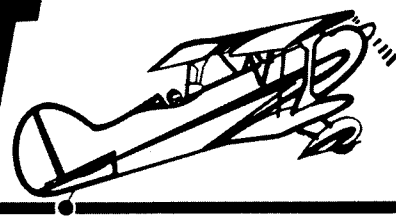


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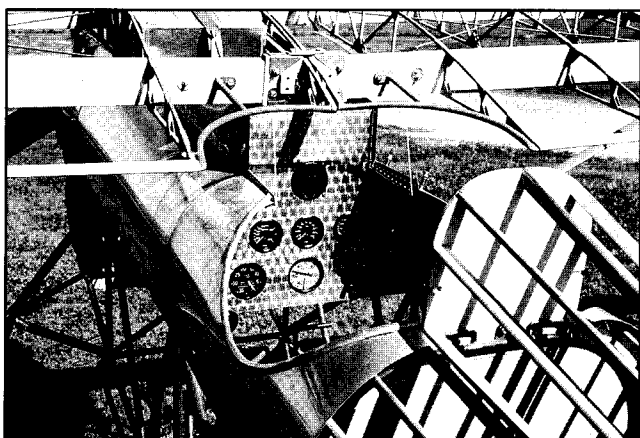
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WINTER 1998



Corben Super Ace Project



Top—What a treat to see this '30s era homebuilders' dream airplane come to life again in 1998. Photo shows all components completed and assembled prior to covering. Note plywood wing leading edges and the superb aluminum cowl—hand pounded into shape—housing a Ford Model A engine.

Above—Machine turned instrument panel on Mark Lightsey's Super Ace.

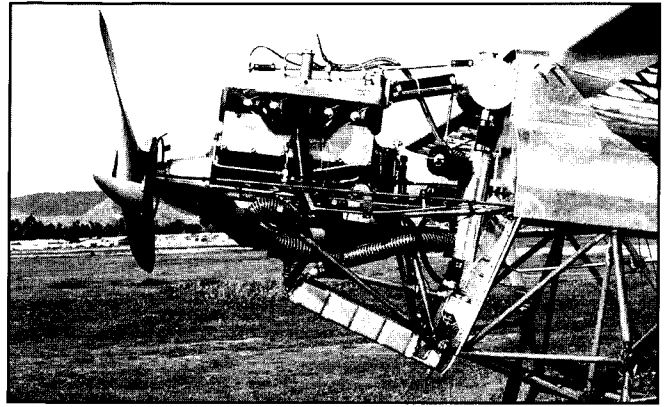
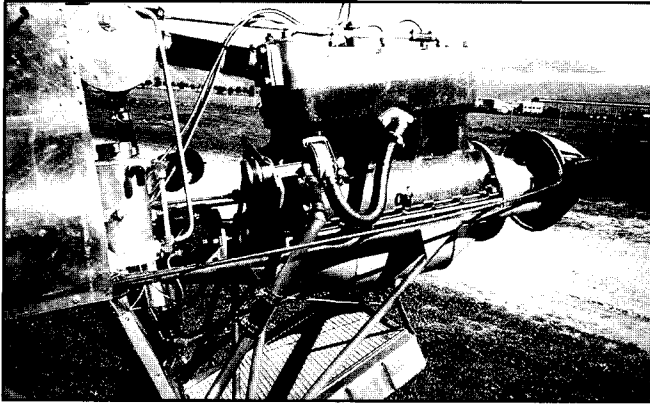
by Mark Lightsey

I first became aware of the Corben Super Ace a number of years ago when I saw a model of one in a hobby shop. At that time, I thought it was one of the most handsome planes I had ever seen. Several years later, I came across several early issues of Sport Aviation which reprinted the original construction drawings. These magazine articles along with the updated Poberezny plans became the basis for my project.

I have followed the original plans very closely, with the only deviations being in the areas of safety, such as brakes and a steerable tailwheel. I decided early in the project to use a Ford Model A engine, and follow the Corben conversion as closely as possible. As you can see from the photos, it came out pretty close. None of the conversion parts were particularly difficult to fabricate, they just took time. In its current form, the engine is counterbalanced, has full pressure oil, a Model B cam, a 7/1 high compression aluminum head, and a 4" prop extension with a thrust bearing. A Speed Queen washing machine water pump is installed on the right side of the engine in place of the original in-head water pump. As far

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as performance, I have run the engine for about 10 hours so far, and with a Felix 74" x 48" propeller, I was able to turn 2150 RPM. Originally I had decided to keep the maximum RPM to 2100, so I have since replaced the original prop with a 74" x 52".

Although this is my first project, the airframe itself was straightforward to construct. The most difficult part was the cowling, because plans are very vague in this area. I started with a 10" spinner, and simply worked my way back to the firewall, fitting as I went. I was first tempted to use fiberglass for the nose bowl, but decided once again to stick with the original, so the entire cowling is hand-formed aluminum. When it came time to install the radiator, I first tried the original vertical position, but it wouldn't cool properly on hot days. After a little experimentation, I ended up installing the radiator horizontally, and using a small chin scoop. The current installation seems to cool very well, and I can now run the engine indefinitely on the ground without overheating.

I am now in the final stages of covering, having used the Polyfiber process throughout. If everything goes as planned, the first flight should occur during the first quarter of 1999.

I would be glad to hear from anyone with experience flying a Super Ace, and would also be glad to hear from anyone else working on a project. If by chance anyone has a lead on any original Corben parts such as wheels and/or engine conversion parts, I would be especially interested to hear from them. (Mark Lightsey, 4150 Rexford Drive, Hemet, California 92545, (909) 658-7142 – msdlight@ivc.net)

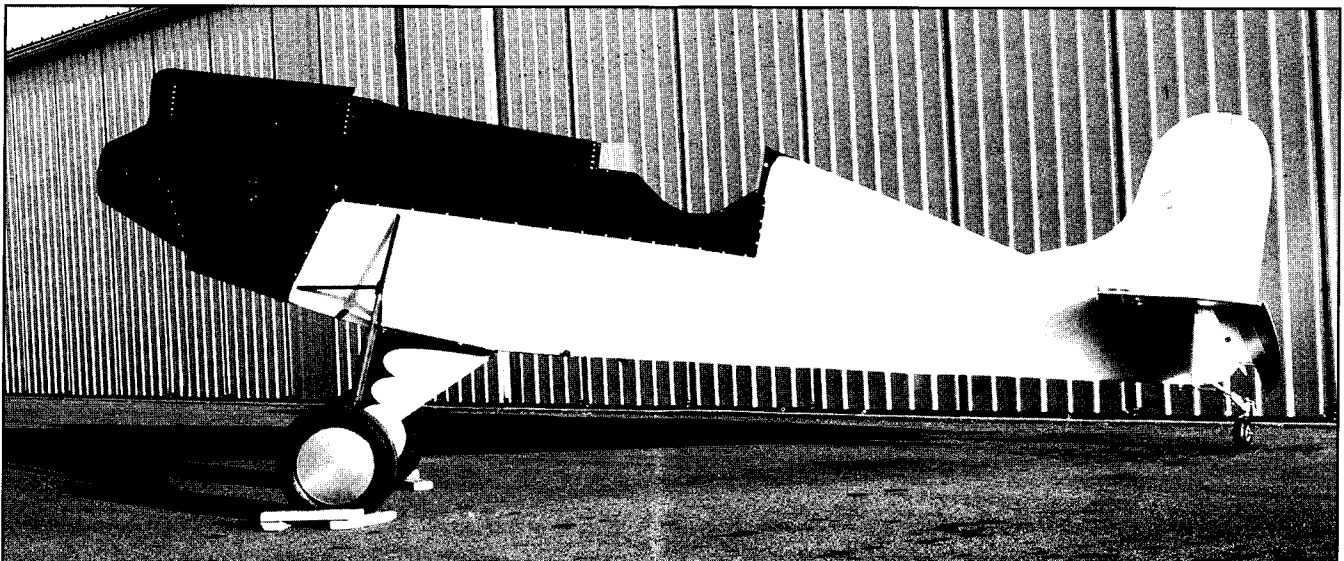


Top-Left—Lightsey equipped his Model A Ford engine with a washing machine water pump, shown at the rear of the engine block.

Top-Right—Left side of engine shows angled radiator installation which completely solved an earlier cooling problem.

Above—Are those motorcycle wheels and tires, Mark? If so, they are the perfect size and proportion for this particular aircraft.

Below—Fuselage covered and painted. Colors duplicate the original Super Ace color scheme of black and yellow. Won't it be great to see this outstanding aircraft at Fly-Ins in the months ahead!





Bryan Scheible's "Over Easy"

by Bryan Scheible

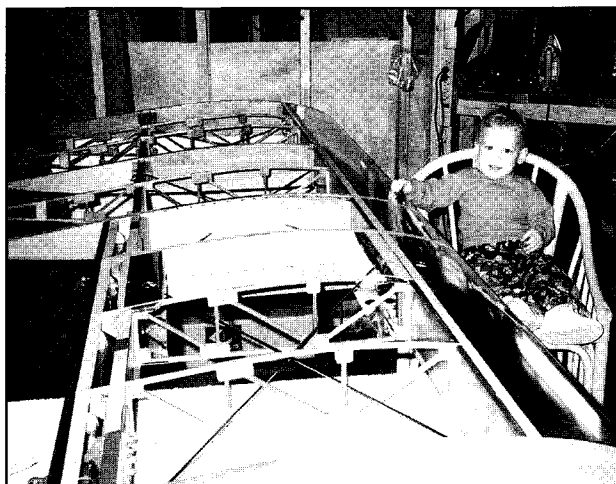
Bryan was on the Acro Sport Forum panel at Oshkosh (OK, AirVenture) '98. His Acro II "Over Easy" N323BS won an award at Oshkosh '97.

He states, "I spent about eight years reading about building aircraft but soon realized there is no substitute for the real thing! I bought the fuselage and wing parts in Texas and trucked them to my home in New York. At first the project seemed overwhelming. Many thanks to my friends Wolfgang Buerger and Gary Rasp who helped me when I got stuck. Ben Owen with EAA was great to work with. He offered excellent advice and was always there to take my phone calls. Without them it wouldn't have been possible."

The only modifications from the plans were changing the lower cowl from .025 aluminum sheet to .040 with the addition of a 1/2" reinforcing tube to cure a cracking problem on the original lower cowl, substituting the now-familiar springs for landing gear bungees and the addition of a step for rear cockpit access.

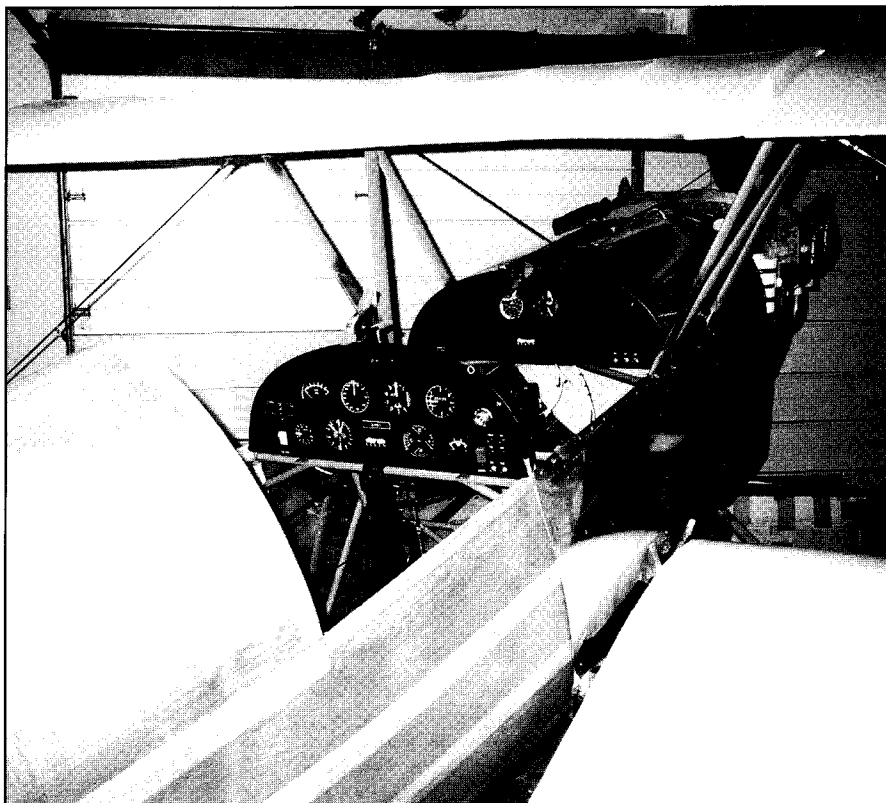
"The plane poses no bad habits and has good slow flight characteristics. This was one of my goals as I had little taildragger time and the Acro Sport seemed straightforward to learn in. The whole taildragger thing took some time to get used to. Thank goodness for Wolfgang and Joe Cosmano for all their patience in teaching me. They always had smiles on their faces when flying the Acro. Once the time was flown off our first cross country was from New York to Texas. To date I have 200 trouble-free hours on it, have competed in 2 IAC competitions and have given numerous Young Eagles rides."

"The only advice I can pass on is to



Above—Bryan and "Over Easy" at home. A grass strip, sturdy hangar and a beautiful airplane. Who could ask for more!

Left—Wing panel gets the once-over from the resident Tech Counselor—including his stamp of approval.



Keeping it light—note minimal instrumentation in the front cockpit

take your time and have fun with the building process. The real highlight was winning a Workmanship Award at Oshkosh '97. If anyone has any questions and would like to chat with me please call me or e-mail me at:

Bryan Scheible
4595 Woods Road
East Aurora, NY 14052
(716) 652-1522 (phone)
ISETTA56@aol.com (e-mail)

Specs:

- IO-360-C1C
- * Sensenich raked and thinned prop 76/60
- BC starter
- BC alternator
- Carbon spinner and backing plates
- 4 into 1 exhaust
- Christen inverted system
- Inverted fuel system
- Empty weight: 1119 pounds
- Stall: 52 MPH indicated
- Cruise: 135 MPH @ 2450 RPM, 110 MPH @ 2150 RPM
- Basic VFR instrumentation



"Over Easy" comes together. Aircraft is powered with an IO-360-C1C engine with a Christen inverted system for aerobatic flight.

Letters

Paul Poberezny passes this along:

Dear Paul;

I was delightfully surprised to receive your letter of the 8th, and must apologize for the delay in penning a reply; however I have been rather busy taking the Acro Sport to the Royal Naval Airstation, Culdrose, in the far southwestern tip of the U.K. where my son flies helicopters for the Queen. He

will shortly be leaving the Royal Navy and is set on a career in Civil Aviation, to which end he has convinced me that I should loan him the Acro Sport so that he can bore holes in the sky and build up his fixed wing hours to qualify for an Airline Transport Pilot's License-Landplanes as well as Rotary Wing. I think it's a case of Daddy subsidizing Sonny again!

During the rebuild of the underside of G-BTWI, I took the opportunity to incorporate the few recommended mods. i.e. the stabilizer front brace, gussets at the undercarriage mounting points, beefier tubing for the undercar-

riage legs, and the extra cross brace at frame (station) 3. So with the Christen oil system and the Ellison carb, the most picky of aerobatic nuts should be happy.

I did in fact attend the Popular Flying Association Rally earlier in July - just one of over 1500 aircraft to arrive at this rather small airfield over three days. The view up the approach to the two parallel runways, one grass and one hard, was at times reminiscent of the Berlin Airlift. I am certain that if you attend the next, or any, PFA rally, you will be given a right Royal welcome. You are rather well-known over here!



George Brothwood's Acro Sport resides in England where it is also enjoyed by his son who flies helicopters for the Queen.

Thanks again for your letter and your interest, and as requested I enclose a photo of 'WI (Pretty, innit?)
George Brothwood, EAA 556309
14, Calderfield Rd.
Liverpool,
Merseyside L18 3HB
England

Right and Below—Jerry E. Brown, EAA#571466 of 1399 E. 139th Place, Glenpool, Oklahoma, 74033 has completed his Acro II project after only TWO years of work. He has two hours on the tach, and plans to paint N7645B white with blue and red stripes once the 40 hours is flown off. The Acro II is powered by a 115 HP Lycoming O-235C. Jerry keeps his bird at Harvy Young Airport, Tulsa, Oklahoma. Great job, Jerry!



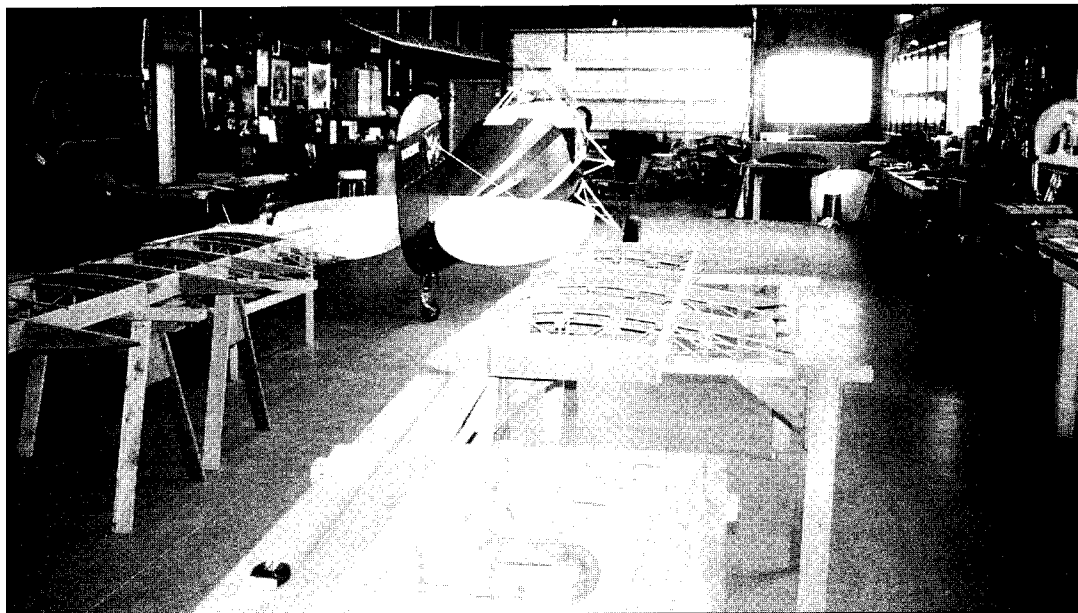
How better to spend a warm, sunny, summer day than airborne in a Pober Junior Ace? Photo shows the prototype over the Wisconsin countryside.

A Reminder...

Any material our readers would like included in the Acro Sport Newsletter must be submitted to:

Chris Kinnaman
Editor, Acro Sport Newsletter
P.O. Box 462
Hales Corners, WI 53130

The Aeroplane Factory is a busy place. Number 2 Junior Ace in background is awaiting covering of wings. Aircraft is powered with a Lycoming O-235 engine of 118 hp.



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Dr. Richard Henry Passes Away

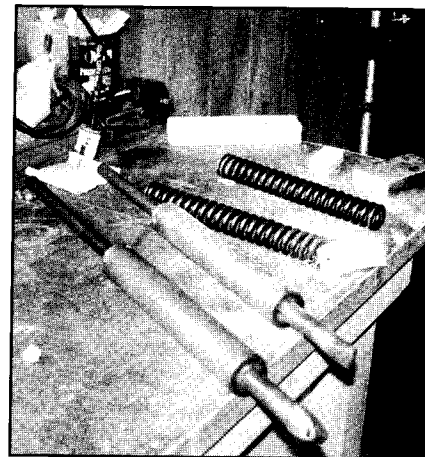
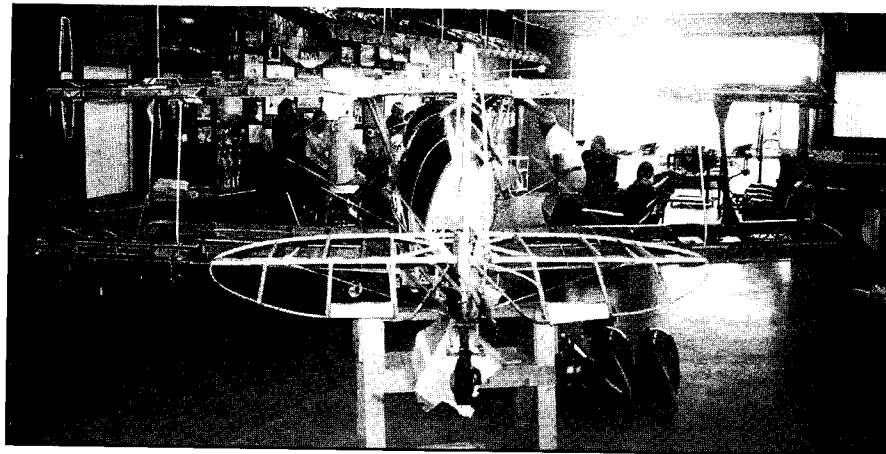
*Sad news from Mike Zeller, EAA
91425, of Mt. Vernon, Indiana:
November 26, 1998*

With great regret I have to inform you of the passing of Dr. Richard W. Henry, EAA 130396, Chapter 21. Dr. Henry's last flight was on God-issued wings, 11-25-98 after an eighteen month battle with cancer.

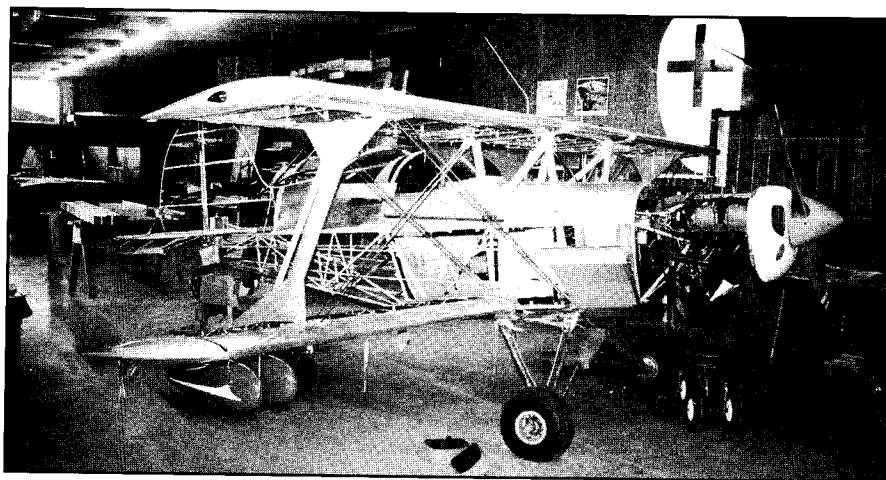
Dr. Henry spent fifteen years off and on building the Acro Sport II. His trip to Oshkosh 1997 in the Acro Sport II was a major highlight in his life not to mention winning the Paul Poberezny Designer's Award and 1997 Best Acro in Show. The Acro Sport II N235RH made a second trip to Oshkosh this year and Doc was very proud to be asked to give an Acro forum presentation.

I was very lucky to have a friend so generous about sharing his plane and knowledge with me. Doc got a kick out of making copies of Don Baker's aerobatic articles for me, he would insist that I take the Acro out and give the maneuvers a try. His trust in allowing me to use an aircraft that took so much time and effort to build was an honor. Thanks to Doc I have learned many new skills.

Richard had also ordered an RV-8 kit and completed the empennage



Above—Springs being prepared for shock strut assembly for installation on the Junior Ace.



Above—Left—Rear view of assembled Acro Sport while the Aeroplane Factory crew (background) take a well deserved coffee break.

Left—This single place Acro Sport was displayed uncovered at AirVenture Oshkosh '98. The ability of builders to see the various structures can clear up a lot of uncertainties when going from plans to hardware.

while undergoing cancer treatment. His attitude, courage, and commitment toward life was a real inspiration, a lesson to all willing to learn. Thank you, Doc.

Mike Zeller
EAA 91245

Everyone at Acro Sport sends our prayers and condolences to the family and friends of Dr. Richard Henry.

Acro Sport T-Shirts

T-Shirts featuring 2 different Acro II styles and the Pober Junior Ace are available from Acro Sport, Inc. Price: \$10.00 plus \$2.50 shipping. Sizes XXL, XL, L, and some M, not all sizes in all styles, and limited numbers of each! Write for availability.

Acro Sport Inc., P.O. Box 462,
Hales Corners, WI 53132

Style #1 - Acro Sport II
Style #2 - Acro II W/Sun
Style #3 - Pober Jr. Ace

Paul Under The Weather

Paul Poberezny is recuperating from a bout with a bleeding ulcer followed by surgery on one shoulder. Both ailments required brief hospital stays. Hope you're feeling better, Paul!



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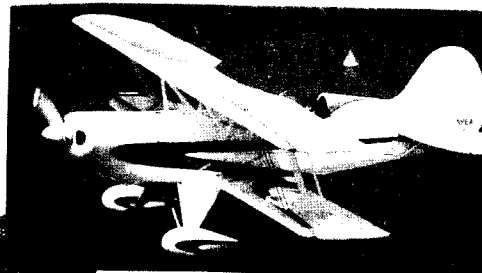
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Ben Owen Retires From EAA

Ben Owen retired from the position of Executive Director of EAA Information Services as of January 15, 1999. Ben worked for EAA for more than 25 years and has helped countless numbers of homebuilders of all types of aircraft. Ben and Betty plan to stay in Oshkosh, at least for the summer months.

Acro Sport thanks Ben for pointing all those that inquired about our designs in the right direction. Ben has been invaluable to Acro builders, as I am sure he has been for builders of other types. Ben was always available for questions and during Convention week was usually found in or around the Homebuilders' area. We also want to thank Ben and Betty for all their efforts toward the Acro Sport Fly-In held this past year at the EAA Air Adventure Museum's Pioneer Airport. Enjoy all that newfound "free" time, Ben!

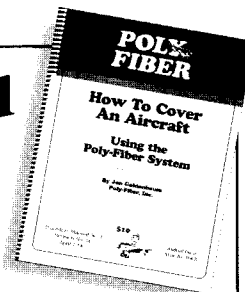
With Ben's retirement, submissions to the Acro Sport Newsletter should be submitted to:

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