

# KR Newsletter

ISSUE #25

JULY 1977



Summer at last!! KR's are rolling out of garages, basements, and hangars like butterflies out of a cocoon. The fly-in season is here with the warm summer sunshine, get out and go!

Have you made plans for the big one at Oshkosh? End of this month starts it winging. I'm really looking forward to seeing many friends there plus all the new guys who are planning to be in the middle of things this year. My family isn't going to camp at the campgrounds this time, matter of fact, they aren't going..period. That means I'll be looking for a place to throw my bedroll. Any offers? Ken Rand is going to fly his KR-2 to Oshkosh and is also looking for a place to bunk. So....if you're looking for someone to share expenses, let me know.

Been getting lots of letters requesting info on the KR-3 amphibian. I didn't know so many were interested in this type of aircraft. At this writing, initial water taxi test has been made. All proved well except for a tendency toward a super quick 180 (waterloop?) if a wing tip hit water. Stu Robinson has installed floats and I am waiting word of his results with this addition. First flight test will be made if everthing is satisfactory. The KR-3 will be at Oshkosh in any case, hopefully with some flight time on the bird.

Revmasters latest Turbo 2100 D and Maloof adjustable prop is installed on Ken's KR-2. Makes a beautiful combination, look for it at Oshkosh and future fly-ins.

We have another flight report for you. This one is with an aircraft engine and should prove very interesting to all. The fact that it is 100+ lbs. overweight and still has such good performance is great news to many builders worried about their overweight projects. Many thanks to Odran Benson for the report. Maybe he will send us a picture for a future newsletter.

Speaking of pictures, I received one from Irwin Faur, Box 236, Princeton, IA 52768. A snapshot of just completed KR-2. Unfortunately it is a color picture and one that will not reproduce well. Irwin has not had the final inspection from the FAA yet as there are a few things to take care of. He expects to make the first flight in July.

A few issues back I requested information on completed, flying KR's for our fellow builders in Australia. Thru a misunderstanding on my part I stated info needed was a total of 100 hours on seven KR-1s or KR-2s. I should have said 100 hrs on each of seven or more KR's of each type. The Australian version of our FAA requires this info before the KR's will be listed as an "Approved to Build" aircraft in Australia. I know of at least four KR's that qualify, Ken's N4KR, the Wicks Organ KR-2 N100MW, Dan Deihl's KR-2 N4DD and Fred Kellar's KR-1 N5552. The number would be five if you count the KR-1 that started it all, N1436, but it is no longer flying so I'm not sure it counts. More and more KR's are flying so its only a matter of time til several have accumulated 100 hours or more. Unfortunately, unless word is passed on to the Australian Builders they will not be able to enjoy these great little planes. Please send a note to this Newsletter if your KR has reached the 100 hour mark (or if you know of one who has). I will forward the information to the fellows "down under" to get their projects going. Name of builder, type of aircraft, registration number and hours flown, that's all that is needed so send it in. Many thanks

KR-2 FLIGHT REPORT...On June 1st following a successful pre-flight inspection by Phil Westbrook of the FAA in Teterboro, NJ office, N250B took to the air for the first time.

With a stiff 15 mph breeze directly down the runway, the plane lifted off in about 300' (8 seconds) with pilot and 10 gallons of gas aboard. The Warnke ground adjustable prop had been set to minimum pitch and engine speed was held to 2600 rpm with less than half throttle. All controls functioned nicely and after a 20 minute flight which included gentle stalls and medium banks, etc. all with gear down, the plane landed gracefully after some considerable floating down the 5000' runway.

The second flight included retraction of the gear...it really works easily. Steep banks and climb out, a high speed low level pass at 150 mph indicated were included in this 35 minute flight.

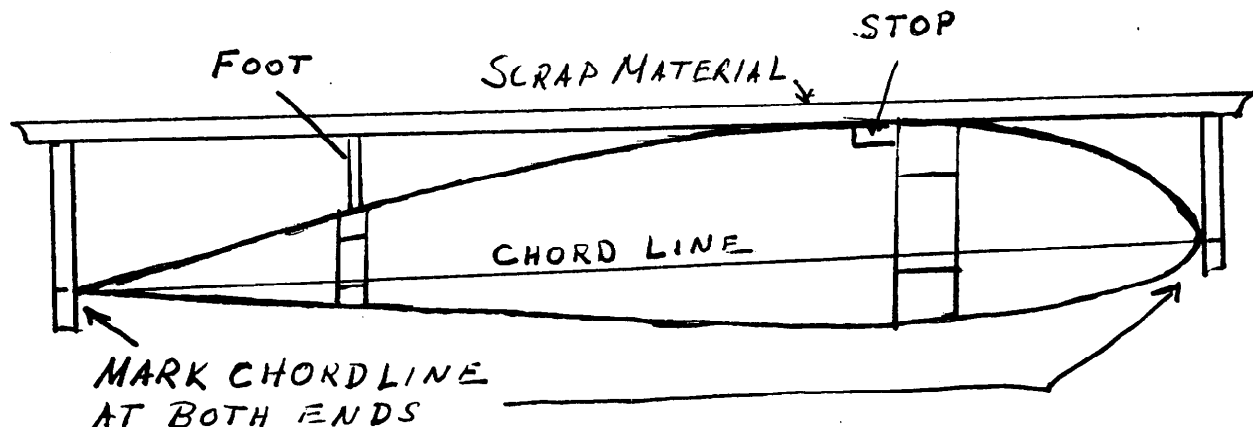
The third flight had both builder and test pilot (Rusty Burtch) aboard and for me this was the high light of two years and 1015 hours of work. Controls were sensitive and positive. All maneuvers were smooth and effortless. The Continental A-75 engine works beautifully. Some doubt on the accuracy of the air speed indicator makes me hesitate to quote actual figures. A static port was not installed and this may be part of the problem. Enough to say I am more than satisfied with initial flights and testing will continue until such time as I can prepare an accurate test report with performance figures which have been verified.

The fourth flight of the evening included rolls which looked very good and a further work out on steep turns and wing overs, this time with pilot only. With darkness approaching, the runway lights were on, the final flight of the day came to an end with a total time of over two hours clocked up on the first day.

Since June 1st an additional ten hours have been flown and the mid-range of the ground adjustable prop has been selected as most suitable. The air speed indicator has been checked against other aircraft and a top speed in excess of 170 mph is easily achieved (at 2600 rpm in still air) a cruise of 145 at 2450 is very comfortable for the engine. The plane has been looped, rolled, stalled and done wing overs. Rate of climb is between 700 and 2000 fpm depending on loading. Empty weight of the plane is 589 lbs. I used 15 gallons of resin and this may be part of the overweight. The only critical feature is landing. Approach is made between 90 and 100 mph holding 75-80 mph down to ground effect. At touch-down the needle is at the peg but appears to be about 50 mph. One has to be very careful not to drop a wing during the final holding period. On take-off the throttle must be advanced slowly and considerable right rudder held until lift-off and flying speed is attained. All movements of the control stick must be gentle and of small magnitude or over-control could occur. This is especially true in stalls.

All in all I am well satisfied with my KR-2 and believe more than ever that the Continental A-75 was the way to go.....Odran Benson, 14602 Fancher Ave., Fair Haven, NY 13064.

Raymond Marshall sent in this handy idea. No problem lining up all three pieces of the center section rib with this jig. Ray's address is 120 Anderson Pl., Martinsville, Ind. 46151. He would like to meet with other KR builders in his area.



## BUY-SELL-TRADE

FOR SALE...KR-2 project at material cost. Fuselage 95% complete. Spar material, mahogany and spruce. Also kits #5,6, & 8. E.J. Dyke, 1010 - 10th, Gothenburg, NE 69138. Phone 308-537-3530 eves.

Freon operated gear retract & extend. Less than 3¢ cost per cycle. Manual back-up. Send S.A.S.E for details. Kits available. Paul Pryor, P.O. Box 435, Mayaguez, Puerto Rico 00708.

Complete plans for an inward folding landing gear system...\$10.00. 90° magneto drive, lets you bolt a magneto in the distributor hole...\$75.00. Glenn Ware, 223 B East 23rd Costa Mesa, CA 92627. Phone 714-642-5162.

Ready for that final touch? Pinstriping, lettering, and numbers for aircraft, autos, etc. by Ed "Big Daddy" Roth. Write or call Ed Roth, 14245 San Feliciano, La Mirada, CA Phone 714-523-8676.

TRADE...1936 Chev 4-door Master Delux for a KR-1. The car has many new parts, no rust, and two engines. Bill Bayman, 1216 Maple, Clarkston, WA 99403.

FOR SALE...Rimco line bored case, aluminum NPR 92mm pistons & barrels, new crank, cam, lifter, all bearings, valves, guides & ground seats. Accessory case w/starter & mag, mounting for alternator (drive included), prop hub, oil cooler, inlet manifold fittings, gaskets & much more. Sacrifice \$750.00 firm. Mary Rezmer...714-894-9131 or 714-846-0358 after 10 pm.

Liquid foam. If you can't find it cheaper there, send \$33.50 for 2-gal kit, \$12.95 for 2 qt kit, \$9.50 for 2-pt kit, UPS prepaid. Dual sticks, toe brakes, all metal, 8 pages plans...\$1.25. Spar drilling jig...\$12.00 deposit with \$10.00 refunded on return less postage. Englemann spruce kits with sitka wing spars...\$115.00. Poly vinyl chloride gas tank filler neck, cap, gasket and key set, set of three...\$16.00 prepaid. Verne Lietz, Box 234, Peshastin, WA 98847.

FOR SALE...Heel brake pedals, cables, brackets, fully assembled, ready to install...\$30.00 Peter Steckler, 5 Millcreek Rd. New City, NY 10956.

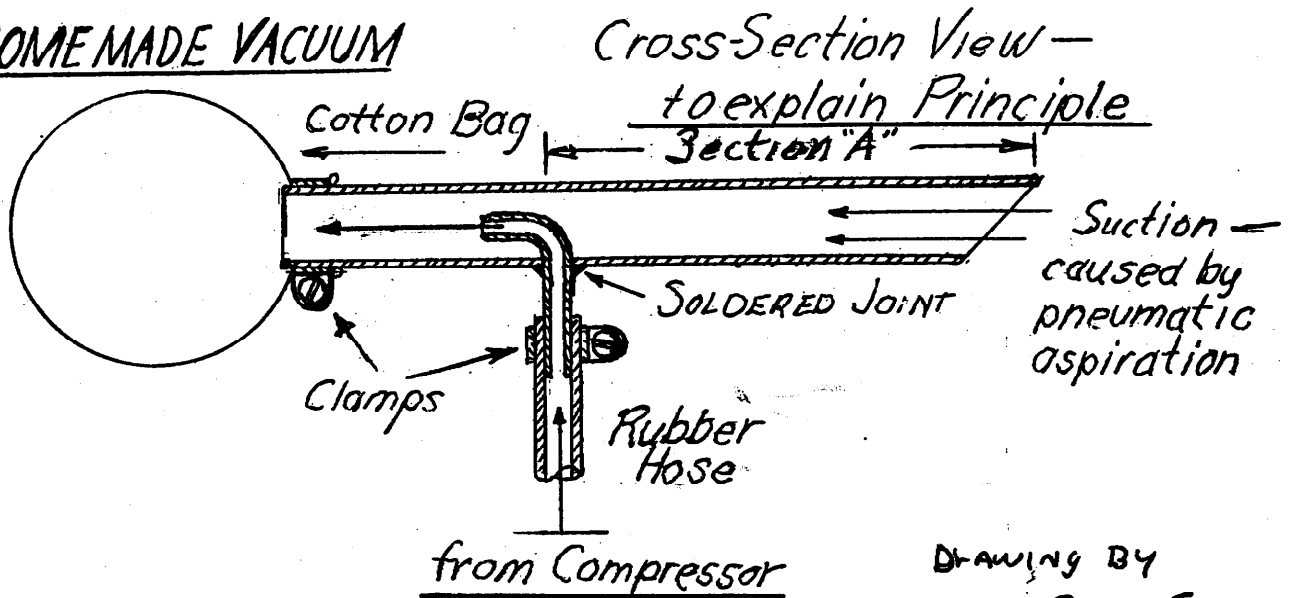
FOR SALE...KR-1 project, 80% (?) complete. All components and materials to complete. Includes wing tanks, electrical system w/alt., overhauled 1500cc engine w/accessories mounted. Fly it this summer. Reason for selling...trying to finance a major overhaul for my Colt. Greg Van Erem, 1116 First St., Hudson, WI 54016 or phone evenings 715-386-9721. Price....\$2000.00.

## QUESTIONS & ANSWERS

- Q. In Issue #5 the cross section of the wing tank shows  $\frac{1}{2}$ " foam between the sapr web & the fuel tank. Is this mandatory or may the dynel/epoxy contact the spar directly?
- A. Experience has proven that the  $\frac{1}{2}$ " foam is not necessary. Just be sure all bolts, corners, etc. are well coated with dynel/epoxy to avoid leaks.
- Q. Where may I get a revised or corrected drawing of the RAF 48 airfoil?
- A. Send a S.A.S.E. to Rand/Robinson (two stamps) or postage costs if overseas. Their address is on your plans.
- Q. The airspeed quoted on the KR pamphlet, is it statute mph or knots TAS?
- A. Statute mph.
- Q. Where do I get the 10mm x 50mm bolts to attach the engine to the Rand/Robinson engine mount?
- A. Try a VW dealer with a large service dept. I bought mine from one.
- Q. What modifications are needed to install a 2100 VW on a KR-1?
- A. Re-inforcing of the fire-wall area. This is covered in the KR-1 plans (blue book) last issue.
- Q. Can one purchase a set of photographs that further complement the Rand photos? I would gladly pay reproduction cost to another builder who has take construction photos.
- Bob Soikkeli, 810 $\frac{1}{2}$  Silver Fir Rd., Walnut, CA 91789.
- A. I printed your address so other builders will be able to contact you. I'm sure at least one builder has a photo record of his project.

Here is a very simple and easy to construct vacuum sweeper. It is especially adaptable to a KR project because the suction nozzle can be made to almost any size or shape and will retrieve nuts, bolts, and etc. which are dropped into hard to reach places. Any size air compressor will work.....Bob Stone.

## HOMEMADE VACUUM



DRAWING BY  
BUZZ ERMEY

ERNEST KOPPE  
6141 CHOCTAW DR.  
WESTMINSTER, CA 92683  
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