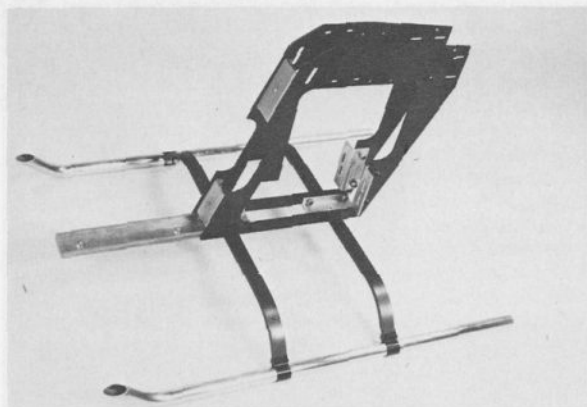


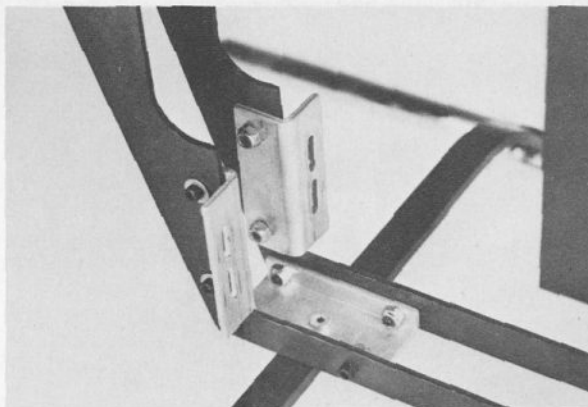
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**The blue anodized frame halves bolted together with the flat center channels. Note PEM nuts in channels.**



**Engine brackets attached to inside of frame halves. Note slots for engine alignment.**

● The Rev-olution is the newest .40 size helicopter to make its appearance. Designed by John Simone, Jr., and produced by American R/C Helicopters, Inc., 26071 Via Viento, Mission Viejo, California 92675, the Rev-olution has a rotor span of 41" and a flying weight of 5¾ pounds.

Some of the unique features of this totally American designed and produced helicopter include a virtually unbreakable one piece polycarbonate canopy, sealed ball bearings, a fail-safe clutch, titanium main rotor shaft, plus a custom designed Semco muffler and adapter designed to fit the .40 engine of your choice. In addition, all main metal body parts with the exception of the skids are anodized in either blue or red. The Rev-olution kit, including muffler and adapter, is priced at \$185.00, less engine and radio, or \$219.00 with the K & B .40 engine. Another welcome feature is the fact that the spare parts for the Rev-olution are immediately available at prices well below those normally charged for helicopter replacement parts.

The Rev-olution kit, due to its assembly sequence and the fact that some parts are pre-assembled for you, can actually be put together in approximately 6 hours. In other words, it is entirely possible to build the Rev-olution one day, and fly it the next. Part

of this short assembly time is due to the extremely complete and comprehensive instruction manual that accompanies the Rev-olution. This manual is written in a check-off, step-by-step method complete with photographs of the important assembly steps and full size plans that are complete and detailed. It is obvious that the plans have been written so that, if this is your first helicopter, you will have no difficulty whatsoever in assembling the kit. It is also quite apparent that the assembly sequences have been well thought out by the designer, John Simone, Jr., since you'll be working from one assembly to another, so that no particular assembly becomes tiresome and, when it is time for final assembly, all of the sub assemblies have been completed and the final stage is rapid to say the least.

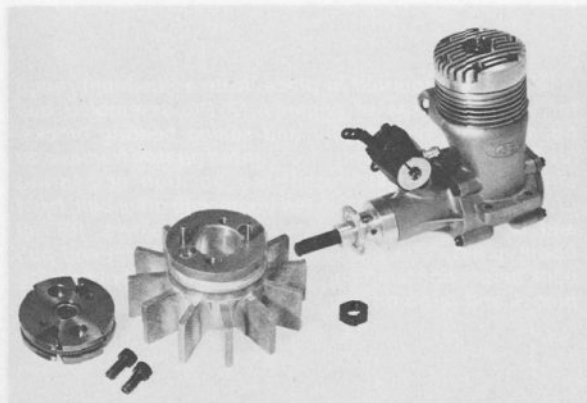
Once the construction is completed, the instruction manual has a section on radio and control check, final adjustments as well as a complete section balance, main rotor and engine set-up, starting procedure, engine and pitch adjustment, tail rotor set-up and flying tips. In addition, there is a simple-to-build training gear illustrated in the manual that can be built for less than \$4.00 and virtually ensures an absolute minimal amount of damage to your Rev-olution.

With regards to construction, the only modification we made was to replace the single wire tail skid with a 3/32" diameter music wire "continuous loop" tail skid to further reduce the possibility of tail rotor damage or having the single wire skid stick in the grass upon impact. The entire helicopter is extremely well made, well packaged, thoroughly engineered both from a construction and flight performance standpoint. Compared to most helicopters, it is extremely reasonably priced and, if purchased with the engine, requires only a 4" length of fuel tubing and a radio in order to be ready to fly. Top grade components are used throughout, including American Standard socket head screws, nylon lock nuts, Sullivan fuel tank, custom designed Semco muffler, an extremely rugged white ABS seat and instrument console, the rugged one piece canopy, and the unique titanium main rotor shaft which is virtually impossible to bend except in the most severe crash.

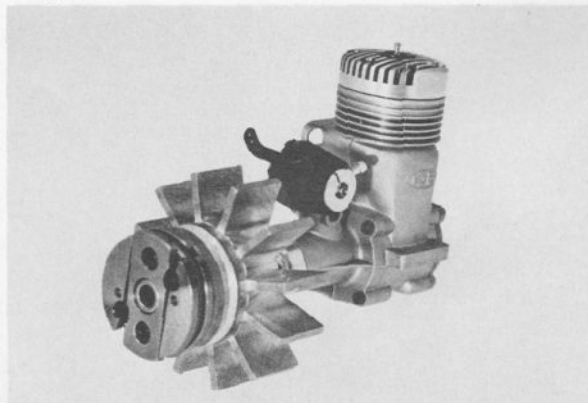
A belt drive to the tail rotor is used on the Rev-olution and, due to the tremendous tail rotor rpm of this machine, we would recommend using the smaller blade size shown on the plan rather than the full length of the tail rotor blades if you are new to helicopter flying. Another unique feature of the Rev-

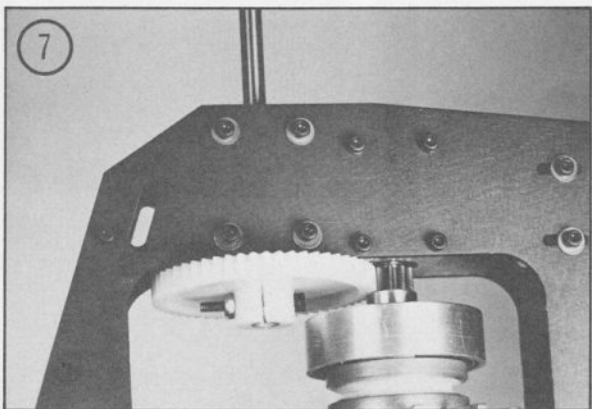
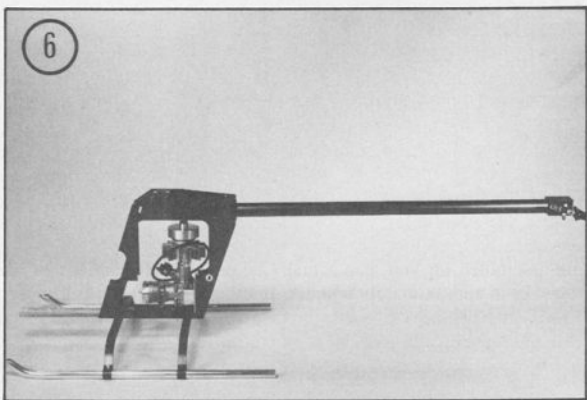
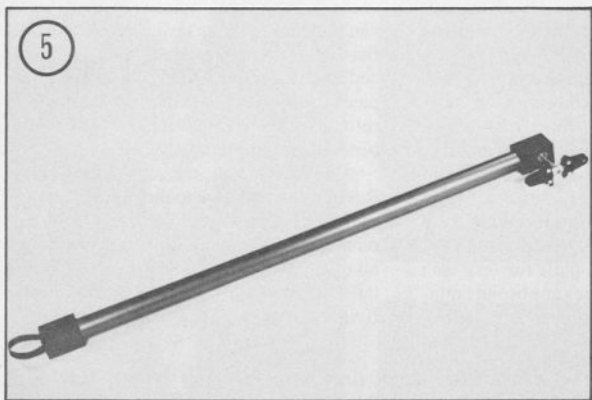
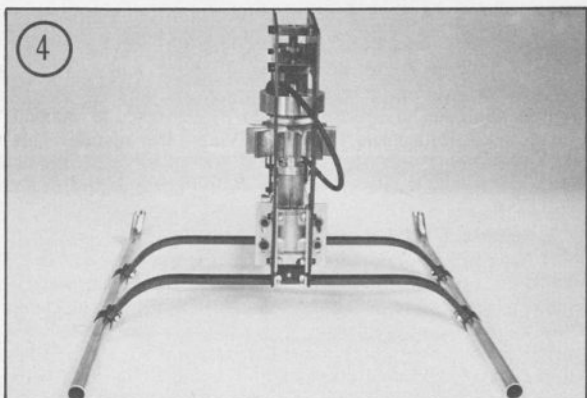
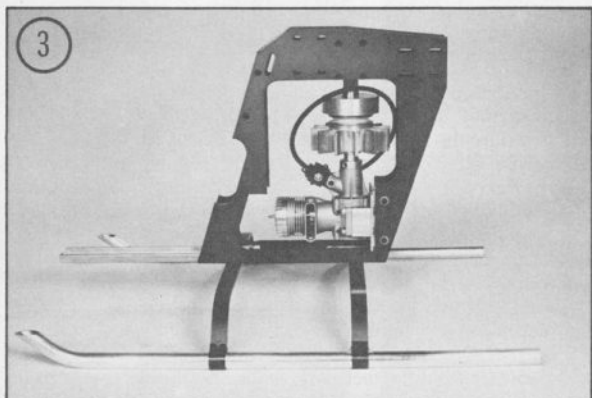
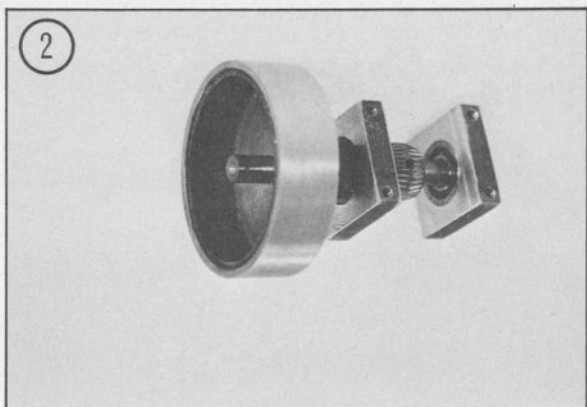
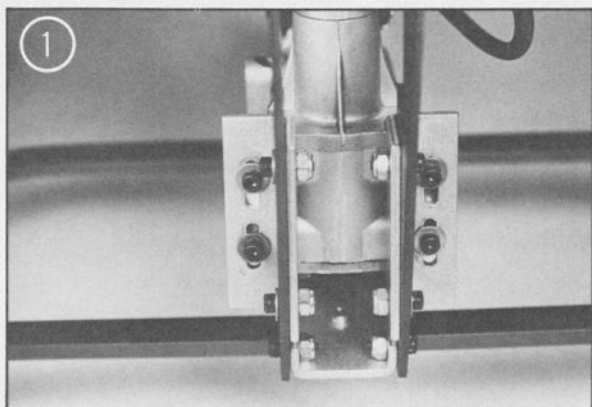
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**The K & B .40 supplied with kit has pre-adjusted throttle arm. Fan and clutch shown.**



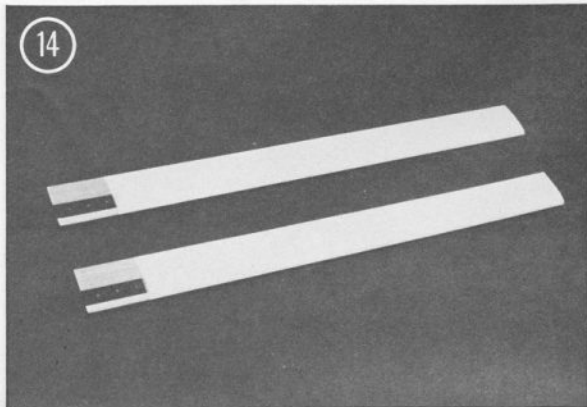
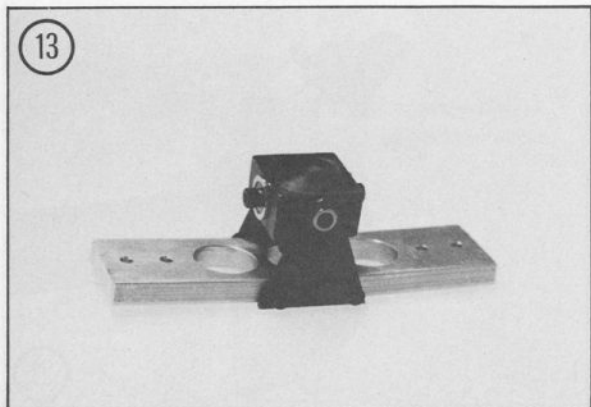
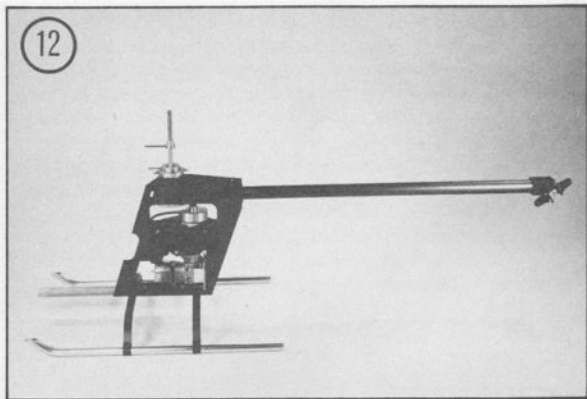
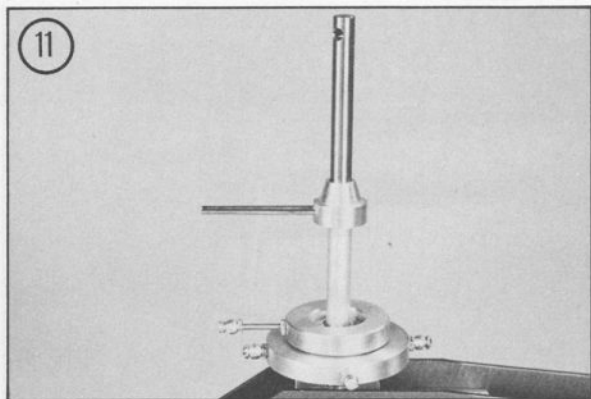
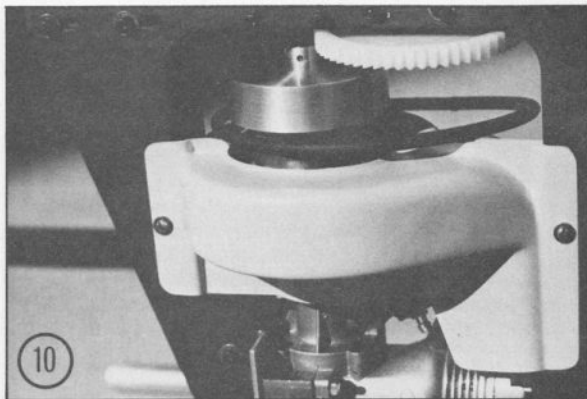
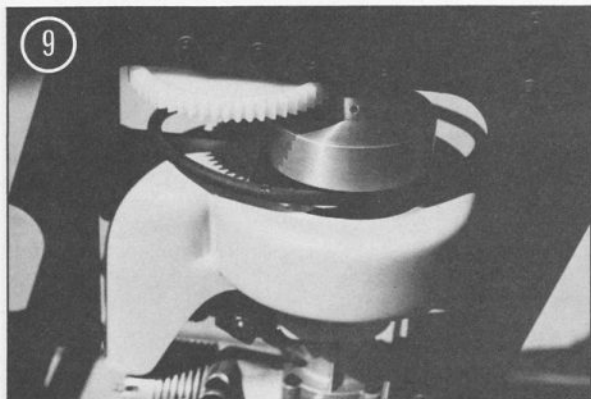
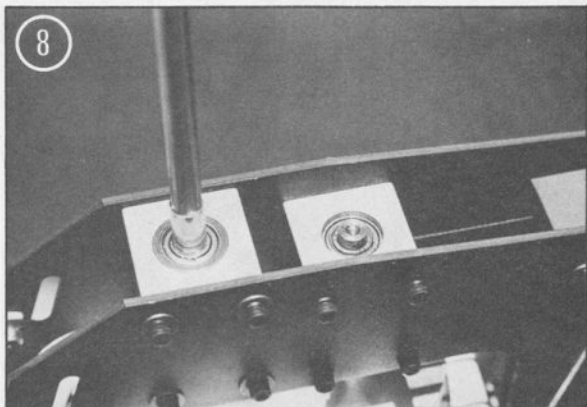
**The assembled drive unit with fan and clutch installed. Clutch shoes cannot break off and make full contact with lining.**

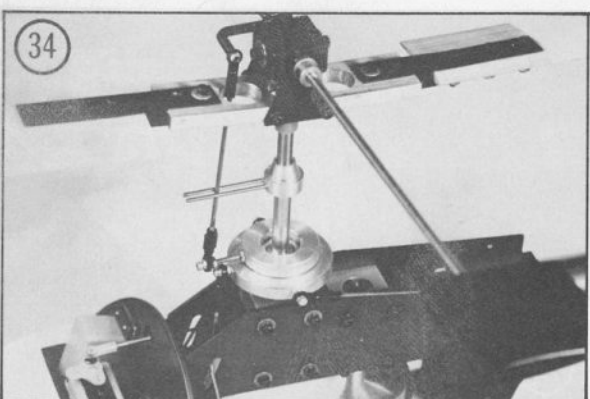
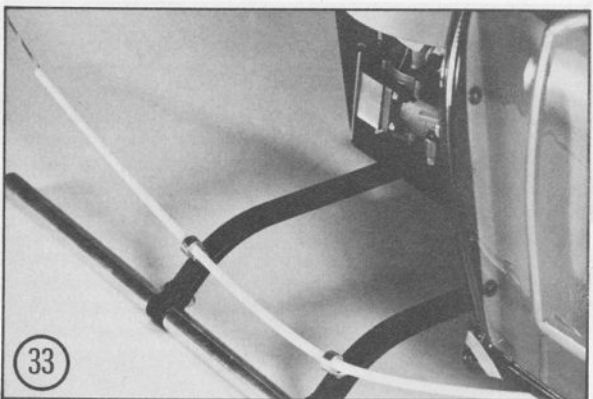
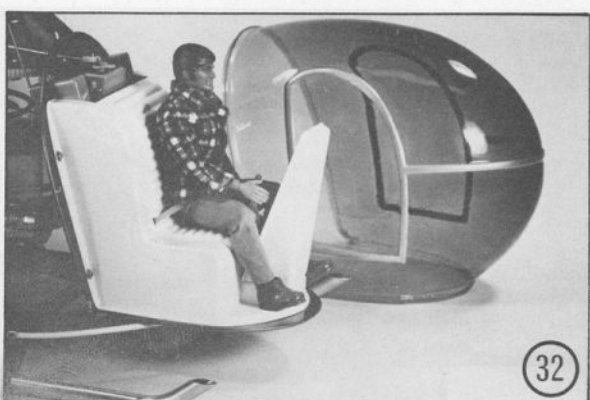
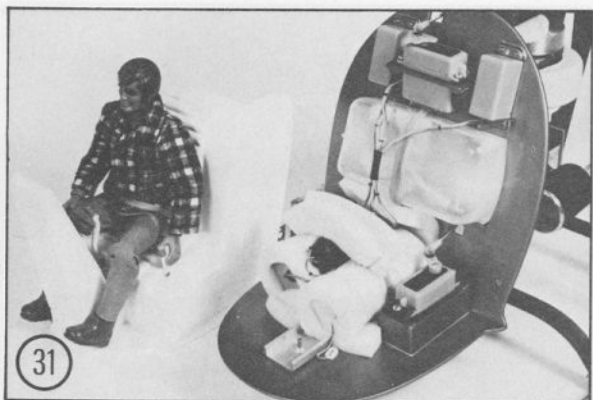
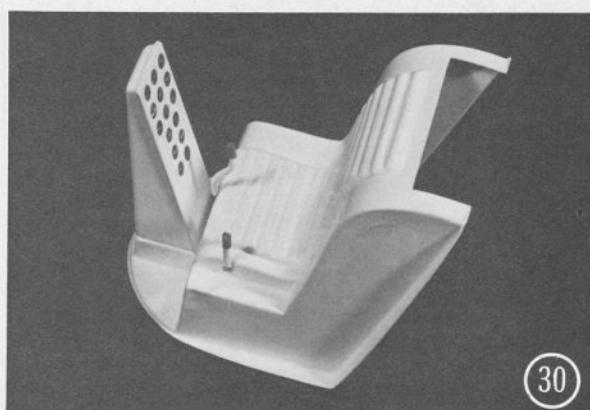
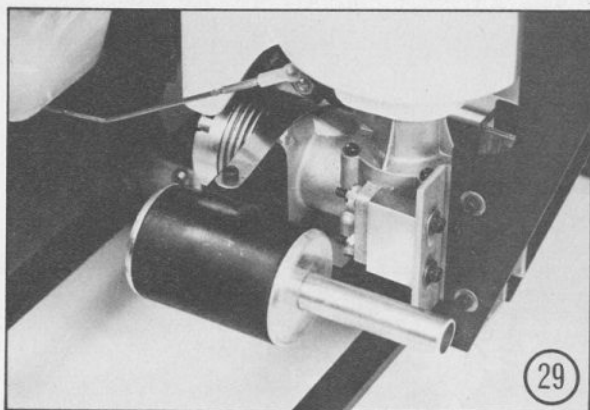




(1) K & B .40 mounted in place. Note adjustment range for various makes of engines. (2) Pre-assembled bell housing with pinion gear and sealed bearing blocks. (3) Engine and drive system mounted on side frames and aligned. (4) Rear view showing position of bearing blocks. (5) Pre-assembled tail boom with drive belt, front and rear blocks and tail rotor blade holders. (6) Tail boom mounted in place. Lift up rear of boom and pull back before tightening mounting bolts. (7) Front bearing blocks and large drive gear installed and aligned.

(8) View of front bearing block with main shaft and lower washplate lock in place. (9) View of left side of engine cooling shroud. (10) Right hand side of shroud. Note lip on each side that holds shroud in position on the frame. (11) Pre-assembled swashplate installed, followed by upper swashplate lock and follower. (12) Overall view of Rev-olution with major mechanical assembly completed. (13) Pre-assembled main rotor hub is attached to the see-saw with the triangular hub side supports. (14) Main rotor blades covered with material supplied. The inner 2" of the blade coated with Superpox resin and sanded. Blade holders are then attached.





(29) Special Semco muffler is provided in Rev-olution kit. (30) Console and instrument panel glued together and trimmed to fit. (31) Big Jim installed on seat with rubber band, and entire unit ready for installation over radio equipment. (32) Seat and console installed with four sheet metal screws. One piece, virtually unbreakable polycarbonate canopy, is trimmed to fit over plywood formers, then ribbed door outlines trimmed with silver DJ's Multi-Stripe. (33) Antenna installation uses 6-32 bolts, nylon cock washers, and Du-Bro wheel collars as Stand-Offs. Antenna passes through a length of Kavan tubing. (34) The main rotor head control rod is installed at this point. (35) The completed Rev-olution ready to fly.



... olution is the reserve power available. Using the standard K & B front rotor .40 engine, the Rev-olution will come off the ground at approximately 1/4 throttle rather than at 1/2 throttle or more which is common to most helicopters.

In the performance department, the Rev-olution seems to leave little to be desired. It is stable in the hover mode, yet has instantaneous response required for extremely precise maneuvering or full bore flight performance. It has

ample power for loops, straight up vertical 360 degree tail rotor ascents, stall turns and the like.

To sum it up, the Rev-olution from American R/C Helicopters, Inc., is an excellent machine that has been thoroughly engineered in all respects both from a construction and a performance standpoint. It is priced lower than any comparable machine and replacement parts are immediately available from American R/C Helicopters, Inc., or their service centers.

We could throw in all kinds of adjectives to describe this excellent machine, but perhaps one of the best testimonials is the recent Shreveport Area Radio Kontrol Helicopter Contest which was held on May 9th, 1976 in Bossier City, Louisiana. There, 14 year old Mark Moore of Shreveport, Louisiana, flew a Rev-olution to 3rd Place in the Novice category — and Mark only had his Rev-olution two weeks prior to the contest.

Need we say more? The photos taken of RCM's prototype will tell the rest of the story of the Rev-olution. □