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KR-1 KR-2
NEWSLETTER

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Issue #12

June 1976

Issue #12...it doesn't seem possible a whole year has slipped by since I started this thing. The newsletter has really kept me busy from month to month and the year just seemed to evaporate! Well, it wasn't wasted, just looking thru the back-issues is proof of that. The builders that contribute drawings, notes, ideas & questions have been deeply appreciated. I am confident the new builders and new subscribers will have new ideas to share with the rest of us.

The next twelve months should increase the finished and flying KR total by 250 to 300 aircraft..and I think that it is a conservative estimate. From the letters received, I get the impression about half that number would be flying now except for the time spent in modifications. There ought to be some interesting KR's showing up at airports this summer.

Lynn Morelock of Greenville, TN reports there is a finished KR-1 in Kingsport, TN belonging to James Summers. First flight has not been made yet.

Jim Warkentin of Santa Ana, CA was at the Corona E.A.A. fly-in with his just completed KR-2. Jim did an excellent job on the 2, which, by the way, is for sale. It has a Revmaster 2100 and basic flight instruments. I asked Jim why he was selling his pretty little bird...."so I can start building again"..was his answer. If you are interested or know of someone who is...price is \$5000.00. You can write to Jim at P.O. Box 10996 Santa Ana, CA 92711. Phone number is 714-541-3484.

Ken Rand is going to be in and around northern Calif. with the KR-2 this month. Merced...June 5 & 6---Porterville...June 11,12, & 13---Santa Rosa...19 & 20---Hollister...July 9 & 10. If you builders in that area want a look at the turbo KR-2, you have several opportunities coming up so take advantage of one or two of them.

BITS & PIECES.....Issue #4 and #8 had co-ordinates for the RAF airfoil. If your KR-1 or KR-2 plans had the 48" rib in 3 sections you should use the co-ordinates to draw a full size template as the trailing edge section of the 3-piece rib is out of line. Bill Lee has been sending full size tracings to anyone sending him a large SASE (two 13¢ stamps). Bill does not charge for this service, he is just one of the "good guys" you meet every now and then. You can write to him at 114 Indian Ave. Tavernier, FL 33070.....Neal Sult is looking for KR builders in Hawaii. If you know of someone or maybe you might be in his neighborhood sometime, drop him a line at 94-341 Ulukoa St. Mililani Town, Hawaii 96789.....Something new from Rand/Robinson again. They have been trying a new product with such success they are going to market it. Duroc Featherfill is the item, a polyester filler/primer that is thin enough to spray on large surfaces. Cure time is approx. 45 minutes and then it's ready to sand. Fine sandpaper leaves a very smooth surface without the mess of wet sanding. Price for the Featherfill & catalyst is \$6.00 a Qt. from Rand/Robinson... For all builders wanting info on a sliding canopy arrangement, Ray Ellis has one worked out for his KR-1. I saw a picture of it in Ken's shop & it looks good. Ray is willing to give details to interested builders so contact him at 2416 East Douglas Des Moines, Iowa 50317 or phone 515-265-3007....Just talked on the phone to Tom Speakman in Portland, Ore. Tom has devised a simple effective dive brake for his KR-2 and it is working great.

QUESTIONS & ANSWERS

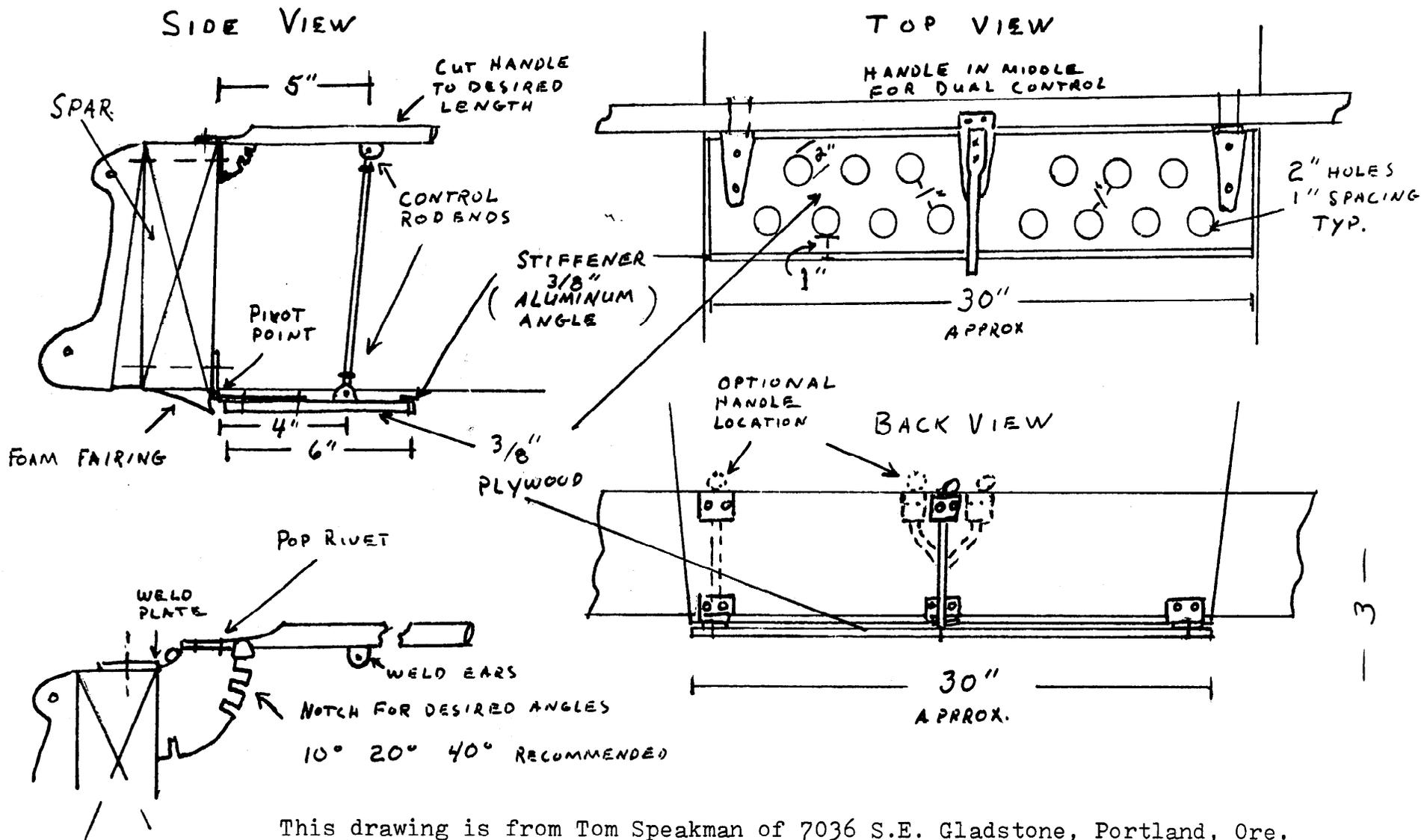
- Q. Are spars tapered with all taper cut off the same side?
 A. Check the grain direction in your spar material. If you can take advantage of longer grain by cutting more wood off one side, do so.
- Q. Will the R/R tubular engine mount fit the back of the VW engine without the rear casting as used on the Revmaster, Monnet, etc., conversions? If so, how does the magneto mount?
 A. The R/R engine mount fits the existing VW mounting holes and these are the ones Ken is using on the KR-2.
- Q. Where does cooling air exit from the cowl?
 A. Usually from the bottom and around the exhaust pipes.
- Q. Why doesn't Ken use his new 3-blade prop on the turbo KR-2?
 A. He is waiting until all testing is complete. By the time you read this, it will probably be installed.
- Q. What type of paint is recommended for the KR's?
 A. Ken uses an acrylic enamel auto finish on the entire aircraft. The plywood should be sealed before painting.

BUY-SELL-TRADE

- SELL...KR-2 unused plans and back newsletters--\$35.00. 84 yds. Dynel @ \$1.50 per yd...T.L. Bachi 1595 South Ridge Dr. Marietta GA 30066
- SELL...KR-2 fuselage 90% complete, plans, VW engine--\$500.00. Contact Wm. Meyer 1630 Central Ave. Alton, ILL 62002 or phone 618-465-1181
- SELL...KR-2 kits #3, 5, 8, 9, 10, 11, 12, 15, & 17...J.R. Heltzel at Route #2 Box 42D Edinburg, VA 22824

Due to the demand, Rand/Robinson has the following kit items for sale as separate pieces:

Spring Bar.....	\$35.00
1" x 1" x 24".....	\$ 4.00
Hinge-Bellcranks	
1 $\frac{1}{4}$ " x 1 $\frac{1}{4}$ " x 7 $\frac{1}{4}$ ".....	\$ 2.00
Hinge Elev., Rudder, Tail	
1 $\frac{1}{2}$ " x 1" x 38 $\frac{1}{4}$ ".....	\$ 6.00
Eng. channel mt. (KR-1)	
1" x 4" x 36" (L).....	\$ 8.00
Pulley brkts., Supports for aileron bellcranks, stick supports.	
Piano hinges 3'.....	\$ 3.00
Canopy hinge, aileron hinge	
5" (I) Section.....	\$ 3.00
Landing gear assembly on spring bar	
1" x 2" x 16" (Box).....	\$ 4.00
Aileron bellcranks, gear retract handle	
1" x $\frac{1}{2}$ " x 16" (solid bar).....	\$ 2.00
Gear latch bar	
Gear lag casting, ea.	\$35.00
Small hinge casting, ea.	\$ 2.00
Large hinge casting, ea.	\$ 6.00



This drawing is from Tom Speakman of 7036 S.E. Gladstone, Portland, Ore. 97206.

The center lock and handle is a folding table leg hinge with lock. It is called "E Z Hinge" and is from Ardor Mfg. Co. This along with the three 5" hinges are available at most hardware stores. If you can't locate the folding hinge, contact Tom, he has eight of them @ \$1.50 ea. post paid.

P.S. Tom (6'1" 225 lbs.) has worked out an offset seating arrangement for his KR-2. If you're interested, drop him a line. (SASE helpful)

A recent issue of Air Progress (May 1976) had an article on the use of foam in the construction of homebuilt aircraft. It wasn't very complimentary to Ken Rand but it did give him credit for being the first to use this construction method.

Their main argument was against the use of foam ribs to carry skin loads to the spars. The prototype KR-1 has been flying approx. 300 hrs. now and has never shown any weakness in this area. Since the article appeared however, there has been several builders with questions regarding the construction and safety of the wings. To these builders I am suggesting this modification. It's quick, easy and adds considerable strength without a weight penalty.

Just install the foam ribs in the wings as outlined in your plans but use half thickness. After installation of the ribs, sand to airfoil shape using a long sanding board between the plywood ribs. This will give you the exact shape of the ribs. Use one layer of Dynel/epoxy on each side of the ribs with a 2" overlap against the spars. It would also strengthen things more to put a layer of Dynel/epoxy on the top and bottom of the rib to tie everything together. When your wing is complete you will have several box compartments distributing loads through-out the wing.

If you plan on wing tanks forget about these modifications. The wing tanks increase the strength of the wings much more than the simple method above, but also adds weight.

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