

KR Newsletter

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First, I want to pass along an observation or two on characteristics of the KR-2 featured in the last Newsletter. Hopefully I can give you guys a hint on what to expect on that first flight of yours.

1. Contrary to what you might have heard about taildraggers, the KR's are very easy to taxi. The positive steering tail wheel lets you drive the aircraft around like a kiddy-car. The only problem here is that a sudden application of brakes could very well ruin a prop. Go easy on the binders and keep the stick full back while taxiing.
2. The KR is a light aircraft and will readily respond to the throttle. Don't just fire wall the throttle and hang on. There is a lot of torque in the VW up front and it will try to take you to the right side of the runway. Just ease the throttle in and be ready on the left rudder pedal.
3. Next thing you will notice is how sensitive the KR is to elevator control. The unwary pilot is going to find the aircraft and himself going down the runway like a porpoise. Over control at this point can cause disaster so hold that stick steady and make small attitude corrections while the aircraft climbs out. Best rate of climb is going to vary from one aircraft to another because of engine, prop, etc. The 1700cc VW in N31158 turning a R/R 3-blade set at the low stop will give a R/C of 1500 to 2000 fpm with only the pilot on board. Pilot and passenger brings the R/C to 800 to 1000 fpm. These figures are at an IAS of 80 mph.
4. Initial landing gear retraction should not be attempted until at least pattern altitude has been reached. I found the gear retract handle location to be unsatisfactory as far as accessibility was concerned. I would advise all KR-2 builders to change the location of the gear handle from center of the spring bar to center of the left seat. Much easier to operate!
5. Now you want to try a few turns to get the feel of the aircraft. Response to the stick is positive and quick. Rudder isn't needed in any but the steepest of turns. Put the aircraft in a bank, hold altitude, and it will do 360s like it was on a track.
6. Landing...the KR doesn't have any surprises in the store for you here. The main thing you want to watch is airspeed on final. Too hot and it will want to float. I've found 60 mph ind. will set up a good glide angle and allow plenty for flare out. That pretty well covers it, I guess. I'm sure you have more questions on performance, stalls, etc. but I've given you an idea on what to expect from your KR on the first flight. Should you disagree with me on any point be sure to write. The more information in circulation the safer it is for all.

BUY SELL TRADE

FOR SALE...KR-2 plans, Newsletter from #9 to date and KR-2 bolt kit...\$100.00. Joe Beyer, 168 SE Haig St, Portland, OR 97236 or phone 503-761-4914.

FOR SALE...Full size cardboard templates for the metal fittings of the control system and the nose rib of the vertical fin...\$5.00. Darrell Bosely, Rte. 4, Marietta, OH 45750.

FOR SALE...Beautiful VW props our specialty. As displayed at Oshkosh. Send for free brochure. The Prop Shop, Box 237, St. Ansgar, IA 50472.

FOR SALE...Complete material kit for KR-2, 15% discount from original price. For details write...Harold Neely, 190 Lorane Rd, Reading, PA 19606 or phone 215-779-7594 after 6 p.m.

FLIGHT REPORT...I have two flight reports this month, one from a very experienced pilot and one from a pilot who has never flown taildraggers.

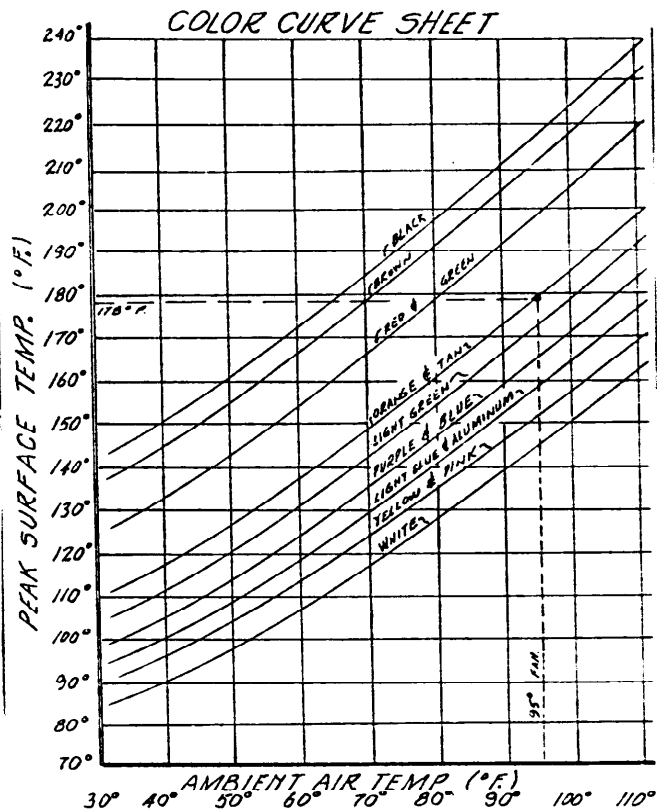
From Jack Aldrich, 2404 Emory Ave., Bradenton, FL 33507.....One word describes the KR-2 in flight, beautiful! We worked on our plane for nine months, beginning from scratch the end of Feb '77 to the final paint job at the end of Nov '77. After going through the hassle of getting the inspector to give it the final inspection and working out a few minor bugs, I finally flew it on Jan 21, '78. Weather was also a factor in the delay. Let me say first that I am by no means a super pilot but average. I hopped into the KR-2 with 200 hrs total time and NO taildragger or stick time. The whole time I was building my plane, I was warned by the old timers to get some taildragger time and I did try, but no one gives lessons in my area. So I decided I would have to teach myself. My first run went like this: throttle advanced slowly, tail wheel came off. Keeping her straight was a little difficult at first due to my inexperience but I quickly got used to it. I had intended to keep her on the ground but she suddenly became airborne. Out of surprise, I chopped the power, came down and hit hard and bounced. This time I gained control and greased it in. I then pulled off the runway and inspected the plane and found everything in order. (Landing gear is tougher than I thought.) Second run: Tail wheel off, steering much better. She lifted probably a foot. Greased it in again. Third run: Tail off, this time I gave it all she had and took off. Controls were a little touchy but I quickly got used to them. I climbed at 80 mph up to 1000 ft. and leveled off to a cruise of 100 mph. But this was with an rpm of 2500 and wheels were left down. This rpm was the best I could get out of the 1700cc VW but we think it is because of the prop which we also made. Anyway, I circled around, made a pass over the field at 300 Ft., circled again and made my approach. Pitch control was a little quick but not to the point of being unsafe for the average pilot. Near the ground, I flared and just let her float in, adding small corrections with the rudder and finally the wheels kissed the runway. Approach was made at 60 mph. The KR-2 is a very well handling and safe airplane and in my opinion, no more difficult to fly than a Cessna 150. Please don't let this statement make anyone who hasn't tested their KR to be over confident though. Use caution and make sure all is well before flying. P.S. Also add that wind conditions were 10-15 mph and 5-10° cross-winds.

From Richard Maddux, 631 Lakeshore Dr., Milton, FL 32570.....I recently purchased a beautiful KR-2 from Rick Basden of Goldsboro, NC. We made arrangements to meet in Winder, GA (outside of Atlanta). After examination of the aircraft I joined him in the cockpit for a flight check. The aircraft interior is nicely appointed with vinyl and fabric seats. The panel has a Bandix 360 Nav/Com. localizer and 3 LMB that takes about $\frac{1}{2}$ the panel. It has dual headsets and an ICS system which makes inflight com very nice. After a short flight around the area we landed. Mr. Basden hopped out and I was going to take it. However a flat left main stopped me short. About an hour later I was ready to go but the sun was getting lower and I had to get to Pensacola, FL before it set. So my first landing enroute would be my first landing. (without any taxi tests or touch & go's) I brought a friend with me and the two of us climbed in and taxied out for take off. The take off roll was normal with the exception of left rudder vs normal right. After lift off, however, the fun began. The two of us weighed about 340 lbs and the empty weight was 590 lbs. for the aircraft with about 72 lbs for the fuel. To say the least, we were heavy. CG was pretty far aft so elevator sensitivity was wild. I thought I was on a roller coaster when I tried to retract the gear. So I gave that up until I reached approx. 800'. Aileron and rudder were fine but that elevator! Wow! (I found out later that with one person or two small people -- no problem.) After clean up at 3200 rpm cruise I was indicating 145 mph. However a static port is not installed and subsequent tests with other aircraft indicate this to be 10 mph too fast. As soon as I can find a suitable static port and its aircraft location I'll install it. Landing on my first hop proved to be no problem although I was quite nervous after that take off. I used 70 mph for approach and was greeted with less float than at higher speeds. Perhaps I should explain that I have approx. 3500 hrs flight time with about 6 hrs in a Pitts, 75-100 in a Starduster and another 50 in other assorted homebuilts so I wasn't really worried about my ability to handle the KR-2 but I do approach each unknown with much caution. At present I am a military pilot and have experience in a wide variety of aircraft. Back to the KR-2, I haven't had any trouble with it yet. It's a sheer joy to fly. I've looped it, rolled it, stalled it and even done hammerheads. Its performed flawlessly. I have about 6 hrs in it so far and the aircraft has about 80 hrs total time. I have a few bugs with the engine. The CHT is running about

425° F (too hot) in cruise and oil temp about 110° (too cold). Further mixture adjustment and a larger oil cooler blocking plate should remedy this. Also the 92mm jugs are blowing oil through the breather and make my belly a mess. I'm told however that "venting" the rocker covers should help. The engine has been burning 100 LL but I believe I'll switch to Amoco premium (no lead). The prop is a 52" 44 pitch. I know little about this and would appreciate any info on props and if this is the correct pitch for a good cruise. The engine is a dual plug, dual mag (Bendix D-2000) set up. I understand there's an A.D. on the bearing on this unit and am checking to see if my serial number is one of them. I am extremely pleased with my little "jewel". It's a hot little ship that loves to kick up its heels. No dull flying here. If any readers have any ideas or comments I would like to hear from them as information on the aircraft and engine is scarce.

TIPS FROM OTHER BUILDERS.....The reference in Issue #29 to the importance of white or light colors in aircraft (particularly plastic ones) reminded me of an article I had saved from "Soaring", Sept '75 issue. I refers to a particularly thorough experiment carried out with various colored fiberglass panels. The details of the article are interesting, but the graph (ambient air temperature vs peak surface temperature) tells it all. I'll be happy to mail free a copy of the article to anyone sending a self addressed stamped envelope. In reference to ultra violet protection, the Rand factory recommends a couple of coats of aluminum paint of the same type used for the fianl finish. I'm enjoying the Newsletter thoroughly, keep up the good work...Buck Buchanan, 4727 Milne Dr., Torrance CA 90505.

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 I am building a KR-2 and have been working on it for 2½ years-part time. For power a Mac 72 hp engine is planned. I have heard both good & bad about the engine, but feel that with the proper bearings, new 2 cycle oil and temp. Monitoring will ward off the problems common to this engine. If it does perform well, the plane whould be some performer. Anyone interested, or in the process of the modification is welcome to write. I can recommend the Monnett tail wheel casting. It came out great. Both myself and Al Starke in Helena used an Aeronca Champ fuel tank. It fits perfectly and did not require fabrication. therefore letting me spend the time elsewhere.... Norman Tebag, Rte. 1, Whitehall, MT 59759 or phone 406-287-3390.



Terry Grimes, 2214 S. Volutsia St., Wichita, KS 67211 reports his KR-2 is ready for final inspection. Norteworth mods on Terry's KR are fixed tricycle gear, toe brakes, bucket seats and a three piece canopy. Looking forward to hearing more from Terry.

The last Newsletter included a question about pre-molded parts for the KR-1. Well, there is a company in Ohio selling some pre-molded foam (not fiberglass) pieces. For more info write...Aircraft Custom Foam Service, Inc, 208 Victor Ave, Columbus, OH 43207. Thanks to Al Remenicky, Ft. Wayne, In. for sending this in.

Bill Lee of Tavernier, FL used particle board to make his spar drilling jig. Easier and cheaper than a metal one and just as accurate. Every hole came out perfectly aligned.

Received a phone call from Don Land, a KR-2 builder here in S. Cal. He has developed a very workable retractable tricycle gear that will bolt directly to a KR-2 with only minor modifications. I went over and had a look and was impressed. The system was well designed, light (13 lbs.) and very strong. Don will probably sell plans and/or kits for the system after it has been tested on his KR-2. His address, if you want to write, is...906 Manzanita, Los Angeles, CA 90029 or phone 213-666-2869.

RAND/ROBINSON UPDATE...Remember last issue? The amphib had just suffered a minor set-back. Turns out the prop used for that particular flight had not been adjusted to the engine. The prop, a Maloof/Revmaster unit, was a loaner replacing the original that had sustained damage from a foreign object (screw, cowl fastener, etc.). The loaner was handed over with directions to adjust the pitch setting before flight. For one reason or another, probably haste, the necessary adjustment was not made properly. Result was an over revved engine and a stall when power was cut. Repairs were made to the KR-3 and within a week it was ready to go back to the airport. The result of this latest trip you see in the picture. The pilot, Jack Moell, received only a couple of minor abrasions. Cause of the accident has been attributed to low-speed control reversal and has prompted reconsideration of the GA(w)-1 airfoil used on the KR-3. Rand says there will be about a year delay in release of the KR-3 plans and those who already ordered plans will have their money refunded. Meanwhile, the KR-3 will be rebuilt using a different airfoil (probably the RAF 48) and testing will start over from scratch....There is some news on the brighter side. N1436, the KR-1 prototype is currently being rebuilt. Should be flying by summer.....Molds will be made for fiberglass cowlings and fuel tanks that will fit the Revmaster turbo-2100. These parts, as well as a welded engine mount, will be marketed. Watch the Newsletter for availability.



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