in them! We immediately started to pick up light rime ice so I asked Memphis center for 6000'. What I should have done was climb to 8500' and I would have been in the clear all the way to St. Louis.

There were a couple of things that made me think that descending was the proper decision. The first was I knew the head winds were stronger up higher, it was already a slow trip and going higher would have made it worse. There were a number of holes in the clouds to where we could see the ground and the layer did not look that thick, I thought 6000' would put me below it so down we went.

Descending out of 7000' the ice accumulation picked up from light to moderate and perhaps severe. At 6000' we were still in it and we were iced up pretty good, I told center of my predicament and I was going down to 4000'. At 4000' we were still in it so I asked how low I could go and was told the minimum safe altitude was 2600', fine I'll take it! I was descending at 1000' feet per minute. A discussion ensued on why I didn't come down faster; it was sure a long six minutes in the clouds! The only reason I have for not coming down more quickly is I wanted a stabilized descent and I knew that the

faster I came down with all the ice of the plane that it would take longer to level out and I would be putting more stress on the plane. Right or wrong that's what I was thinking.

At 3000' we broke out and I leveled out at 2500'. For the first time I got a good look at the ice accumulation and I could not believe what I was seeing. I tried to pull the power back to normal cruise and our ground speed dropped to what I felt was a dangerously slow speed so I put full throttle back in and kept the prop at 2450 RPM.

With no sun coming through the clouds and the temp at 0 degrees Celsius I knew that this was not going to melt. Now we were handed off the Kansas City center, they wanted to know if I could climb to 3000'. I informed him of the ice encounter we just had and 3000' would put me back into it, no way was I going to climb, I'm staying right ay 2500'! I was again told that the MSA was 2600' and I replied I was in good VFR and could manage my own obstacle avoidance. The Garmin 496 has a terrain and tower database so I felt confident that I would not hit anything.

Since I was below radar coverage center had me go direct to the Marion VOR and then direct to Cahokia. On the way to the Marion center again asked me to climb to 3000' to which I said a stern "NO". I did not catch it at the time but this was now a different controller and he evidently knew nothing of our predicament. I was so busy flying the plane that I did not realize this was a different controller. One of the guys in the plane with me pointed this out.

The plane seemed to be flying fine and stable so I asked the others what they thought we should do, I know that I was the pilot in command but I had three other pilots (one is also a CFI) on board so I wanted opinions. I figure you can never have too much information and I wanted the others thoughts on the situation.

We decided to continue on to Cahokia since the plane was flying and we were out of the clouds. I figured if we tried to land now with all the ice of the plane it could get interesting so hopefully some of it will melt by the time we get to Cahokia.

As we neared Marion we were given vectors to the east (we were headed north west) for IFR traffic landing at Marion. I was told to turn east and intercept a radial off of the Marion VOR so I got the GPS set up to display this and as we approached the radial I radioed center and they told me to continue on to the east. Looking at the sky ahead it looked as if we were going to be back into the clouds at 2500'. A few minute had passed and we hit freezing rain! I immediately did a 180 and told Center what we had flown into and I wanted direct Marion and then CPS. The controller gave it to me and I put that new course into the GPS.

Matt noticed that there was some sun breaking through to the west and perhaps we should fly that way to see if there is enough to melt the ice. I saw on my GPS that the fastest way out of the cloud cover was to continue on to CPS. I did not feel that there was enough sunshine coming thought the clouds that it would make much difference. We talked about this and someone brought up the fact that on yesterday's flight it did not seem like the cloud layers were actually matching what the GPS's weather showed, thinking about yesterday I believe the cloud cover imagery was correct and haze was our problem, not necessarily the clouds. I had been checking METAR reports of the airports along our route and they were confirming what I saw with regard to cloud cover so we were going to continue on to CPS and land.

The center controller several times wanted me to climb to 3000' to which I sternly refused, the plane was flying fine and I did not want to do anything to disrupt that. I know that only climbing 500' should have not been a problem but I was not going to take any chances. I was thinking about a show I had recently seen on TV about the Alaska air flight that crashed off the coast of California a few years ago. The plane has a problem with the elevator trim, the pilots following the check list, cycled the trim motors a number of times to the point that the trim system failed and the airliner plummeted into the ocean. Our plane was flying without problems, I had good visibility so I was not about to change anything unless I had too.

As we approached CPS I told everyone that I was going to fly the approach at 130 mph (this is the speed we were already doing) and once we got onto final I would slow to 120 and over the threshold I would slow to 110 and touch down and I would not use any flaps. The final speed of 110 mph is something I came up with, it happens to be the top of the flap range, other than that fact I had no real reason to pick that speed.

Once we were handed to the tower I let them know of our predicament and I would be making a fast approach. The ice finally started to melt off and I flew the approach as I said I would, once over the numbers at 50' or less I slowly pulled back on the power and let the plane settle down to the runway. I figured we used almost 6000' of the 7000' of runway we had.

We taxied to Ideal Aviation and got out of the plane. I was glad to be on the ground!

On the ground at Cahokia, IL

We decided to grab a bite to eat at Oliver's, the restaurant is on the field and Ideal aviation took us over there and brought us back.

Once the plane was fueled up we loaded back up for the final leg home.

Cahokia, IL (CPS) to Ankeny, IA (IKV)
2.8 hours, 295 statute miles, 105 miles per hour

The last leg of a LONG trip, it's good to be in the home stretch. Not much conversation on this leg, I think we were all anxious to get home and a bit tired. We landed after dark and it was a good landing. I flew the ILS36 at Ankeny for fun but we had good VFR.

On the ground at Ankeny, IA

After we unloaded the plane I put it away in the hangar and I gave the cowling a little kiss and told the plane "good job" for the trip.

The trip was 14.9 hours, 1846 statute miles traveled at an average speed of 122 miles per hour.

Trip Recap

There were several things that I should have done differently and a number if things that I did correctly.

1. When I first encountered the ice I should have climbed the 500' – 1000' and stayed on top all the way to St. Louis and none of this would have happened.
2. I got lured into descending because I thought I could judge the thickness of the layer and I wanted to get below it.
3. I also got lured into descending because I knew the head winds were lighter and I'd pick up some ground speed.
4. I should have climbed on top and then used my Garmin 496 with the full aviator weather package to look at freezing levels and cloud bases.
5. When ATC wanted me to climb up from 2500' to something higher I refused as I did not want to reenter the clouds as I knew there was ice in them. I would tell ATC this and they were fine with leaving me at a lower altitude. When I got handed off to the next controller he wanted me to climb and I had to explain myself again. It was not obvious at the time that they were not passing my predicament along. In the future if there is something going on out of the ordinary I will make sure that I tell the next controller and not previous one to pass the information along.
6. When landing at St. Louis I choose to NOT make any configuration changes to the plane. Some examples would be landing at a much faster speed and not using flaps on landing. This was no time to become a test pilot.
7. I consulted with the other pilots on board to get their ideas on whether we should land right away or continue on to St. Louis.
8. I stayed IFR even though I was below radar coverage because I wanted to be talking to someone in case I did need to declare an emergency. Since I was below radar coverage I would not have been able to get VFR flight following as they couldn't see me. Staying IFR meant they HAD to stay with me and I could provide position reports on my location.

NASA has an online course for icing that is very good. It can be accessed at http://aircrafticing.grc.nasa.gov/courses.html

NOAA's National Weather Service also has a very good JAVA applet that will show predictions for icing for a 24 hour period. It can be accessed at http://adds.aviationweather.noaa.gov/ This site is now part of my flight planning.

I'd like to conclude by saying many times that the Cessna 182 is a darn fine plane that does a good job of carrying a load and four people in comfort. I know that the decision to buy a 182 was the right one, thank you Clyde Cessna for creating such a wonderful and capable aircraft!