International Cessna 120/140 Association

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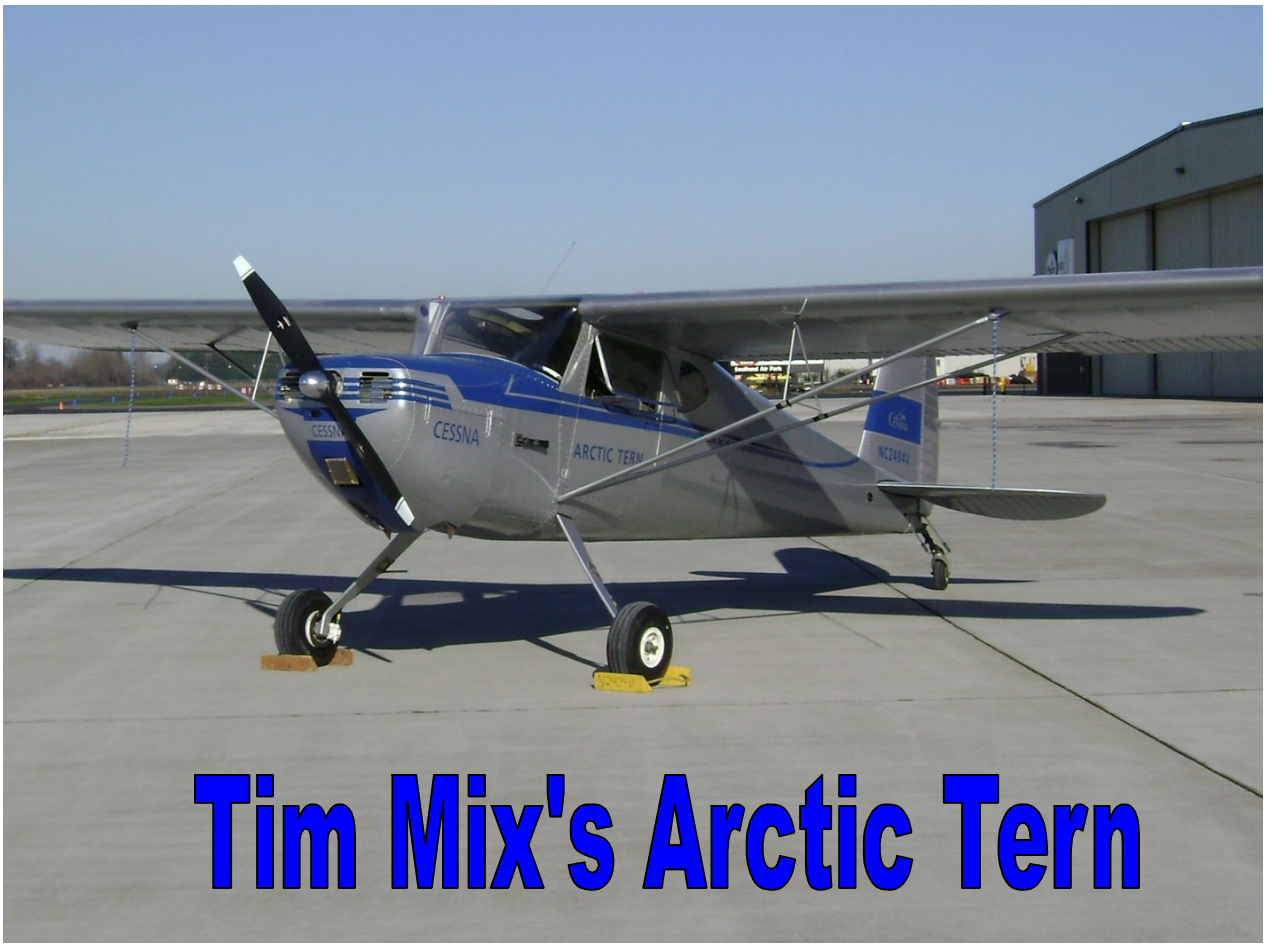

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The Story of the Artic Tern
By Tom Mix

Hello my name is Tim Mix and I have a story that is about a special airplane……it is my airplane.

But before I start let me tell you a little about myself. I live in Hubbard, Oregon and am a Aircraft Maintenance Technician (AMT) by trade. My love of airplanes goes back to when I was 3 years old and when we moved from Minnesota to Michigan and our neighbors gave me a toy airplane to play with on the trip. Then when I was 7 I received my first plastic model of a Devastator and my dad told me that when I got older we would look into building a real airplane. Wow, I thought a real airplane, cool! I remember still to this day the child-like enthusiasm. Well, as I grew older I continued to build balsa and plastic models some flew, but most crashed.

N2404N after some fix ups!

After we moved to Oregon I found the airport and only was met with no money, and an arrogant instructor. After High school I went in the military (US Navy) and was trained how to work on ejection seats, air-conditioning systems, pneumatics, Oxygen systems, and radar liquid cooling systems. This is called an AME (Aviation Mechanic Safety Equipment). While I was in the Navy I had a friend that earned is SEL and the talk of it, re-sparked the flying interest.

After my discharge I went back to my log mill job that I had taken a military leave from. After a few months and I had nothing better to do, so I again went down to the airport and was met by a nicer instructor and a new Jeppesen Pilot kit.

After about two weeks of looking over the books and talking with my dad I decided to go to the airport to schedule my first flight. After a few months went by, the FBO changed hands and I met who was soon to be a good friend and my mentor, Zahid. After about a year at the mill the timber industry went south and I was left with-out a job. Well, since I was part timing (mostly voluntarily) at the airport I decided that this would be a prime opportunity to get back into the airplane thing.

Shortly after starting at Flightline Services I earn my SEL. Now I was looking for a plane to work on and hopefully fly. Well, my dad and I started looking at different kits and projects and couldn't find anything that was going to suit our needs and budget or should I just say budget. Anyway, so here comes the meat of the story.

One day and man came in whose name is Bill. Bill wanted Zi to recover his wings on his 1946 140 that had a 0-235 in it. Bill offered to pay Zi and/or trade him the work for a lot of aircraft parts that Bill had. Zi said that he wasn't interested but told him to come and talk to me since I had been looking for something to work on. So, Bill came to me and asked if I would be interested in these parts. The next day dad and I went to look at them. The fuselage was sitting behind his shop and had no belly skin, no gear boxes, totally gutted, filled with water and dirt and rolled over on its side. I could hear this small weak voice coming

from it saying “help me……”

In Bills barn he had a set of metalized wings, one rudder, the gear legs and gear boxes, three top cowls, one junky nose bowl, one horizontal, one extra tailcone, and a box of misc parts. So after a few minutes I ask Bill how much and he said “$750.00” I smiled and said “sold!”.

So the next day, some day in September 1995, I went down to the credit union and acquired a signature loan for $1000 and carted all the parts back to the airport.

Now, when I got back to the airport I headed straight to work. Jim, a friend who got is SEL the same day I did wanted to get in on the fun. We talked and since either one of us had a lot of cash thought it sounded like a good idea to split the expense of getting her flying again. So we diligently started working on the fuselage cleaning and trying to figure out where to start.

The wings are put on for a fly in!

My GA experience at this point was just mostly flying, removing panels and cowling for annuals, and washing bellies of neglected airplanes, so I didn’t have a clue where to start. Each day Jim and I would work a little to remove dirt and corrosion.
One day while looking through the “trade-a-plane” we saw an add for a tail wheel, flaps and an aileron for sale in Eugene, Oregon. So, Jim and I went down to look at them. We found that the price was right and decided to purchase the parts.

After a couple months of cleaning and finally locating a parts manual we realized the arduous task that was ahead of us. Shortly after that Jim had to take leave out east for family and even though with his money and effort that he put forth in the project, decided that it would not work out for him anymore. With that he headed back home not wanting any of the funds that he had invested since it was only about $300.00.
So from here on out it was all me. Boy, did I feel overwhelmed. So many parts, so little money, so little experience.

As time went on I studied the parts manual like it was a college text book. Noting all the part numbers and trying to figure out the difference between the 1946-48 and 49. When I bought the airplane all I had was a data plate that was in the airplane. On the data plate it only gave me the serial number and I didn’t know how to obtain any information about it. When I ask Zi about getting information he said that I would have to go to the FAA and ask them if they had any records on it. I don’t think that the internet could have told me anything then, besides I was very computer illiterate then. So I just blew it off. I wasn’t ready to talk to the FAA yet anyway.

Slowly but surely I locate a NOS fwd gear bulkhead and a new from Cessna aft gear bulkhead. After blasting and priming the gear boxes I assembled the parts together and clecoed them into the airplane. Not knowing any better I ordered from Cessna a belly skin, and when it arrived I saw that it was just a flat piece of metal that I could have cut myself. At the time it was only $100. So with that experience under my belt I took the opportunity to fabricate the skins around the gear box out of .050” 2024-T3 aluminum sheet. This

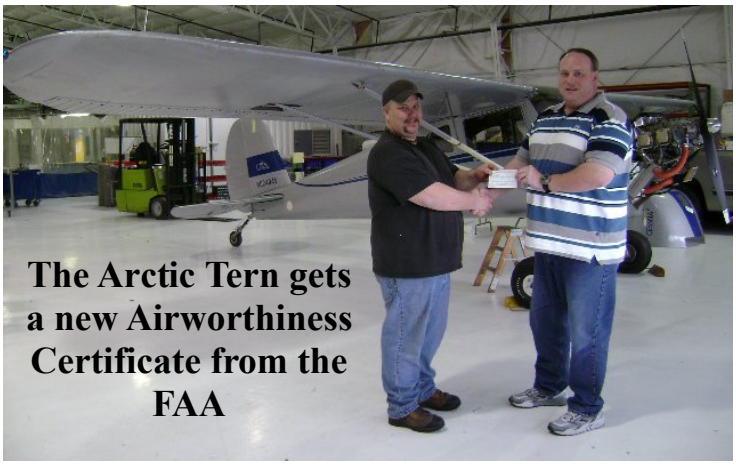
worked out quite well. I learned to roll the metal, locate and back drill holes. I found that the cleco and I were going to become good friends. Still to this day the cleco is one of my favorite tools in my box.
Before I could put the gear boxes, bulkheads, skin and stringers in I had to do a repair on the aft cabin bulkhead. The lower potion of it was totally disappearing because of corrosion. It had this big bulky steel fitting that later I found out was part of the float fitting kit that was installed at Cessna. So here was my first ever sheetmetal repair.

Luckily I had an extra tailcone and was able to cut out the damage and splice in a section from the extra tailcone. With the guidance of Zi, and another excellent sheetmetal tech by the name of Tom, we were able to pull off the repair. The other obstacle I needed to overcome was joggling the bulbed angle that is used for the stringers in the belly. This is where my dad helped out. That was one thing about my dad he was really good at problem solving, he taught me a lot.

Anyway, he took on the task like it was nothing. I happen to have a chunk of aluminum billet that he cut the shape of the bulb angle into then made two sections out of it, and when we spaced it correctly, it made a nice offset joggle when squeezed in a vise. Fortunately, the tool lasted just long enough to joggle all the stringers that I needed.
After all the skins, stringers and bulkheads had been located we started riveting everything together. What fun that was! The hardest part was trying to figure out what bar to use to drive the rivets. And to see what was once a heap of junk, starting to take form into what resembled an airplane, just drove the excitement deeper.

There were times I just sat and stared at the whole thing trying to take it in and understand why what was what. This had become the ultimate sheetmetal class of its kind. One thing that was nice about the whole thing was that I lived right on the airport in a small outbuilding that was right next door to the shop, so I didn't have to go far to work on it after the day was done.

During that summer my friend Denny wanted to go to California, to pick up a Super Cub, in the LA area. He asked if I would be willing to go with him to help drive and load the plane.



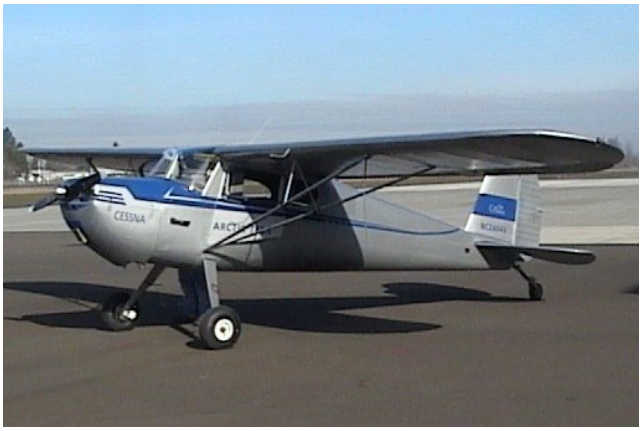
The Arctic Tern gets a new Airworthiness Certificate from the FAA

He said that he would pay me and I figured it would be a good way to buy more parts. Once we got down to the airport, we had to wait for the man that Denny was buying the airplane from so I figured I'd do some hanger flying and meet some more fellow aviators. I just happened to fly buy this one hanger that had 2 140s sitting in it and a man and his wife were sitting eating lunch. I introduced myself and told them of my airplane. We got to talking about engines and he told me that out of the 3 140s they owned that they like the one that had the 0-200 in it the best. Before I left I asked if he happened to have any parts that he didn't need. He got up and said that he did but they had been in a flip over and were damaged. So after looking at his parts which consisted of a vertical stab, a aileron and wing tip lights he agreed to sell them to me for $250.00. After loading up Denny's Super Cub I went back and paid for the parts. I was smiling all the way back to Oregon knowing that the whole 3day,

straight thru, non-stop trip was all worth it. They were still broken parts I had to fix, but they were better than what I had.
Later on that summer I finally got to a point where I could put the landing gear on. One night after work, I borrowed my sisters video camera set it up and then my dad, little brother Jon, and I put the gear under "The Tern" for the first time in who knows how long. What excitement there was that night!

After Zi saw that I was pretty serious about this undertaking, he pushed again about contacting the FAA and trying to find out about some paper work. So, I called the Portland FISDO and the rep that I talked to was very helpful and said he would look into it to see if he could find anything. Well, about 2 days later he called me back and gave me the N-number and the last registered owner. I called information and gave them the name of Fred E Knutzin in Seattle, Wa. I called Fred and told him that I had his airplane and was wondering if I might get the log books from him. He said that he didn't have them, but did know who did. "But" he said, "do you know the story about that airplane?" I told him "no". That is when he started to tell me about the book *Flight of the Arctic Tern* by Harmon "Bud" and Constance Helmricks and that was the airplane that was in the book. He mentioned that it had a third fuel tank installed at Cessna but still to this day I havn't been able to confirm that. However, there is a peculiar patch behind the cabin on the left side; it looks as if it could have been a filling station at one time.

I immediately called my mom and dad and told dad what Fred had just told me. I couldn't see straight I was sooooo excited. Dad went down to the library and found that they had already removed it from the shelves, but there was one still in the Salem library. Once we got the book dad read it in 2 nights. He was probably more excited than I was because when he was in the military (US Air Force) he was stationed in Alaska and recognized some of the names of towns, mountain ranges, valleys, lakes and rivers that were mentioned in the book.
With the name that Fred gave to me when I talked to him I called information again to locate the man that he sold the plane to. The mans name to this day escapes me, but I do know that he had taken 3 140s and made one good one (that is why mine had been cannibalized so bad) which he was going to try to get an STC for a Subaru engine installation. Once I had his number I called and told him who I was and where I got his name and asked him if he still had the log books for this airplane. He told me that he did and would be willing to send them to me. What a score! The Original log books! Right On! This one thing just made my life so much simpler. In about a week the log book showed up and they had definitely had been through some hard times. The one original was burnt around the edges (I guess his place had been in a fire) but it was clear enough to see that the serial numbers matched the data plate in the airplane and that the first owner was Bud.



When I restored it I applied the original paint scheme minus the polished aluminum to the exterior and installed a 0-200 in it since I didn't have an engine for it. It has been quite of an adventure in restoring it and I have actually been in contact with Bud and his son Jeff who still reside in Alaska. Bud is about 94 and in good but frail health.

Tail Wheel Rebuilding 101
By Ron Bland

Just thought I would pass along some tid bits about what I found in the process of rebuilding my tail wheel.

As I related in the story (last issue's feature), the little 140 was kicking my butt on take offs and landings. A good one of either was just a matter of luck. It really had me bugged because I use to be able to do about anything I wanted with it, and now I had hundreds more hours of tail wheel time than I did then. One day I was taxiing and had a crosswind. I noticed the plane would veer away from the wind instead of try to weathervane into it. That seemed odd to me and so I did some investigating. If I grabbed the tail and moved it back and forth I found the entire spring assembly would twist a great deal. This in turn leaned the tail wheel way over. I deduced it was giving me a gyroscopic effect much like that of a motorcycle when leaned into a turn. Thus began my process of fixing it.

My plane has a serial number that calls for the single bend spring set. I ordered a set from Univair, just down the road from me. I purchased all new bolts and when I received all the parts removed the entire assembly. I found the rubberized material that goes around the spring in the tail cone to be hardened and just flaking away, thereby giving no cushioning or support. I cleaned everything up and reinstalled it. I used some ¼" neoprene for the rubber around the spring. When finished I tried taxiing and found once it went out of detent, which was difficult to make it do, it would not go back. I had to physically lift the tail and rotate the wheel back. Looking at it from a side view I found a negative angle on the steering post of the tail wheel. I tried shims and all sorts of stuff but that just didn't feel right. That is when I first contacted Neal Wright. We discussed lots of things. Finally I did some angle calculations and decided to try the double bend spring. Again I ordered a complete set from Univair. I also found the neoprene compressed too much so I went on a search for a suitable material. I tried everything I could think of and finally settled on a stiff rubber found on a coupler used to couple PVC pipe together. I cut it up and "hand planned" it with a razor blade to the proper thickness. Once I had it all back together the angle was almost perfectly vertical. I also replaced the steering springs and had to do a little trial and error to get the right tensions for the wheel to go in and out of detent in both directions. Finally I noticed a little noise coming from the tail wheel itself and decided the bearings might need replaced. Pricing on parts for my Maule tail wheel were about as much as a complete new unit so I simply bought the entire assembly from Chief for $249.00. Now, everything from the fuselage tail cone to the ground was new.

This made the plane handle like a new one. It tracks straight as an arrow and instantly take off and landings improved. I think the old tail wheel was amplifying all rudder input I gave it and forced me to use excess rudder to correct it which then led to wider and wider swerves down the runway. Now I just have to give it small corrections to keep it on the straight and narrow.

I guess the moral of this story is what the book says is correct may not always be the case. I corresponded with several folks from the forum and read all the prior posts. Neal wrote a great article but even he was baffled at what I was finding. This might be different with another type of tail wheel but that is how I ended up fixing mine.

Tech Talk - Aircraft Wiring
By Victor Grahn

More and more these days, whether you are reading professional Aviation Maintenance journals, Aviation magazines, type club newsletters such as ours or dabbling on aviation websites, “Aging Aircraft” is being covered by just about everybody.

This “Aging” can be thought of as structural, powerplant and related systems, avionics, just about anything concerned with aircraft.

This month I’d like to write about wiring. That fancy electrical “spaghetti”, that used to be cloth braided and now is either Teflon coated, or “Tefzel coated” or any one of a bunch of fancy chemistry names that is a copper wire that carries the electrical power from the battery, to the starter, then from the alternator, or generator back to all the items that require electrical power to operate.

I’m going to hold up the article several paragraphs to give you some inside information. I’ll let you in on a little “trade secret”. Something that most all Technicians, avionics guys, and Electrical shop Techs refer to as “The Smoke Test”. A little humor here before we start in on the main article.

You may not be aware of it, but your radio, your lights, your transponder, your GPS, & just about anything that you consider part of your electrical system actually operates on “Smoke”.

How can this be? You might ask. Well it’s simple. If an electrical system or component fails, shorts out internally, or if a wire shorts out to ground you usually see smoke coming from the offending system, wire etc. And one thing’s for certain, when the smoke appears, then the electrical unit (whatever these wires were attached to) quits working. You might in an interest of trying to “fix” things, put in a new fuse, or push the popped circuit breaker back in, but the net result is that the smoke appears again and the system or light or whatever still fails to operate.

Thus, we deduce, once smoke appears, that part of the electrical system quits working. So actually instead of electrons, and protons and electrical current, voltage and all those other fancy terms, what you are really carrying around in all those wires is smoke.

And following this reasoning, if you for some crazy reason, through poor maintenance, or operational practices(or worse yet, allow water to enter an electrical device) decide to let the smoke out, something is going to quit working.

Thus we come up with the “Smoke Test”. When a technician tells his coworkers, or boss he’s replaced a landing light and he’s going to give it the “Smoke Test”, everybody knows he’s going to give it an operational check.

So now you know.

On with the article.(we’ll leave the satire alone now)

About 1991 when I started a restoration/re-build on my own airplane I wasn’t the least bit surprised to find quite a bit of original wiring. Our Cessna 120/140’s are not alone in this department. Through the working year I see anything from 1940 vintage aircraft to brand new aircraft, with the majority of the aircraft being in the vintage of 1965 to 1985.

An aircraft which we might think of as new, newer, say from the mid 1980’s is still approaching 20-25 years old and probably has all it’s original wiring in it. Other than radio installs or some repair work there really isn’t any reason to take the wiring out, after all, “it’s not broke, why should we fix it”.

Well, by and large aviation wire is a better grade of wire than many types of electrical situations you might run into. Aviation wire has to stay flexible and maintain its integrity over a wide range of temperatures and conditions. Within recent memory, lets say from at least the 1940’s wire had to meet “MIL SPEC”, which means the folks who made it had to make it to an established standard.

Unlike your 1970 or 1980 car (and even newer than that) or yours or my motorcycle, TV, or anything else of the same vintage, Aviation wire is made to a much higher quality. Luckily it maintains its integrity for a lot longer than say the wiring in my 1977 motorcycle that I ride quite regularly and have had to replace quite a bit of its wiring.

Today’s current MIL SPEC were you to want to run a new length of wire for your Nav lights is typically something like MIL-W-22759/16. When replacing or inspecting aircraft wires you’ll usually want to see something colored white, fairly slippery when you hold it and pretty flexible, even when it’s cold. Inside are multi strands of high quality tin plated copper wire.

Some systems such as the magneto switch wire, (P lead wiring) or the strobe wiring will generally be

"shielded". This means it has an external wire braid that is grounded to the ground plane of the aircraft. Then an internal insulator followed by the core wire which handles the necessary function for the system it serves. This wire braid, or "shielding" keeps the electronic impulses and "noise" from escaping the wiring and causing you radio static.

You can get wire from small sizes of –24 to as large as –00 or bigger which can be found in aircraft. Almost all aircraft wire, unlike other applications is white. Typically companies that manufacture aircraft will label their wires with numbers so you know which circuit you are dealing with when you have the wire in your hands. Just like there is an ATA code for chapters of systems on aircraft, chapter 24 = electrical, chapter 27= flight controls & Chapter 33= lights. Wire can be labeled similarly, the first letter denoting the system that the wire belongs to.

For example; Wires that are routed through the landing gear system on a retractable gear aircraft will begin with a very small letter "G" before the actual wire number.

Similarly lighting will be denoted with an "L". Ignition with a "J", Radio with an "R" and so on.

On a fairly complex aircraft there will be double and sometimes triple letters before the wire number to denote say a wire that runs in the gear indication circuit, as opposed to the power to retract and extend the gear. Or, perhaps a landing light would start with "LE" and an instrument light would start with "LL".

Different manufacturers have somewhat different codes, it doesn't appear to be completely standardized yet, but by and large each manufacturer will have a code at the beginning of their electrical chapter to explain their alpha numeric system.

What this allows you to do is to pry apart a bundle of wires and be able to tell which system each wire belongs to, when you are troubleshooting an electrical problem and tracing a wire.

I should perhaps mention that older aircraft such as ours don't have this identification, but you may find a top shelf shop that does a radio mod to your aircraft and may label them this way.

By and large aircraft are not "color coded" such as many other industries such as automotive or Motorcycles. You will find some color for small aircraft radio racks, but that is about it.

Mostly when you are considering wiring, it is for troubleshooting purposes, such as "why doesn't my landing light work?", or replacement, as in a major restoration such as mine where just about all the old cloth bound wire came out and was replaced with modern wiring.

This does several things, one of which is hopefully eliminate future problems. Wiring just like anything else in your airplane does not have an indefinite lifespan.

There are many related considerations with wiring. One of which is bonding. Most all your systems require a ground for them to work. Aircraft such as ours seldom run two wires to a component. They simply use the outside skin as the second leg of the circuit or the ground. So in this case where you find a problem, or a system that isn't working correctly always check to make sure you have a good ground as well as adequate power.

Just because the negative wire is touching the skin of the aircraft does not mean it necessarily has a good ground. Corrosion, paint, oil, lots of factors can come into play to make for a poor connection.

You also want to check under the instrument panel during annual time and move the control yokes throughout their full range of motion. More than one pilot has muttered some rather rude words when the yoke won't move because it's caught on a loose wire under the instrument panel.

Just because you have good wire doesn't mean all is fine and dandy either. You still need to stop and start the wire somewhere. This means wire connections.

Aviation wire connectors do not look like the ones you buy in the auto store. I could show you the two side by side and you can actually see and feel the difference. An auto connector will be opaque, and feel cheap and hard in the plastic shielding department.

An aircraft connector will stay pliable even when it's minus 10 outside and should be able to be seen through. Say if you install a "butt" connector and splice two wires together then you should be able to see through the insulation and make sure the wire is firmly grasped by the "squeezed" connector after you used the proper Aviation crimper tool.

Yes, there is also a difference between Aviation

Small Bore Continental Case Repair.
By Jim Cavanagh, DivCo, Inc

The small bore Continentals are a pretty good engine. We ask them to provide peak power pretty much every second they are running, and they continue to put out for years and years. They have shorter TBO's than newer engines or some of the equally powered Lycomings, and they develop the same cylinder problems as all engines as combustion heat is a commonality. But the case itself is a pretty stout little critter. They rarely develop cracks or problems, being asked to support cylinders and a drive train that only produce 65-100 hp., because they were cast with the same technology used for the much larger and more powerful E-185 and –225 engines.

But when they do develop problems what can you do? Being such a small and inexpensive case, they are relegated to "get to it when I can" status, being overshadowed by all of the larger commercially used AOG cases that flood into the shops. Well, it doesn't have to be this way. DivCo, Inc., in Tulsa, OK, is one of those *first come first served, first in first out* shops that will give your small bore Continental equal footing with the big boys, PLUS, give you the best workmanship and warranty in the business.

DivCo was started by Chuck Jarvis, Sr. in 1976, and is run today by Chuck Jarvis Junior. Senior and wife Sandy, play heavily in the day to day operation of the business, but Junior is the phone guy, shop manager, office manager and "get 'er done!" guy. DivCo has repaired over 97,000 cases in their thirty-two years of operation, and this is why they are pretty much the gold standard in case repairs.

The company is in a nice industrial building on North Sherwood Avenue, probably the most aviation oriented street in America, with several of the very best machine and overhaul shops in the industry located elbow to elbow. The all know each other and work with other on a day-to-day basis. While competitors, there is remarkable communication and synergy in the community.

An aircraft engine case is subjected to many different kinds of stresses. There is the strain of holding cylinders that try to depart the assembly every time the spark plugs fire, the constant torque of the crankshaft, the thrust and differential forces produced by the propeller in different power and flight modes, as well as normal mechanical and environmental damage. Over time, a case will either suffer damage or simply wear out. The aluminum will harden and become embrittled through vibratory frequencies in certain areas or paths, and lets not even talk about dirt, sludge, improper oils, inadequate lubrication for different reasons, and years of starting stress, particularly seasonal variations in temperature. They may be cast aluminum, but just like us, they begin to wear out. Suddenly, it is overhaul time, and a wise owner will choose appropriate procedure over cost and ship the case off.

What I mean by this is that a case doesn't necessarily have to be sent to a Repair Station for an overhaul. Any A&P mechanic can clean and inspect the engine for damage and use it to hold new parts. However, a conscientious owner or mechanic will take into consideration that wear is a subtle thing that can destroy a block, or at least make it susceptible to accelerated wearing. This will result in either premature failure or a very expensive repair at next overhaul, if not replacement.

Two areas that deserve major attention during an inspection are the journals and the case half mating surfaces. Fretting is the culprit. This is the constant,

Tech Talk Continued from page 9…

and auto crimper tools. The former being quite a bit more money for one, and more exacting in its crimp action as well.

Fuses, Circuit breakers, BUSS BARS etc all have a MIL spec on them in Aviation. Almost nothing electrical for aircraft is truly available at the "Aviation row" at your local Wal Mart or Lowes.

One last item for wiring is if you are going to re-wire an existing circuit, or install something new you need to know there is a "Wire Chart" available to you. Find yourself a good copy of AC43.13-1B and go to chapter 11.

In this chapter is all the info you need to access to determine wire size for your particular installation. Whether it be a single wire running to the tail of your aircraft for a Nav light or a bunch of wires running in a bundle to power up your radio stack, just about anything you need to know, current carrying capability, types of wire, how far apart to space out the supports holding a wire bundle, etc and so on is contained in this chapter for standard acceptable practices for wire inspection and replacement for your aircraft. Yup right up to your personal Gulfstream IV.

To sum it up, there is no way I can cover all aspects of wire, other than to let folks know that there is more than meets the eye to it. There are established rules for governing the replacement of wiring and to mostly draw attention to the fact the wiring in our aircraft is getting old and needs to be monitored.

microscopic "rubbing" of the surfaces during operation. Despite dowels, case bolts and through bolts, all torqued to book specs, any inconsistency in the surface mating will result in movement that might only be noticeable at the molecular level. The problem with fretting is that it doesn't just fret to a point and stop. Rather, it continues to allow movement between the surfaces and as the molecular structure changes, the amount of movement increases.

Fretting is addressed by removing the studs and milling the mating surfaces to a perfectly flat condition. Upon assembly, the Permatex and silk thread are squeezed to fill any possible gaps and compressed to form a hair thin gasket. Proper torque ensures not only the security of the cylinders and case halves, but also the thickness of this "gasket" and the elimination of dry spots, resulting from too much torque.

The shop can only surface a case half so much before it reaches serviceable minimums. This differs depend upon model. If the case has been overhauled too many times, it goes into the recycle bin.

But even with milling to within tolerance, there is still more work to do. Milling changes the dimensions of all attachments. The dimensions of the crankshaft and camshaft journals are changed and lose their roundness. The case needs to be line honed (The used to call it line-bored) to dimension with stones). Magneto holes are closer, the accessory case dowel pins may not line up precisely, idler gear shafts and gears won't line up precisely with the accessory case holes, and gears will have different lash. DivCo will weld up these locations and re-machine them so that everything will line up correctly.

While it is unusual for a case to develop a crack, it does happen. FAR's allow shops to write their own manuals, and set their own guidelines for what can or cannot be repaired. Divco has well over 135 years of collective experience, with many of their shop crew having been there for over twenty years. This kind of experience guarantees that the right decision will be made. Because of the availability of some cases, many are repaired more extensively than cases of which there are thousands of duplicates floating around.

Knowing right where to look and having repaired the same spot on thousands of cases eliminates a lot of time and guarantees a good repair, especially on cases that don't often crack. It isn't unusual for an inspector to know where to find a crack just from the model number.

Smaller continentals, if they do crack, will develop cracks mainly at the main journal. In the O-200's this will be on the left case half emanating from the Oil hole. On the A65 through the C-85, the crack will be coming out of the threaded hole where the through stud attaches. On all of the smaller engines, if there are any cracks in the cylinder mounting faces, they will be at the top 3/8-in. hole. These are very difficult to see because of the "orange peel" texture of the casting. When the studs are installed, the cracks will grow and tend to keep growing. A dye penetrant test is recommended regardless of the visual inspection. Other than these areas, the small cases are remarkably impervious to stress cracks. DivCo is proud that they can completely overhaul a case in 7-10 working days. They have an online service that tracks the part through the cleaning, inspection and machining process, so with a few clicks on a button a customer can know exactly what stage his case has reached.

DivCo doesn't have to completely overhaul a case, although this is preferred, philosophically. They will do whatever the overhaul shop wants them to do.

Sometimes it is just an inspection, for integrity and dimensionally, and sometimes it is just for a line honing. All of the time, though, it will be at a cost that is surprisingly attractive in today's aviation.

The small Continental is a dying breed, and keeping it viable is incumbent upon owners and the overhaul industry alike. While DivCo handles the case work of a Small continental overhaul, other companies can provide either standard or performance oriented PMA parts for the reassembly. Sky King Aircraft Parts, of Springfield, can provide a number of aftermarket PMA replacement parts that are either standard or offer increased performance. Their O-200 kits have seen a lot of success over the years.

Keep 'em flying is no longer a military or museum phrase. It is something to which all of the maintenance and repair people in aviation should aspire. It would be sad to have to replace the neat little four bangers with a high revving, bee buzzing Rotax at some point

Are you going to the Annual Convention in Dayton, Ohio?
See the worlds oldest and largest military museum!
Join us and make your Reservations today!
Details on Pages 18 & 19!
See more info on the museum at:
http://www.nationalmuseum.af.mil/

How would you like to get involved in this Association???

Next years Convention will be held in Dayton, Ohio, September 25-28, 2008!

At the Convention, we will be voting for three open positions:
Vice-President
Secretary-Treasurer
Newsletter Editor

If you are interested in running for one of these positions, please let any of the Association Officers or Board Members know!
Come to the Convention and Get Involved!

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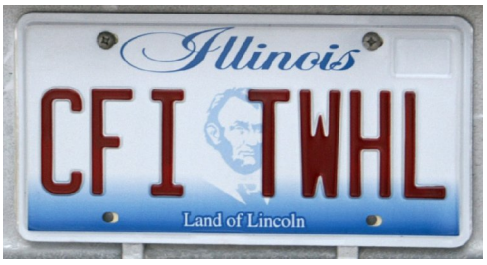
This issue will feature the duties of the **Newsletter Editor**.

1. Collect, solicit and organize interesting articles and material for the six newsletters that contain content per year.
2. Layout the newsletter in a publishing format. Send one copy to the Publisher for print and one PDF copy to the Webmaster for inclusion on the website.
3. Coordinate and bill advertisers for advertising in the newsletter.

Computer skills a must. Publishing skills helpful.

Bob O'Quinn's License Plate of the Month



Do You have or know of a cute aviation related license plate?
Send it to me!

Did you enjoy your 2008 Calendar? Would you like to see your airplane in next years calendar? Please start early by sending me your best pictures so I can get a head start on the 2009 calendar! Email or send them to the Editor!

…..the Rest of the Story….
By Hugh Horning

as radio commentator (and pilot) Paul Harvey would say. Or perhaps "True Confessions" might be a more apt description of what I am about to share with you. They say confession is good for the soul, even though embarrassing, so here goes.

Every year, for the past 40 years, on the first Saturday of December, The Holly Run takes place from Cambridge, MD to Tangier Island, VA, located in Chesapeake Bay. A number of pilots fly Christmas holly to the islanders for their little church and for the islanders' homes. In 2007, the date was December 1.

I have flown in The Run three or four times in the past with as many as 40 planes in the flying flotilla. I contacted the editor of AutoPilot magazine, suggesting they cover the unique event for an article. They asked if I would do it (pro bono, of course). I assented. I also suggested to "What's Up on The Eastern Shore" magazine to cover it and offered to carry their reporter/photographer as a passenger.

On Saturday morning, December 1, 2007, I arrived at Cambridge airport in my 1947 Cessna 120 taildragger in winds of 14 gusting to 23, met the photographer in the terminal, participated in the briefing and took off. The magnetic heading would be 180 degrees , keeping mainly over land to Crisfield, MD and then 240 degrees over the bay to Tangier, a total flight of some 65 miles.

Let me mention at this point that for the past several years, my annual flying has averaged 20 hours and mostly short, local flights as I cannot be away from home too long. Thus, no need for using the GPS as I "know the territory" and am a Golden Age pilot (both my age and the "contact flying" that era represents).

So , as we climbed out heading South, I was quite casual in my contact and pilotage….looking out of the window more than at the compass and certainly no GPS. When we got over what I judged was Crisfield, I made a 90 degree turn to the right (west) and flew out over the open water at about 2500' altitude. Meanwhile I was chatting away with the young photographer.

Well,. after 10 minutes or so over the water and no island in sight, I thought I'd better use the GPS for a heading, but the sunlight in the cockpit was so bright I couldn't read the screen. So I gave the controls to the young man and told him to keep it straight and level while I "shadowed" the GPS screen to be able to read it and crank in Tangier's airstrip designator TGI. Realizing that we had descended to about 1000', I took the controls and tried to get a course indicator on the screen to follow to TGI, but no navigation picture would appear.

Now, we're still over open water for about 20 minutes and no island in sight. We kept flying around looking and finally saw an island, approached it but it was not Tangier, perhaps Smith Island to the North ? By now, 30 minutes late for arrival at Tangier, I figured we would miss most of the activity to be photographed. I apologized to the young man and decided, shamefacedly, to return to Cambridge. So I steered a course to the northeast. After a while, we came upon the mainland and I was looking for familiar landmarks but saw none. We kept going and I looked down and saw a single paved runway airport. Mindful of fuel, I decided to land, find out where we were and fuel up. It was Accomack County Airport, VA about 20 miles southeast of Tangier ! I confessed to the several pilots and lineman my stupid flying and they consoled me saying "stuff" happens.

We departed with me now paying attention to my navigation, saw Tangier Island off to our left as we proceeded back to Cambridge. I felt so bad that I had let the young photographer down on his assignment, not to mention my own. He said no problem and that he'd enjoyed the "adventure".

Back at Cambridge, I took him to lunch in the nice new terminal building and chatted with the Holly Run organizer, Ed Nabb, Jr. who was also having lunch with his wife and several other pilots. I learned that a friend of mine, Dr.

What a Trip - Part 2

By David and Peggy Hoffman

Upon leaving Casper, Wy (CPR) (with great service and no tie down fee, but $5.24/gal. Gas!) we had no trouble with communication, and at 40 miles out I called CPR APP on 120.65 mHz and said: "Radio check", and they said: "Receiving you loud and clear". Go figure that one out! We did experience weak communication during the rest of the trip, however.

Our next "scheduled" stop was Chadron, NE (CDR), also a great little airport, but usually very windy in the afternoon. They provided us with a nearly new Chevy Impala courtesy car and great service, with free tiedown. We stayed at the Grand Westerner Motel, a fully restored '50's ranch style with real ceramic tile in the bathrooms for $35.00 per night. The sign out front says: "spend a night, not a fortune!" My dad, was a school textbook rep. and worked Nebraska in the '50s, and something tells me that he stayed in the Grand Westerner, and possibly in our room at one time!

We got in early, bought some great Chinese food to go just down the street, and took it back to the gazebo (complete with radio and barbecue grill) and enjoyed an early afternoon meal with afternoon sun filtering in, and gentle breeze for cooling. We then took a walk into town to especially see the old high school building (now a middle school) and walk up those same front steps that my dad did. We even were invited in by a very gracious lady teacher. The building, solid brick with hardwood floors, was in great condition, built in the early 1900's, but very much appreciated by the staff.

The next day, Tuesday, we took off early for our next scheduled stop in Yankton, S.D.. As usual, it was windy, but the great airport and staff (GARY and KATIE CARLSON owners of Carlson Aviation) made it a nice event. We borrowed their courtesy car for short drive to a local Arby's for lunch, and then back into the air for Waterloo (ALO)/Cedar Falls, IA for an overnight visit with my cousin NORMA CAQUELIN and her husband, Ken. Silver Hawk Aviation always gives me the best parking spots on the airport, right up near their office. We had no problem with the radio communication when we got within fifteen miles of the airport, thankfully.

The next day, Wednesday, we were off after a temporary "good bye" to my dear cousin (since we planned to stop back by on the return flight) for Beloit, WI (44C). I selected this stop because it would allow me to "log" Wisconsin, a first for me, and for PEGGY, too! A beautiful little airport with paved runway and well manicured grass, but nobody was home! We tried the phone numbers listed for gas, but the manager said that he wouldn't be there until very late. We were just about to crank up and head for something close and a guy in a Cessna 172 flew in and knew the "code" and got us gas! Now we were off for the beautiful Lake Michigan shoreline just south of Waukegan, IL, and safely north of the Chicago Class "B" airspace. This was the leg I most looked forward to with Terminal Area Chart in hand and following the lakeshore fly-way about 1,000 ft. offshore and about 2,000 ft. AGL. Wow! Peggy was definitely impressed seeing all of those sky scrapers so close. I had a personal "moment of silence" as the grave of The Late, Great Merrill C. Meigs Field passed below our right wing. Now the runway and taxiway are gone and only a curvy bike path skirts the periphery of the grassy island flanking a big yacht

Neil Kaye, who flies a helicopter and has a second home on Tangier did a complete photo coverage of the Holly Run activities on the island. I subsequently got a disk from him which I sent to my young friend and used several of the photos in the article I wrote for Auto Pilot magazine. I never admitted that I wasn't on the island nor did I literally imply that I was. The article will appear in the forthcoming issue of the magazine .

That afternoon, after landing on my grass strip on the farm after 3 hours of flying, I pondered why and how I had screwed up like that for the first time in 45 years of flying; I was never scared or panicky, just confused. The reason was that I was too complacent, too casual , was not focused and didn't use the "tools" at my disposal properly. The reason I couldn't get the GPS to navigate is that I forgot to put a "K" in front of the designator when cranking it in. due to insufficient use of the GPS as noted earlier. From now on, I will use the GPS even if I am just practicing landings, to keep familiar with it.

Well, as they say. "All's well that ends well". End of confession. Amen.

Hugh Horning, Wilmington, DE. and Cambridge, MD

basin. We all can thank Mayor Richard Daley, Jr. for his blatant disregard for the "will of the people" in his late-night demolition of a landmark airport. I forgot to instruct PEGGY to snap a picture of the remains. I would have loved to have tossed out a wreath in memory of an airport that I had always longed to land at since being a student at I.I.T. on Chicago's south side. As we passed to the south (under the Chicago Class B Airspace with "heavies" on approach to the west) I did manage to get a glimpse of my old school off in the distance on south State Street. Next I also looked for the U-505 German "U-Boat" captured in W.W.II now permanently on pylons by the Museum of Science and Industry near the lakeshore. It was gone! Later, at home, I looked up their website to learn that the museum had totally enclosed the sub in a permanent building. Next we were approaching Gary/Chicago Int'l (GYY) near the south shore of the lake, and we gave it a wide berth and didn't use the radio, accept Mod C xpndr, of course. We were, for about six or seven minutes, out of gliding range to the shoreline, and it made me very nervous! It was a beautiful afternoon, and we were enjoying the smooth air and shoreline lined with beautiful lake homes after we passed the nearly dead steel mills to the east of Gary, IN. Yep, business has gone "offshore". Really offshore! So sad……

Now, the very destination we were anxious to see, Benton Harbor Airport (BEH) was steadily coming up on our right wing, to cap off a very leisurely and enjoyable "cruise" along the lake shore.

Well, my landing was not what I hoped it to be, but when observed, most landings aren't, and the video camera was recording us taxiing in along with some of the arrivals. Upon shutting down we were greeted by LEE SCHERWITZ, DICK ACKER, VICTOR GRAHN, and several other greeters! So many faces to go with the names I've read about came in so fast that I had trouble keeping track, and apologize for any names left out. The van crew with DON PRIESTER and KEITH BREW was really great taking us into town and back all during the convention! LEE SCHERWITZ, the Airport Manager drove us, in his truck to the terminal for registration. Wow! What door to door service! At registration we met LORRAINE MORRIS and all of the registration personnel including JOY WARREN.

They decided to register us as "1st. Time Conventioneers" since my last and only convention was in Newnan, GA (CC) in '82. That flight to attend took less than 25 minutes to fly from Camp Hill, AL airport (62A) (now a drag strip!) to (CC) in N89191 (now owned by STEVE and EDNA SIMMONS of Kinston, AL). Then there was a long absence from the Association until signing up in '02. DON PRIESTER then drove us to town, and we checked in to the Red Roof Inn. PEGGY got a super deal for us online ($199.70 for four nights) and the motel had a fantastic coffee/ expresso/hot chocolate machine in the lobby, 24-7, That evening we walked to the China Grill for some good Chinese buffet food (for PEGGY to feel more at home!).

Thursday morning after breakfast found us hiking over to the one of the coin laundries convenient to the motel, and then we hitched a ride to the airport courtesy of volunteer KEITH BREW and another nice van ride. Whoever thought of putting the convention schedule "checklist" on the backside of the registration I.D. tag is a genius. So convenient! We really enjoyed the "box lunch" gathering at noon. Then it was off to the local wineries for wine tasting. We did enjoy the guided tours and sights, but were definitely disappointed in the meager, and I mean meager, samples of wine at these spots. We were shocked at the prices of the chocolate makers, and the little crumbs of chocolate they let us taste. Here in Idaho, the local wineries give the visitors copious samples of their wines, which really nets them greater sales after only a few "samples" if you know what I mean! Then before we knew it, we were off via "asphalt VOR" to Chicken Dave's Barbecue. In retrospect, we should have flown over since that grass runway looked so inviting when we got there by van. Maybe the wineries were instructed to "hold short" on those otherwise copious samples in lieu of the pilots in the tours not wanting those flying to dinner that evening to "fly" too high! Ha!

Friday morning at 7:30 found us at the "1st Time Conventioneers" free breakfast at the Marriott Hotel. So nice of the Association! We felt like royalty! We messed up and got to the business meeting that evening late, but enjoyed what we saw and the dinner at the airport. I'm glad some folks were on top of everything! We did make it to the hospitality room later that evening and a chance to meet more folks.

Saturday, 8:00 a.m. found us wolfing down breakfast and hot coffee (to get warm!) at the airport, and enjoying the "Maintenance Forum" with guest speakers like DAVID LOWE and his interesting hangar tales! We did ask him to "scan" our airplane for any "viruses" that may come to the attention of his trained eyes. Yep, he found some, but now most of them have been eradicated. Thanks DAVID!
After lunch at the airport, VICTOR GRAHN, the Convention organizer, purchased one of our new OVERHEAD CONSOLES and two MOD1-W (soft white), and two MOD1-R (red LED) cockpit lights, bless his heart! For an A&P to purchase an after market aircraft accessory is saying something! Both PEGGY and I thought VICTOR GRAHN and his team did a

great job of organizing and running the Convention in addition to being smart to snap up some of our little products! TOM NORTON (also, bless his heart) purchased two of our MOD1-W cockpit lights!

Now it was time for the "Fun-n-Games" activities after the "Safety Briefing". When I think back to my first Assn. Convention "Fun-n-games" in '82 I commend myself for doing so well in comparison to this Convention in '07! This time I really goofed up. First mistake was to take PEGGY along, but I wanted her to enjoy it too. That killed my short field take-off. I'm sure we were last in this maneuver! Next, I forgot to "pop" the flaps down to hasten the liftoff. I knew better, but was asleep, apparently. Next, I should have opened MY side window and hung the nerf ball and flour sack out the window as I approached the drop zone. As we approached the field target I instructed PEGGY to open her side window, "Whoomp" the window was gone, followed by engine and prop noise and wind! I called out on the CTAF, "we have a problem", and then decided to go ahead and fly the rest of the maneuvers regardless. Well, I did poorly and messed up the spot landing event too! We discovered that somewhere en route from our home airport in Idaho we lost the front hinge pin on that right side window, and when Peggy opened the window, the slipstream ripped it off. Thankfully the window-retaining strap kept the window frame (and gasket) attached to the airplane. LEE SCHERWITZ, the Benton Harbor Airport Manager (bless his heart, too!) volunteered two golf carts to use in "mowing" the airport field for that missing window panel. I had already failed to find it by circling the field in the air to pick up the sun's glint from the window "pane in the grass". We literally covered the entire half of the airport, and even looked off airport for that pane, but to no avail. It was probably in somebody's tree in the adjacent neighborhood; and our $80.00, hardcoated 3/32" polycarbonate windowpane was gone for good! Thankfully JOE MORTLAND of Weymouth, Mass came to our rescue with a nice S.S. "hairpin" type hinge pin! A perfect fit and it wouldn't vibrate out, either! Now I recognize it as the same type that is used to secure the battery box lid shut! Thank you JOE! I've not been able to find a S.S. version of that size anywhere, including marine stores

That evening, at the "Banquet" we relaxed and forgot the goofed up day. The "GEL CAPS" a cappella singing group entertained us with some really great "do whap", and I really wanted PEGGY to get up and dance with me, and even considered dancing "solo"! The awards ceremony was quite special to us since we were awarded a nice plaque stating that we had made the "Longest Distance Flown" in a 140; 1,333 nautical miles (GPS distance direct, not counting the circuitous portion around Lake Michigan's shoreline rather than going directly across the pond). We were both blessed and have the plaque in our office today, and have fond memories when we look at it.

Thank you JOY WARREN for having it made up! Also that evening the State Rep's gave out door prizes. PEGGY was thrilled to hear her name mentioned as a winner, and I had to urge her to get up to the front and receive it! She won a nicely framed aerial photo of the Cessna Plant in Wichita, Kansas taken back in the forties, and signed in 2007 by MORT BROWN, the Chief Test Pilot at Cessna back then. He actually test flew each and every Cessna 120 and 140 that rolled off the assembly line!!!
Thank you JOHN VON LINSOWE for providing this present! As "State Reps" from Idaho, we donated two MOD1-W cockpit lights and one of our new OVERHEAD CONSOLES. Regretfully we didn't write down the name of the recipient, but he did come over and thank us. I should have stood up and announced the fact that the FAA Engineering Officer (in Seattle, WA) told me there currently is no TSO on cockpit lighting. In other words this is a "loophole" that hasn't been plugged yet! Wonderful! So all of you out there wanting to buy our lights and console don't be afraid any longer!

Sunday morning found us with some problems to solve. The right windowpane was missing, and the rear hinge was mangled beyond repair, We were able to borrow one of the vans and drive to Home Depot to look for some 1/16" clear acrylic sheet. Well, they had some, but told us they couldn't cut it, but we could buy one of their $80.00 sabre saws, but wouldn't be allowed to cut it on the premises. Somehow their ad slogan: "You can do it! We can help" didn't seem to apply in this case! Ha! So we bought some of that clear shrink wrap stuff used for temporary storm windows and a roll of clear packaging tape. Then a trip back to the motel to use their hair dryer to heat shrink the film on both sides and then apply some clear tape over parts of it to reinforce it. We used some S.S. safety wire to lash the rear window hinge together. Thankfully it lasted for the entire return flight, although a lot of prop and engine noise came through that thin membrane of a windowpane.

Continued in the next issue!

Our Website
www.cessna120-140.org

Our website is located at www.cessna120-140.org Our website Committee is staffed by the following members:

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We invite everyone to explore the website as a wealth of information can be found at your fingertips

www.cessna120-140.org

Is THE *official website* of the International Cessna 120/140 Association. www.cessna120-140.org offers club information, Officer and State Rep contacts, membership information, a guestbook, merchandise and club calendar. The discussion Form is a favorite place to communicate with members. The photo album is available to show off your "baby". You can update your contact and aircraft information in the Members Only section as well as join or renew your membership and purchase club merchandise from our online store. There are links to member sites, printable membership applications and merchandise order forms and much more. Stop by and sign in!

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Convention Update #1

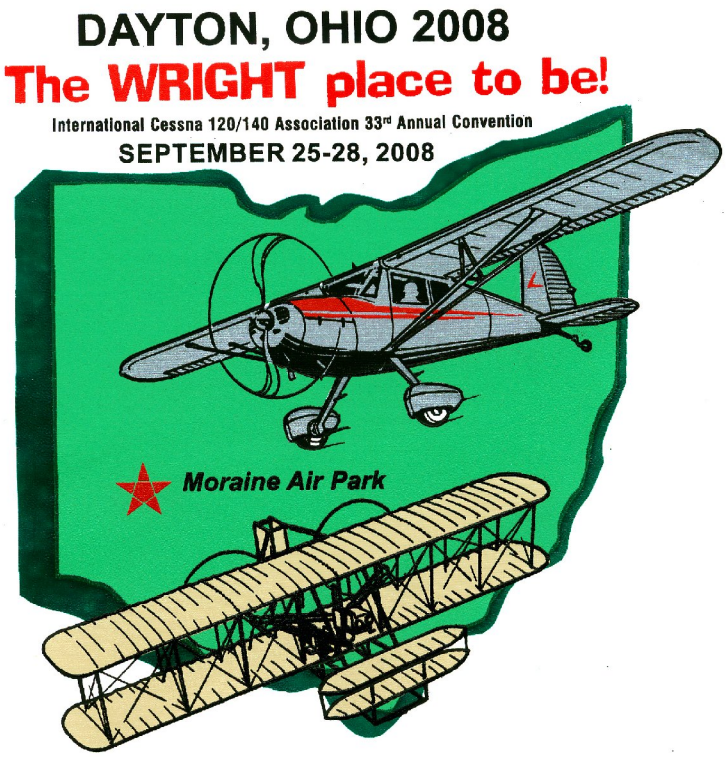
This is the first installment of convention updates which will appear on the website and hopefully will make it into a couple of the newsletters that come out over the next few months.

I want to take a little time to introduce you to the airport we have selected for the 2008 convention. Much of the following information has been provided to me by George Bockerstette with some editing to include other useful notes. George is the fabulous, multi-tasking host manager of Moraine Airpark.

Moraine Airpark (I73) is located in, of course, Moraine, Ohio. The Airpark is on the southwest side of Dayton, Ohio in a bend of the Great Miami River. It is near the original Wright Brothers Seaplane Base. The airport retains much of the charm and history of the early days of aviation. There is a very active EAA chapter on the field and many fly-ins and conventions for other type clubs have been held there. The locals love to host fly-ins and are looking forward to us being there in September. If you use the Airnav link feature on the website or on your own you can find all you need to know about the airport's physical location, runway layout, facilities, etc…, but a quick recap follows:

Unicom 122.7
Runway 8/26 3500 ft x 65 ft paved with displaced thresholds on both ends
Paved taxiways
Beacon
Weather Station
88 T-hangars
Home of EAA Chapter 48
Pilot Lounge
Maintenance Shop
100LL Fuel (discount for the convention)
Attended 8am to Dark
Camping allowed on the airfield and electricity can be hooked up

The location of the Airpark in the bend of the river means fog in the morning is possible but it usually burns off by mid morning. There are several very tall antennas 2.5 – 3 miles north of the Airpark and the Dayton (DAY) Class C airspace is also north of the field. This information appears on the north side of the Cincinnati sectional chart. Also take note of the location of Wright Patterson Air Force Base to the northeast of Moraine/southeast of Dayton-Cox and please avoid this area unless you have established communication and have been cleared through their airspace. The area around and under the outer shelf of the Dayton Class C is generally very busy with several small airports in the area so keep your eyes outside as much as possible! More info to follow in future updates so please stay tuned!! **Dayton – It's the Wright place to be!**



Tentative Schedule of Events

Wednesday Sept 24 - Early Arrivals

Thursday Sept 25 - TBD
Dinner at Moraine Air Park

Friday Sept 26 - United States Air Force Museum, Dayton, OH
Membership Business Meeting
Dinner at Moraine Air Park

Saturday Sept 27 - First Timers Breakfast
Maintenance Forum
Lunch at Moraine Air Park
Aircraft Judging
Flying Contests
Banquet at Holiday Inn

Sunday Sept 28 - Departures

Convention Headquarters

Holiday Inn Hotel & Suites
2455 Dryden Rd.
Moraine, OH 45439

phone: 937-294-1471
fax: 937-294-4282

website: www.holiday-inn.com/day-south

Room rate: $75.00 + tax per night - rate is available from 9/23/08 through 9/28/08

Room rate is guaranteed through 08/24/2008. Reservations made later than 08/24/2008 may be subject to rate increase so please make your reservations well in advance if possible.

Rooms currently blocked for our use: 35 King size/65 Double (hopefully we have to increase that number!)

Convention attendees who make their reservation at the Holiday Inn Hotel & Suites - Moraine, OH no later than June 1st, 2008 will be eligible for a drawing in which the winner will receive their room free of charge for up to 4 nights.

AS ALWAYS:
MENTION THAT YOU ARE ATTENDING THE 2008 CESSNA 120/140 ASSOCIATION CONVENTION FOR THE CONVENTION RATE!

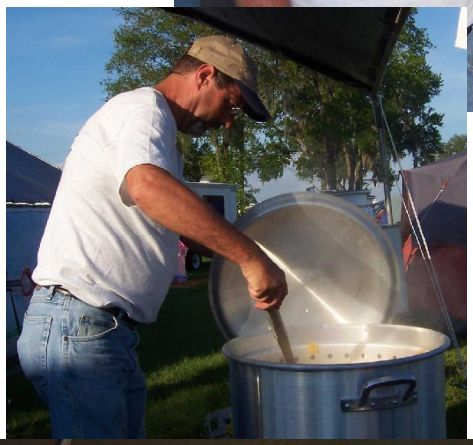
Hotel is located is approximately 3.5 miles from the Moraine Airpark.
Less than a 5 minute drive.
Van transportation will be arranged for those flying into Moraine Airpark.

Camping and RV's are allowed on the Airpark.

We Will See You There!

Sun 'N Fun 2008

Gene & Debbie Jackson
Put on the Dinner!



Clare Warren won the
David Clark Headset

Cool New Tools – Form-A-Funnel

I haven't done a review or checked out any new tools in a while, and you, my trusted field agents have NOT been sending in any reports either! So I guess it is up to me!

I just heard about this new product, the Form-A-Funnel, (that coincidently was developed and produced within miles of where I live) and thought I would give it a try.

It is a thin sheet of bendable, formable lead, covered by a green rubber coating. You can bend this into any shape you can imagine. I used it to change the oil on the 140 the other day, without taking off the cowl, and without drooling oil all over the inside of the lower cowl. When I was done, I just wiped off the excess oil and I was done. Now I know you should take off the cowl and inspect other stuff when changing the oil, but in this case it was a test of the Form-A-Funnel, and it passed with flying colors.

Draining my Oil

Funnel

Drain

Tray

You can use this for filling the oil and tricky applications by bending the funnel shape to work around the engine components that may be in the way if you were using a standard funnel. It can be used as a drain or a tray, or anything else you can think of. It would be a great present for someone that already has everything!

It weighs over a pound, so I don't plan on leaving it in the airplane, but it is going to be a great addition to the workshop. I checked out the FAQ on the Form-A-Funnel website, and it says that the green coating is resistant to chemicals.

The funnel comes in two sizes, a smaller General Purpose size (GP-1) 6.5" X 14.5" priced at $24.95 and the larger longer Aviation size (AV-1) 5" x 29" priced at $34.95.

You can get more information on this product on the web, at http://www.formafunnel.com or call them at (815) 623-6576.

As is the case with all the stuff I 'review' or tell you about, I have no interest in this product, either financial or otherwise. I get nothing at all for 'reviewing' this product, except hopefully turning you on to some neat stuff for your workshop or tool room.

For Sale

Cessna 140 parts for sale: $12,000 takes it all!
1-C-85-12 Engine complete with Hanlon Mufflers
1-Yellowtagged prop for 140
1-New wind shield-never used
2-pair of 140 wings with fuel tanks and flaps.
1-complete fuselage from firewall to tail wheel
1-set log books for one airplane
2-sets of doors for 140
1-grimes landing light with mounting hardware
2-sets of gear legs
1-set of IFR instruments (old)
Many other parts for 140s
These parts are sold as ONE LOT, and are located in Jordan, MN on a private airfield (MN63).
Contact Eldred Stocker, 952-492-6600

New Product!
OVERHEAD CONSOLE for mounting up to six MOD1 lights and switches/ dimmers. Replaces that old, ugly, inefficient dome light! (No TSO on cockpit lighting)
Basic wt. 3.8 ozs.
$19.99 each (includes shipping!)

David Hoffman Products
10126 Airpark Loop,
Givens Hot Springs, ID 83641
Ph.208.495.2307
www.cockpitlights.com
for more info

Application for Membership
International Cessna 120/140 Association
9015 E. Coleman Rd., Coleman, MI 48618

Your Name_____ Phone No. (___) _____.
Street or Box No._____ Email: _____.
City _____ State_____ Zip _____.
A/C Info: Model:_____ S/N_____ N_____ Year_____ Engine _____.

Your Prime interests in joining: Maintenance ☐ Engine Mods ☐ Parts ☐ Fly-Ins ☐
Other (please specify)_____.
ANNUAL DUES - $25.00* (U.S. Currency) - Overseas Members add $10 for postage (total $35)
*Family Membership add $5.00

Disclaimer...
This newsletter is for educational and informational purposes only. Readers are reminded that Federal Air Regulations Part 91 places primary responsibility for ensuring the airworthy condition of the aircraft on the owner or operator. Any person who maintains, modifies, or otherwise changes an aircraft must do so in accordance with manufacturer's recommendations and all applicable FAA regulations.

Active STC's

C-85 Carburetor STC
David Lowe - 270-736-9051
Continental O-200 120/140
Gary Rice
Continental O-200 120/140/140A
Randy Thompson - 530-357-5440
Alternator Installation
Fred Lagno - 410-827-7896
Cessna 150 exhaust
Walt Thomas - 410-544-7670
Shoulder Harness Installation
Jack Hooker - 815-233-5478
Vortex Generators
Cub Crafters - 887-484-7865, Ext. 209
Cowl Fasteners
Dip Davis - 815-568-6811
Wing Fabric Attach Rivets
Dip Davis—815-568-6811
Leading Edge Landing Light
John Nichols - 845-583-5830

International Cessna 120/140 Association

9015 E. Coleman, Coleman, MI 48618

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Are you reading this in Black and White?
Go to the Website and download or view this newsletter in FULL COLOR.
It is in the Members Only Section!

COMING EVENTS

<<< ALWAYS BRING YOUR TIEDOWNS >>>

33nd Annual Convention—International Cessna 120/140 Association

Dayton, Ohio—2008

Moraine Airpark—I73
September 25-28, 2008 - Dayton, Ohio
Details to follow - Plan Ahead!

FOURTH SUNDAY OF EVERY MONTH
Riverside Flabob "International" Airport (RIR)
Breakfast at the Silver Wings Café.

Come Join Us?

If you're ever out on a Sunday morning, listen for our Breakfast Club on 122.75 at 8 am (Chicago Area). We go all over the place! See ya later. **Gary Latronica.**

Curley Owen

March 6, 1932 - May 5, 2008

Curley Owen, Past President of the Association, passed away at age 76 on May 5, 2008 after about a 12-year battle with Alzheimer's disease. He was also a retired Captain with United Airlines.

The "Best 140" plaque was awarded to Curley at the Newton, Kansas Convention in 1980 for his beautiful polished and burgundy Cessna 140, 3603V - a terrific restoration - a real winner!

Curley was elected President of the Association in October 1981 at our 6th Annual Convention in Anderson, Indiana. But most "old- timers" will remember him for his sharing of knowledge about flying in general and the 120/140 in particular. His newsletter column "Tail Winds" covered many useful and informative topics, such as using the ATC system and history of the 120/140/140A. He also shared practical, invaluable information on cross wind landings, wheel landings, and hot props and wheel chocks, and much, much more. During his three years as president he also conducted forums at conventions and Oshkosh.

Before becoming president he was Eastern Regional Coordinator. As president he initiated the idea of State Reps to more effectively promote the Association and flying activities in their local areas. State Rep kits were distributed to all former Regional Coordinators and new volunteers.

At the 1983 convention in Effingham, IL, Curley and his wife BeBe were winners of the "Glenn Usher Award." BeBe served for several years as State Rep Coordinator.

Soon after being elected president Curley ordered a complete list of 120/140s registered in the U.S. He and BeBe cross-checked the list with our membership and 2,829 letters were sent to non-members in May of 1982. By July over 300 new members were signed up and more continued to join in the months that followed. In January of 1984, thanks to their efforts, we had more than 1,300 members!

Curley restored many aircraft over the years, including the 140, of course, and an Apache, both of which were featured cover pictures on AOPA magazine. That's quite a testimony to his expertise! He also had many more projects waiting "in the wings."

Along with his wife BeBe, he is survived by his daughter, Pam, who is a pilot with American Airlines.

Thanks, Curley, for all you did for the Association and we certainly miss your sharing of your vast experiences and knowledge with us. It was the best!

May you continue to fly higher in a better place.