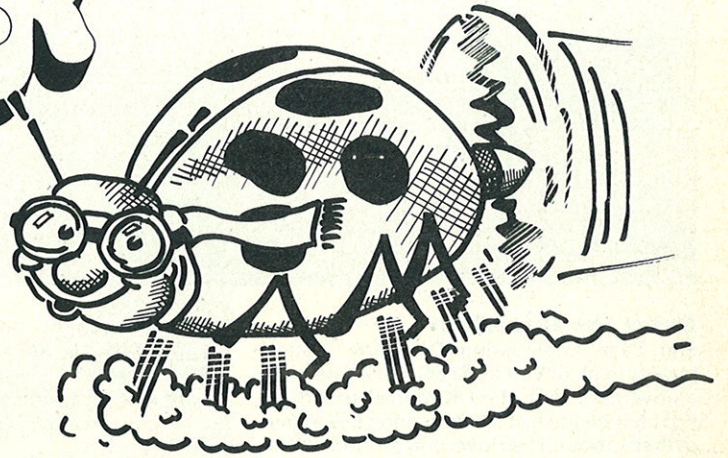


HOVER BUG

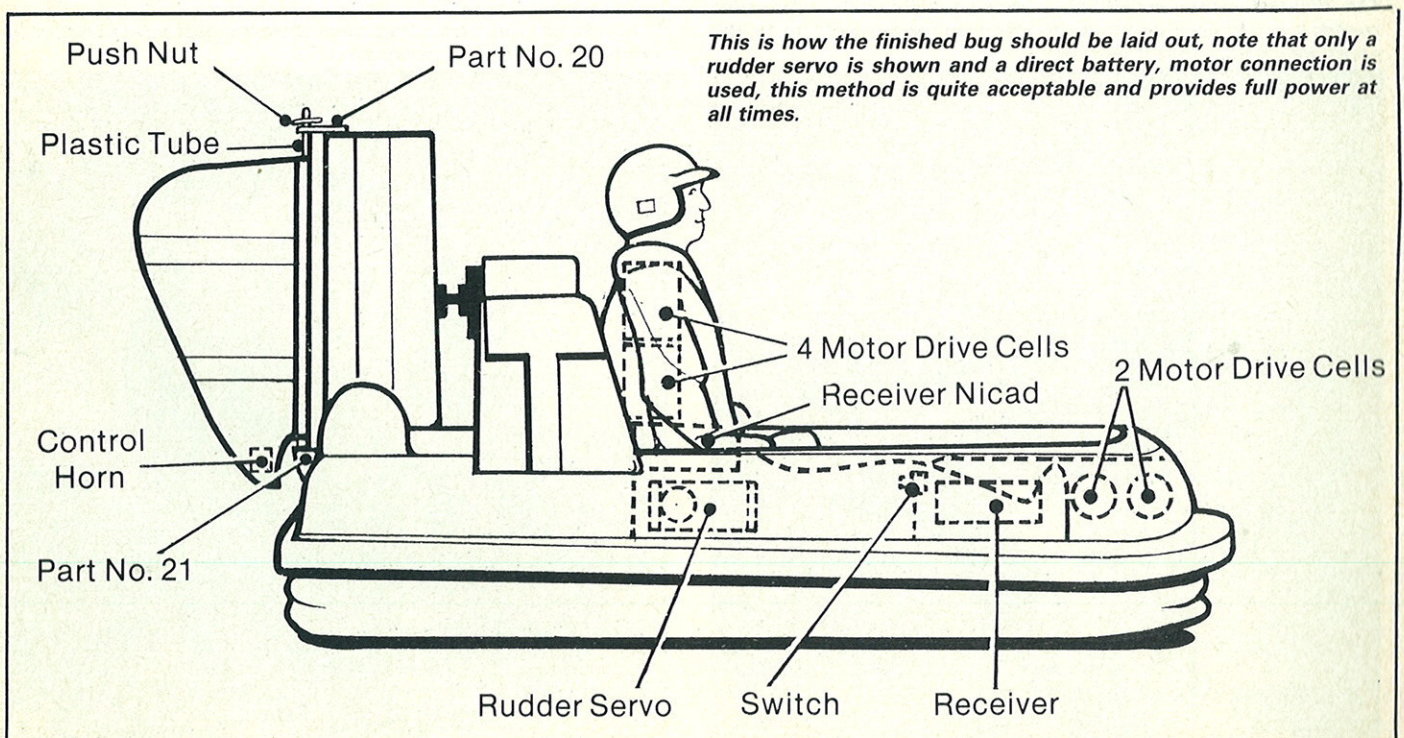


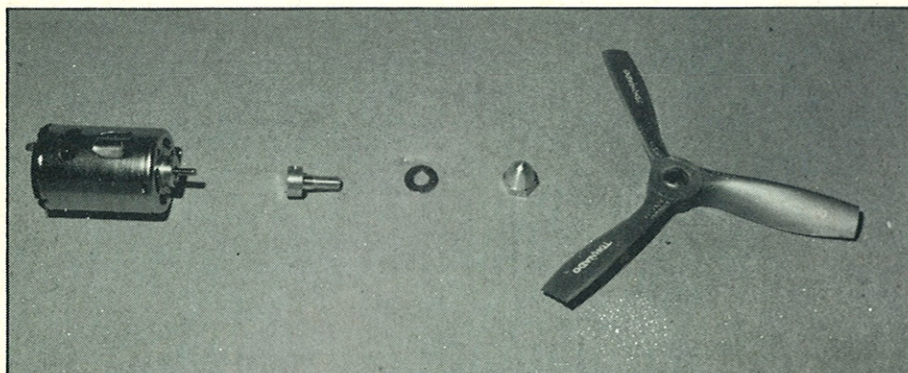
Radio Race Car looks at the alternative way of going places using 7.2 volts and a 540 motor.

Until a short while ago, floating on air was only possible if you owned a magic carpet, that is until a young engineer discovered the flymo and elevated the whole principle into a form of transport. Or should that be the other way round? Oh well, the young engineer's name was Christopher Cockerell and for his pioneering work in the field of hovercraft, he was awarded a knighthood, he is now known as Sir Christopher Cockerell.

History lesson over, from that original one man vehicle evolved a series of hovercraft, the most well known must surely be the huge monster type that ferry people between England and France.

Hovercraft development in the modelling world has been fairly sparse over the years, one or two have been allowed to dip their toes in the lukewarm waters of the retail shelves, but it seems they ventured no further.





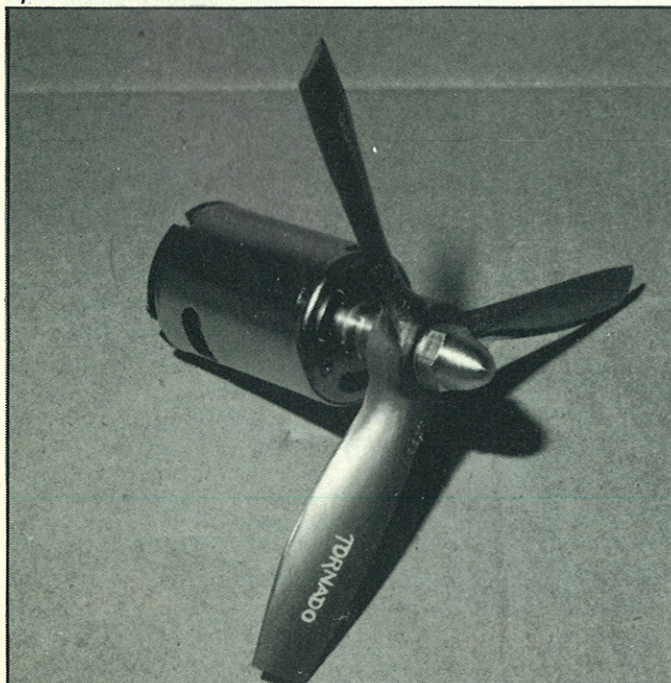
Enter the Hoverbug

Sun Lane Engineering Company, better known to all of you as SLEC, have released a hovercraft onto the UK market that may just change the fact that you don't see many of them about. The Hoverbug as the vehicle is named may just have cracked the market because of its means of energy and propulsion, namely a six cell battery pack and a 540 motor of one sort or another.

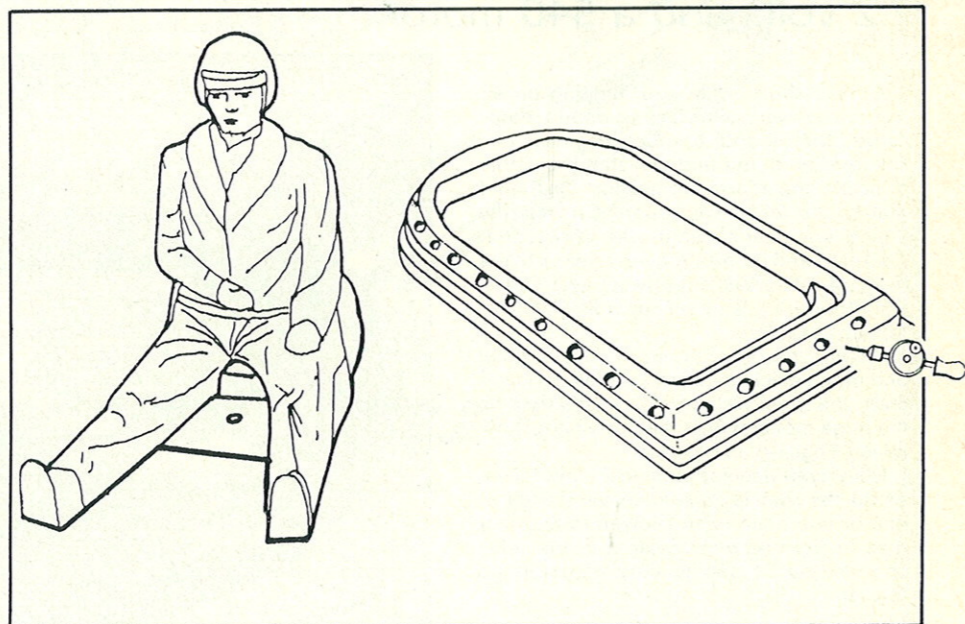
Take a Sharp Knife and Begin

The main ingredient of SLEC's Hoverbug is ABS plastic, this keeps the whole model light and fairly crashproof. All parts are left exactly as they come off the mould, so there is some cutting out to do, don't worry though it's all so straightforward that our example was all cut out in about an hour, and in the lounge whilst holding a conversation with my better half. The best method of removing the sprue (waste plastic) from the moulding that I found, was to lightly score around the piece to be removed and then flex the whole thing, gently prising the score line apart, the plastic then separates fairly cleanly, leaving only the smallest amount of tidying to do. This method saves a lot of bother, plastic has no grain and attempting to cut straight through only results in the blade acting as a wedge and the knife then follows the cut, instead of the other way around.

The finished motor assembly, watch your fingers — propeller speeds are very deceiving and this three blader can build up 12,000 r.p.m. Remember that it will bite.



Above, a propeller adaptor and locknut is supplied in the kit and holds everything safely in place using a grub screw in the same way as a pinion gear.

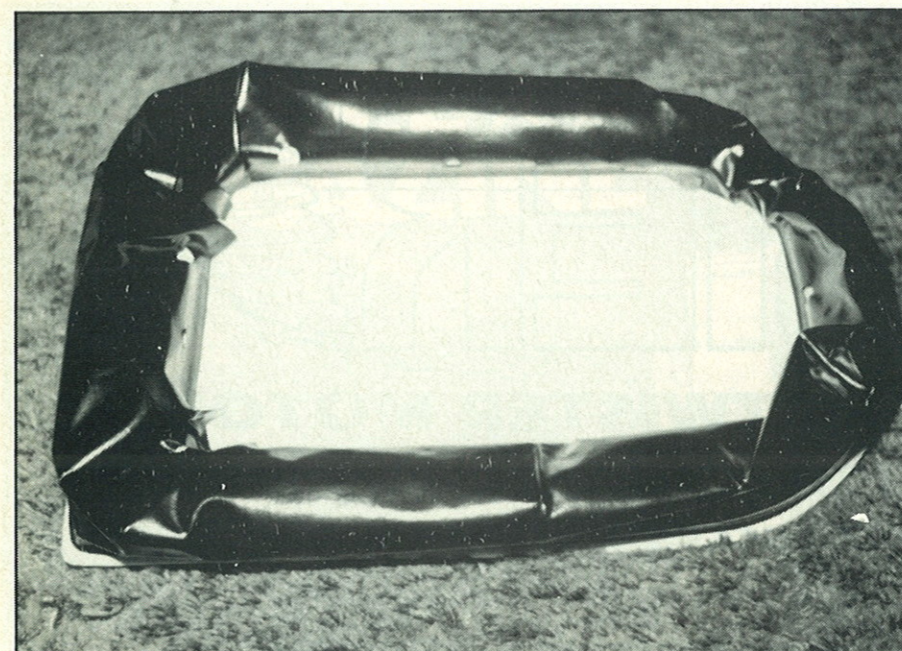


Ready to go, the Hover Bug does look the part when completed and is fun and fast to assemble.



Once all parts are released it is best to sand all edges smooth, two methods of sanding are required here, the first is freehand just following the contours of the moulding, some different diameter dowel is useful here so that awkward corners can be got at. The second method is used for making sure that any moulding that should have a flat edge, or flat edges, actually does. Take a sheet of glass and tape your abrasive material to it, making sure the glass is on a firm, flat base and sand the moulding against the whole thing, this method gives you a flat, secure base or join line every time.

The driver/pilot is essential as he holds two thirds of the batteries within his shell, use velcro to keep the two halves together. Be sure to drill all exit holes before the skirt is fitted, careful attention here will pay dividends in the long run.



The skirt, this is the device that keeps the Hover Bug aloft. The skirt inflates and excess air is also blown out, helping to maintain lift.

Stick A to B

After drilling holes in all the right places, correct positions are feintly marked on the components to be drilled, you can start sticking it all together. Britfix or Humbrol model cement seemed to work best, it's also not a bad idea to hold the parts together using masking tape while the glue sets, this makes sure that nothing slips and dries permanently twisted.

Once the main components are assembled excluding radio, skirt, batteries and motor the whole lot can be sprayed. Any spray paint obtained from your local motor car accessory shop can be used. Apply the paint in thin mist coats, even if it takes ten coats, it's no real hardship as the paint is dry in minutes and you'll obtain a finish like glass.

Once your glass-like finish is obtained fit the skirt, take time here and ensure all holes are properly aligned. Also fit the bumper strip, this is a clever idea as with all bumpers after a while they get tatty or even damaged, with the Hover Bug you just peel the old one off and replace it with a new strip.

Radio, Batteries, Motor and Propeller

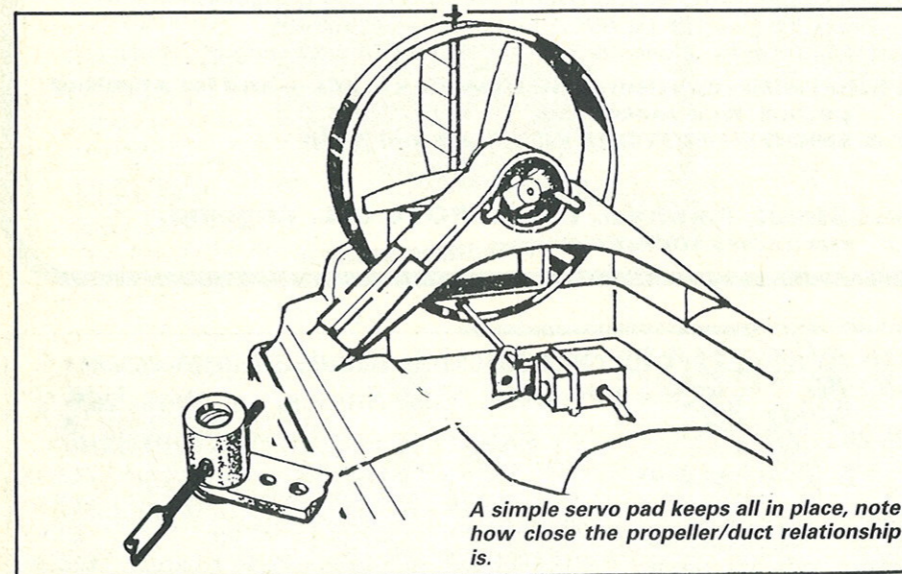
Both servos are installed using nothing more than servo tape, these are held firmly against the radio bay floor. Do keep in mind when adding all the bits that make the Hover Bug go, that aircraft rules apply and the whole thing must balance at the point described in the instructions, if it doesn't balance then it won't, please note the word was not maybe, perhaps or possibly, but won't work at all.

Installing the batteries again is a simple task, the pack is split into two and four, again hold everything in place using servo tape, remember the balance point will alter if things start to shift when the Hover Bug is on the move.

Motor installation is easy as the photographs show. A standard 540 will make the Bug work but the hotter the motor, the better the performance. Another point worth bearing in mind whilst performance is being mentioned is this, the more blades on the propeller, the better the lift and the thrust, four blades work best and remember to balance the prop before use or you may find your Bug may just shake herself apart.

Once all this is done and the radio and control surfaces have been checked and are found to be working in the right direction, that also applies to the motor, nothing looks sillier than a Hover Bug that's sucking not blowing. You can believe me I know, just don't ask how. Also bear in mind that the rudder also works like an aircraft i.e. viewed from the top when turning left the rudder moves left and right for right hand turns. How does she go? Like walking on air.

Available from your model shop via J. Perkins Distribution or Flair Products. Also available direct from Sun Lane Engineering Co.



A simple servo pad keeps all in place, note how close the propeller/duct relationship is.



The Bug is essentially built in two halves and held together using a single fixing point.