EAA MILE HIGH CHAPTER

PRESIDENT	VICE PRESIDENT	SECRETARY	TREASURER	NEWSLETTER
KIRBY WHITE	FRED SEAL	KIRBY WHITE	CATHY SHEEON	KIRBY WHITE
423-5134	659-1589	423-5134	232-9535	423-5134

VOLUME 9, ISSUE 9, SEPTEMBER, 1986

THIS MONTH: There will not be a meeting of Chapter 43 in September, as decided by the membership at the August meeting. The Greeley Fly-In was considered to be our gathering for the month.

LAST MONTH: With 55 members and guests in attendance, the meeting of August 16, 1986 was called to order at 7:55 P.M. by President Kirby White at the Rocky Mountain Energy Center. The minutes of the July meeting were approved as published in the Newsletter.

Guests: Guests present were Cheryl Hughes -- the wife of member Phil Hughes, Jim Dugan of Westminster -- who was a guest of member Mike Ladigo, Bill Luce of Lakewood, Jim Anderson of Aurora, Al Beardsley of Englewood, and Bob Pratt of Honolulu, Hawaii.

Treasurer's Report: There was none given.

Old Business: Ellora Larson -- the daughter of Chapter 43 member Glen Larson -- stepped forward and talked about her experiences as a participant in the 1986 EAA Air Academy. She mentioned some of the many areas of instruction relating to aircraft construction and repair that were taught. She had access to all areas of the EAA Museum and Convention Grounds. She felt that this was one of the best experiences that she has ever had in her life, and was very grateful that she had the opportunity to attend. Kirby asked for a show of hands from those who were planning to go to the Greeley Fly-In. The response was excellent. He also mentioned that volunteers were needed for judging and a number of other duties, and a special volunteer patch would be given for only two hours of work. Kirby said that normally there is no meeting of Chapter 43 in September, as the Greeley Fly-In is considered to be the gathering for the month. He asked if everyone was in agreement with this, and there was no discussion to the contrary, so no meeting would be planned. Kirby reminded everyone of the Open House at the Cheyenne extension of Colorado Aero Tech, which was scheduled for Sunday, August 24, 1986. He said to see him during the break if interested in flying up.

New Business: Chapter 43 member Don Mobley donated a BD-4 fuselage kit and complete set of plans to the Chapter. He has been storing it for Dan Ashberger for quite a number of years, and is now in need of the storage space. Dan, who is an ex-member of the Chapter and is now living in the Northwest portion of the United States, gave Don permission to donate it. The pilot and passenger portion of the fuselage has already been built. There was much discussion about the pros and cons of the Chapter undertaking the finishing of the BD-4. John Thomas, who is a Chapter 301 member and is now building a BD-4, brought in his plans and a few parts and answered

New Business cont: a number of technical questions about the construction of this type of airplane. A motion was made to form a committee to look into all of the possibilities, which was seconded and approved. Everyone was very thankful to Don for the donation. Brad Davenport brought in a number of lists of items that he had for sale, which were passed out among the members. Kirby said that he would publish it in the September Newsletter, with those items already sold deleted. Kirby read a Cessna Owner Advisory that he had received in the mail earlier in the day. The Advisory concerned "Seat Locked" and "Fuel Contamination" warning placards that were included in the envelope. The installation was to be mandatory, and accomplished within the next 10 flight hours of operation. Ken Lysek talked about a flight that he and his wife took in their Cessna 150 to Lake Powell. They landed at Hite Airport, which has a 2,200' runway and is located at the North end of the lake. This was his wife's first long airplane trip, and she enjoyed it very much. Ken recommends this trip to anyone, and says that the scenery is magnificent from the air. Kirby read a poster that he had received in the mail about an upcoming Airshow and Fly-In at the Gillette, Wyoming Campbell County Airport. It was scheduled for Saturday, August 23, 1986. Bob Green asked if Kirby had seen the article in Sport Aviation about Chapter 43 being one of the many Chapters that were not current with National. Kirby said he had seen it, and was planning to find out what the problem was. Kirby was also asked if he had heard anything about Chapter 43 participating in the Louisville Parade on Labor Day with a fly-by. Kirby said he had not been contacted this year about it.

Gene's Corner: Gene Horsman reported that Piper Aircraft Corporation has notified distributors that as of July 1, the price of all factory parts went up by 77 percent. In justification of the hike, a spokesman explained that the company had made a comparison of its parts prices and those of competitors and concluded its own were low. Furthermore, it needed to make the move to make money on the parts, and to help pay for the product liability burden. At the beginning of June, Piper resumed production of the entire piston engine line that had been suspended in February. The year's biggest AD disaster may be just around the corner. Owners of Rockwell 112s and 114s, still reeling from last year's $1,500 shoulder harness AD, will, in all liklihood, soon be looking down the barrel of a wing spar AD that could cost $6,000 plus. Gulfstream Aerospace, which took over responsibility for product support of the 112 and 114 when it bought the line from Rockwell, has once again declared it won't pay a penny to help owners bear the cost of the repair and beefup. The problem involves cracks in the forward wing spar, typically in the upper spar cap. The Husky A-1, a new two-place tandem-seat utility airplane which is designed to be a replacement for the Super Cub and Bellanca Scout, is on the verge of receiving its FAA certification. Christen Industries of Hollister, California, who designed the Eagle II aerobatic biplane, will have gone from a clean sheet of paper to full certification in 13 months when this project of theirs is completed. Phillips X/C II aircraft oil was removed from production in June. There have been numerous reports of valve sticking problems in engines switched over to this oil. Phillips does not agree that their oil is to blame, but they are now making "classic" X/C again, and will exchange X/C for X/C II with any customer who requests it. Amsoil, one of two fully synthetic oils approved for aircraft use, has been withdrawn from sale.

Gene's Corner cont: Amsoil says the reason is product liability insurance, which went up about 700 percent, so it didn't warrant keeping it on the market. A diaphragm type engine driven fuel pump that keeps most low wing Pipers, both new and old, running is being phased out of production. It is made by the AC Spark Plug Division of GM, who sees it as a miniscule and unprofitable portion of their giant effort building auto engine components. The firm is actively looking for a company willing to take over production of the fuel pumps. Norm Bender, who turned the engine overhaul business on its ear with his cut-rate prices on new Lycoming engines, is getting out of the business because it has ceased to be fun for him. He is now taking dead aim on the aviation insurance industry, though, with a "revolutionary program of insurance for aircraft owners." Owners of thousands of mostly older aircraft of every make and model are facing an AD on their prop clamps. The AD affects maybe 10,000 to 30,000 aircraft with Hartzell HC-V or -X propellers with certain serial numbers. This is a controversial and expensive AD, and has yet to be settled. Chapter 43 member Glen Counts is having quite a battle with this now, as his 1956 Cessna 182 is affected by the AD. The National Transportation Safety Board has moved to fire the head of the Denver field office, George Baker, pending his response to various charges. Several other staffers have received admonishments and/or proposed three-day suspensions for various types of unapproved behavior. Final Board action will be taken after their responses are considered. Gene congratulated Brad Davenport for being mentioned as a contributing factor in the design and building of the Skyote in the September, 1986 issue of Kitplanes Magazine.

Progress Reports: Guy Sheeon stepped forward and reported that he had a first flight after recovering his 1947 Piper Super Cruiser. He also installed a Lycoming O-320, which really makes it perform now. He and Cathy are very happy with it, and everyone congratulated them for their efforts. Earl Ellis said that he was very close to having a first flight in his Vari-Eze. He planned to have it at the Greeley Fly-In. Curt Prentice keeps plugging away on his Bobcat project. Pam Carver has gotten her Ground Instructor license, and is now in a position to help if anyone is working on their written exam. Congratulations, Pam.

A&P: The business portion of the meeting adjourned for coffee at 8:45 P.M. After the break, Chuck Graf and Jim Thompson showed their slides of Oshkosh. Chuck brought mostly Homebuilt-type slides, and Jim took a lot of pictures of Antiques and Classics, so it turned out to be a very well rounded presentation. Bob Greeno then showed a tray of slides about the duties that he and the helicopters had during the Korean Conflict. Many of the slides were of the Sikorsky H19-C that was written about in the August, 1986 Chapter 43 Newsletter. Another tray was about the Helicopter Proficiency Competition that Bob participated in a few years ago. It was held in Vitebsk, Russia in June of 1978, with a total of six different countries competing. The United States team placed second in the men's division. After the presentation, Kirby asked the membership if they would like to have Chapter 43 donate any money to the restoration of a Sikorsky H19-C so it could be displayed in the U.S. Army Aviation Museum. A motion was made to donate $50.00, which was approved by those present. Many thanks to Chuck and Jim and Bob for their very nice slide presentations.

For Sale

1	Heath Thomas Elec Organ	Used	$100.00
1	Heath Kit Depth Sounder	Used	$50.00
1	Power Master Winch	Used	$150.00
1	Drill Press Stand Sears	Used	$5.00
1	AM Radio 1986 Chev.	New	$25.00
1	Right Side Auto Mirror	Used	$1.00
1	3/8 Rachet	Used	$1.00
1	Ball Vairiometer 2K	New	$300.00
1	Instrument Lite	New	$15.00
1	Radio Alpha 200	Used	$300.00
1	Suction Gage	Used	$10.00
1	Rate of Climb	Used	$20.00
1	Hydro Parking Brake Valve	New	$20.00
1	Solinoid Starter	New	$8.00
1	Tail Wheel Spring Kit	New	$8.00
1	Inverter	New	$10.00
1	Misc Gauge Unit (5)	Used	$2.00
1	Lyc. Seal Retainer	New	$7.00
1	Gas Cap/Plate Assem	Used	$3.00
1	Lyc Mag Impulse Adapter	New	$15.00
1 Set	BD-5 Wheels And Brakes	New	$50.00
~~1~~	~~Gerdes Fuel Valve~~	~~New~~	~~$28.00~~
1	Gruman Trim Wheel	$5.00	
1	Lyc Rocker Covers	Used	$10.00
1	Lyc Mag Drive Gear 61278	Used	Offer
1	Bailout Bottle	Used	$2.00
1	Trim System Stab Jack	New	Offer
3	Vented Gas Caps Cub Type	New	$2.00@
	Misc Steel Tubing And Hindge Stock.		

Brad Davenport 666-5744

For Sale: Connecticut bending brake, W. Witney Stuik Inc. Model U-322, 32", Includes all fingers, Some aluminum is included with purchase. Phil Young 665-5773 H. or 924-7788 W.

For Sale: Sport Aviation Magazine collection from August, 1969 through December, 1985, $175.00. Gene Horsman 279-5782

For Sale: Sensenich M76AM-2-46 propeller, For Lycoming O-235, $350.00. Guy Sheeon 232-9535

AIR PROGRESS
JUNE 1971

WHEN YOUR AIRPLANE IS TOO OLD TO TRUST

Part II: Be on the lookout for the subtle but dangerous effects of corrosion. Here's a sleuthing guide to help ferret out some of the less obvious sources.

While you're checking the airplane, be on the lookout for anything that even resembles a stress raiser, especially corrosion. A bad nick, or corrosion, in a critical area—spar or wing attach fitting—is really dangerous. You should be constantly aware of corrosion, especially if the airplane has been in, or near, a salt-water environment. Beware of the ultraclean wing and fuselage interior that has bright new zinc-chromate over it. Check carefully to see if the spray job was done before the airplane was completely assembled or after. If some huckster is trying to cover up corrosion, it's obvious because he can't gain good access to the inside of the structure and there will be "shadows" of bare aluminum behind frames and stringers where he couldn't get the spray gun around the corner.

Sometimes corrosion will attack one piece and not touch one right next to it. To combat corrosion, most aluminum sheeting now used in aircraft is coated with a thin layer of pure aluminum called Alclad to prevent the different moved with a brush and a solution of 3 ounces of alidine and 20 ml. of nitric acid in a gallon of water, rinsing thoroughly after 30 to 60 seconds. This will also prevent the area from corroding again. Corrosion usually looks like a whitish powder similar to the ring Alka-Seltzer leaves on a glass. The more the powder buildup, the worse the corrosion. Sheet corrosion isn't fatal, but where there's advanced sheet corrosion, there will also be corrosion of fittings and spars, and that's something to worry about.

One type of corrosion doesn't need the salt air to begin eating the airplane. This type is called "galvanic corrosion" and it results whenever you have two pieces of dissimilar metals, like steel and aluminum, touching one another, with no corrosion proofing between them. Basically, it's the result of a difference in each metal's natural electrical potential, so a small electrical current starts flowing between them, not enough to measure, but enough to move electrons from one to the other. This is the of corrosion, but if the airplane is quite old, 20 years or more, they may not have used cad-plated hardware, the cadmium may have worn off, or the bolt may have been replaced with an unprotected one.

Steel tubing is a whole new ball game. Although steel normally has a much longer fatigue life than aluminum, approaching infinity in some applications, it is also much more likely to corrode, or rust in the case of steel. Most steel used, especially in fuselage tubing, is 4130 Chromium-Molybdenum, and you only need to whisper "moisture" around it for it to start to rust. If you leave a clean, unoiled piece of 4130 out for even one night, it will be covered with a frost of bright red rust in the morning. The better tubing fuselages had holes connecting each member and then the entire network was filled with linseed oil. This way it never rusts from the inside out. A red-oxide primer, or the equivalent, will keep it from rusting on the outside. Unfortunately, most fuselages weren't built with eternity in mind, so

TOO OLD TO TRUST

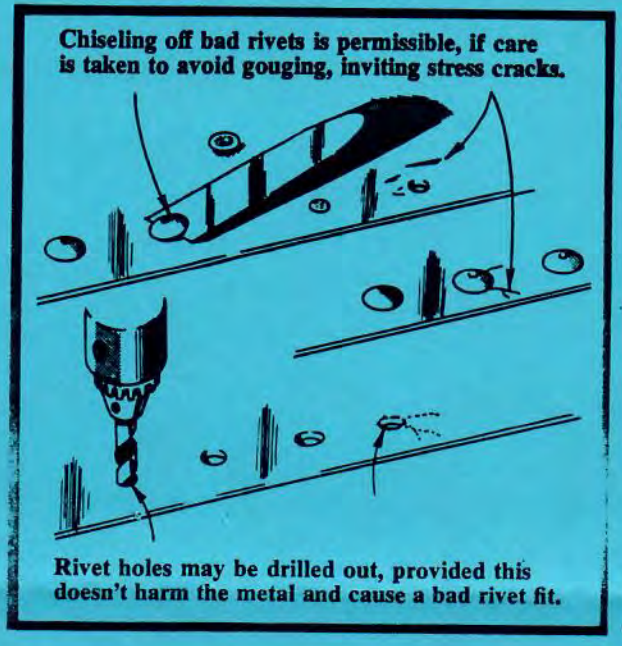
fatigue resistance of steel drastically, especially flat-plate used in fittings. It takes very little rust to make steel dangerous. Because steel is so strong, the application may only need a piece .050 inch thick, but it takes no time at all for rust to eat pits .020 inch deep, which virtually destroys the load resistance of the piece.

Most fatigue failures in steel tubing structures are due to the welds embrittling the tubing adjacent to the weld. All welds should be scrutinized with the magnifying glass, looking for cracks radiating out of the weld. This may mean tearing portions of the interior out and crawling around in the tail cone, but the resulting peace of mind is worth all the trouble.

Wood itself is virtually fatigue-free; unfortunately, the fittings bolted to it are not. Also, it's quite easy for the wood to hold a small amount of moisture and not be harmed, but the bolts and fittings that are constantly in contact with this moisture can be badly pitted. Check bolts carefully if they go through wood or are installed in such a way that moisture could run under the head and be trapped in the shank portion.

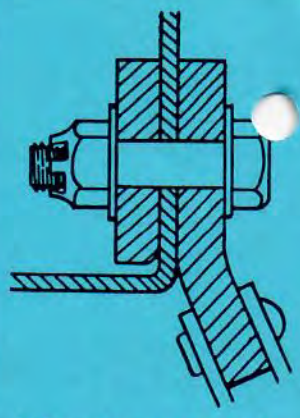
In general, it's a good idea to shy away from buying an airplane that has been damaged and repaired. This isn't to say that it's unsafe, it's just that this requires a lot more inspection. An airplane that is properly repaired by a reputable firm that specializes in rebuilding aircraft is often as good, or better, than it was when it came out of the factory. The reason the buyer should be a little wary of the repair of unknown quality is that it could be nothing more than one big nest of stress raisers. In removing the damaged parts, the old rivets are taken out. If this is done carefully, so that the parent material isn't touched in any way, there is no danger. However, too many repairs are done by unqualified people who have the attitude that a scratch or two doesn't make any difference. These types indiscriminately chisel off rivet heads, which is fine, but it's hard to do without marking the aluminum, and the chisel marks are great places for fatigue failures to begin. It must be understood that repairs done by a good, conscientious shop are not to be feared, but watch out for the work done by the itinerant metal bender. If the repair is

(continued on page 77)

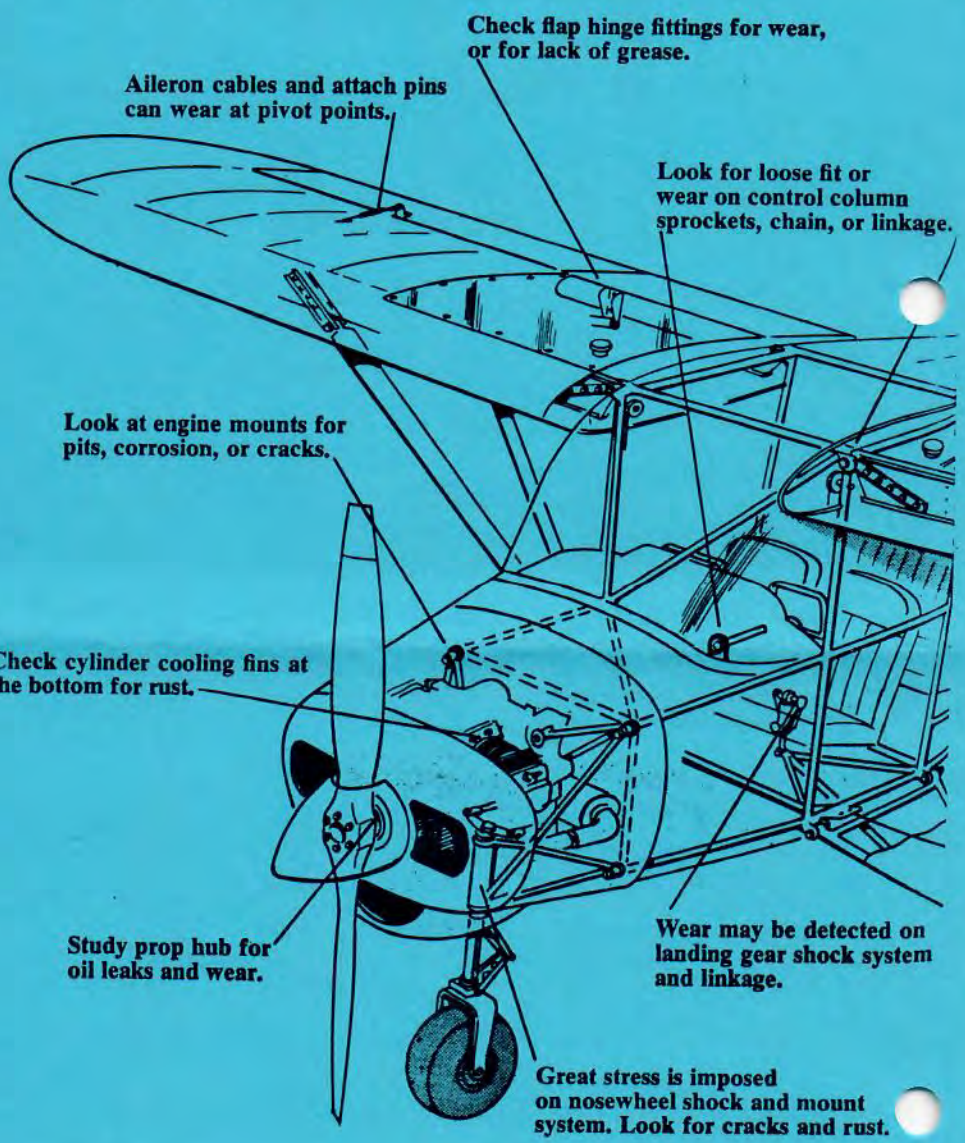


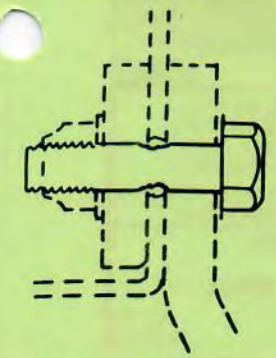
Chiseling off bad rivets is permissible, if care is taken to avoid gouging, inviting stress cracks.

Rivet holes may be drilled out, provided this doesn't harm the metal and cause a bad rivet fit.



Different types of metal placed in close contact may set up a galvanic action. This may lead to corrosion and powdering of the bolt

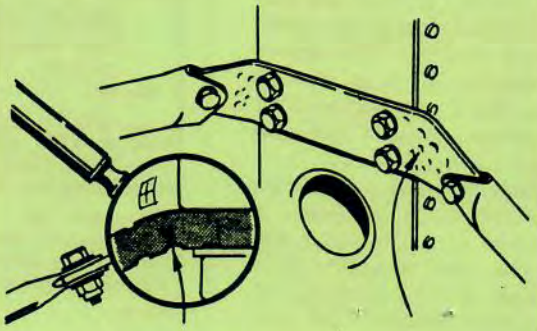




shaft (above) and the aluminum it passes through.

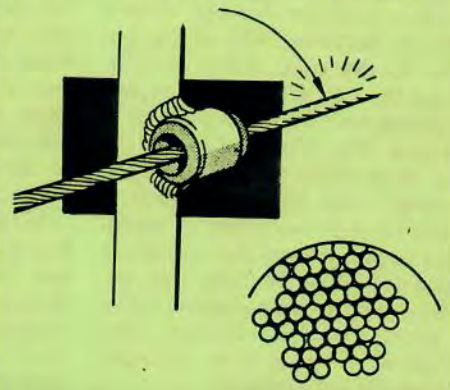
Use of a cadmium-plated bolt is one cure for this.

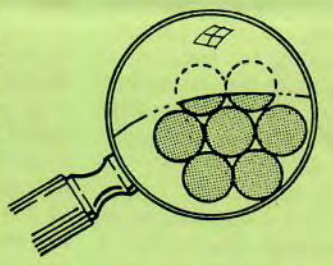
A pockmarked surface on a steel strap may indicate that corrosion pits have been



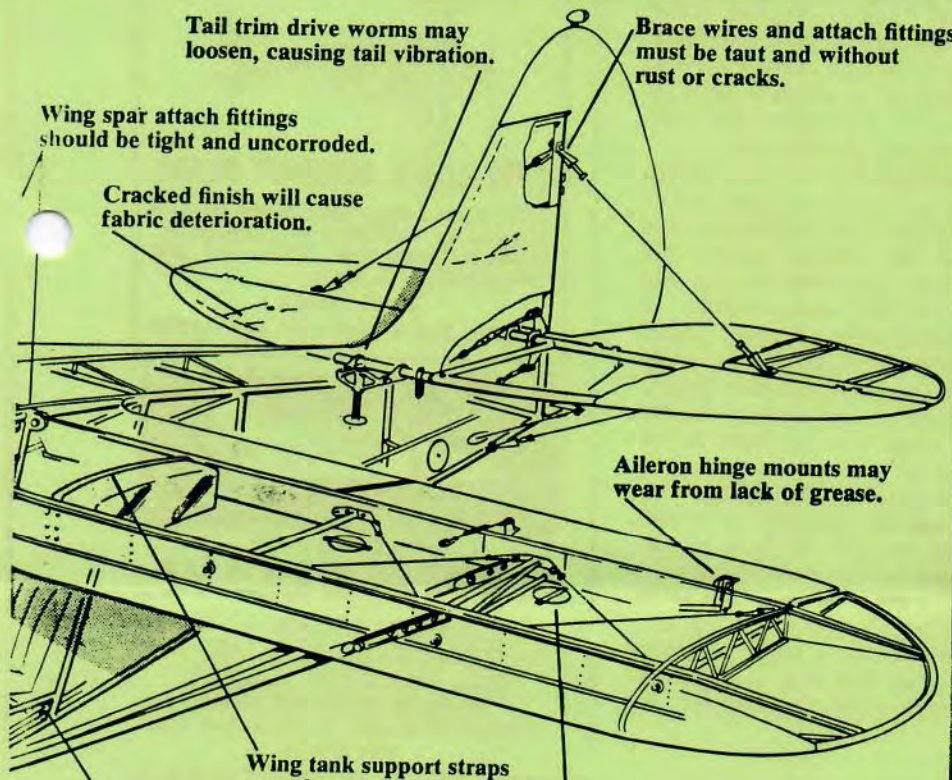
scrubbed away. This, however, may have weakened the steel fitting. As can be seen under the magnifying glass, in a cross-section, cracks may form as a result of the inadvertent pitting.

A bright, shiny portion of a control cable can be a clue to wear and tear.

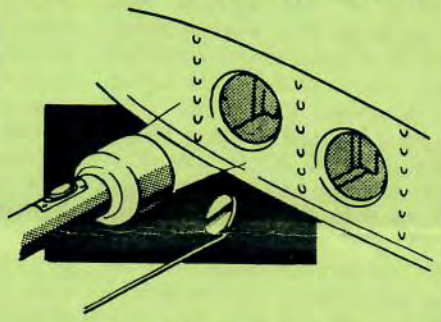




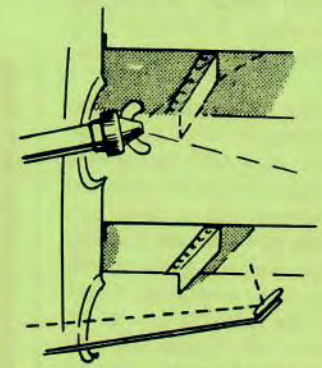
The enlarged section shows how rubbing can wear away outer strands of wire, calling for replacement of the cable.



With a flashlight and mirror, look inside the wing structure. New paint may have been sprayed over corroded



surfaces. A dentist's mirror will



disclose paint "shadows," or areas not disguised by a quick layer of paint from a nozzle placed through a rib hole.

ILLUSTRATION: HANK CLARK

legitimate, there will be a 337 form on it filed at Oklahoma City. All too often aircraft are damaged and the local expert with a ball-peen hammer fixes it himself, not bothering with all the paperwork. In this case, neither the logbooks nor the 337s will show the repair. On taildraggers, the first clue to a ground-loop that doesn't show in the log is a mismatched set of skin panels on the outer wing. Different degrees of oxidation between two sheets is almost always a dead giveaway that something was fixed and should be in the logs. Beware the slightly beat-up airplane with a fresh, flashy paint job, because paint can cover up a lot of evils, including obvious repairs and corrosion.

Notice we haven't even mentioned the actual chronological age of an airplane. And we're not going to, because it doesn't make that much difference. Just because a man is old doesn't automatically give him wisdom or experience; it's what he did with his years that makes him what he is. The same is true of airplanes. It's what it has done in its lifetime that determines whether it's a good buy or not. If it were put in a hangar and never touched for 25 years, then you know that certain systems will be damaged because they haven't been exercised, but you also know it hasn't seen any rough roads. Only a very few things are damaged by time: fabric, an engine that isn't turned over, and seals in hydraulic systems deteriorate, but that's about it. The airframe itself doesn't age much. Also, older airplanes, especially those certified under pre-Part 23 FARs, were built before the knowledge of structures and fatigue grew, and there is a tremendous safety margin built into them. A 20-year-old, thousand-hour airframe may be a much better airframe than a 1970 bird with the same amount of time . . . then again, it may not. You have to evaluate what it's done, its maintenance, and the general cleanliness of the airframe. Every airplane is an individual case that must be judged on its own merits, considering the facts known about how fatigue affects the airplane and how the use affects fatigue.

At this time, the major aircraft manufacturers are trying to work out some sort of program that will satisfy the FAA's latest requirements for substantiation of the fatigue life on their airplanes. According to Piper and Cessna, this doesn't mean they are going to put a specific life on their airplanes, it just means that they are going to have to do more investigation into fatigue life and ways they can predict the service life of specific components. In doing this investigation, both plants have recalled the highest time aircraft that they now have in operation for study. They found that very seldom does a civilian airplane exceed 6,000 hours, usually hovering around the 3,500 to 4,500 mark as a maximum. It seems airplanes are flown like crazy for the first 10 years and then flown very little because they can't compete with newer products. This doesn't apply to transports; DC-3s go close to 100,000 hours. But it's not unusual at all to see 20-year-old airplanes with less than 1,000 hours on them.

If the airplane you have your eye on has less than 2,000 hours, regardless of age, and is clean as a new dollar bill, chances are you won't be able to fly it enough to wear it out, depending of course on its background. If the time approaches 3,000 hours, especially if it's only a few years old, it has probably been used commercially in either training or air taxi/freight work and should be checked carefully.

Is a low-time airplane worth more money? Absolutely, if the facts support its time and it's clean. Anybody should be happy to cough up an extra $500 to $1,000 for a 550-hour Swift that looks like new because he can fly it for many years worry free, and still be able to sell at a premium as a low-time plane.

Now you ought to know just enough to scare you, so the next time you're out kicking tires, keep in mind all we've said about the different factors that cause fatigue. Also, keep in mind that fatigue is a fairly minor problem in most weekend puddle jumpers, and it will be the stress raisers and corrosion, rather than the time, that will be critical. As time goes on, and airplanes accrue more and more time, we might see fatigue come up as a very real problem, but we can't predict when that will be. We must educate ourselves so we will know when to back off from an airplane because of fatigue considerations.

Eventually there comes a time when everything must be put out to pasture, even airplanes. Let's hope we know enough by that time that we don't end up in the pasture with the airplane. □

MAP AND COMPASS

by GENE HORSMAN

This year my trip to Ohio was combined with the Luscombe Association Fly-In at Dayton, Ohio. The Fly-In started on Friday afternoon, June 27. I chose to leave on Friday morning, figuring if I could fly all day I would be stopping overnight at Hannibal, Missouri or Mattoon, Illinois and have just a quick hop into Dayton on Saturday morning. Right? Wrong!

The weather was bad across Kansas City by mid-afternoon and I decided to RON at Amelia Earheart Memorial Airport at Atchison, Kansas. A local taildragger pilot took me into town for a motel, and I persuaded the desk clerk to help me get back to the airport the next morning. She and her husband picked me up at 5:30 A.M., and when we arrived at the field there was ground fog all around. I finally got off at 8:30 A.M. Needless to say, with about 550 miles to go I made it into Dayton (Morainne Airpark) at 5:00 P.M. following a rainstorm and the end of the days activities. I did get there in time to Eat, however. I made some quick friendships during the evening and did have a guaranteed motel reservation, so all was well there.

A beautiful trip to Toledo, Ohio was accomplished the next day. I spent the week of the Forth of July with my family, and had the joy of celebrating my parents official 50th Wedding Anniversary (they took seven years out to see what divorce was like)! I flew about 3½ hours sightseeing with relatives while there.

I left Toledo on Monday morning, July 7, at 7:00 A.M. Denver time after being told of bad weather heading west.

I didn't find this weather until about half way across Illinois. There was a stationary front laying from the Great Lakes to Texas, and I underflew it completely. Worst stretch was just short of Blakesburg, Iowa, with rain and low ceilings.

After leaving Blakesburg, the weather improved rapidly heading west, and by Shenandoah, Iowa I was in sunshine again.

My fuel stops heading west were all accomplished rapidly, and I hoped to at least make Akron, Colorado by dark.

But overflying McCook, Nebraska at about 7:15 P.M., things between McCook and Denver didn't look too terribly swift. Towering thunderheads south toward Colorado Springs, dark Virga to the north, and lightning straight ahead in black clouds made the yellow streak on my back very vivid. So I went back to McCook and landed.

I was fortunate here, because the young man running the FBO was still working. He made room in the hangar because the weather didn't look too good, furnished a courtesy car to go to the motel, and supplied a couple of beers with aviation talk besides. What more can a pilot ask? Really enjoyed it.

I made a leisurely 235 miles the next morning to finish off the trip.

I flew 33.5 hours, about 3,100 miles, burned 11 quarts of oil, and enjoyed the heck out of the trip. The Luscombe never missed a beat, and although burning 100LL except at Dayton, Toledo, one stop in Indiana, and one stop in Illinois, didn't foul plugs (I used TCP faithfully)!

I only used the radio for Unicom, using map and compass all the way. This is what sport flying is all about.

Hefty aviator soars in homemade plane

By REBECCA JONES
Rocky Mountain News Staff Writer

BROOMFIELD — David Ebershoff strapped his 6-foot-8-inch body into the cockpit of his 3-year obsession yesterday and flew to glory, dipping his wings to dozens of cheering friends at the Jefferson County Airport.

"Man, can he drive," whooped one observer as Ebershoff barreled a few feet above the runway in his homemade blue-and-orange-striped biplane, leaving crowd-pleasing trails of smoke.

Every piece of the plane — which his stepson named Totally Awesome — Ebershoff installed himself, spending an estimated 4,000 hours and $30,000.

A sign carefully mounted inside the open cockpit proclaims, "Time you enjoy wasting is not wasted."

"It's hard for me to find an airplane that fits my size," Ebershoff said after he landed.

Ignoring skeptics, the 45-year-old Genesee real estate developer built the plane.

He chose a biplane because it's — well, it's neater.

"Biplanes create a lot of attention," he said. "And they're fun to fly. It's just old-time aviation."

Ebershoff admitted to a few minutes of apprehension before he took the biplane out for its maiden voyage. His wife, Rebecca, flatly refuses to ride in it until he's tested it more.

"There are a lot of parts," Ebershoff said. "Something could have failed. But, fortunately, it didn't."

LaMar Steen, a retired Manual High School teacher who lives in Greeley, designed the airplane and was there to watch it yesterday.

"Like watching one of your children," he said.

Steen, a pilot during World War II, has designed airplanes since 1969.

"Their main feature is the size, which will accommodate someone other than a 150-pound person," said Steen, who himself boasts an ample girth.

Steen claims anyone with a little patience can put together a flyable airplane.

"There are four things you need," he said: "Number one is an understanding family, because you'll be spending a lot of time away from them. Number two is a place to work. Number three is a lot of perseverence. And finally, you've got to have some money.

"Not necessarily in that order."

Depending on the number of preconstructed parts, a homemade airplane can cost from $15,000 to $65,000, Steen said. A comparable factory-built one would cost around $80,000 new, he said.

"Of course," he added, "you don't have to spend 3 years working on one you buy."

Chapter 43 Newsletter
c/o Kirby White
8780 West 90th Place
Westminster, CO 80020

DENVER, CO 802
SEP 12
PM
1986

USA 22

EUGENE A. HORSMAN
210 LOOKOUT VIEW CT.
GOLDEN, CO. 80401