

Top Banana

A 40" span 3 channel R/C trainer complete with .049 engine that has everything going for it



You can't get more complete than this! All that is missing from the box is the glue and R/C gear. Oh Yes, even the Banana engine is included, and not only that - it has a start-pack and all the accessories included to complete this 'petite' trainer.

The presentation of the model is without a doubt worthy of a mention as the glossy printed box is well detailed showing exactly what you get for your money. Open it up and it's packed with goodies. I felt like a kid in a toy shop when venturing through the multiple numbered packs and was impressed by the quality

of workmanship and presentation - there was even a roll of Solarfilm for covering the model!

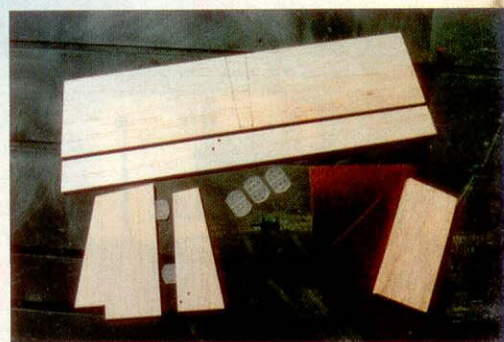
Made entirely from balsa wood, the kit has all the parts pre-cut and individually packaged and numbered to avoid confusion. This kit is really designed for the beginner, and all the assistance is included in the box to make the construction an enjoyable experience, and the flying - well we will no doubt talk about that later. There are two multi-lingual pictorial instruction books; one for building with 64 pages and the other has 12 pages and explains the flying techniques. A plywood building board is included with a sheet of transparent film to cover it. Two full-size working plans are included, and clearly written; nothing is left to chance!

I used Zap CA superglue and Aliphatic PVA for the construction.

Pack 1: Fin & Stabiliser

With each stage numbered, the accompanying packs make assembly quite simple. Pack 1 contains the stabiliser and elevator both cut from good quality 1/8" balsa sheet and have the nylon hinge slots pre-cut. The instructions suggest placing the

hinges into the slots and making five holes for glue even though there are only four in the hinges!? A 'board' pin is supplied for this job (I told you the kit had everything!). I did also notice that the two edges would just butt together and there was no LE shaping allowing for the rudder or elevator to move, Hmmm! The plan indicates a 1/16" gap between the surfaces but this can induce sloppiness in the controls resulting in a weakening of the wood around the hinges. However, when assembled I was proved wrong, fortunately. There is a ply sanding block and two pieces of 180 grit paper included for finishing the edges. Be careful as this will remove balsa very quickly and you could finish up with just a pile of dust!



The Fin & Stabiliser pack gives an indication of the attention to detail and completeness of this kit - sandpaper and sanding block included.

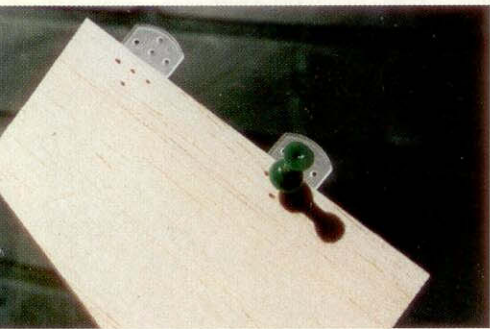
Packs 2 & 3: Fuselage Doublers & Formers

The pack contains two 0.8 mm ply front doublers, two 1/16" balsa lower fuselage doublers and two 1/8" pine wing-seat doublers. The instructions suggest making several holes in the balsa doubler surfaces, lay the pack pieces onto the fuselage sides and again add glue through the holes. This system seems to work well. Make sure of the correct alignment of these parts for the ply formers 1, 2, & 3 before adding glue. A moulded plastic alignment jig is supplied - of course!

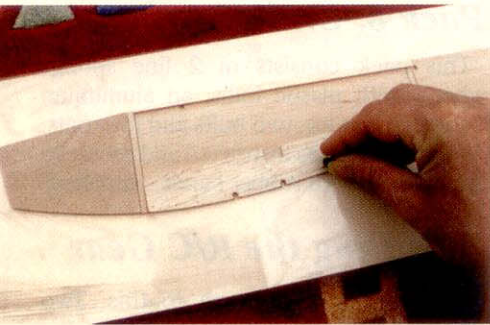


Opening the box reveals the most complete kit this writer has come across - everything except the radio is there!

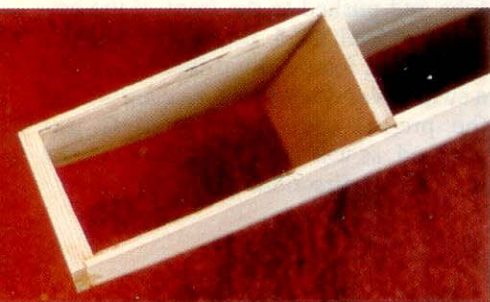
na!



The suggested method of installing the rudder hinges with the supplied pin.



Fixing the doubler to the fuselage side is by running the cyano through the pin holes - different but effective!

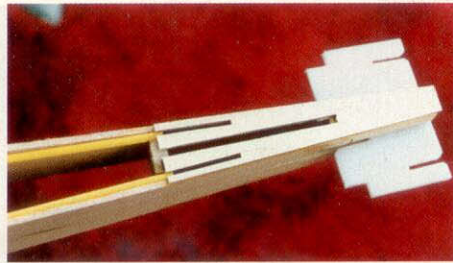


When gluing the formers in place do ensure the fuselage is square and straight.

Pack 4: Fuselage Panels & Tailplane Formers

Here we have the tailplane supports, servo tray, fuselage ply floor, top and bottom, dowels for wings and u/c, front top and hatch.

All these parts are glued in place in order according to the instructions. Make sure that there are no twists in the fuselage as this is easy to do at this stage - as I found out! Check and double check before gluing, and clamp in place if necessary.



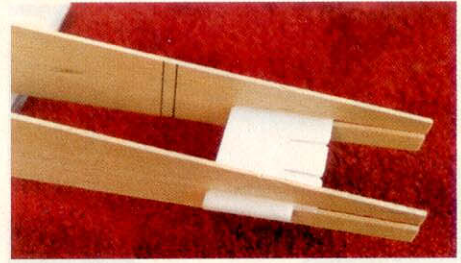
The jig also brings the two fuselage sides into the correct position for the decking etc.

The tailplane and fin are then added and you should now have a straight fuselage. According to the instruction this will receive a couple of coats of dope later. Place to one side whilst building the wings next...

Pack 5: Wing Pack

This is where you are supposed to cut the plan and secure it to the building board. I hate cutting plans, so I simply folded it to fit for the right hand wing panel construction first.

Lay a spar, LE and TE pieces on the board and pin them in position over the plan and protective plastic sheet. Make sure they are aligned correctly. Slot into position the ribs, 8 mm tip rib and 40 mm centre rib, and glue with cyano. Attach the webbing between alternate ribs, and again cyano in place. Now attach the top spar and glue in position. Fit two of the corner braces to the tip rib and then glue in position the shaped outer tip block. Remove from the plan and sand lightly to remove any edges - not that there are any as the fit is so good and flush, all the parts fitted perfectly. It took me 15 minutes to finish the first wing panel. The operation is repeated for the left panel, and this took about the same. Both wing panels ready in half an hour. The centre joint is strengthened with a short ply dihedral brace and this is glued into the slots in the centre ribs at the same time glue the two halves together and leave to dry.



This plastic 'jig' helps to get the fuselage straight.

When dry, add some PVA glue to stiffen the rib joints and spar areas. Finally cover the wing with the Solarfilm provided, following the instructions carefully.

TOP TIP: Make sure you don't waste any as there is very little to play with. Measure carefully ALL panels to size before cutting the film, and carefully apply to the wing using the manufacturer's instructions as a good guide. Remember there is none left when finished, so do be careful if this is your first attempt. Seek advice if necessary.

As the R/C gear installation would be the final part, it was at this stage that I decided to dope the fuselage. I used non-shrinking dope, and the first coat was 100%. When dry I sanded it down and then gave it two more coats of 50% dope/thinners and allowed it to dry between coats. This left me with a smooth finish.

Pack 6: Pushrods

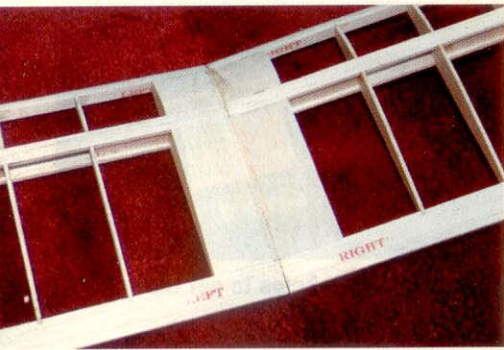
There are two pre-bent 16 swg piano wire pushrods each with a Z bend at one end which simply slots into the plastic horn which in turn is passed down the installed Bowden tube and screwed to the rudder and elevator. The front end will be secured to an adjustable link fixed to the servo output arm after the two standard-size servos have been installed at this stage.

It is then suggested that the rest of the R/C be installed now, but I will fit this later.

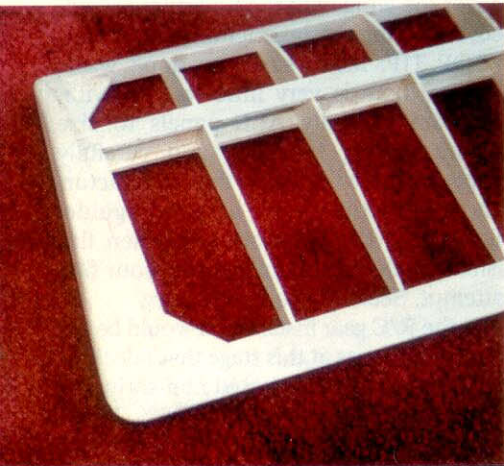


A fly by for the camera - what a delight!

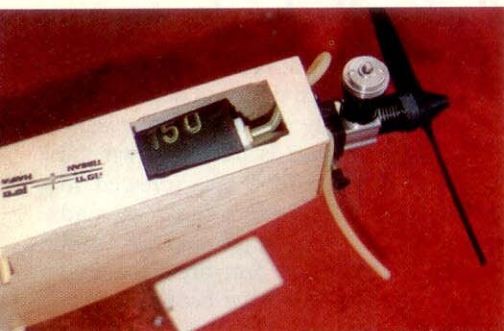
'designed
for the
beginner'



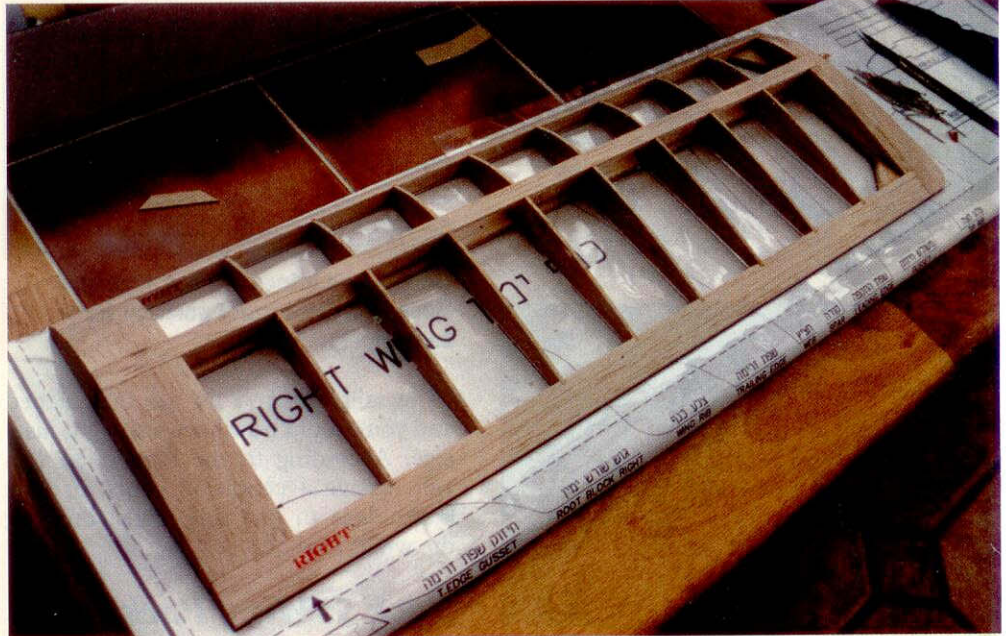
I loved the way they had marked each wing panel component, it would be hard to make a mistake.



Every detail has been thought through - the tip blocks, the spar webbing and the gussets - nice!



The supplied .049, mounted on the off set firewall, is typical of the Cox variety of engine in that it needs to be fairly 'wet' to start. The sound brought back memories!



The building board, the protective clear plastic are also part of the kit.

Engine Installation

As previously mentioned, this kit comes with everything. The engine is a Cox .049 glow-type with a recoil start and a 6" x 3" prop is included. A Cox spanner for servicing the engine is also included, but we won't need that yet! The engine is simply attached to the front bulkhead by three screws into the pre-drilled holes.

Pack 7: Fuel Tank

This is a small round nylon bottle and is complete, all you have to do is assemble the limited components as described in the normal manner, and as in the instructions. This installation is made very clear, and should cause no problems. A piece of the protective foam is first installed into the tank bay and the tank simply slides into it and then positioned in the bay. The fuel lines pass through the two pre-drilled firewall holes and are cut to 8 cm and attached to the engine (feeder pipe) with the other pipe (filler tube) cut to 4 cm and remaining loose for the tank breather/filler pipe.

Pack 8: Undercarriage

This pack consists of 2 fine sponge wheels with plastic hubs, an aluminium undercarriage leg, two bolts and four nuts. Assemble these as instructed and secure to the fuselage with rubber bands - supplied.

Installing the R/C Gear

There really isn't much to this. Two standard size servos were screwed to the servo tray in the pre-cut-outs, and the small 600 mAh 4.8v Ni-MH Rx battery was squeezed into more protective foam tube and pushed to the front of the bay. The lightweight 5 6-channel Rx was installed in foam behind the battery and a switch was fitted to the fuselage side in the pre-cut space. The C of G was checked, as was the R/C gear for control throws and direction.

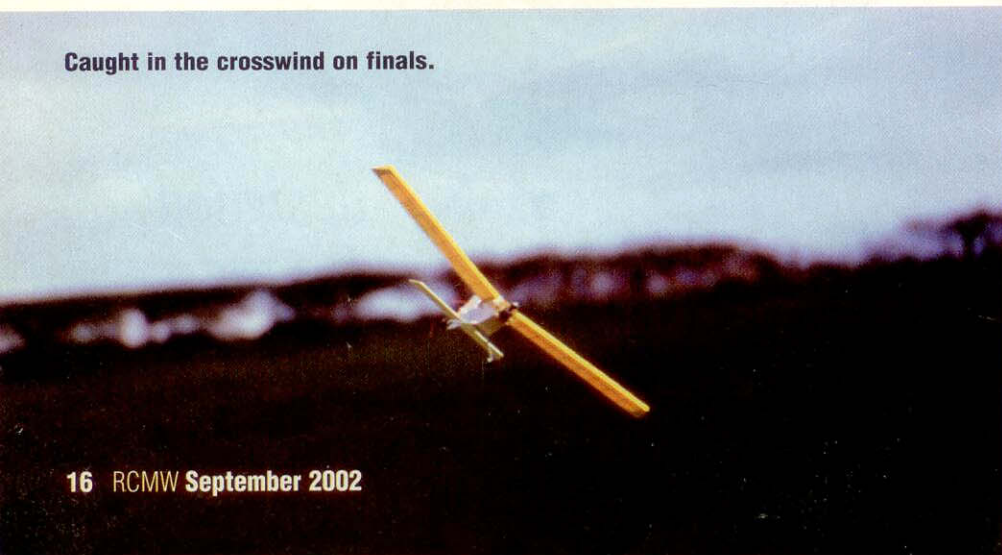
Flying

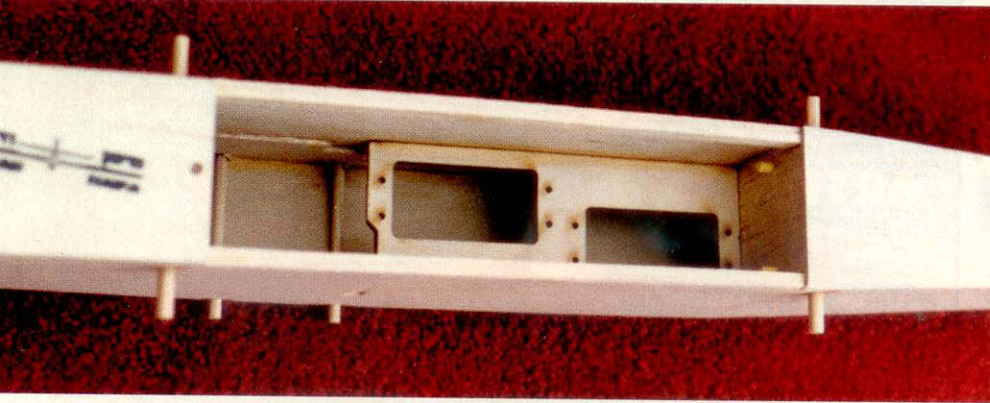
The sticky-backed foam wing-seat tape is included which is stuck in position, and the Banana 2000 is finally balanced for the correct C of G, and now we are ready to fly.

Did I ever mention that was a very complete kit? Well just in case you wondered, it even comes with a plastic 2-cell battery box for the D size dry cells for attaching to the glow plug for starting - now how complete is that?

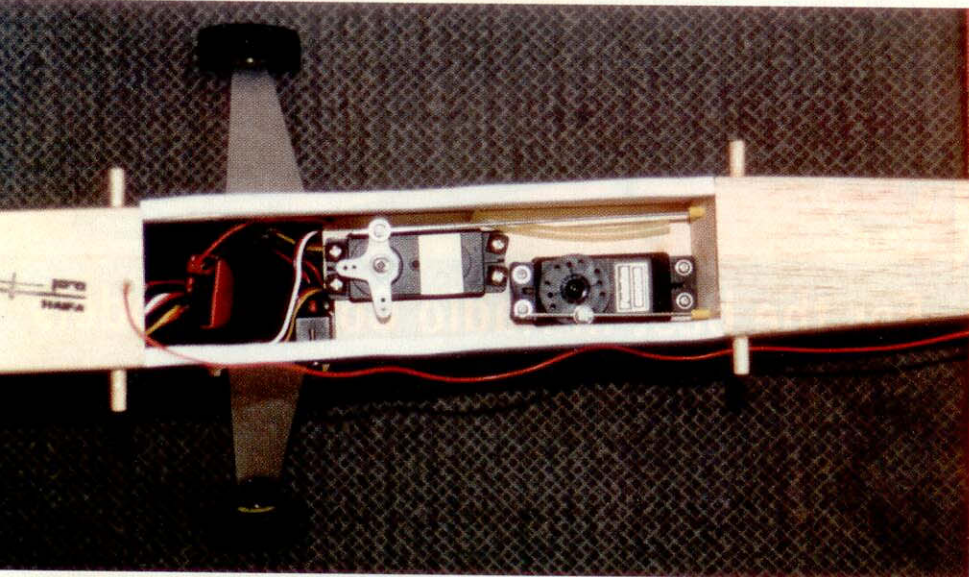
Initially the fuel tank was filled with the recommended 10% Nitro fuel - I use synthetic normally as it is cleaner. There's no throttle, so the needle valve was adjusted to 2 1/2 turns open, and tiny squirt into the cylinder to prime and the glow plug attached - hear the fuel sizzle!

Caught in the crosswind on finals.





The fuselage ready for the gear.



The radio installation is simple with the push rods aligned nicely with the servo outputs.

As this little Cox .049 has a recoil spring for starting, the prop was rotated clockwise one turn and released. After a few attempts the engine made a loud banging noise and burst into life. The needle was set for a reasonable 2-stroke running and

With the .049 singing, a good push and the Banana was away and the memories of yester year flooded back but without the pain, as this model is eminently controllable.

the R/C was switched on and checked.

A hand launch was elected as the terrain is a little rough for the small wheels.

RCMW

Tony van Geffen



Take care when covering the wings with the supplied film as there isn't a lot of spare. Job done she looks good and ready for the off.



Diminutive the .049 may be, but she can still bite hence the glove.

*'the construction
an enjoyable
experience'*

SPECIFICATIONS

INFORMATION

Name: Banana 2000

Manufacturer: Tissan Haifa, Israel

MODEL INFORMATION

Model type: Traditional 3-channel high-wing trainer

Engine/Motor: .049 cu. in.

Test Engine: Tissan Haifa (Cox) .049 (0.8cc)

Construction: All wood built-up

SPECIFICATIONS

Wing Span: 40" (100cm)

Weight: 100 g

DISLIKES

Difficult to find anything incompatible or disagreeable.

LIKES

A very complete kit.
Everything needed (apart from R/C gear) included
Construction and flying so easy.
A well illustrated and precise instruction book.
Very accurately cut parts.
Flying characteristics for small 2 function model.