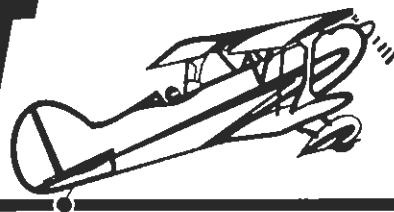


# ACRO SPORT Newsletter



NO. 47

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SEPTEMBER 1994

## A Dream Takes Wing

Dear Bill

May 1, 1994

I have just received your letter of 25 April, and I would be more than happy to send you some comments and pictures of N611EV! What proud father doesn't like to show off his new offspring? I have taken the liberty of enclosing some other information for your review; you are welcome to include it as you see fit.

My dream of building a full size aircraft began to take shape long before 1982, in fact, probably in the early sixties when I was a very young teenager. I was building balsa and tissue models then, but I dreamed. In 1973 I attended my first Oshkosh Fly-In and I knew then it would only be a matter of time. I just didn't realize then that it would take until 1993 to finish it!

In 1982 I ordered plans for the Acro II and began building wing ribs on the kitchen table at night with my wife's help. Inevitably, as so often happens in these things, many interruptions and delays presented themselves so that building slowed to a crawl, and eventually stopped. Short of money, several job changes, building a house, etc., etc., took their toll, but the desire was still there.

A chance meeting of one of my former flight students, Randy Headrick, in the lobby of the National Air and Space Museum changed everything. At the time, I was working as Chief Pilot for former Senator Howard H. Baker, Jr. While in DC on a trip and with some time to spare, I was visiting the museum. Randy happened to be visiting the museum also. In our conversation, I men-



**Above — Emilio's Acro II photographed by designer Paul Poberezny at Sun 'n Fun '94.**

**Right — Randy holds onto his cap as Emilio, in cockpit, runs up the engine prior to first flight December 12, 1993 — and according to Emilio, unequivocally one of the biggest thrills of his life!**



tioned that I was still trying to find the right motivational tool to help me get the construction of the Acro II going again. He expressed interest in the project and wanted to see it. That was in November of 1989. He and I worked together one day out of every weekend for the next four years. As you can see from the building chronology, a lot has taken place since then!

As for building tips, the most important thing I have learned from all this is that this aircraft, (or any project), is made up of many, many small items. When viewed that way, you won't be overwhelmed with the complexity and immensity of the whole thing. We found there were some errors on the plan set

I had. We anticipated some, others we came across after we had built a part. I guess that is where the education part of it comes in. We seemed to have had lots of educated left-over parts laying about! Mr. Ben Owen, in my opinion, was very helpful and patient in answering all my questions when I called. He knew he had a first time builder on the line when I was calling him. Regardless, he was very reassuring throughout the building period whenever I had ANY questions. I also want to mention that a lot of valuable information was culled from the three books by Mr. Tony Bingelis and his monthly articles in SPORT AVIATION.

When construction really got in gear,

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**Above** — With structures completed initial covering efforts begin January 1993 with the tail surfaces.  
**Right** — One of the four Acro II's wing panels following five coats of silver and lots and lots of sanding!



neither Randy nor I knew how to weld. For all of you out there who are having second thoughts about doing your own welding, take it from me, it's not as scary as your imagination says it is. Practice, practice, and more practice is all it takes to learn. We did it, and so can anybody else. It fell to me to do the majority of the cover work, including the 500 or more stitches and nearly all the sanding on 5 coats of Polyspray. Since I had never previously covered an aircraft, I thought I'd better learn. I did, in the Stits tent at

Oshkosh '92. I walked up to Ray Stits and politely said, "I want to learn how to work with this stuff, because I'm going to cover my airplane with it." He didn't hesitate putting me to work and learning. I spent 4 days there and enjoyed every minute. I learned what I needed, and when it came time to 'roll' my own, I felt very confident. I followed the manual just like Ray said to, and had no problems. When I had a question, factory support (a.k.a. Norm), was prompt and precise. Neither Randy nor I had

ever spray painted with any Stits product before. After mastering the technique, we proceeded to spray everything with white Aerothane. Then we masked off what we wanted to keep white and sprayed everything else with red or black Aerothane or both, as needed. We went through a lot of masking tape and masking paper. Of course, we had to build a spray booth first; I've got the prettiest pink driveway in the neighborhood!

And now for the recreational part of

## EDITORIAL/ from Hard Knocks School of Aviation

by Bill Berrick

When I first had my Acro Sport up on the gear, some of my visitors suggested that the Cleveland brake assembly was hanging in a vulnerable place below the axle. This was also about the time that Curtis Pitts decided to rotate his brakes 90 degrees to the front. I had already welded on the attach points fore and aft for the wheel fairings, and decided to press on according to the plans.

I'm happy to report that I flew for three years with no more than a minor abrasion on the underside of one brake casting when I cut a corner on a taxiway and dropped a wheel off of the concrete. But then came a fly-in breakfast in July, soon after 9WB's third birthday, where the two Swifts of our formation and my Acro Sport were flagged off of the runway and parked on the grass after landing.



**The brake casting is rotated 90° forward on this Pitts gear.**

After taking on our load of pancakes and kicking tires of various other fly-in visitors, we turned our airplanes 180 degrees by hand ready to taxi back onto the runway as soon as we could find a break in the landing traffic at this uncontrolled airport. I felt a solid "clunk" when I taxied onto the concrete and followed the Swifts to back-taxi for takeoff. No problems, but a little rushed to get off before the next arrivals turned final.

As I pulled into the formation, number two said he would fly under me to look at something hanging from my landing gear! You guessed it! The whole Cleveland brake casting was dangling on the end of the flexible hydraulic line!

We avoided flying over housing areas on the way home, my flight lead cautioned me to stay off of the brakes on landing, and offered to divert to a grass strip. We went on to the home base, I made my one good landing for the day, and rolled out successfully to the usual taxiway turn-off, still dragging the poor brake. All turned out well, but I figure my "free" pancakes cost something over \$50 each that day! A new brake is now in the same old place, and the wheel fairing is repaired, in spite of my vow that morning to move the brakes to a safer area.

The moral of this story is that you may want to consider a different arrangement if you are not already fully committed to sticking to the plan. I know some of you have rotated the brakes on your Acro Sports — how about sending me some drawings or photos to publish?

this exercise! I can say unequivocally that one of the three biggest thrills of my life thus far has been taking the aircraft that we built into the air for its maiden flight. Of course, my wife would want me to say that the day I married her should be first, and my daughter would want me to say that the day she was born should be second! To get back to the matter at hand, this aircraft flies differently than any other I have ever flown. Because it flies like a Pitts, and not like a Cub or a Cessna, that is the way we have learned to fly it. There are a lot of drag producing parts on this airplane, and consequently, power has to be kept up to work best. Because each approach and landing is different, we come prepared for anything. The aircraft prefers to 3-point its landing, so we don't fight it. In cruise, we have found that 2400 RPM will give an indicated 103 kts. At full throttle and in level flight, she will indicate 118 kts. Single pilot and fully fueled, the aircraft will climb at 1500 ft/min. at 80 kts. Not too bad for a fixed pitch wooden prop! If we had to do anything over, we would probably lengthen the engine mount a couple of inches. She feels a little tail heavy, but not bad - maybe twitchy is a better word. I suppose that's good for aerobatics. Even fully loaded, the flight characteristics aren't really uncomfortable. Actually, the only thing uncomfortable thus far has been the down-wash from the upper wing into the rear cockpit. After an hour of flying, you are ready to land, somewhere, anywhere! The front cockpit is really much nicer in that respect. Maybe a bubble next year, who knows?

On Friday before Sun 'n Fun '94, the 25 hour test period was completed. Early the next day, Randy and I took off for Florida. We had a great flight and a great time. We had added 14.9 hours to the Hobbs by the time we got back. And that's about where things stand now. We hope to do a lot of flying this summer and are planning to be on the flight line at OSH '94. We will look for you there.

I know this is longer than I had planned and maybe longer than you can use. You're the editor. However, I just can't stop talking, (writing), about this wonderful ACROSPORT III! Looking back through the Newsletters, I found that I had previously contributed material for the #31 issue of April '90. I have to laugh now at my unbounded optimism - I predicted then that we would have N611EV at OSH '91! Well, I can confidently predict now that you'll be seeing us at OSH '94; count on it. If I can be of help to anybody, please let me know. Call or write. The end.

Emilio Verastegui  
12304 Early Road  
Knoxville, TN 37922  
(615) 966-7133



Top — Neat rear instrument panel nears completion in July 1993. Picture directly below shows the Acro II beginning to look like it's supposed to look — with fuselage fabric attached and painted awaiting installation of front seat, gas tank and metal cowlings.

Above — Final assembly and rigging took place November 14, 1993.

Left — Randy's first flight in N 611 EV took place on January 24, 1994. That smile was even broader after the flight!

## 1994 OSHKOSH WINNERS!

Paul and Sandy Muhle's Acro Sport II won the big one this year, moving up from last year's Reserve Grand Champion to the '94 GRAND CHAMPION PLANS BUILT!

Mike Finney's Acro Sport II won the BRONZE LINDY for plans built aircraft, and won our First Place award for the Outstanding Acro Sport II!

Emilio Verastegui's beauty scored as the 2nd place Outstanding Acro Sport II!

Ben Owen earned an Acro Sport Award for his countless contributions, including his work as past editor of this Newsletter, and Bill Blake was honored by an Acro Sport award for his plans drawings.



Ben Owen — past Editor Acro Sport Newsletter — Outstanding Contribution '94.

## Letters To The Editor

Dear Bill,

I have some general comments regarding the Acro II tailwheel setup to compliment your article from Issue 45. I have installed a PA-18 Wag Aero tailwheel spring and a light weight Maule Model SFS solid rubber tailwheel. I have been using the standard 'tension' type control springs with heavy chains. This has resulted in good control and absolutely no tailwheel shimmy over the last 280 hours.

I have had a couple of unique problems. First, similar to your experience, I have bent a standard tailwheel control horn and replaced it with a Scott horn. Although much more expensive, the Scott horn is very strong and resists bending. Secondly, I have had the AN



Paul Muhle, Richland, NE — '94 Grand Champion Custom Built (Plans).



Michael E. Finney — Outstanding Acro Sport II — First Place '94.



Emilio Verastegui — Outstanding Acro Sport II — Second Place '94.



Bill Blake — Draftsman for Acro Sport Plans — Outstanding Contribution '94.



Bill Berrick — Editor Acro Sport Newsletter — Outstanding Contribution '94.

bolt attaching the tailwheel to the spring, break at the point where the threads begin. This allowed the entire tailwheel assembly to flop around and tore up the rudder. The only good point was that I found the Acro II handles very well with a tail skid!

Prior to its breaking, the bolt had been found to be loose during the annual condition inspection and re-torqued. I believe that the bolt was over-stressed when it was loose, and the re-torquing was enough to allow the fracture within the next few landings. My advice would be to always replace the tailwheel bolt if it is found to have become loose.

I really enjoy the Newsletter and want to thank you for taking over the respon-

sibility for keeping it going. One last comment; I wonder if I have highest time Acro II or the oldest flying? Mine was signed off in August of 1981 and now has 640 hours TT.

Sincerely,  
Bill Batson  
305 Keithland Court  
New Lenox, IL 60451  
(815) 485-4895  
or (312) 886-6351



## SPINNING IN THE ACRO II

by Don E. Baker

Spins are just 'plane fun in the ACRO II. Every day I go flying, I do at least one spin. I think everyone should learn spins and, of course, recoveries from them. I don't compete and I am not sure if my entry to a spin is competition caliber, but it works well and it is the spin itself that is the fun part. Who cares about entries anyway?

I like to do five turn spins, or more, so I generally climb to 2500 ft. AGL and acquire straight and level flight prior to entry. Full recovery will then be 500 to 1000 ft. AGL for the five turn spin. IF THIS IS YOUR FIRST SPIN ATTEMPT, GET PLENTY OF ALTITUDE; FIVE OR SIX THOUSAND FEET.

I understand that competition entries are supposed to have no pitch-up prior to the wing drop at the beginning of the maneuver. This is where mine may differ. I reduce the power to idle, maintain altitude during the deceleration by feeding in up-elevator until stall speed is reached. The nose will come up if altitude is maintained to provide a good true stall before spin entry. Ailerons remain neutral throughout the maneuver.

As the stall is reached, use rudder to keep the nose on heading a second or two after full aft stick is in. Then quickly feed in rudder, (don't kick it in), the wing should drop on its own, and the spin is started. Hold the full aft stick and full rudder, and count the turns or half turns aloud. The spin will develop and be fully stable in about two turns. What is happening as the spin develops is the forward speed at the time of spin entry is gradually dissipated to zero, and a true vertical descent is finally established after about two turns. The changing picture out of the windshield for that first two turns is just due to the changing forward ground speed component.

Upon reaching the last half of the last turn of the spin, recovery is initiated by applying opposite rudder, and the rotation should slow a small but perceptible amount. With one quarter turn remaining, break the stall by neutralizing elevator, and the machine should stop rotating right on heading. Fly the airplane on a perfect vertical down line for several hundred feet as speed builds, then begin the pull-up to level flight adding power slowly as the pull begins.

Always begin recovery with rudder, then follow with elevator. If the opposite

sequence is used, the rate of rotation will increase immediately when elevator is relaxed, and then the rotation will not stop promptly when opposite rudder is applied, but may continue for another one or two turns. Because of the unpredictable nature of the elevator first recovery, it is seldom used in competition, airshows, or practice.

In order to get the rotation to stop exactly on the desired heading, it will be necessary to determine the precise point to begin recovery. It will vary somewhat according to airplane rigging, technique, etc. You will just have to practice until you get it nailed. But hey, that's what weekends are for!!!!

I generally always spin to the left because any propeller gyroscopic forces, (small at idle power setting), are in a direction to pitch the nose up slightly and help keep the wing stalled. In fact, adding power, generally full power, will bring the nose up to almost horizontal for a flat spin to the left. Ailerons are also used in the flat spin to level the wings, i.e. right aileron for spins to the left. For a normal direction engine, (clockwise rotation), flat spins can only be done to the left for upright spins, and to the right for inverted ones. But for now let's keep the power at idle, and do normal spins.

I do not perform flat spins in my ACRO II because of the extreme stress placed on the crankshaft by the gyroscopic forces encountered at high RPMs. It is about the same as trying to lift the airplane by the propeller alone .... a lot of force. Mine has a hollow crank, and it ain't worth the risk! So be sure the engine is at idle throughout the spin.

Inverted spins are similar to upright spins except they are more thrilling and the G meter will read negative during the spin. I enter them inverted, but otherwise the same as an upright spin. If necessary, loosen your shoulder straps enough so that you can push the stick full forward as the airplane reaches stall speed. This is important, because less than full down elevator will make the spin rotation much faster, recovery less predictable, and the whole affair definitely more exciting, maybe too exciting!!!!

Anyway, keep the FULL down elevator in and feed in full (right) rudder when the stall is reached. Hold everything, (ailerons neutral), and wait for it to de-

velop. This is truly an exciting and fun maneuver, but if attempted by yourself for the first time, do as I did, and practice it in your mind many, many times to prepare yourself mentally for the experience. The axis of rotation will be above your head, but try not to focus your attention there. Remember that in an upright spin you can't see the spot on the ground where the center of rotation is located, and it is not necessary to see it for the inverted spin either. Instead, keep your eyes and attention focused on the earth directly over the nose of the airplane. You will note that the ground is moving in the same direction as the rudder you are holding in. If you look out the top of the canopy, the earth will appear to rotate in the opposite direction, and may confuse you, so keep those eyes just over the nose. Right over the nose of the airplane will always give you the direction of the spin, upright or inverted.

Recovery is similar to upright spins; first opposite rudder, then neutralize elevator. Hold a true vertical down line, then recover to level flight. I want to caution you here with respect to G loading on your body. The inverted spin will probably be somewhere around two Gz negative, and if sustained for five or six turns, will be 15 to 20 seconds duration. A positive G pull-up during recovery may well reach three Gz, the total excursion will then be five Gz, (from -2 to +3), and this does not seem like much especially when compared to a five G loop which we do routinely. However, I must point out that it is the total G change in the positive direction which tends to cause gray-out and that sleepy feeling. A five G loop, however, only has a change of four Gz because it starts at plus one and peaks at plus five. Thus, a negative two G spin followed by a positive three G pull-up is similar to a six G loop, not a five G one. Believe me, the old bod' can tell the difference in that one extra G! It really is not that big of a deal, but you should be aware of it.

I highly recommend the Gene Beggs emergency spin recovery technique if you get lost and can't seem to recover the spin. This technique works on the ACRO II, and is used as follows: (1) Make sure power is reduced to idle; (2) Let go of the stick; (3) Look directly over the nose and put in rudder opposite to the direction of rotation; (4) When rotation stops, recover from the dive. It works for any spin, however, if there is a passenger in the front seat, you cannot be certain that he is not touching the stick, therefore, you cannot assume that letting go of the stick will work. You must be prepared to do the correct thing with the elevator/ailerons and overpower him if necessary.

Crossover spins are also great fun. You may not want to do them, but you



should at least think about them, because a botched spin recovery could easily turn into a crossover spin . . . unknowingly! This is a spin which is changed from upright to an inverted spin; the picture over the nose will reverse directions, and the G meter will also reverse. You can crossover between modes as often as you have altitude and desire for.

Use a small model airplane in your hands to see how the crossover spin works. You will note that a ground ob-

server will not see a change in direction of rotation of the spin, but merely a flop over in attitude. The pilot does however, see the direction of rotation change when looking over the nose.

Because of the relative ease with which the airplane crosses over in the other mode, it is easy to see why spin recoveries are sometimes botched. An over-excited state of mind, confusion, over-exuberance on the controls, and many other factors could easily create an unintentional spin crossover. If you

aren't paying close attention, you could miss it and find yourself recovering from the wrong spin, which means you are now holding in PRO-spin inputs and not recovery inputs. That has happened many times, and is what finally led to the Beggs recovery technique. More than once an airplane has recovered itself as the pilot let go of the stick to prepare to bail out from an "unrecoverable" spin!!!

Well, that's about all I have for now. Keep flying, keep practicing, and keep on a grin!!

## SIDDERS MODIFICATION FOR ACRO II AILERON BELLCRANKS

Neil Sidders  
235 Rowland Road  
Monroe, LA 71203

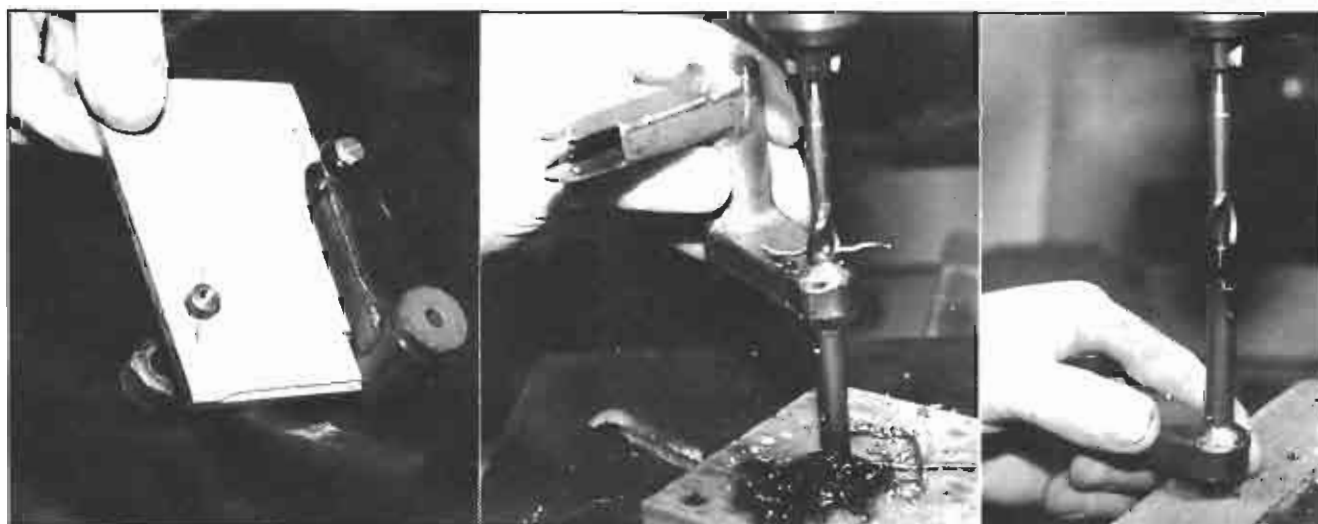
We modified the aileron bellcrank a little to simplify building. The bearing sleeve in ours is  $2\frac{7}{8}$ " long, allowing both levers to be welded to the sleeve at 90 degree angles. (The Acro I wing is not thick enough to use this taller bellcrank). A plywood gauge was made to locate the angle of the levers to each other. A steel slug .900" in diameter is used to insert into the bearing sleeve when welding the levers to the sleeve. The slug keeps the atmosphere from the inside wall of the tube during welding and also keeps the ID of the tubing to the proper size for a KP-4 bearing.

Locate the bearing in the bearing sleeve as per the plans. Then tap the slug in until it contacts the spacer, clamp the lower arm to the bearing cage and prepare to weld. Start the weld by heating the slug to a bright red. This will allow you to weld the lever to the sleeve without losing your heat to the slug. After the part cools, you can knock the slug out and it will leave a good clean hole for the bearing.

Now you get to use the little plywood gage you made. Slide a rod through the hole in the lower lever, (you haven't welded in the bushing stock yet have



The steel slug is for insertion only during welding. Heat the slug before welding lever.



Plywood gauge to locate bellcrank levers. Squaring off ends of busing stock.

you?), and locate the upper lever as in the photo. Clamp the lever to the bearing cage with the slug in place and repeat the welding steps.

The aileron bracket flat pattern dimensions on sheet 14.0 change like this:

$3\frac{1}{4}$  becomes  $3\frac{3}{4}$

$2\frac{1}{2}$  becomes 3'

$6\frac{1}{8}$  becomes  $6\frac{5}{8}$

The gusset  $1\frac{1}{4}$  becomes  $1\frac{3}{4}$  and the bearing cage  $2\frac{3}{8}$  becomes  $2\frac{7}{8}$ . Weld the levers  $\frac{3}{16}$  from the ends of the bearing cage.

If there is a weak link in the aileron control system, it is the rod end at the bottom of the bellcrank bushing stock. It is extremely important that the end of the bushing stock be very square to the bore to reduce the bending loads on the AN-3 bolt. All the other rod ends are driven on both sides of the Uniball which is great because it eliminates the bending loads altogether. We used a Tu-Lip counter bore to spot off the end of the bushing stock after it is reamed to size.

In the May 1989 SPORT AVIATION, pg. 56, there is an article on control bearings that I wrote. This article is descriptive of how we did it. Just keep in mind that when two bearings such as the KP-4 are used with a bolt or axle passing through them drawing them together, some means must be used to control the dimension between: both inner and outer races of paired bearings. If anyone has any questions, please feel free to give me a call at (318) 343-3885.

**AILERON HORN BEARING.** On Acro Sport II plan, sheet 16.0, zone A5, Neil recommends using a Fafnir KP3A instead of the KP3 for its smaller outside diameter, (0.625" vs. 0.770").

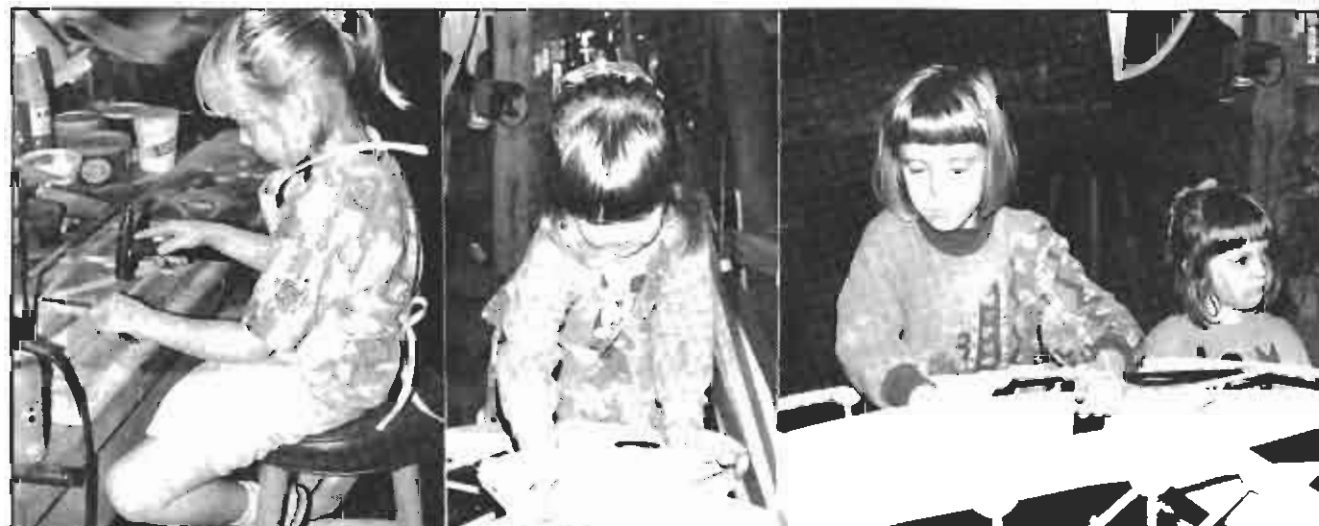
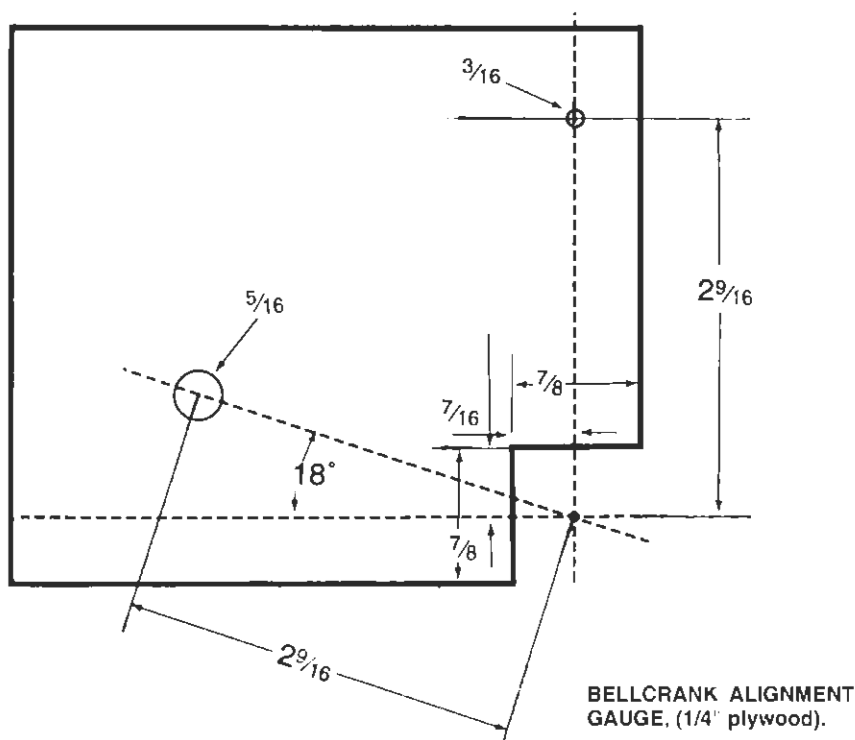
## Aileron Stop Adjustment

Submitted by Joe P. Spencer

The Acro II plans call for the aileron stops to be set at 25 degrees aileron travel. There is another consideration when setting these stops that may or may not apply to your plane. Check the first male rod end in the elevator push-pull system, (the one that bolts into the rear control stick), for twisting at full aileron travel. If torque is applied to this rod end, then the stop should be re-adjusted 'till the torque is eliminated. On my particular plane, I had to set the

stops at slightly less than 25 degrees — I still have more than enough aileron.

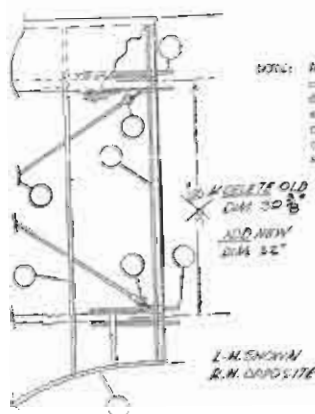
On the way to Sun-n-Fun 92 I stopped at a small airport in south Georgia for fuel. The local FBO, (a homebuilder), told me of a Skybolt that crashed from loss of elevator control. He showed me the part that failed—the male rod end immediately aft of the rear stick broke in the threads—possibly the result of the aileron stops being set too wide. I believe it's worth a check.



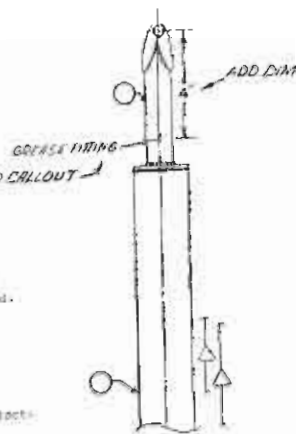
**THINK YOU'RE TOO YOUNG, (OR TOO OLD), TO BUILD AN AIRPLANE?** Left — Becky gluing and nailing the last wing rib for the Sidders Acro II. She does pretty well at driving those little aircraft nails, mixing glue, and putting the parts in the jig. Quality time? You bet!! Center — Sanding technician Laura — If you are as lucky as Neil to have kids who are curious and want to try what you are doing, make sure you have some extra stock to remove! Right — Becky, (6), and Laura, (3), daughters of Neil and Debbie Sidders going over the wing one last time before varnishing. Don't ask why there is a push-rod tube hole in the tip rib, and don't blame the girls!

A design by  
Paul H. Poberezny

The Super Ace was designed as an educational project for those working with hand and mind to better develop



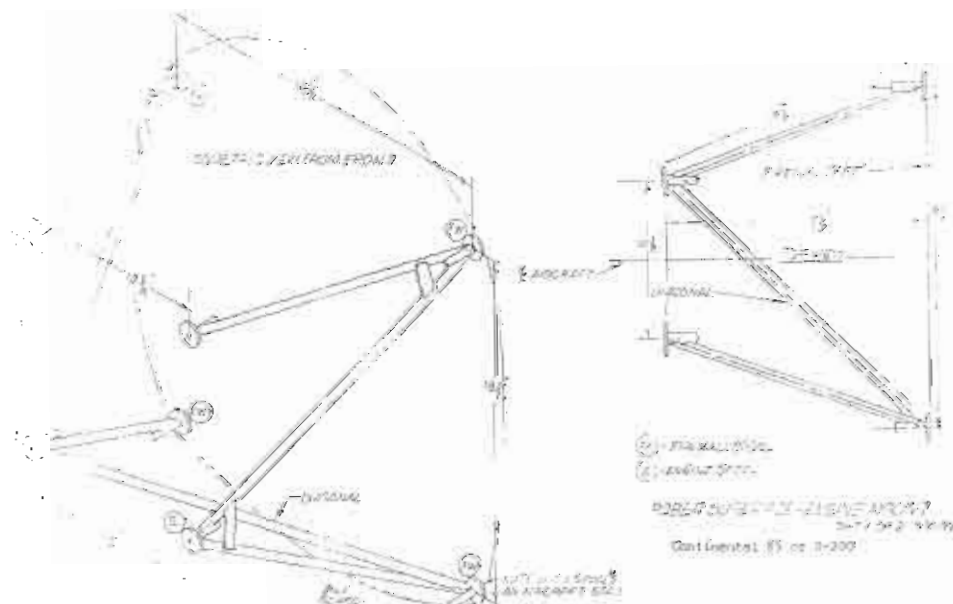
Each spring should have a compression  
for a weight of 880 lbs. each landing  
must be 1" for a gross weight of 1400 lbs.



SHT P-7

SAT-P-2

Please note the following, SUPER ACE PLANS CORRECTIONS and the address for obtaining the shock strut coil springs.



2) F.S.3 Front view: Height of rear cabane from 18" to 17 3/4"



## '94 OSHKOSH FORUMS

The Acro Sport forum was well-attended and rewarding, with a panel including Paul Muhle, Rich Hartzell, Wally Weber, and Don Baker as moderator. Don reported on his problems with cracking and leaking of fuel tanks, finally solved by welding aluminum channel on the flat ends and bulging them with air pressure. He also cautioned all to use '303' flexible fuel hose, not '601'.

Don described an easy static system check—note or set the altimeter with the airplane at rest, then make a very low pass to see if the altitude reads the same. (Set it to an easily recognizable number so that a very brief look will do that close to the ground!) Don reported breaking the 3/8" bolt that attaches the tail spring to the fuselage; he recommended checking and torquing it carefully.

Rich reported on the frequent finding of chaffing where the flying wires and landing wire cross each other, and recommended using deeply notched batten to keep them apart.

A show of hands revealed 20 Acro II's under construction and three Acro I's. There are 75 two-holers flying now and 70 singles!

The Pixie and Ace forum was moderated by Hart Jewell and John Leitus, and included a report on the Pober Super Ace by J.J. Tomlinson. Ben Grosso, now flying off the restrictions on the first home-built Pober Junior Ace was in attendance—we hope to have his story and photos in the next issue.

### GBL'S George Biang Joins The Alexander Family

GBL Welding Equipment started in 1989, primarily marketing the Henrob 2000 (Dillon) Welding Torch, expanded to include all types of welding equipment, and is now a part of Alexander Aeroplane Company. George Biang has become Alexander's Official Welding Instructor, and will continue to be seen at the Aeroplane Builders' Workshops and in demonstrations at the major shows.



### PLAN CHANGES FOR POBER JUNIOR ACE

from Bill Blake

SHEET 1.00 zone C5 . . . . . Top view, between sta. 2 & 3, change 36" to 36 3/8".

SHEET 5.00 zone B26 . . . . . Step, make like lift handle Sheet 1, zone D3

SHEET 7.00 zone C40, Change 3 3/16" to 3/16" on plywood plate.

SHEET 7.00 zone D37, 5/32" tube callout should read: .035 x 5/32 tube.

SHEET 9.00 zone B49 . . . . . Change 4" to 3" zone C52, (End of control horn), change 1/2" R to 1/4" R.



### Wicks Aircraft Supply

P.O. Box 129 • 410 Pine Street  
HIGHLAND, ILLINOIS 62249

618-654-7447

#### ACRO SPORT II KITS



#### POBER PIXIE BASIC KITS

#### ACRO SPORT KITS



FOR MORE DETAILED INFORMATION PLEASE CONTACT...



### Wicks Aircraft Supply

P.O. Box 129 • 410 Pine Street  
HIGHLAND, ILLINOIS 62249

618-654-7447

## Notice! Acro Sport II Full Size Wing Rib

If you have recently purchased plans for the Acro Sport II that did not include a full size wing rib drawing, please contact Acro Sport immediately and a full size rib drawing will be shipped to you free of charge. Send plans serial number, name, complete address with zip code to: ACRO SPORT, P.O. Box 462, Hales Corners, WI 53130.

When building be sure to check and double check all dimensions and measurements — and be sure to include whatever corrections or updates to the plans that have been indicated.

# HELP!



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