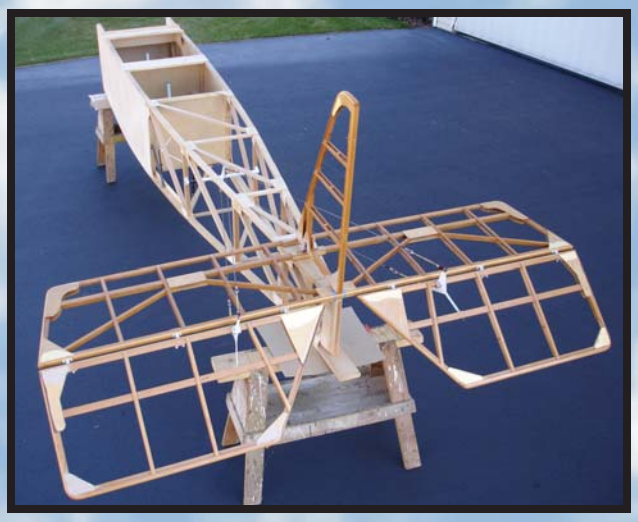
Leading Edge

Vol.1, No.9 November 2005

Chapter 1414
at
Poplar Grove Airport

In this Issue . . .

Helsper Open-House



Helton Lark 95

"Flying West to North Omaha"

Dirty Side Up . . .

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1414

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Mission Statement

Promote, encourage and facilitate an environment that fosters safety and high standards in the design, construction, restoration and operation of all types of recreational aircraft as well as nurture camaraderie and friendship amongst all members!

President's Column

Our thanks go out to Mike Auster for his presentation last month on LifeFlight. Mike brought up the fact that they are always looking for ways to help those in need and that their free service needs to be made known to the various organizations that could benefit from the service.

Following our meeting in October, I took a trip to Virginia Beach, Virginia to visit with my son who had just returned from a deployment with the Navy. The weather was beautiful and I spent a fair share of my time outdoors. On the third day of the trip, I began wishing that I had my airplane so that we could do some sightseeing. It was about this time that I noticed the absence of the sounds so familiar in my neighborhood back home. I hadn't heard a single, small, general aviation airplane all afternoon. There are no airplanes flying around. Sure brings on an eerie feeling.

It was about this time, the thought crossed my mind just how close the nearby Washington ADIZ happens to be and also, that there is legislation currently taking place to make the ADIZ a permanent restricted area. The thought of a permanent flight restriction here on the east cost makes me think that Chicago or O'Hare could also become one in the future. I wonder how that would affect the traffic in and out of Palwaukee, Schaumburg, DuPage and the more than a dozen other GA airports within the class Bravo vail of O'Hare. Recently, I received an e-mail from Mark Wiencek of the Sunday Morning Breakfast Club (SMBC) who is recruiting pilots to post their views on the legislation. At first, I may have taken a pass, but now after this experience, I feel compelled to do something and I ask that each of you think about it. By the time you are reading this, it will be too late to have your input registered, but this issue won't be over. Please refer to the "Make it Personal" article later in this newsletter. It will help you understand the issues of a permanent restricted zone and it will show you how easy it is to file your words of protest.

According to AOPA, "If the FAA makes the Washington, D.C., ADIZ permanent, it will set a dangerous precedent, creating the possibility of IFR-like flight restrictions within the footprint of every Class B airspace."

Let's ask our legislators to find a better solution than to make permanent restricted zones.

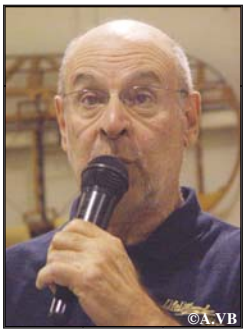
Tom Barnes

Editors Note:
The ADIZ comment period has been extended for 90 days. Send your comments to the FAA. See page 12 for info!

This Month's Meeting

For our November meeting, our speaker will be Dave Gustafson. Dave is an FAA tower controller from Rockford and he will point out recent changes to the FAR's and discuss some of the services they provide at Rockford. Dave will also clear the way for us to visit the tower on a day in the very near future.

Looking Back at Last Month's Meeting



At our October meeting, Mike Auster of ***Life Line Pilots*** informed us of all the things this organization does to help people in need to get transportation to life-saving medical treatments.

Wanda Wissett started ***Life Line Pilots*** in the early 80's in Champaign, IL. Originally, the main purpose was to fly young leukemia patients to Tennessee for treatments. The group of pilots who started it were known as "Wanda's Flying Club".

They moved their operation to Peoria when the main person in charge of fundraising had relocated there.

There are about 500 pilots who volunteer for Life Line Pilots. 150 missions were flown in September. An average of 750 missions are usually flown in a year.

Amazingly, the most difficult job Life Line Pilots has is getting the word out that they are available.

If you are interested in finding out about becoming a volunteer pilot for Life Line Pilots, you cam contact them by e-mail at Lifelinepilots.com.

Tom Barnes presented Mike Auster with one of Frank Herdzina's Cylinder Lamps.

Carol Von Bosse

Pietenpol Open House November 19th, 2005

by Dan Helsper

One day while I was scrolling through the "A" volume of the 1963 World Book encyclopedia when I was about 11 years old, I came across the section titled "How an Airplane Flies."

I was immediately bitten by the bug and it was all downhill from there. I would spend endless hours constructing home-made model planes and helicopters out of shirt cardboard and pretend-fly all of them around the house. After a time I was lucky enough to get in with a few (lifelong) friends of common interest, and we began flying gliders with the local CAP squadron starting in 1968. When I was 17 I received a Private ticket and a commercial soon followed. My friends and I continued our quest of all things aviation, and we got our A & P's in 1975. Over the years I have owned an Aeronca Champ and presently an Aeronca Sedan.

Back in 2000 I was finally in a position to pursue a lifelong dream of building an airplane. Contemplating which homebuilt to build, I ultimately decided on a 1928 all-wood design called the Pietenpol Air Camper.

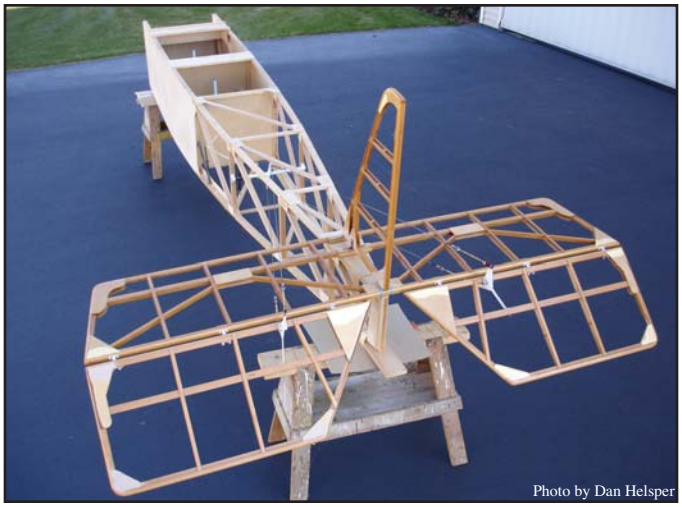


Photo by Dan Helsper

The reason I chose this airplane was threefold:

Photo by Dan Helsper

1) I loved, and was familiar with, working with wood.

2) I wanted a low and slow airplane to admire the world from 500 ft.

3) I did not want a kit because I really enjoy creating something from nothing, and actually have it work when I am done.

For those of you that are not familiar with this design, it is a 2-place parasol (one-piece) wing, utilizing the most common available motor of the day, a Ford "A" engine. It has been a real joy for me ever since the first day I received my first batch of spruce. At present I have the entire wing and fuel tank complete, ready for cover. The fuselage is about 50% complete. I have incorporated a unique elevator trim system that I would like to get any and all opinions on. The Pietenpol does not typically have a trim tab (too high-tech for the day) but I did not like the prospect of two hour flights with no elevator trim. My sys-

continued on next page

tem utilizes bungee cords to exert pressure on the elevator bell-crank. The only way I will know if it will truly work, is when I fly it and put it to an actual test. (That is the beauty of home-building!) I have had to overcome many obstacles and have had to learn many new skills along the way, but this has been pure joy for me. I relish the chance to lay awake at night and engineer and design new gizmos and parts in my mind's drawing board in the peace and tranquility of the middle of the night.

The Open House will be Saturday, November 19th, 2005 from 10AM til noon, at 3043 Fairchild Str. Belaire Estates.

Helton Lark problems

by E. "Buck" Hilbert

Four Years ago, I bought a Helton Lark 95.

A very rare airplane, originally a WW II derivation based on the Culver Cadet, and used as a radio controlled Anti-Aircraft Target. Radio Control was accomplished by an observer operator from another manned aircraft, usually flying out of range of the guns or in some cases from a ground base, although it was possible to fly out of range of the primitive RC equipment of the day.

The main difference between the pre-war production "Cadet" and the PQ-14, as it was designated, was its fixed tri-cycle gear. The solid gear was one less item that had to be radio controlled.

The Airplne is now a two place, side by side, but in those days the entire right side (seat areas), was filled with about a hundred pounds of radio equipment. Not very fast, but very maneuverable, the little "PQ" was shot at and often missed by shipboard gun crews.

The Factory Super was able to acquire the type certificate after the war production ended and it became the Jameson "Jupiter One" certificated as a single place airplane.

The certificate changed hands several times as aspiring people tried to sell the design. Unfortunarely, an all wood airplane couldn't compete with the new Cessna 120s, 140s, Luscombes, Champs and Cubs. Several people suffered financial losses trying to prove its worth.

Production went from Arizona to California as the type certificate changed hands, and some sixteen planes of the last production run were eventually made by a Colonel Helton from a plant at Tracey, California. Hence the name "Helton" and the 95 designated the Continental 90 hp engine.

After I purchased this one, serial number 8, about four years ago, I was a pretty happy guy. Of the sixteen on record, I could only find three active airplanes here in the continental U.S.. There were a couple inactive in aviation schools around the country, and a derelict or two in Maryland and California. So I had a very rare low time airplane that had just been completely gone over by my good friend Paul Workman out of Zanesville, Ohio.

Although this picture is not of Buck Hilbert's Helton Lark 95, it gives you an idea of what it looks like.

For a 1966, it was very low time. Paul had done a beautiful job on the re-build, with new interior, (his business and specialty) and the price was right. He lauded the fact thet there had never been a "wrench" on the engine. At the time, it has a bit over 800 hours total time since new.

I had some medical problems crop up right after I acquired the airplane. As a rehab, I went through the airplane; doing an annual on it, rearranging some of the equipment, re-doing the cowling, changing out hardware, fixing a balky trim tab assembly and generally doing whatever to make it a first class little fighter.

With its "Spitfire" elliptical wing and its racy lines, it's an appealing airplane. But with its little five inch wheels and tiny oleos, it would be much happier on a paved strip rather than here at the "Funny Farm".

Those little wheels find every bump in the sod, and the oleos seem to be connected directly to the end of my spine. I don't have enough insulation in my butt and every little bump hurts! Back to the reason for this article.

Paul had told me he had just done an oil change, and that it wouldn't be due for about another thirty hours. I flew the airplane a couple of times, chased Nels Hanson's RV-6 around, took it up to Lake Lawn, over to Poplar Grove, out to Brodhead, and was just beginning to really appreciate it when I had my med problems and it was just left to sit for the next two years.

Feeling better and rarin' to go, I put a new battery in it, cranked it up, and flew it. Much to my anxious surprise, the oil temp red-lined within minutes after I took off and climbed to fifteen hundred feet. I didn't like that one bit. Leveled off, waited a few

continued on next page

minutes for it to cool, and tried again. As soon as I opened the throttle, red line again!. I tried several times and had the same results.

Back at the Aero Shop, I opened up the cowling, looking for a possible problem. Couldn't find one, but as a precaution, re-worked the baffle seals. Put it back together and tried again. Same problem. Red Line. Oil Pressure was good, but it was very obvious the engine was really cooking.

Bought an oil filter adapter from Wag-Aero and installed that. Tried again, same problem.

Maybe it needs more airflow; installed cowl flaps. Tried again, same problem!

Now the oil is beginning to "stink"; there's nothing like the smell of burnt engine oil, it really stinks. I changed the oil, put some more openings in the front of the cowl to enhance air flow some more. Tried it again. The new oil got hot real quick, same as before.

I parked it, and it sat for another year while we got involved with Lee's Champ, and the Cessna 120 projects. Now I'm back at it.

Decided there must be an internal engine problem, so I put a clothes pin on my nose and went after the engine. Pulled it and started disassembly.

First surprise. No oil screen! The factory had eliminated the oil screen and put an adapter in its place to hold the oil temp bulb. Now that isn't right, but it'd been that way since it was built, so maybe that's not the problem.

Sludge! The bottom of the oil tank is full of sludge. There is also sludge in the oil screen cavity. I'm beginning to suspect that the engine was fed non detergent oil for many years, and when I changed over to the multi-grade oil, it broke all the sludge loose and now it was plugging all the oil passages.

The engine isn't quite disassembled yet, and I'll have a later report on what we find when we split the case and check everything out. I do suspect the sludge is the problem. In all the years I've been playing airplane "Wrench", this is a "first".

I have changed to detergent oils before, and have noticed the oil gets black very quickly, indicating it's doing its job. The new oils, with their additives, enhance even better what "three tasks oil" has to do. First, as we all know, it lubes, secondly it cools the hot spots as it circulates, and lastly and most important it keeps contaminents and sludge in suspension and keeps the interior parts of the engine clean. Black oil means the job is being done.

When I see the final results on the engine overhaul, I'll make a new report.

You might be a REDNECK PILOT if . . .

You've won the "Barb Wire" award at a spot landing contest.

Refurbished ORS and LGJs!

(Object Recognition System and Landing Gear Joints)

(For those of you that are not familiar with these high tech terms -eyes and knees)

by Frank Herdzina

As the year started off, I found myself gung-ho to start the restoration of my Brunner-Winkle Bird and the F2 Cub. However, as I gathered parts for these projects, it became obvious that I was having trouble reading those fine hash marks between the inch lines on the ruler.

Well, it's been two years, time for a new exam. Two days later, I am sitting in the examining room, only to be told that I have stage 4 cataracts and a new prescription will not help, nor would I pass my up and coming driving test.

After reviewing a short film on cataract surgery, we made plans for *Small-Incision Cataract Surgery*. Like so many things in life, modern medicine got much of its start on this operation during WWII. The plastic canopies on the British Spitfire exploded when hit by gunfire into very small sharp pieces. Some of these pieces where getting embedded in the pilots' eyes. Several pilots reported that they were able to see through this plastic, thus the start of Cataract Surgery. While I was trying to recuperate from this surgery, I decided to check into the pain I was having in my knees. Ten years ago I was told that they were going bad and to make them last as long as possible; I think that day has come. The good doctor recommended some physical therapy prior to surgery and have both knees done at the same time. The recovery is equal whether one knee or two. To make a long story short, I went for the double knee replacement and, as of this writing, everything is coming along very well.

If you would like to see a major development in bionic surgery check this out.Jesse Sullivan's arm at work, go to:
http://www.rbi.ims.ca/4399-560

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from AvWEB"s Short final -

A transmission heard in the O'Hare TRACON:

Airliner: Approach, what's our sequence?

Approach: Calling for the sequence, I missed your call sign ... but if I find out what it is, you're last.

"Flying West to North Omaha"

Story and pictures by Don and Maureen Alesi

"So, where's the trip this year Don?" Jim (my mechanic) always knew of an upcoming trip whenever I scheduled my annual inspection a bit early. "Maureen and I are flying to the Cessna 120/140 convention in North Omaha Nebraska with a stop over at Mt. Rushmore, South Dakota." "Uh Don? Mt Rushmore is nowhere near Omaha." "You know I never figured out what a compass was used for. Straight lines are for sissies, Jim," I replied. Bar Harbor wasn't anywhere close to Lumberton, North Carolina but that little fact didn't stop us from flying there two years ago. If Jim had another opinion, he was keeping it to himself.

While the annual inspection was going on, Maureen and I planned for the trip by conning our good friends Mark and Carolyn Pasqualino into joining us. Besides having a Cessna 120, they also have a Beech Debonair that can haul lots of gear. Other friends of ours had flown to Mt. Rushmore before and offered us brochures and ideas. For some reason, everyone we talked to said that we had to make the trip to Wall Drug, more on Wall Drug later.

To get in shape, Maureen and I decided to take up mountain biking. Bad idea. On our first ride down a beginner's hill we learned why helmets are very important on bicycles. Let's just say that Maureen learned to fly; over the handle bars that is. She went on the trip sporting bruised legs and a bent ego.

It was about six hundred and fifty miles from Poplar Grove Illinois to Custer County, South Dakota, or three sectional charts laid over a kitchen table with two extra leaves put in. Carolyn went over our route and made suggestions on fuel and places to avoid. She and Mark would meet us in Custer County on Sunday and carry our extra clothes with them. Previous experience taught us never to take more than thirty pounds of gear, including tools, in the baggage compartment.

At O' dark thirty in the morning on September 15, I carefully woke Maureen to tell her that we had perfect weather all the way to Mt. Rushmore. Two things you need to remember before a trip in a small airplane. First; don't drink much coffee. Enough said about that. Second; fold all charts ahead of time or you might be IFR on a clear day.

As we readied for takeoff, we saw Poplar Grove's owner Tina Thomas, in her Beech 18. She wished us well and then made a perfect wheel landing right in front of us. Now that's the way to fly. As we headed west, we noticed that something was missing, no head wind. We also had calm air. We were doing better than 100 knots and at 1000ft above ground you could watch all the cars heading to work.

We made a quick stop in Spencer County, Iowa, after a three hour flight and continued west. The farther we flew; the green pastures began to fade into a brown moonscape. In case of a forced landing, we planned on putting down near the herds of cattle and the ranches that were nearby. It was like watching an episode of "Bonanza" from the air.

After fueling up at Wiley Field, South Dakota, I had the brilliant idea of circling Mt. Rushmore in the plane. For me, "brilliant and idea" is the ultimate oxymoron. Flying near mountains on a sunny afternoon is sort of like putting dynamite in a milkshake. Luckily, after the first shot of turbulence, Maureen made it very clear without saying a word that we ain't going anywhere near the monument and we better be on the ground real soon. The landing on a downhill runway was one of my better ones. Seven and a half flying hours sure beats driving.

The old saying that flying is safer than driving sure came true on this trip. Just five minutes after getting a car, a large deer decided to play chicken with us. We just missed him. That deer was one of four that almost got us. The animals in South Dakota are not afraid of people. We watched wild turkeys, pronghorn antelope, prairie dogs, and the ever present bison either crossing the road or standing right by it. When Maureen tried to get a picture of a herd of sheep, they all turned around and mooned her. It's true. As you can see, we have the picture to prove it.

Mark and Carolyn arrived on Sunday afternoon. The first thing Mark said was, "The highest airport in South Dakota and you had to land here." I didn't think 5500ft elevation was too bad

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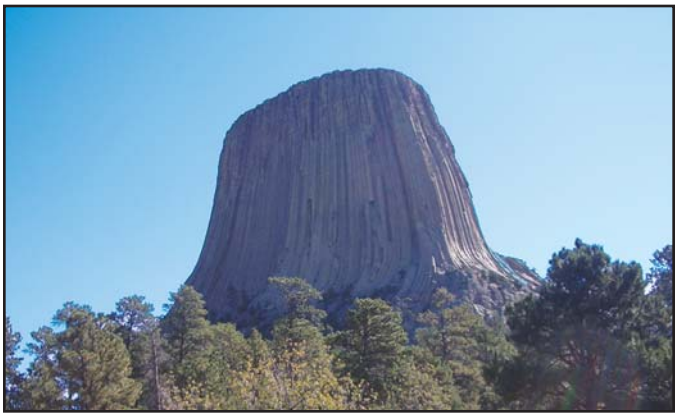
until I realized that the downhill runway had you staring up a steep hill. Luckily, we had used up two hours of fuel and cool mornings were expected for the next several days.

Driving around the area taught us several things. Besides the abundant wild life, we encountered such things as narrow winding roads that ended up going though short one way tunnels. On one occasion we helped an elderly gentlemen turn around his large motor home after backing up a steep hill because he could not fit through a tunnel. Also, we found out why certain parts of South Dakota are called the Badlands. That's because some of the roads are really bad. On the other hand, the air and sky was as clean and clear as anywhere that we have ever been.

Maureen, Carolyn, and Mark learned something about me. I HATE CAVES! I made it about ten steps down Wind Cave before I started a major freak out. I did not scream out loud but the guide did have to let me out then and now. While everyone had a nice tour, I stayed topside and watched a movie inside in a big open theater.

Mt. Rushmore was spectacular, as was Devil's Tower in Wyoming. We also checked out a site that has uncovered Mammoth remains. We did make it to the famed Wall Drug. It reminded us of an older tacky strip mall. It actually was pretty interesting and the buffalo burgers were not bad either.



Early Wednesday morning, I loaded everything we had into the Debonair while Mark wasn't looking. Then Maureen revved the engine up before heading down the runway. If we had room, I would have flapped my arms. The little Cessna actually broke ground in less than a thousand feet. Maureen followed a road though a pass and we had no problems gaining altitude.

A fuel stop fifty miles South put us at a much lower elevation. Then the good news. We picked up a huge tail wind. Our ground speed was well over 135 knots! Not bad for a 100 knot airplane. Three hours later we were in the pattern for North Omaha airport.

On final approach, I could feel a strong gusty wind blowing us all over. But the worst part was all the other Cessna pilots that were watching us land. Can you believe it? I actually had a really good landing. As we got out of our airplane, Ken and Lorraine Morris came over to say hi. "Nice landing Don." Lorraine said. "Your fly is open." Boy did I turn red. But Lorraine is cool, she said only a friend can say something like that. I guess I felt a bit better. Mark and Carolyn showed up a bit later after getting a car.

The convention was great. Omaha has a really nice zoo and the SAC museum was second to none. On a pedestal was an SR71 spy plane. I have personal knowledge of it having ordered Photo Recon missions for it while in the service. What I didn't know was that it cost about 200,000 bucks an hour to fly. That was one heck of a roll of film I got.

Mark had to fly home on Thursday to fly a jet for his boss. Carolyn needed a ride home. Several people offered her a ride.

Doug Corrigan keeps his really nice 140 near Poplar Grove and said he had room.

On Sunday, the weather looked pretty cruddy with isolated showers popping up all over. After waiting several hours Doug had a great idea. The weather was better the farther North we went. If we could pick up I-80, that would keep us out of trouble with several airports nearby if we needed to land. Other people had taken of earlier and said that although the ceilings were a bit low, the visibility was at least five miles. Sounded good to us.

Maureen and I took off right behind Doug and Carolyn and stayed right on their tail. Although the weather wasn't perfect, we were very safe. Doug did a great job of going around some really small pockets of rain.

Stopping at Grinnell for fuel, the owner the FBO told us that he used to own a Cessna 140A. He decided that we should get a ten percent discount on fuel because he just likes 140s'. What a nice guy.

Doug led us in to Poplar Grove and Carolyn decided a celebration pizza was in order. Okay it wasn't champagne but it tasted a lot better.
The moral of this story is that just because you have a small airplane, doesn't mean you can't go anywhere. Travel in it. They fly just as good five hundred miles from home as they do fifty.

Dirty Side Up . . .

THE THRILL OF COMPETITION

by Dianna Ingram

Eight a.m. on Saturday, and the airport is quiet. 25 aircraft in a myriad of bright colors sit in a row on the ramp: Extras, Pitts', Sukhois and Decathlons in reds, yellows, blues, greens and oranges. On the south end of the ramp, a pilot walks through his routine on the ground, his hand spinning and pirouetting through the sky as his airplane will in flight.

I sit under the wing of my rented green Super Decathlon, eyes closed, lost in thought. I, too, am going through my routine in my mind before the flight. I have worked hard these past two weeks between my first and second competitions, perfecting the maneuvers that didn't work so well the last time around. I placed fourth at my first competition, and I am determined to do better this time.

After the first competition, I had a wealth of criticism and advice at my disposal from fellow competitors and the judges. After thinking about what they had said, and reading every single back issue of Sport Aerobatics from my collection that included advice that might help me become a more effective competitor, I formulated a practice plan for the weeks between competitions. I spent a lot of time experimenting with various spin entry and exit techniques to see which one worked best for the Decathlon. Was spin entry cleaner with power on or power off? Should I apply rudder slowly and steadily, or give it a swift kick? I tried to increase G-loading in the loop to make it a little more round. I felt much better prepared this time, and not at all nervous.

I snap out of my reverie as I notice the starter heading my way, clipboard in hand. After I put on my parachute, climb in the aircraft, and strap myself in tightly, the starter checks to make sure my altimeter is set to zero, and that I know the correct frequencies to use in the holding area and aerobatic box. "Have a good flight," he says, clearing me to launch into the holding area.

I take off and circle in the holding area, awaiting my turn in the aerobatic box. A strong southerly wind pushes me north. Many competitors will have a hard time remaining in the box today. Fortunately we Primary category competitors do not have to remain within the confines of the box.

My radio finally crackles to life. It's the chief judge. "Dianna, you're cleared into the aerobatic box, good luck."

It takes me a little longer than usual to get to the box owing to the strong winds aloft, but when I get there, I am in the zone and ready to fly. I wag my wings three times to signal the beginning of my sequence as I enter the box.

My first maneuver is a one-turn spin. I enter the spin using just a touch of power and kick in the rudder at the onset of the stall. The nose immediately begins to yaw, sending me into the back of my seat with the auto-rotational force of the spin. Once three quarters of the spin is complete, I push opposite rudder and bring the stick forward. The spin stops on the heading from which it started, pointed straight down in a vertical descent. I give the stick a 4-G pull, going a little gray at the edges of my vision. As I let go of the stick, the G-forces all but disappear, and my vision returns to normal.

I am now ready to complete a loop. Pulling 4 G's once again, I clench my stomach muscles to keep the blood from rushing form my head. I float over the top, trying to keep the loop as perfectly round as possible. Then, as the speed builds up astronomically on the back side of the loop, I begin another 4-G pull back to level flight.

I turn through 180 degrees in a competition-style steep turn. With the nose on heading, I roll into a 60-degree bank, turn 180 degrees, stop the nose on my new heading, then roll abruptly back to level flight.

The next maneuver has been my greatest nemesis through all of my competition practice thus far: the slow roll. I take a second to relax before rolling. The slower I roll, the better I can see what I'm doing, and how well the maneuver is progressing. I must relax and avoid the temptation to rush through the maneuver.

I add left aileron and roll at perhaps half the roll rate of which the aircraft is capable. As the aircraft approaches inverted, I need to push the nose up to keep the aircraft from descending.


Photo provided by Dianna Ingram

Once upright again, I do one more competition turn, 90 degrees this time, right toward the judge's line. Three more wing-wags, and the sequence is complete. I return to the airport for landing.

When the flight is over, I pay my dues as part of the aerobatic community by assisting on the judge's line recording scores for

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the Sportsman competitors. On my way to the judge's line, I purposefully pass by the scoring room without looking at the results. I don't know if I want to know how the flight went yet or not. I am surprised when some of my fellow Primary category competitors come up to me to congratulate me on the flight. Apparently I had won the first flight. I am ecstatic, and can hardly believe my ears. This is the first time I remember ever having won anything. But I still have two more flights to go before the final scores will be determined. With the scores fairly close between the top three, I still have my work cut out for me during the rest of this competition.

Sunday afternoon, and the airport is once again quiet. I strap in for the flight home after bidding my fellow competitors and colleagues goodbye, promising to meet again next season. I have stowed my first-place trophy in the baggage compartment, still more than a little amazed that I had been able to hold on to first place after all three competition flights. This has been a wonderful experience, participating in my first aerobatic competition season. Next year, Sportsman category, here I come!

Answer to last month's Quiz!

SPITFIRE AND MUSTANG POWER

The Rolls Royce Merlin engine started out as a 790 hp V12 plagued by reliablity problems,gear-train failures,and faulty water jackets.Adding a two-speed,two-stage supercharger boosted power but also heated incoming air so much it caused premature ignition. An air cooler between supercharger stages solved the ignition problem, and a fuel-injection system was also added. Horsepower climbed to 1420.High-octane gas imported from the U.S. pushed it to 2,050hp.Further refinements focused on improving the engine's reliability and ability to withstand abuse. Over 160,000 Merlin engines where built in 52 versions,including 16,000 built in the U.S. at the Packard Co.

TECH SPECS: MERLIN
Date of manf. 1940
Power: 1,695hp,and up to 2640hp for some models.
Cylinders: V12, liquid d-cooled
Size:1695 lb. 1,690 cu in.

This Quiz question and answer provided by Frank Herdzina

It's QuizTime!

In what year did Dick Rutan and Jenna Yeager fly non-stop around the world?

a. 1979 b. 1984 c. 1986 d. 1989

Member Profile

Ed Harvey

As with many of you, my passion and fascination for flying began at a very early age. Just how early? Well during a recent adventure back in time through a box of old family photos. I came across several photos of me as a child playing with toy airplanes. One photo in particular struck me as special. There I was at the ripe old age of about two, playing in the yard, blue eyes, blonde hair and…well…. only clad in my fruit of the loom underwear. In my hand being skillfully thrust and maneuvered through the air was a toy airplane. Next to me in the photo was "HARVEY FIELD" constructed on top of a metal wash tub turned upside down. Scattered across its surface were more airplanes waiting to be flown by this young highly skilled aviator. Well! One would like to think so anyway.

I loved airplanes and played with them all of the time as a child. As I grew, so did my passion and interest for airplanes. Even at a young age, my Dad would take me out to the local field to airplane watch after church on a Sunday afternoon. My uncle, who had learned to fly while in the military, would sometimes tag along. Occasionally, he would rent an airplane to take me for a ride. At that time you could rent a Cub or a Taylor Craft, for around $2.00/hr.

Over the years, between school work and other activities, I read and learned everything I could about airplanes and flying. Someday I would be a pilot! I built models from kits and from scratch. When my Dad could find the time, he would take me out to Chicago Midway Airport. I could have spent all day there watching the big Airliners come and go. AMERICAN, UNITED, TWA, PAN AM. In those days you could walk around the entire upper deck of the Terminal Building where you could see everything. Lockheed Connie's and Electra's, landing and taking off to and from destinations all over the world, or so it seemed.

Several years would pass before I was old enough to take my first flying lesson. But I didn't waste any time finding ways to make and save my money. I had not just one, but three paper routes! I delivered three newspapers every morning before school. I would spend an entire Saturday collecting from all of my customers. But, I was filling up the cookie jar. When the time came, I had enough money saved to begin checking out local flight schools. I bought; "The Student Pilots Flight Manual" by William K. Kershner, and studied it every spare minute I could find. I bought (and still have) a 33 1/3 record titled "The Theory of Flight" which explained basic aerodynamics. Airplane rental was a little more expensive now, Instead of $2.00/hr to rent an airplane, it was $7.00/hr for the Champ, and the instructor was $6.00/ hr. Inflation! But that was OK! I would soon be a pilot!

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Finally, on a beautiful Sunday morning, August 28, 1966, at 7:37 AM, I arrived at Hinsdale Airport. As I walked into the Flight Office that morning, I remember I had a tiny case of the butterflies. But, by the time I finished the ground portion of my lesson, the butterflies were gone and I was ready to go flying. Under the direction of my instructor, I pushed forward on the throttle of the 7 AC. The Champ sprung to life as we awkwardly rolled down the runway. My boyhood dream was becoming reality as we lifted off and began a shallow climb. I logged (:54) minutes of flight time on my first lesson. I will never forget the excitement I felt that day as long as I live. I was on my way!

Today I am a pilot with American Airlines based at Chicago O'Hare. From that first lesson in the Champ to where I am today has been a memorable and rewarding journey. Some of the high lights of my career include serving as a Chief Pilot, Director of Flight Operations, Regulatory Chief Pilot and Check-airman. While serving in a high level management position with AMR, I managed and oversaw the development of the largest regional carrier in the world. Served on the committee to provided input for the redesign of Jeppenson Approach Plates, coordinated involvement of company aircraft in the initial test flight phase of TCAS. I personally over saw and occasionally flew new aircraft deliveries from the factory in the south of France.

While I have enjoyed a wonderful career as an airline pilot, it was on a delivery flight across the North Atlantic with a new airplane, several years ago, that my love for grass roots flying was rekindled. I wanted to get back to my flying roots, back to those days in the Champ. As I crossed over the southern tip of Greenland, encountering strong headwinds, rain and light turbulence, I remember thinking about Charles Lindbergh, as I glanced down at the rough water and icebergs below. I was thinking about what it must have been like for him on that historical crossing; new airplane (experimental), raw navigation, no radios, no sleep, minimal fuel and weather information, what an amazing feeling of accomplishment he must have felt upon his arrival and landing in Paris. Probably, similar to the feeling I felt after I soloed in the Champ.

I joined my first EAA chapter in 1969. In those days there weren't as many plans and kits available like there are today. Most projects were built from scratch with plans. I took advantage of every opportunity to volunteer to help someone with a project. I was always volunteering to help. I wanted to gain experience and learn as much as I could. After helping on many projects, I decide to build an airplane myself. I started a Curtiss Pitts S1, from a set of plans I had bought at a garage/hanger sale. I got off to a good start, thanks to a lot of help from some fellow EAA members in the chapter. But not long into the building process, duty called and I entered the military. The construction on the Pitts came to a grinding halt. One other aspect of my earlier years that I have not mentioned up until this point, was I also had a love and interest in music. I began playing with a local band while still in high school in Chicago. I had many opportunities to pursue a very successful start in a music career. However, my love for flying was drawing me back. After fulfilling my military obligations and attending college and dabbling in the music business, I had a decision to make, aviation or music. My choice was obvious. I couldn't wait to get started on the Pitts again. Unfortunately, that never happened. Years later I bought a Pitts S-1 project, which was about 50% complete, from a fellow pilot and friend from work. I spent a lot of time gathering the remaining materials and finishing off some detail work, at the same time making some modifications to the original fuselage. But due to a couple of life changing events, I had to stop building once again. It was later sold.

I have enjoyed being involved with the Experimental Aircraft Association over the years, the events and people. I have belonged to a couple of different chapters, the first being Chapter 15 at Lewis Lockport Airport, and later on Chapter 579 at Aurora Sugar Grove Airport, and now Chapter 1414 at Poplar Grove Airport. The EAA has provided me with a way to stay in touch with my passion for grass roots flying. Belonging to a local chapter and attending the annual fly-in, helping out with Young Eagle flights and by volunteering as an EAA Flight Advisor. The Flight Advisor and Technical Counselor programs, I feel, are so important to the experimental home builder. When you think about the word "Experimental" when associated with aviation through out history, it has played an important role in the development of mans quest to fly and achieve goals which may have seemed impossible to others. One thing I have always found around fellow EAA members, no matter how or when your love for aviation began, or what heights it has taken you to, we all share that common bond, the memories, personal rewards and most importantly, the love for airplanes and grass roots flying. As a member of Chapter 1414, I look forward to being a part of what is shaping up to be an exciting and fun group of aviation enthusiast helping and volunteering to keep the dream alive and well.

In ending, if you ever see someone just setting around the airport watching airplanes, with a smile on his face, it's probably just me. Fly Safe!

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from AvWeb's Short Final -

Back in the days when direction finding equipment was being installed in towers, a pilot enroute from Pensacola to Norfolk and not knowing exactly what his position was, called:

"Atlanta Tower, this is N1234."

"N1234, go ahead."

"could you give me one of those practice DF steers?"

"Sorry, but we don't give 'practice' DF steers."

(short pause)

"Well, how about one of them other kinds, then?"

Safety Corner by Nick Helsper

Is your aircraft legal?

According to the FAA, in 2004, there were approximately 20,800 active experimental aircraft around the country. How many of these aircraft were flying legally? Is your aircraft legal?

We all know the acronym AVIATE or PAVET as is used by pilots and mechanics as a memory aid to help us remember what inspections have to be accomplished on our aircraft and at what time intervals. Let's review.

A- Annual inspection every *12 calendar months*.

V- VOR check every *30 days* (If IFR- see AIM for different types of checks).

I- Not really an "I," but a "1" for the *100 hour* inspection to be accomplished (If the aircraft is to be used in a commercial operation or flight training).

A- Altimeter to be accomplished every *24 calendar months* (If IFR).

T- Transponder inspection every *24 calendar months* (If installed).

E- ELT inspection every *12 calendar months* (If required).

A pilot should not only know ***what*** inspections must be accomplished, but also ***when*** they must be accomplished. How does a pilot know if his aircraft, or the aircraft he is renting has had its required inspections? Good record keepers will have a summary sheet at the beginning of the aircraft logs, which will indicate whether each inspection has been accomplished. Many FBOs use this summary sheet so that "good" renter pilots can check the legality of the aircraft they are about to rent at a glance. This is, however, probably not a practical suggestion for the common aircraft owner. For the small aircraft owner, a simple logbook entry is probably adequate.

Why must these inspections be accomplished? As professional pilots, our aircraft must be maintained in tip top shape. In keeping with this, we must also keep our aircraft compliant with the FAR's. Our aircraft must also be kept ***safe***; therefore, we perform inspections every 12 months, accomplish our VOR checks at the suitable intervals, 100 hour inspections if applicable, altimeter inspections, transponder checks, and check for proper ELT operation. Keep those inspections up to date. Happy flying. I'll see you at the airport.

References:
14 CFR Part 91

Reading for Mastery:
Required inspections at a glance:
- http://www.fly-hawaii.com/eviator/aircraft_required_inspections.htm

Experimental Aircraft Statistics
- http://www.aopa.org/special/newsroom/stats/aircraft.html

Questions? Comments?
(nickhelsper@letu.edu)

On the lighter side . . .

Tower: "Hawk 20, is this the same aircraft declaring an emergency about two hours ago?"
Pilot: "Negative, Sir. It's only the same pilot."

Pilot with Southern drawl: Birdsee Approach, Barnburner 123 withya at seven thousand, with Information - - excuse the expression - - Yankee.

Make it Personal

You know the Washington ADIZ is hurting general aviation, and you don't want your community to be next. But what's the best way to communicate that to the FAA?

AOPA has made writing and filing your comments easy, with step-by-step instructions and links so you can file your comments electronically. When you write to the FAA, describe yourself as a pilot, including the certificates you hold, and the type and amount of flying you do. Then tell the FAA how this type of restriction adversely affects VFR flying. You can use your experiences from the post-9/11 Enhanced Class B that imposed similar operating restrictions in the Class B airspace in your area. In your own words, tell the FAA that the Washington ADIZ is operationally unworkable and imposes major burdens on pilots and air traffic controllers alike, all with minimal security benefits, and it must not be made permanent. Point out that Washington, D.C. can be protected with the existing requirements for the 15-mile Flight Restricted Zone (FRZ), and lighter aircraft, flying at slower speeds, should not be subject to the current ADIZ requirements for filing a flight plan, obtaining a unique transponder code, and maintaining two-way communication with air traffic control. For more tips and electronic filing links, visit AOPA Online at www.AOPA.org.

Buy, Sell , Trade, Give-away or Participate!

Classified ads may be submitted by any chapter member free of charge. If you have an item that you want to throw away, don't! List it here and we'll find a new owner for it. - - Remember, one man's junk is another man's treasure! If anyone needs some form of help, you can list your request here.

For rent: New 2 bdr, 2 bath condo 3 miles north of C77. 2 car garage, wash & dry. $825.00 plus utilities. For info call Dean May at 815-337-5845.

Events Calendar

Nov. 8,	Chapter 1414 General Meeting	7:00 PM	Poplar Grove AP Maintenance Hangar
Nov. 12,	Chapter 1414 Board Meeting	8:00 AM	Frank Herdzina's "North Hangar"
Nov. 19	Dan Helsper Workshop visit	10:00 AM to Noon	3043 Fairchild St., BelAir Estates
Dec. 13,	Chapter 1414 General Meeting	7:00 PM	Poplar Grove AP Maintenance Hangar
Dec. 17,	Chapter 1414 Board Meeting	8:00 AM	Frank Herdzina's "North Hangar"

Join the New Poplar Grove EAA Chapter 1414

We meet the second Tuesday of the month at 7:00 PM in the Poplar Grove Airport Maintenance Hangar

Dues are $20.00/Y and include the newsletter in e-mail form

The dues are $30.00/Y for those that prefer a hard-copy newsletter

To join, fill in the form below and mail together with the proper amount to:

EAA Chapter 1414
P.O. Box 399
Poplar Grove, IL 61065

1414 Member Information Card

Name: (last, first) _____ _____

Spouse: _____ _____

Address: _____

_____

Home Phone: _____ Other Phone: _____

E-mail: _____

Military Service: Branch: _____ Specialty: _____

EAA membership no. _____ Newsletter/fee: ❑ E-mail $20 ❑ Hard copy $30

Aviation Interest:

Pilot Rating (past or current): _____

Type of Airplane(s) owned: _____

Type of Airplane(s) under construction: _____

Type of Airplane(s) I'm interested in: _____

Would like to join a partnership to buy or build a plane (type): _____

Would like to see more: ❑ Social Functions ❑ Ground School ❑ Hands-on Demos

❑ Outside reps from aviation tech dealers Other: _____

Would attend additional tech sessions (i.e. painting, welding, etc.) ❑ Yes ❑ No

Premeeting Checklist

___ • **Bring suggestion for activities, etc.**

___ • **Your member profile for the Newsletter**

___ • **Any aviation article of interest that you would like to share with the other members**

EAA Chapter 1414 meets on the second Tuesday of the month in the Maintenance Hangar at Poplar Grove Airport, unless notified otherwise in the newsletter. The meeting starts at 7:00 PM.

The Newsletter is always looking for interesting articles and pictures by our chapter members. If you have written anything or would like to write something or have pictures that you believe would be of interest to the chapter membership, please submit what you have. The preferred method for the editor to receive articles is by e-mail to: ***flydo27@northboone.com***. Alternately, a ZIP disk or CD with articles written with any major word processor with a printed copy may be submitted to any board member at the meetings.

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