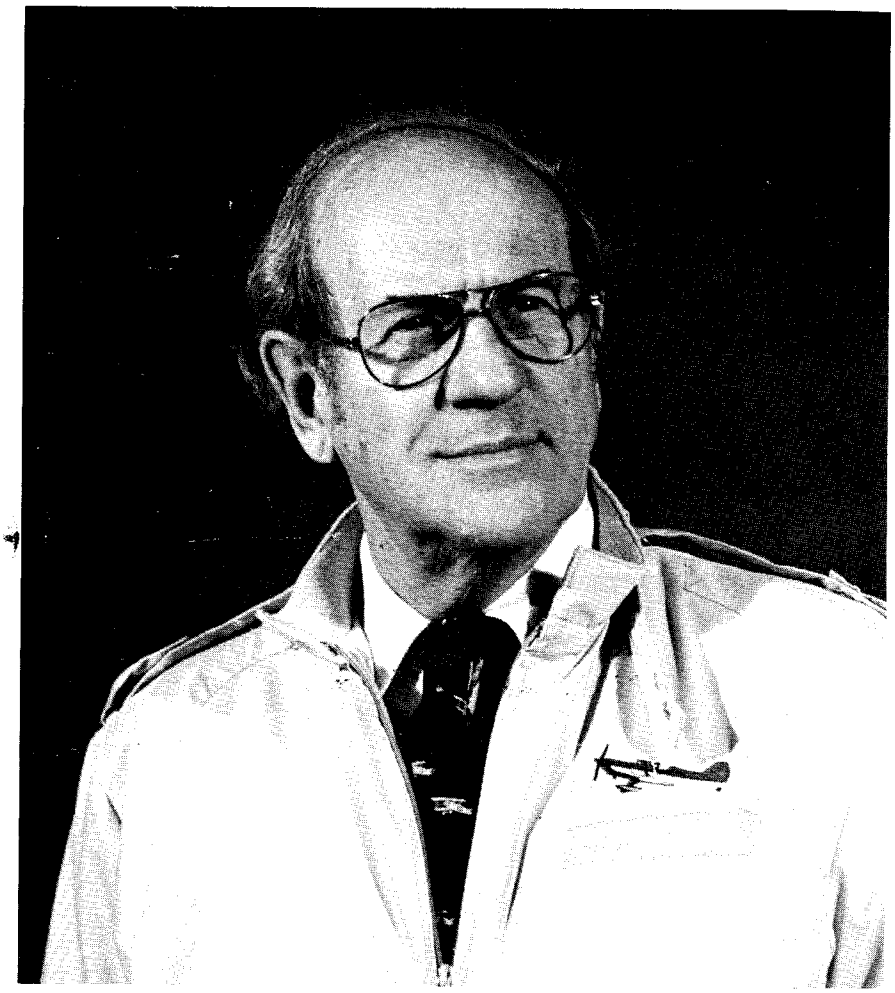
P.O. Box 462 Hales Corners, Wisconsin 53130

ACRO SPORT NEWSLETTER

AND PROJECT SCHOOLFLIGHT

Issue No. 7 May 1984

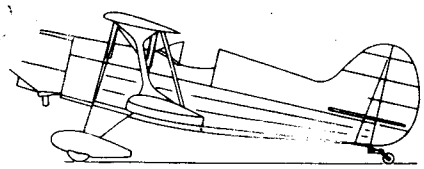


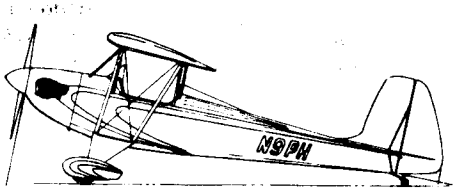
Wouldn't it be a wonderful experience in the few years ahead to have a special gathering of the clan here at Oshkosh -- no, not at EAA Convention time, a time during warmer weather -- of all builders of the Acro Sports or the Pixie, to show your aircraft, to bring your family and to share the self-education you have learned. Maybe at that same time at the EAA Aviation Center we could share this same knowledge with the schoolteachers, the industrial arts teachers, to be the motivating force in using aviation, the airplane as an educational tool, and thus giving the airplane an increasingly better public image. Project Schoolflight started out many years ago -- 1955 -- with the beginning of construction of the Baby Ace, that I designed and built. The airplane is now on display in the EAA Aviation Museum at Oshkosh. It was Bob Blacker, an industrial arts teacher at St. Rita's High School in Chicago, who saw the advantages of working with the hand and mind, and the airplane as a motivating force for education.

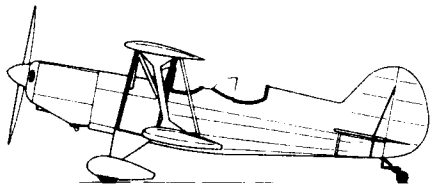
After completing the Baby Ace, they then went on to build the prototype EAA Biplane, designed by Jim D. Stewart and myself, this aircraft to rest in the EAA Air Museum. Bob moved on and up as did many of his students. Bob went to work with FAA on assigments

continued next page

NOTICE: Experienced aircraft builders are needed to help with the Pixie project at the Oshkosh '84 Convention. If you volunteer, you can contact Bob Stagner, 1911 Fernwood, Poplar Bluff, MO 63901. Office phone 314/785-9651; home phone 314/686-1969.







throughout the country, and a number of years at FAA in Washington; his students rising to higher positions in aviation, especially the airline industry.

As we all know, self-education takes time and patience, but our country is richer for it as are we.

Again this year, and during the EAA Convention, we would like to continue the completion of the Pober Pixie. We made a great start last year, and many favorable comments were received by the many visitors as to the great value the construction of an airplane was.

Bob Stagner, of Poplar, Missouri, will again be the project manager of the continuing Pixie project to be worked on as we did last year, at the EAA Museum workshop. We again will need volunteer help as we did last year. If any of you can be of help during the convention on this project, please drop me a note so we can put a program together.

Due to our move to Oshkosh and my many areas of responsibilities, I have not been able to make any progress on the Lycoming O-235 108 HP Acro Sport II two-place. I am sure it will be at least a year before it is ready to go.

With the Acro II light, empty weight, I am sure its performance will be satisfactory. If any one is installing a Cont. O200, I would like to hear from you. As the engine weight is much less, it would give a good HP to weight for just plain, economical fun flying, as well as a more reasonably priced power plant.

For the Pixie builder, the Air Motion two-cylinder air-cooled power plant may be another answer to power plant availability.

Air Motion of Oshkosh has test flown one of their engines in a Heath Parasol flown by big Ernie Mosser, down at their airport in St. Augustine, Florida, and No. 2 engine is scheduled to go to Ken Brock of Gyro Copter fame for test work in his Gyro. No. 3 may be available for test work in the museum's Pober Pixie. The designer has told me that the engine should develop about 50 HP at about 3000 RPM, swinging a larger diameter prop than a VW.

We will keep you posted on the engine's progress throughout the newsletter and SPORT AVIATION.

Keep those problem areas, construction tips and photos coming in, and let's see a large contingent of Acro's and Pixie's at this year's EAA Convention.

Paul Poberezny

ACRO SPORT II BUILDER'S GALLERY

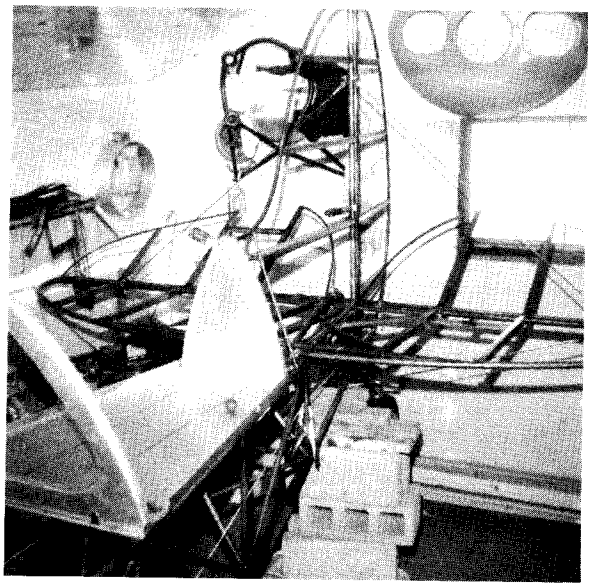
(NOTE: In this issue the gallery of pictures and articles pertains entirely to the Acro Sport II. The reason is simply that we did not get any input from Pober Pixie or Acro Sport I builders. Acro Sport I and Pixie builders are reminded that the newsletter is supported by the builders, and we would appreciate your sending any photographs and construction tips on. Of course, the same also applies to the Acro Sport II builders.

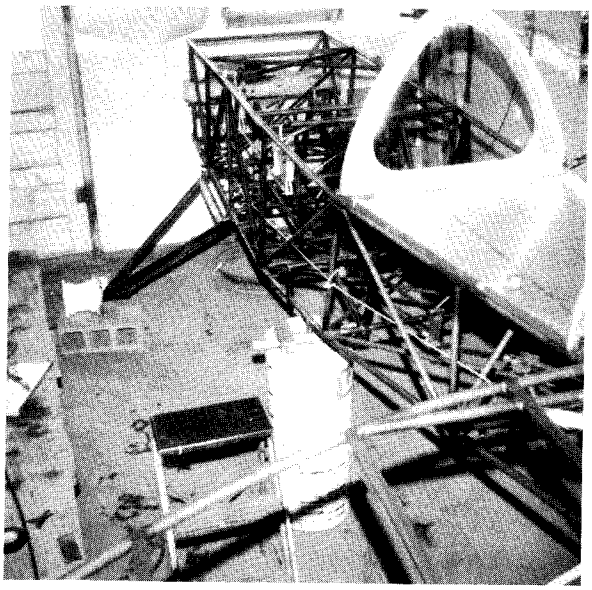
Acro Sport II Builder/Owner
Paul E. Felkner
Route Two
enterville, IA 52544
.5/649-2451

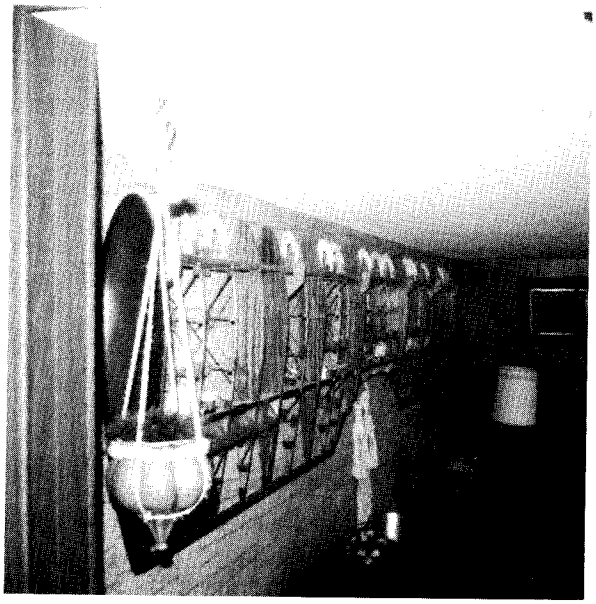
Building my own plane was not something to which I had given any consideration. As a child and youth, I built scores of balsa models, and I have been an active pilot for 42 years. In the winter of 1978-79, however, I saw an ad concerning an EAA biplane in a two-year-old Popular Mechanics. I wrote to Hales Corners and discovered that they still had the plans. When I learned that it would be cheaper to join EAA and then buy the plans, I proceeded to do that. My wife, however, saw the plans before I started to build and said she wanted a seat too. About that time I saw the plans for an Acro II advertised in SPORT AVIATION. I sent for those plans and began to build.

In August of 1979, I made my first trip to Oshkosh and welded my first bead in the welding tent. I ordered the wing kits in September 1979, deciding to build the wings first while learning to weld. A year later in October 1980, I found out about a local chapter in southern Iowa. I joined Chapter 409 of EAA at that time.

My building has been done in my spare time, since I am a farmer. In a little over four years, I have completed the wings ready for cover, have the fuselage on gear, tail feathers are done, and I have a Lyc. O-360A4A engine. I enclose a picture of the top wing, which is hanging in our family room. I am building the fuselage in a 12' x 20' garage, which is a little crowded now. I am going on my second year as president of Local Chapter 409. Any problems which I have encountered with the Acro II plans have been answered by Ben Owen.







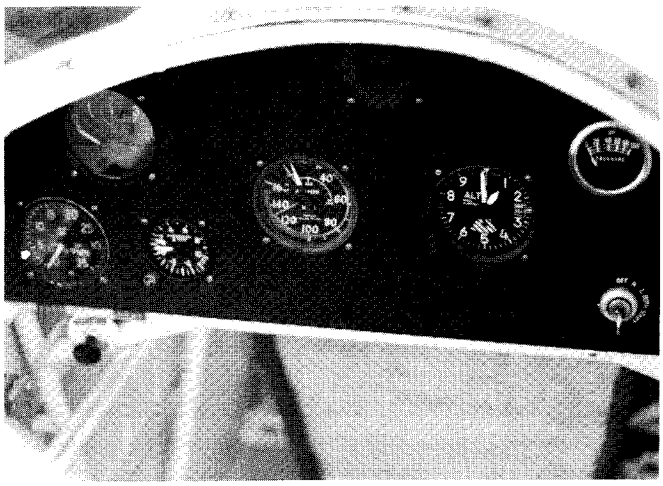
Acro Sport II Builder/Owner
David Kragnes
Route 1 Box 99A
Glyndon, MN 56547
(See additional pictures on page 16)

I came away from Oshkosh, after seeing the prototype Acro Sport II, with a set of plans and the knowledge that I had to have one of those airplanes, but without any idea of when or how it would get started. So the plans sat in my closet.

In the winter of '81 an ad appeared in my local paper to sell a wing kit and it seemed the time had come. A man had started making ribs when a medical problem caused him to give up on a project he could never fly, so a stack of wood was added to the plans stacked in my house, and planning began to start the building.

I am a farmer so there is no time to spare in the summer, but it seemed if things were crowded in I could find three or four months in the winter for two winters in a row. By putting in extra hours in the summer of '81, by January 3, 1982, I was ready to cut tubes. Things went really well and by late March, when I had to start farming, I was shooting my mouth off about flying it to Sun 'N Fun '83. I didn't realize that over the summer there wouldn't even be one rivet or bolt added. I just couldn't get at it. December '82 saw me moving back into the shop, and boy, did that winter fly by.

There were times when it looked like the winter would be too short, but on March 29 Lee Balantine, from Minneapolis GADO, told me 317DK was now an airplane, not just a stack of neatly arranged parts. Celebrating my 31st birthday on March 30, weather and some very pressing farm work put the first flight on April 7, 15 months and four days after the first tubes were cut. If you subtract the eight months that I totally ignored the project in order to scratch out a living from the soil, it took me seven months to build. I didn't make Sun 'N Fun '83 as I bragged about, but it was close! The ribs were started when I got them, I had the fuselage sandblasted and painted, and I bought the gas tank and aluminum kit with the dashboards formed. But otherwise, the whole thing was built from scratch, including my first attempt at painting. I had worked on our club CUBy (Chapter 317) and on my own Aeronca Chief some, but this was my first full project.



So what is the airplane like? Well, pretty much to plans. I am a big guy, 6'4", 265 lbs., which is one reason I chose the Acro II. So, first I moved the rudder pedals four inches forward and then when I closed a deal on a 0 time O-320, I started in trying to guess weights and settled on two extra inches in the motor mount. I put in heel brakes, because I like them, and cloth sides and belly on the fuselage up to station two, because I don't like tin work. I have a metal prop of 74/53, a starter and gell cell mounted on the firewall that will give me 20 starts, if I don't flood it. I have

intercom and I carry a 720 hand-held radio. There are no inverted systems; I had never liked flying upside down and I didn't have any more money, so that would have to wait. With the wheel pants, the rear bubble and radio it weighs 898 pounds.

So, here was summer and it was signed off. Now, would you fly it or spend your time on finish work? You are right, I flew it! The wheel pants would have to wait. The ugly bungee covers and rear bubble didn't seem important, instead we spent 60 wonderful hours getting to know each other.

It flies like everything. The lack of forward visibility on the ground and in the flare were hard to get used to, but you aren't on the ground long. At 1525 pounds one day, 78F and +3 wind I was off in 820 feet from a strip with five-inch grass. My strip is 1100' x 60'. Cruise is about 115 at 2300 with no wheel pants and both holes open. It is a super learning airplane, and in the hands of someone with some skill it would be competitive. It does everything so fast, solid and precise it is a tremendous confidence builder. I love it! Thank you, Paul, and thank you Ben Owen for your help on the phone.

* * * * *

Acro Sport II Builder/Owner
Bill Neelin
139 Westridge Road
Edmonton, Alberta T5T 1B5
(See additional pictures on page 16)

Like a great number of members I have enjoyed the monthly magazine and, with envy, drooled over all the pictures.

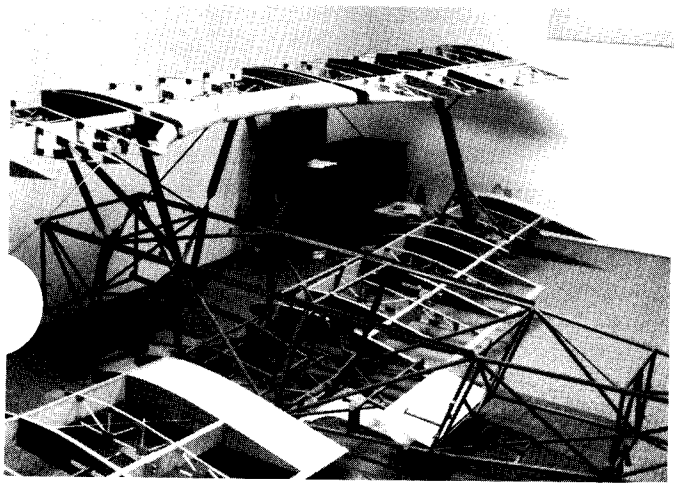
Never having built anything, except a deck which is slightly crooked, and being blessed with very little patience, I was somewhat reluctant to undertake the construction of an airplane.

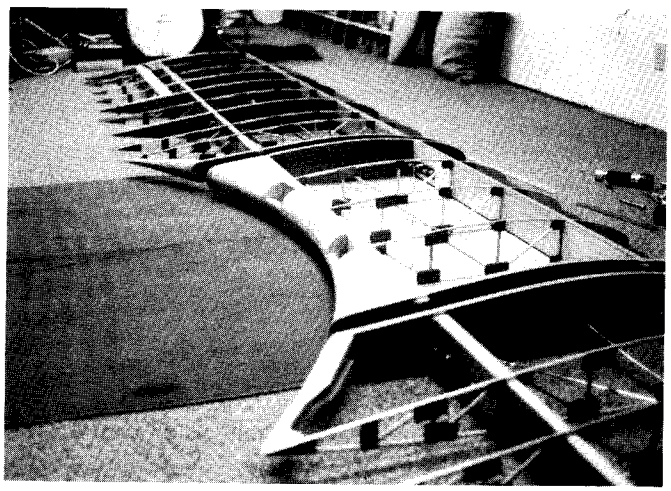
It was exactly one year to the day that I took the accompanying photos. I still haven't learned patience; however, I have learned to walk away until another day.

When I first started, I realized there was a strong possibility that I would never finish. For that reason I started on the wings. For one thing, wood is relatively inexpensive compared to the other components, and secondly, one could always warm oneself in front of the fire if all was lost!

At some point you realize that the doubt has passed and there is no longer the question of finishing. This doubt is replaced by impatience to get it done and in the air.

If it flys half as well as it does in my daydreams, it will be fantastic.



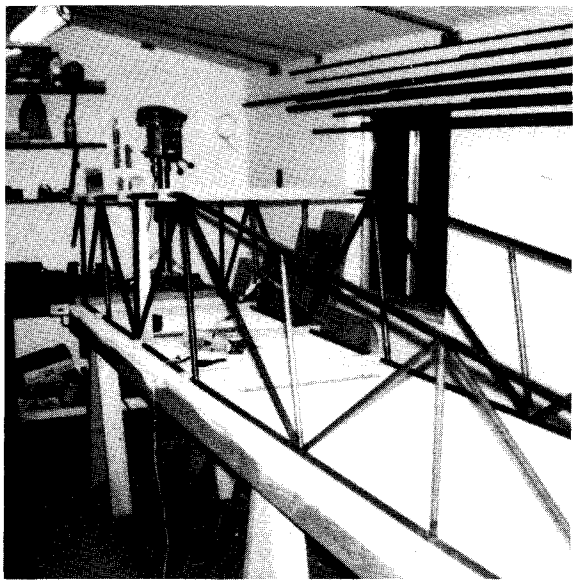


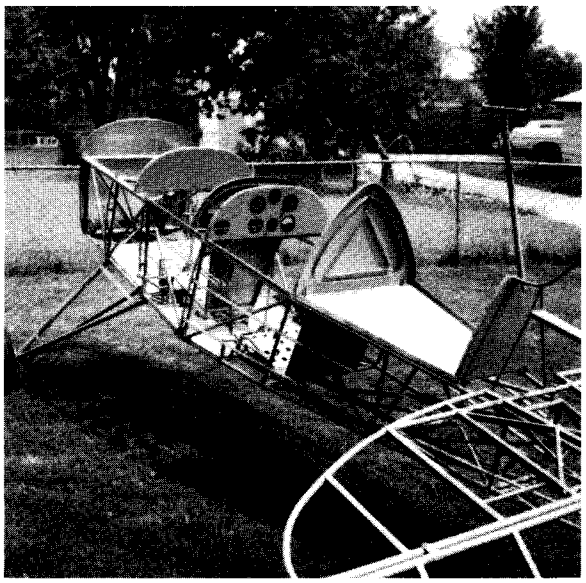
Acro Sport II Builder/Owner
Nick Nickle
2026 Mars Road
Garland, TX 75040

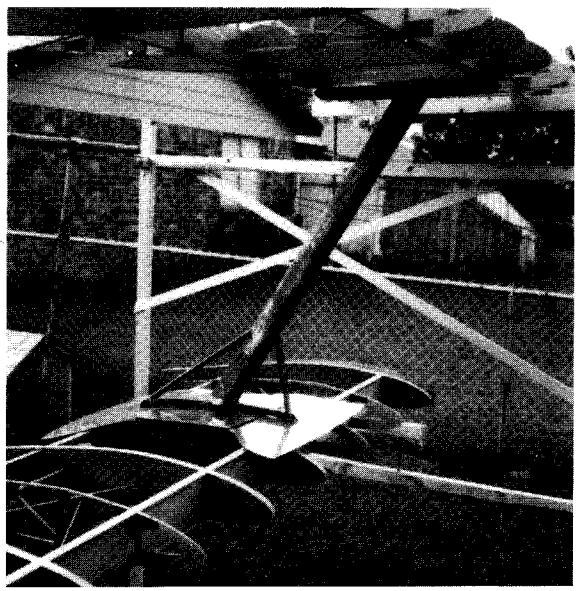
I started building on October 20, 1980, and it is currently ready for cover when weather permits.

My Acro II has been built from scratch (no kits) and the only change from plans is the landing gear shock struts where I will be using die springs (urethane) instead of shock cords. I don't have my engine yet; however, I plan on using a Lycoming O-320.

I enjoy the newsletter very much and it has been very helpful during the construction of my Acro II. Keep up the good work. I will send some better quality photos in the near future, along with a few comments concerning the construction of my Acro II, N6N. I don't believe that I will be ready for "OSH" this year, but I hope to be ready for "Kerrville '84".







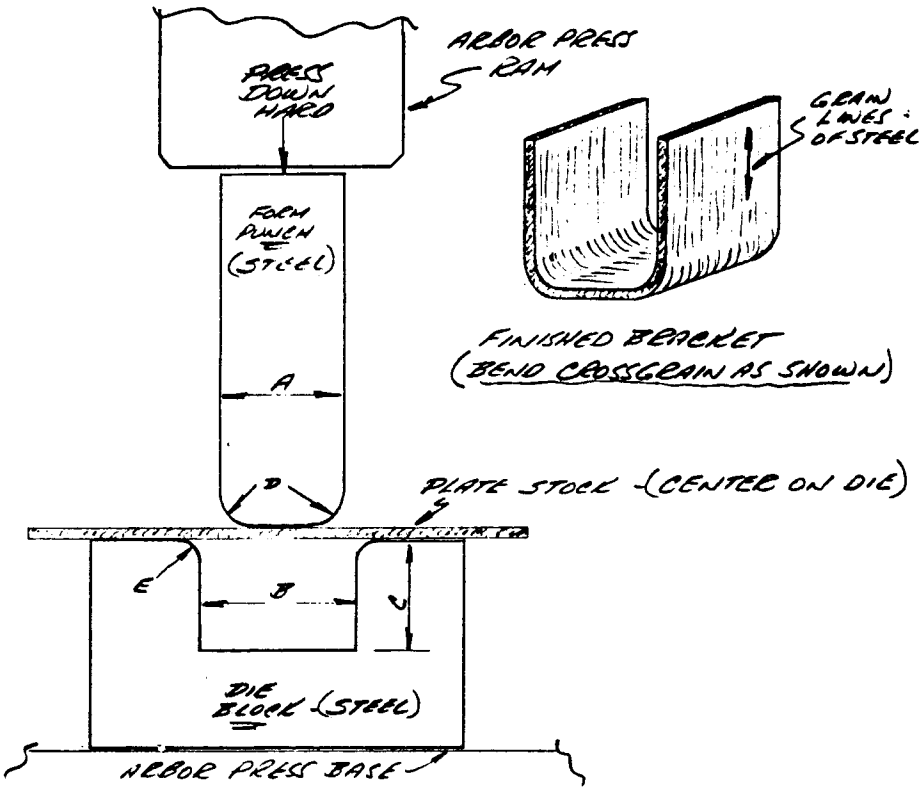
BRACKET-DIEBLOCKS

By Doug Bell
EAA #102556
Cadillac, Michigan
616/775-2232

Bending "U" shaped brackets accurately can be a difficult problem for builders who lack experience in this type of metalwork.

The simple punch and die setup I used during Acro Sport construction served me well, in that all similar brackets were formed with relative ease and to very close tolerances.

The punch and die shown in the attached sketch are formed from odds and ends of any machine shop scrap box. For those who have no buddies with machine shop equipment available, I see no reason why a similar set made from a close grain hardwood would not work equally well. If hardwood is used, I suggest the die block be made longer than shown to avoid a grain split when the punch is forced down into the die. It is surprisingly easy to form perfect parts in this fashion.



A = EQUAL TO INNER WIDTH OF FINISHED BRACKET
B = A + DOUBLE STOCK THICKNESS + .030" APPROX.
C = 3/4" TO 1" DEPTH - (NOT CRITICAL)
D = RADIUS TO BE EQUAL TO TWICE METAL THICKNESS
E = APPROX 1/8" TO 3/16" RADIUS TO HELP PLATE STOCK FLOW AROUND CORNER DURING BENDING. OIL THIS AREA FREELY TO ASSIST SLIDE ACTION OF METAL DURING BENDING.

To create full radius wrap around hinge fittings such as the Pitts and Acro Sport require, simply disc sand a full radius on the punch and proceed as shown. All die blocks may have a square bottom slot as the sketch shows, since the pressure of forming the steel or aluminum is created by the punch section.

When the punch is removed after forming, the bracket will have a tendency to lay open slightly. A few taps with a mallet will close up the legs to a parallel condition. All other shaping and hole drilling should be completed <u>after</u> the bracket is formed.

Remember, bend <u>across</u> the grain as per example shown. To do otherwise is asking for trouble via the stress-crack route after your bird has been flying for a while. Good luck.

ARBOR PRESS FORMING PUNCH & DIE
D. W. Bell
CADILLAC MICH.
7-14-88

EDITOR'S NOTE

This issue, prepared in April and mailed to you in May, should have been the March issue! Due to the fact that we moved and were getting set up, we have been delayed in doing many things. Issue #8 is scheduled for June, and should be out on time. This, in spite of the fact, that for both the designer and the editor, EAA business has always come ahead of working on our own airplanes. I am sorry for the delay -- Ben Owen, Editor.

ACRO SPORT MISHAPS

We have had several callers inquiring as to what mishaps might have occurred to the Acro Sport I, Acro Sport II and Pixie aircraft. At this time, we have no record of any mishaps to the Pixie aircraft. The following is a preliminary report from the only known mishap to an Acro Sport II.

DATE OF ACCIDENT	LOCATION	REMARKS
July 7, 1982	Columbus, OH	This particular aircraft had been completed except for installation of the fairings. In addition, no weight and balance had been done on the aircraft prior to flight, as the builder had no intention of flying the plane that day. The pilot's personal weight was 235 pounds. The aircraft's empty weight was not known, but it was a little heavier than the original design because of the installation of a starter and generator on the Lycoming 150 horsepower engine. The aircraft had strobe lights on the wing, tail and on the bottom of the fuselage. It used heavy dope and finish and had a Sensenich 74/54 propeller. During taxi testing, he found the plane to be what he considered "squirrelly" while operating at a slow speed. He decided to test it at a faster speed to see what would happen. On the first taxi down the runway, the tail went up and the aircraft built up speed very quickly. He claims he maintained a full-forward stick, and the aircraft just leapt off the runway. He eased off on the throttle and the nose came down. At this point, he started porpoising the airplane. At the top of the last one, he stalled the plane slightly, and with a little rudder and the elevator up, he reduced the power and pancaked it in. The plane hit just beyond the end of the runway and the landing gear was knocked off. The aircraft did go up on its left wing, but did not overturn. The bottom of the fuselage fabric was torn, and there was extensive damage to the rest of the plane. The pilot was not injured, only shaken up a bit. He did notice that one of the gear fitting welds gave out on the left side, but the others had held up rather well. Further information obtained indicated that the battery on this aircraft was on the firewall, and the plane had a full electrical system. The pilot also mentioned that he hadn't had any flying time since it took him three years to build the plane. As to taildragger experience, he had indicated some 15-20 hours in a taildragger. Lack of fairings may also have been the cause of some of the problems with the aircraft. Unfortunately, there is no further information on this accident. Possible cause of the occurrence may have been the pilot's lack of recent experience.

* * * * *

ACRO SPORT I MISHAPS

DATE OF ACCIDENT	LOCATION	REMARKS
July 9, 1983	Huntersville, NC	The pilot was flying inverted low in this Acr Sport I when the top wing hit the trees. He returned to the airport and landed successfully.

March 3, 1981 N. Little Rock, AR This Super Acro Sport was involved in an incident when he was returning to the airport due to engine roughness and cutting out. The engine quit and he landed short of the runway approximately 300 feet. The aircraft nosed up and sustained damage to the prop and right main gear. Both fuel tanks were empty, apparently due to the fact that a fuel line fitting was loose between the fuel tank and selector value. Fuel stains inside the cowling indicated leakage had incurred. No personal injury.

March 24, 1979 Cappatola, CA Aircraft on climbout developed vibration in the engine and lost power. The pilot made a 180 degree turn and landed on the runway. Left gear collapsed, no injuries. The cause of the engine problem not yet determined.

December 4, 1976 Oceanside, CA This Super Acro Sport was involved in an incident when the engine developed partial power failure and the pilot executed a forced landing. The pilot stated that he ran out of gas after no mechanical discrepancy could be found.

October 22, 1976 Oxford, CT This incident occurred when the pilot was landing on runway 31 with his Acro Sport. This was after initial flight subsequent to construction. The aircraft encountered turbulence at five to six feet about the runway and dropped rapidly to the runway with sufficient force to collapse the main landing gear. The propeller and under fuselage also sustained minor damage. The pilot received no injuries.

NOTE: There is a difference between an "accident" and an "incident". An incident is actually a very minor accident with only minor damage to propellers, landing gears, etc. An accident involves heavier damage, and any personal injury would turn an incident into an accident. Overall, the safety and flying record of the Acro Sport I, Acro Sport II and Pixie aircraft has been remarkably good.

The following are hints and tips for Acro Sport II builders. This building information may also apply to Acro Sport I or Pixie aircraft.

1. FLYING AND LANDING WIRES -- The aircraft should be completely jigged up and measured before wires are ordered.

2. ACRO SPORT II CENTER SECTION DRAG/ANTI-DRAG WIRES -- The second hole on the rear fitting is used to match the up-down, up-down bolts so that there is no interference between the drag and anti-drag wires. Use of the second hole as the pin point on the rear spar is normal.

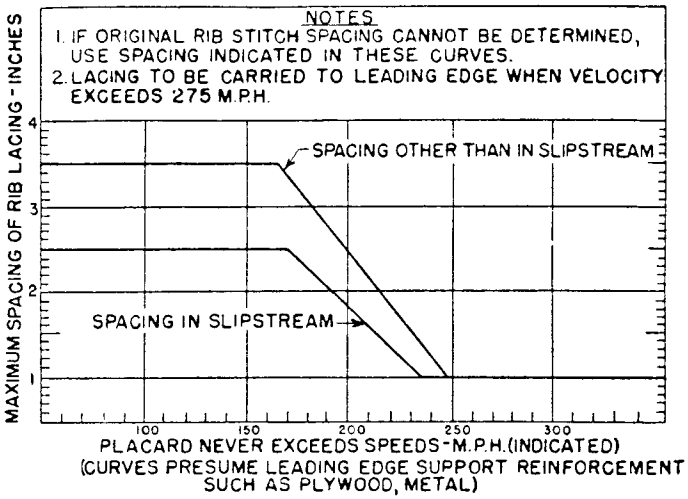
3. ACRO SPORT II BUILDER BOB STAGNER recommends that the rudder pedal top be turned around, and if so, you do not need to add a cross tube across the bottom of the fuselage to attach the pedals. See the pedal change in the previous Acro Sport issue. Bob also states that it is difficult for him to weld with a 1/32" to 1/16" gap as some have recommended. He states this pulls things together and changes dimensions. He has done two fuselages with close to no minimum gap with no problems so far.

4. ACRO SPORT II BUILDER BUD GORES recommends that you be careful and not over-torque the prop bolts; they stretch. Prop bolts must have a torque wrench used on them, and as Curtis Pitts succinctly says, "A long handled wrench is not a torque wrench! Bud also replaced the 1280HD bungee cords that stretched even while he was working on the aircraft with 1380's. Wing incidence ended up approximately one degree on the lower wing and two degrees on the upper wing with no apparent problem in flight. His propeller is clipped and he is indicating 100 mph and stalling at an indicated airspeed of about 40. His static port is on the lower wing tip inside the "I" strut.

5. PITOT STATIC SYSTEM -- The Pitts Aerobatics Company has an excellent pitot static system that you might like to purchase. This is available from Pitts Aerobatics, P.O. Box 547, Afton, WY 83110, 307/886-3151.

6. RIB STITCHING -- There was a recent accident to an original design biplane with improper rib stitching. The CAM 18 gives rib stitch spacing information which is a good guideline.

7. FUEL GAUGE IS TYGON -- If the proper size cannot be found, you may have to design an adequate substitute. You can use automotive hose clamps for clamping it in place. The hose used on the Acro Sport I and II may also be available from Pitts Aerobatics.



8. PLEXIGLASS WINDSHIELD SHAPING BY BILL CHOMO -- Bill recommends that John Monnett of Monnett Experimental Aircraft in Oshkosh has a windshield frame that seems to work well with our airplanes. The bottom of the fuselage does have to be shaped to the top of the cowl, and this is normal. You can use a grinder disc of about 2-1/2 inch diameter on an air tool, or a cutoff wheel on the Dremel saw. Do not use reciprocating saws or heat to modify the windshield to suit the cowling. The windshield can be protected front and back with three inch tape. This also gives a surface to draw cutting lines on.

9. WIRE TIGHTNESS -- The early air mail pioneers occasionally had a problem with thei. thin wires breaking from ice building up in flight. We rarely have this problem. However, many of our builders have had some difficulty in tightening the drag/anti-drag or flying and landing wires properly. According to McWhyte who manufacture the wires, the flying and landing wires should be tightened to approximately 20 percent of their strength. Frankly, this seems to be a little tighter than most of our aircraft use. The Pitts' method is described in the Acro Sport Newsletter #1, page 12, giving the number of turns. The deflection method is also described in the previous Acro Sport Newsletter. One excellent way that an old-time designer used to determine if the flying and landing wires were tight enough was to fly the airplane to altitude and put repeatedly heavier g's on it, working up to six. When the landing wires just barely sagged at a six-g application, the wires were considered to be properly tightened. On the drag/anti-drag wires, this was given in the Acro Sport Newsletter #2 and it was suggested that they be hand tightened so that you can't move the wire sideways in the hole. Then you preload both drag and anti-drag wires one and one-half turns. The wires are tightened to a maximum of three and one-half turns from hand tightened, including the preload turns. Builders are reminded to not use steel tools on the wire themselves, but that aluminum or wood can be used if properly smoothed with a slot cut in the end.

10. In racing classes they require engine cables attaching the engine permanently to the airframe. This way if a propeller blade loses a tip, the ensuing vibration does not cause the engine to depart the airframe, and enables the race pilot to land the aircraft instead of having to parachute. A safety cable tied from the aircraft frame to the engine itself completely around it is an excellent idea. Th. size cable recommended would be a minimum of 3/16 inch.

ACRO SPORT I PLAN CHANGES

The first set of Acro Sport plans had an orange cover, and were numbered from 1 to 129. There were a few schools that have these orange cover sets that would be numbered higher than 129.

2. The next set of plans was a pink cover set numbering 130 to 486.

3. The following set, and current set of Acro Sport I plans, has a blue cover and is number 487 on.

4. Each set of Acro Sport plans has a set of corrections that apply to it alone. All three of the Acro Sport plans should have the change indicating that the horizontal stabilizer leading edge tube brace is required. There is also a drawing for this change. There was also an important change to the landing gear and the cabane insert in the January '75 Sport Aviation on page 8.

ACRO SPORT II PLAN CHANGES

1. The first set of Acro Sport II plans was green on the cover and were issued approximately from 11/21/78 through 3/30/79.

2. The second set of Acro Sport II plans had a yellow cover and where issued from 3/31/80 through 5/25/82.

3. The third set of plans had a pink cover and have been issued from 5/25/82 to the present time, and all have their own changes.

The horizontal stabilizer brace was included on all sets of Acro Sport II plans. Some of the important changes done on the Acro Sport II plans include the following:

a. The green set, sheet 11, zone D5, the stabilizer mount on the rear was changed to .090-4130. This correction was included on the drawings that have a yellow cover and pink cover.

b. The green set on sheet 2, zone D3 also had a change at station 7 when the rear most cross-member was changed from .035 x 3/4" to .049 x 3/4". This callout change was also entered in the August '79 Sport Aviation, page 6. It was also defined as a change from callout #3 to callout #4, as most builders will recognize. This again was an important change in the horizontal stabilizer area for the Acro Sport II.

5. The above changes were those referred to in Acro Sport building tip #1 in Issue #5. The changes to the Acro Sport II plans, mentioned above, were done on the drawings of the pink set.

6. There is an excellent article on why the horizontal stabilizer brace is necessary, and also why the horizontal tail bracing area has to be secure. This is in the December '80 Sport Aerobatics, page 12. Any Acro Sport builder who is interested can receive a free reprint of this article by simply contacting Ben Owen at EAA Headquarters. The same applies if you are unsure as to what changes have been made to the horizontal stabilizer area and want clarification.

POBER PIXIE PLAN CHANGES

...e plan changes to the Pober Pixie have been sent on to all builders of the aircraft. It might also be of interest to know that the very early sets of Pober Pixies plans were found to have what we felt were an excessive number of changes. Due to this, the 90 or

so sets that were currently out were recalled and new corrected plan sets were issued at that time. It was of considerable expense, but it was considered a worthwhile investment by Acro Sport, Inc. It is also felt that all of these early plan holders wh had the wrong sets of plans have had these old sets replaced.

WICKS AIRCRAFT SUPPLY COMPANY SENDS THIS NOTE

We have noticed a few peculiarities in the Acro Sport I materials list. Per attached page, Aeroquip 602 hose is called out. This hose is listed as medium pressure and to be used only with Kydrol fluid. Would it not be better to call out 303 hose as described in the Acro Sport II plans? Also, the AN491-5 nut should be an AN491-4 to match with the 4D fittings. In the Acro Sport II plans, 3065 hose is called out for the front hydralic lines. This is low pressure hose. Should this also be 303 hose as called out for the brake lines? Please advise us at your earliest convenience. Thank you in advance.

(The Acro Sport Editor cannot locate any 602 hose, and recommends that you callout the 303 hose as described in the Acro Sport II plans.) Actually, there is no front hydraulic line for the Acro Sport II, as the Acro Sport II has the hydraulic cylinders in the rear cockpit and the front is actuated by a lever from the front brake pedal to the rear. The hose running down the landing gear would be low pressure vent lines for which any suitable hose can be used.

ACRO SPORT II ARTICLES IN SPORT AVIATION MAGAZINE

ARTICLE	MONTH/YEAR/PAGE
Acro Sport II progress report	Feb. 1976 8
Acro Sport II progress report	Apr. 1976 6
Acro Sport II progress report	Dec. 1977 7
Cover photograph	Sep. 1978
Acro II plans	Sep. 1978 9
Acro II Flys	Sep. 1978 44
Flying the Acro II	Nov. 1978 33
Acro II plans change	Aug. 1979 8
Acro II now has sliding canopy install strips	Nov. 1979 84
Horizontal stabilizer struts and attach points	Dec. 1980 12 AB
Bob Davis in the Acro Sport, cover only	May 1981 AB
George Jones' Acro II with Lyc. 150	Jan. 1982 23
EAA wants photos -- Acro Sport	Mar. 1982 7
Birth of an Acro Sport II	May 1982 48
Acro Sport II Newsletter	Jun. 1982 6
Newsletter available	Jan. 1983 6
Bud Gore's Acro Sport II	Jan. 1983 41
Al Smith's Acro Sport II; cover photo	May 1983 8

ACRO SPORT I & SUPER ACRO SPORT I

Acro note	Jan. 1971 7
Acro progress	Feb. 1971 6
Progress, NIAC construction article & shots	Mar. 1971 7
Acro progress note	Jan. 1972 12
Acro notes and pictures, flown	Mar. 1972 10
Saga of L'il Abe, flight test by Sam Huntington of NIAC	Apr. 1972 4
Acro pointers notes	May 1972 7
Aerobatic Flight Test Report by Bob Heuer on NIAC	Dec. 1972 33

Acro Sport, color pictures & article, Acro Sport II	Jun. 1972	7, 30
Acro to be stress tested by Tri-State College	Jan. 1973	8
Note on plans cost	Jul. 1972	7
uper Acro Sport PR note and picture	Feb. 1973	45
:ro diagram and info. - note	Aug. 1972	6
ri-State College Acro Sport being built	Apr. 1973	22
Acro plans available in Oct. 1972	Oct. 1972	14
Super Acro flys 3/28/73 note	May 1973	9
Acro flown, pictures and short article	Feb. 1972	16
Super Acro plans available at $15 each.	Jul. 1973	7
Two Acros in flight	Aug. 1973	Centerfold
Request for pictures from builders and list of plans corrections for holders of orange and pink covered sets.	Nov. 1973	7, 8
Color prints, 5"x7", available from EAA @ $2.50	Feb. 1974	6
PR note on Sam Burgess' tour and also article on flying the Super Acro Sport by Mike Heuer	May 1974	6, 46
Acro Sport gets NASAD certificate, N1AC Tour	Jun. 1974	8, 68
PR on Sam Burgess' tour, short note	Jul. 1974	6
N21WC Acro Sport in color (picture only)	Oct. 1974	47
Sam Burgess, Spirit of Flight, Tour of U.S. in Acro Sport	Nov. 1974	10
Cabane tab and landing gear change	Jan. 1975	8
Upper aileron horn change	Feb. 1975	7
Acro Sport and Pixie pictures and article	Apr. 1975	10
Canadian Acro Sport Flys - note	Aug. 1975	7
0200 Acro Sport	Oct. 1975	6
Plans note	Nov. 1975	7
Plans change	Feb. 1976	6, 23
ooks Super Acro Sport	Mar. 1976	89
nding gear change	Jan. 1977	7
rtified for aerobatics in Canada	May 1977	6
Acro Sport plans correction	Jul. 1979	7
" " " "	Feb. 1976	6, 23
" " " "	Jan. 1975	8
Plan changes to seat and seat area	Feb. 1980	17
200 HP Super Acro built in Germany	Apr. 1980	63
Horizontal stabilizer struts and attached points	Dec. 1980	12 AB
Ed Hartz's Super Acro Sport (cover only	Dec. 1980	AB
EAA wants photos for Acro Sports	Mar. 1982	7
Acro Sport Newsletter	Jun. 1982	6
" " "	Oct. 1982	5
Larry Lindsey's Acro Sport (Lyc. 100)	Sep. 1982	40

PIXIE ARTICLES

Pixie construction note	Jan. 1974	8
Pober Pixie one page article	Feb. 1974	8
Progress report and pictures	Mar. 1974	8
" " (note only)	May 1974	6
" " with 2 pictures	Jul. 1974	7
" " (note only)	Aug. 1974	7
Note only	Oct. 1974	6
Pixie plan price change to $40.00	Feb. 1975	6
ro Sport/Pixie Round-up	Apr. 1975	10
ing the Pixie	Apr. 1975	39
pter 443's Pixie	Jun. 1977	50
ixie in passage	Aug. 1978	42
Pixie on skis	Aug. 1979	84

Bobbie Green's Pixie with A-65	May 1981	32
EAA wants photos (note only)	Mar. 1982	7
Jerry Dunn's two-place Pixie	Apr. 1982	16
Pixie newsletter (note only)	Jun. 1982	6
" " "	Oct. 1982	5
" " available	Jan. 1983	6
Project Schoolflight will build a Pixie at Oshkosh '83	Apr. 1984	12

Back issues of SPORT AVIATION and SPORT AEROBATICS (AB) are available at $2.00 each postpaid.

ACRO SPORT TRADING MART

ACRO SPORT II FOR SALE. Elmer Farris, Jr., 142 Preston Avenue, Lexington, KY 40502, has the Acro Sport II for sale. It has all new parts, tires, brakes, prop, slick mags, spark plugs, etc., and it is in very good shape. Has over $15,000 invested in it and if he can get $16,500 he will let it go. It has a full electrical system, inverted fuel, intercom, Bendex R/227 radio with Air Force hard helmet with built-in mike and headset. Engine is Lycoming O-320E2D, 1832TTSN, four hours STOH, comp. on all cylinders 78/80. Elmer has, unfortunately, developed a medical condition and must sell the aircraft.

* * * * *

Dear Sir:

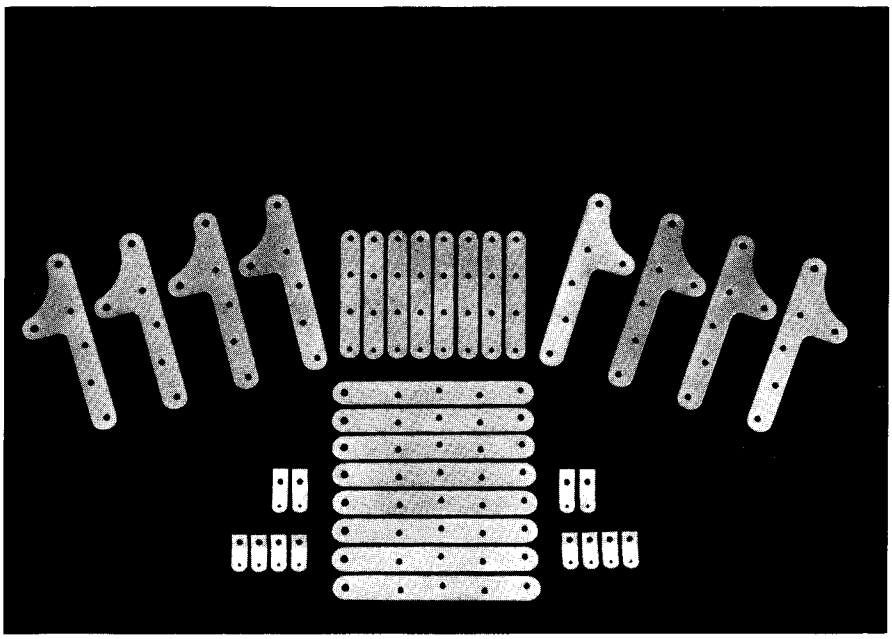
I am interested in purchasing an Acro I that is built and flying. If you know of one for sale I would appreciate hearing from you. Thank you.

William R. Barnett
5555 Copenhagen Drive
Westerville, OH 43081

* * * * *

FITTING SET AVAILABLE

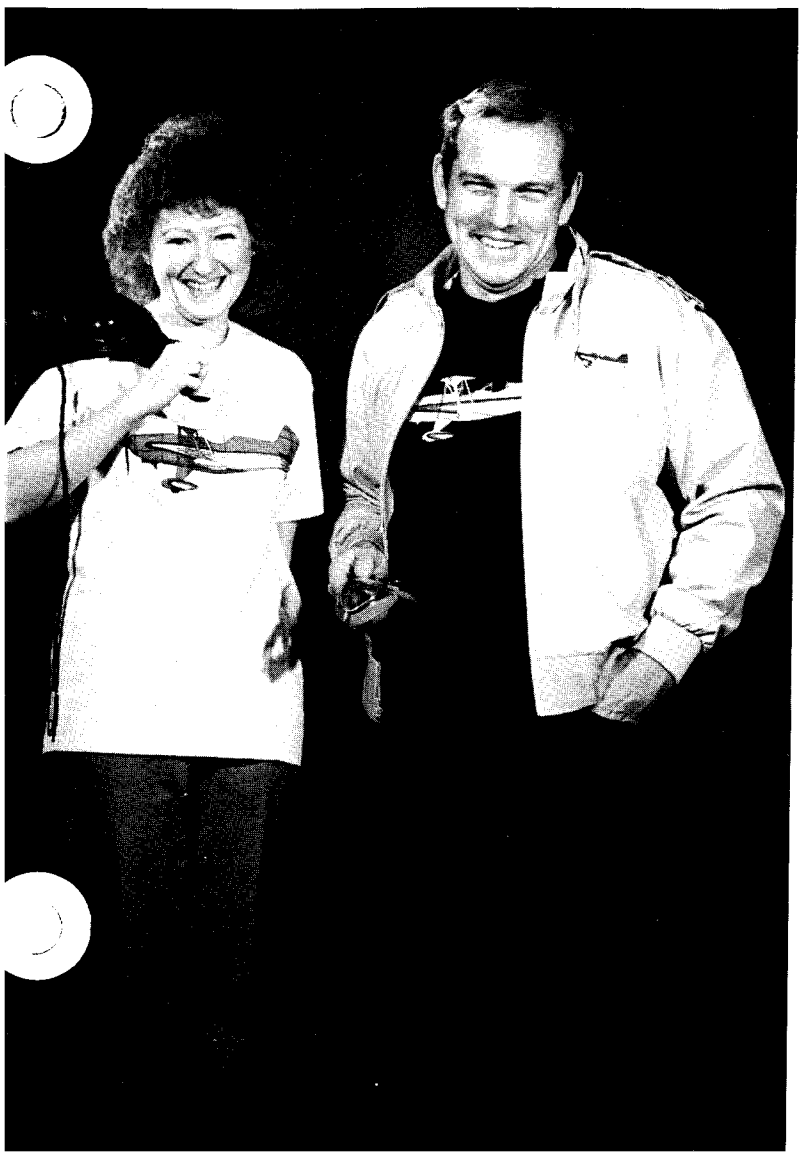
Ken Brock Manufacturing of 11852 Western Avenue, Stanton, CA 90680, 714/898-4366, does have available Acro Sport II fittings. Contact them for further details.



O N E T I M E O F F E R !

ACRO SPORT I, II & PIXIE SHIRTS & JACKETS

The light colored Acro Sport sport shirt can be had either with the Acro Sport I, Acro Sport II or Pober Pixie decal. The blue colored sport shirt is the same. The flight jacket is also available with either one of the three logos sewn on. In order to determine demand for the jackets and the sport shirts, we request that Acro Sport builders write us with their needs. We will then go to the supplier for a limited run. IT IS IMPERATIVE THAT YOU RESPOND AS QUICKLY AS POSSIBLE. Prices will be determined as soon as the size of our order is known. You will be notified of the price, and are under no obligation.

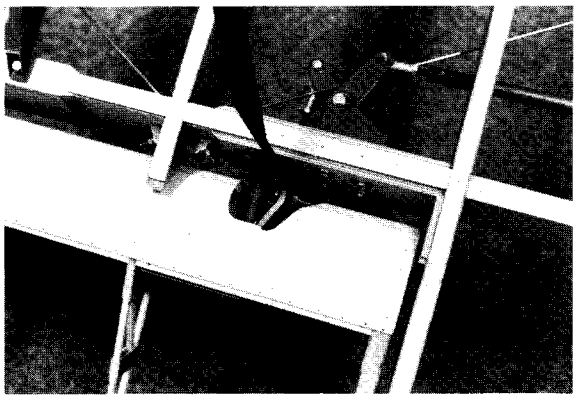


In responding regarding your needs for the possible jacket or sport shirt order, please write directly to Acro Sport, Inc., P.O. Box 462, Hales Corners, WI 53130.

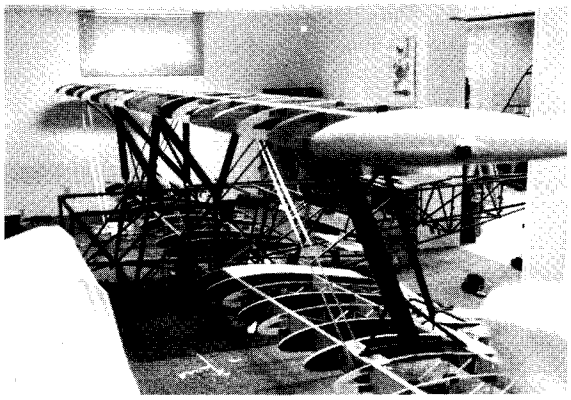
Acro Sport Tail decals are available from Acro Sport, Inc., P.O. Box 462, Hales Corners, WI 53130, at $6.50 each.

Dave Kragnes' airplane waiting for spring. Next will be wheel pants, nicer bungee covers and other details. It is covered in Stits with four colors of blue polytone. He highly recommends the color system for a first-time painter, like himself.

Steve Adams takes time from building his Sonerai to help Dave Kragnes hang the wings. EAA people are the most helpful in the world!



Bill Neelin's Acro II detail on the aileron push/pull tubes.



Another shot of the jigging up procedure. Things are a little tight in Bill Neelin's family room!