

# KR Newsletter

## SUBSCRIPTION RATES

SEPT. 1978  
ISSUE #39

ONE YEAR \$9.00 BACK ISSUES-75¢ ea.  
OVERSEAS AIR MAIL \$15.00



### OSHKOSH '78"

This year's edition of the EAA Convention is now past history. As usual it was a great success for everybody. Everybody, but KR enthusiasts that is. A disappointingly small number of completed KR-1s and KR-2s were on hand to greet the hundreds of current KR builder's inquisitive eyes. Eight KR's were on display, some trailered in, some flown.

KR-1 N-1436, this is the KR-1 that started the whole composite shebang. The restrictions have just been flown off the third rebuild of N-1436 which this time includes a Revmaster 2100 D, turbo-charged naturally, and the Maloof constant speed prop. The performance figures Ken Rand is giving this little hot rod is enough to stagger even a true believer, i.e. a 2000' R/C and a 240 mph cruise. WOW!!!!

KR-2 N4KR was flown in by Ken all the way from California. A malfunctioning fuel transfer pump, one of the few certified aircraft parts on the KR-2, failed about half way thru the flight. What started out to be a one stop flight ended up as one long jump and a half dozen shorter ones. N4KR was also flown by Ken in the 1st annual 500 mile efficiency race to be held each year at the EAA convention. An interesting race in that it is not only speed that counts. A participating aircraft must carry 22 gal. of fuel, use only 18 gal. or be disqualified. A bonus speed is awarded to each contestant according to how much remaining fuel he has on board after completing the race. Ken was one of four contestants selected for this initial running of what gives every indication of being a highly successful annual event. Steve Wittman (who won) and two Vari-sizes (2nd & 3rd) were the other contestants. Rand had trouble locating a turning point of the first lap, fell behind and then used too much fuel in trying to catch the others. Oh well, maybe next year.

KR-2 N17NA belongs to Albert Epp of 4919 Mattis Rd., St. Louis, MO 63128. First trip to Oshkosh for this KR-2 built by one of our senior builders. Al apparently followed the plans closely on all but the canopy which swung forward for entry/exit.

KR-2 N4DD built by Dan Deihl of 4132 E. 72nd, Tulsa, OK 74136. Dan probably has more hours in a KR-2 than anyone other than Ken Rand and is usually ready to give you a detailed account of the KR-2's abilities. I get the impression that "unusual attitudes" are more usual than not when Dan is at the controls.

KR-2 This one is owned by A. Carlson of Sweden. It was at the Chino, CA fly-in earlier this year, minus the tricycle gear. The gear modification was made by Finelli's Machining and Welding, 5327 West Ave., L-10, Quartz Hill, CA 93534 who is taking orders for the kit. Write to them for further information.

KR-1 N7138. Bill Reents, 3874 Dunbar Dr., Youngstown, OH 44515 built this very nice KR-1, the nicest KR to show up at Oshkosh this year. Powered by a 1700 VW turning a R/R three blade prop, Bill's is one of the two KR-1s flown in this year.

KR-2 N76PV. Paul Venne set out to build his KR as cheaply as possible. Power is a 1200 VW, pulling an aircraft as close to plans and as light as he could make it. First flight is due the latter part of September, more info will follow then.

KR-1 N31123. This KR-1 built by Steve Bennett, Rte 1, Bondurant, IA 50035 was the last to show up at Oshkosh this year. He arrived the morning I was leaving so I didn't get too much info from him. At present Steve is flying with his second prop, the first having been the victim of a mishap. Performance is not as good with this second prop but the fun flying is there.

BUY SELL TRADE

FOR SALE...Award winning KR-1...ready to fly. This modified KR-1 was displayed at the EAA Chino, CA Air Show in May 1978 and won the trophy for best composite aircraft. Some of the modifications include open cockpit, fixed landing gear, hydraulic toe brakes (disc), Cleveland wheels (500 x 5) & center control stick. All parts are new. It is powered by a 36 hp VW (run a few hours for break-in) with balanced crankshaft, rods and pistons. All internal parts are new. The magneto is driven directly by the crank. An oil seal (removable) has been installed in the case and rides on the prop hub. Fuel primers are installed in the intake manifolds. An extremely efficient oil cooler is mounted above the magneto. The propeller was built by Les Trigg. Instruments (all are aircraft) include air speed ind., compass, altimeter, oil pressure, oil temperature, manifold pressure, tachometer and cylinder head gauge with sensors on #1 and 3 cylinders. A unique gas gauge arrangement incorporates a magnetic dial with float and gear driven shaft which eliminates the gas line on the instrument panel. The entire instrument panel is removable. The interior of the cockpit is finished in mahogany and spruce. There is a compartment and access panel (hinged) behind the seat for access to the rear of the plane. Inaccessable aluminum hinges and bell cranks were drilled oversize and 4130 bushings installed. The entire wing section from the front spar aft is covered with a layer of Dynel and then with an additional layer of fiberglass cloth. This increased the strength tremendously without significantly increasing the weight. (The empty weight is 419 lbs.) Meticulous attention was given to detail and all aircraft parts were used in construction. The many refinements not even mentioned that went into the building must be seen to be appreciated. A photograph of the aircraft is in the July issue of "Sport Aviation" and in the June issue of the "KR Newsletter". Included with the aircraft is a custombuilt trailer from which the complete aircraft can be removed (or placed) in a very short period of time..... \$3,900.00 FIRM. Contact Frank Walker at 213-943-7658 or write to 11226 Kibbee Ave., Whittier, CA 90604. No collect calls please. Photos sent on request.

WANTED.....KR-2 completed aircraft, send specs and price to A.N. Polidori, Rte. 2, Box 340 Mundelein, IL 60060. Phone 312-566-6469.

FOR SALE...KR-2 project. Most all woodwork and metal parts complete, extra materials... \$1000.00 or best offer. Phone 805-525-8241 or 805-724-5393 after 4:30 p.m. No collect calls please.

I have received many requests for an address of anyone selling Type IV conversion parts. Gilbert Duty has developed the Type IV engines accessories from prop hub to accessory case. For more details write to Custom Aircraft Engines, Rte 3, Sanford, NC 27330.

FOR SALE...KR-2 project 60-65% complete, on gear, empennage complete, controls installed, all materials to finish except engine and instruments. Rick Thomas, 8300 Thoreau, Riverside, CA 92504 or phone 714-687-9567.

**\*\*SAFETY NOTICE\*\*** Dan Richards at R/R called my attention to a problem one builder encountered with rough field operation. The tailwheel bellcrank arms are getting nicked and bent by assorted runway debris. Make sure that you include the tailwheel bellcrank on your pre-flight check list. Another problem in this area is that some builders are putting too much tension on the rudder and elevator cables. They should only be taut enough to take up slack, not enough to make them hum.

Are you using a gascolator in your fuel system? A vapor lock problem is possible if the gascolator is located too low in regards to the injector/carburetor. High cowling temps will cause a vapor lock in the fuel line from the gascolator to the injector/carb. If you suspect a problem in this area, raise the gascolator until it is on an even plane with the injector/carb. This will end the vapor lock problem in this area.

One more time dept....structural integrity of the KR's require that the Dynel/epoxy skin be in direct contact with the load carrying spars. DO NOT PUT FOAM BETWEEN THE SPAR AND THE SKIN!!!!

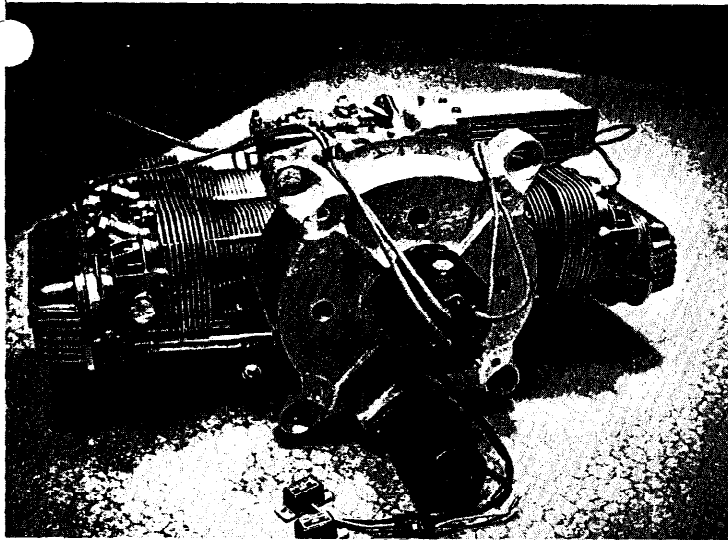
KR CLUB HAPPENINGS....Ken Rand is going to be a very busy person for a couple of weeks this month. He has scheduled a coast-to-coast cross-country and is going to follow this itinerary (weather permitting); Sept. 15th, leave So Cal early a.m. for the EAA Fly-in at Kerrville, TX. Sept. 16th, leave Kerrville, TX mid-morning for the EAA Fly-in at Baltimore, MD. Sept 17th, afternoon departure to Brainard Field in Hartford, CT where he will spend a few days with his folks. Sept. 22nd, leave Brainard Field early a.m. to fly to the EAA Fly-in at Alvin, TX. Sept. 23rd, depart Alvin for Mid Valley Airport in Albuquerque, NM. Sept. 24th, Ken will leave in the early afternoon to make the final lap of the long cross-country. None of these flights are for records, altho I'm sure he could set a few. Ken is just demonstrating that the KR's are capable of extended cross-country flights.

There will be an informal meeting of the SoCal area KR Club members Sunday, Oct. 1st at the Corona, CA airport. Circle that date on your calendar and fly, drive, walk, or whatever, just get there. Just across the street, south of the airport, there is a very large and well kept park, so bring a picnic lunch and we'll all talk about airplanes. Might even get Ken Rand to give us a de-briefing of his latest cross-country haul.

Is there an airport, hangar, shop or someones garage near you that the local KR Club members might use as a home base? If so, send in a time and place to the Newsletter and maybe we can get it together on a regular basis. Let's try it!

October 21st and 22nd look for Ken at Marana, AZ regional EAA Fly-in and Oct 28th and 29th at the EAA Fly-in at Ramona, CA.

"SUPERCASE" By Dan Diehl

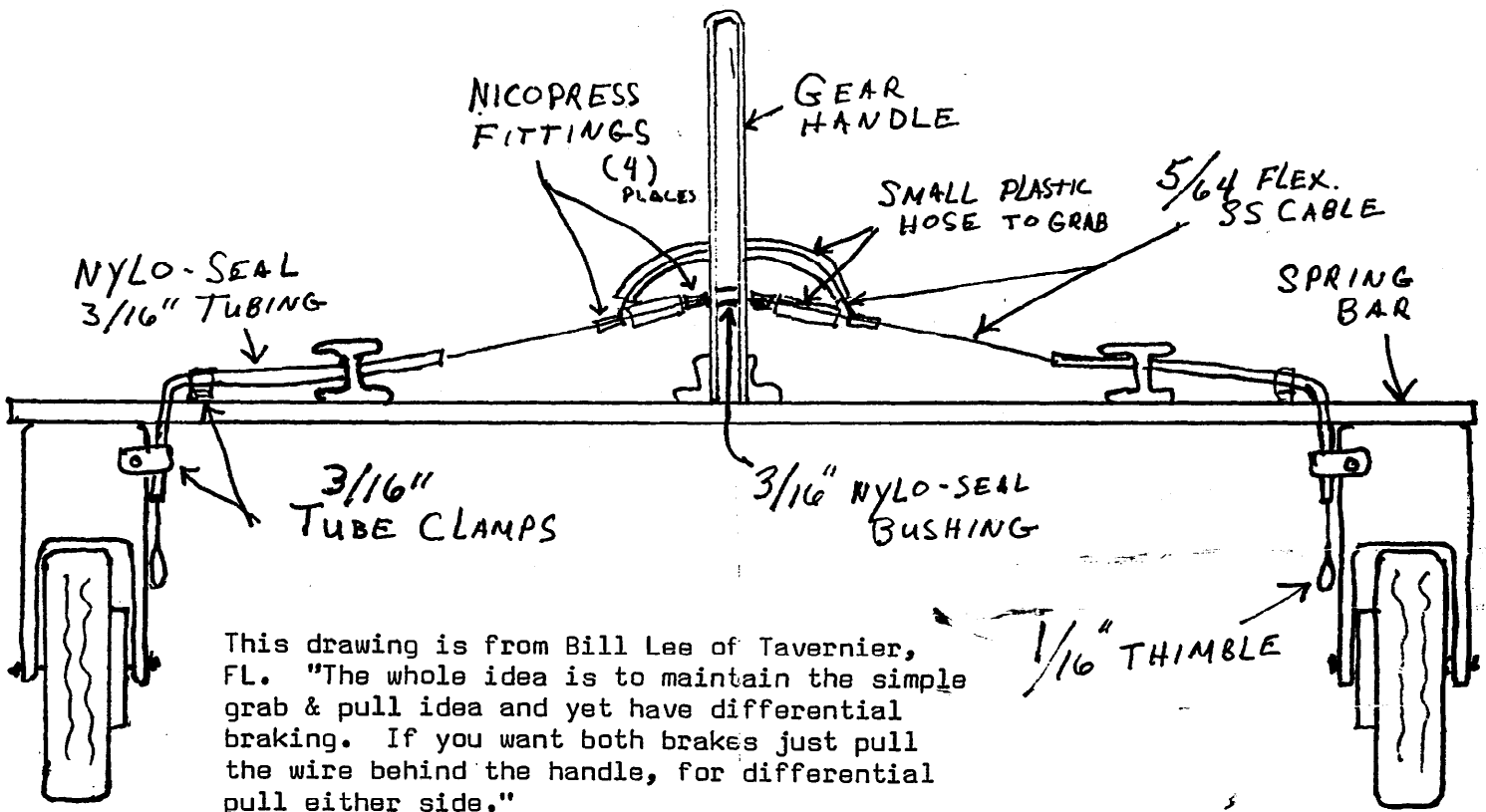


There are hundreds of KR builders wanting to build up their own engines but are not sure where to start or where to buy conversion parts. Dan Diehl (KR-2 N4DD) has developed an accessory case that will fit most VW engines (1200 cc to 2200 cc). It utilizes the new Rand/Robinson engine mount based on the Lycoming (Revmaster) bolt pattern. Currently available are the following items: Accessory case, machined and ready for installation-\$100.00 Magneto drive-\$35.00. Fly wheel (using your 6 volt 180 MM VW as a core)-\$45.00, add \$20.00 if no core furnished. The Slick Magneto and 12V starter sold by Rand/Robinson are bolt on items. A 20 AMP alternator will bolt on inside the accessory case-\$90.00 if enough orders (25) are received, if not, Monnet sells a 10 AMP alternator (\$100.00) that will fit. Weight of the case and all accessories comes to 24 lbs. Want more info? Send a S.A.S.E. to Dan Diehl, 4132 E. 72nd St., Tulsa, OK 74136 or phone 918-492-5111.

.....  
 • VENNE KR CONSTRUCTION  
 •

• Most experienced KR builder offers complete technical assistance, inspections, and construction. Charges to suit any budget...international inquiries welcome.  
 • 919 Grand Ave., Long Beach, CA 90804  
 • or phone (213) 433-0520.  
 •

*The picture and info above was received just before press time. Looks like Dan has a good thing going, ain't going to send him the first order.  
 E K*



This drawing is from Bill Lee of Tavernier, FL. "The whole idea is to maintain the simple grab & pull idea and yet have differential braking. If you want both brakes just pull the wire behind the handle, for differential pull either side."

ERNEST KOPPE  
 6141 CHOCTAW DR.  
 WESTMINSTER, CA 92683  
 ISSUE #39