

TISSAN HAIFA BANANA 2000

HE'S BUILT A 'PLANE OR TWO IN HIS TIME, BUT PETER MILLER JUST CAN'T HELP GETTING EXCITED OVER THE TISSAN TWO-CHANNEL TREAT

Made in Israel, the Banana makes an ideal two-channel starter model.

Once or twice in a reviewer's lifetime, he may be lucky enough to get a perfect kit - this is one of those times. Made to perfection in Israel, the Haifa Banana deserves its place on the shortlist for 'Model of the Year'; indeed, if there is any justice, it should win hands down.

Actually, I reckon I could review the product in a paragraph, so here goes: This is the most complete model kit that you've ever seen, everything fits to perfection, there are no problems to overcome, and it flies exactly the way a trainer should.

Alternatively, if I was to describe the perfection in detail, I could fill some pages of the magazine. I'll try and strike a happy medium.

PEELING THE LAYERS

Okay, here we go with the inventory. We have all the usual things: rolled plans, 68 page instruction book, a separate manual for flying tips, fuselage sides, a bunch of wing spars, eight numbered packets with a set of parts for each construction stage, and a big sheet of stickers. Well, that takes care of what we might expect from a good quality kit. Also, there's an engine - the Tissan Haifa Banana .049 which is, in fact, a Cox by another name. This comes with the correct 6 x 3 Master Airscrew, a squeeze bottle, a battery box with high quality glow clip, a brush for cleaning the engine down after a crash, and a nicely printed cloth to wipe the model down. (You think that's amazing?)

Three hours of easy work, and the fuselage is complete!



You ain't seen nothing yet!

Now get this. Tissan supply two pieces of plastic, especially cut to fit over and protect the building board. "How do they know what size the board will be?" I hear you say. Well, if you haven't already guessed it, the kit contains a beautiful piece of 3/8" liteply, 29" long by 7 1/4" wide, to build the model on. Of course, you get the pins to stick in the board, too. Oh, and plastic gloves so that the CA doesn't glue your fingers together. And a sanding block with two pieces of sandpaper. They even give you a plastic-headed pin for making holes to wick CA into the hinges, and for gluing the doublers down. Is that all now?

Nope. Mind you, it goes without saying that

you get Solarfilm to cover the wing, wing seating tape, some foam rubber tube to protect the radio, and rubber bands. A word about the bands - you might expect the exact number required to hold the wing and undercarriage on, but this kit gives you loads of spares. They know that trainers thump the ground, and that one loses bands.

You do have to buy glue and dope, plus your own radio - a standard two-channel buggy set will do just fine.

Once you start building, you'll soon appreciate the quality and attention to detail that has been lavished on this model.

TASTE OF PARADISE

Not too many tools are needed for this kit. Two small Phillips screwdrivers are essential, and the instructions suggest a light hammer to drive the pins in - plus a pair of pliers to get them back out again. That will do it!

A clear drawing accompanies each operation in the instruction book, as do brief notes in four languages: English, Spanish, Hebrew and Arabic. These are placed in separate corners of each picture; easy to understand, and a far cry from the more common, poorly typed A4 sheets, and those multi-lingual instructions that leave you taking ages to find the right blurb.

The first operation is to hinge the control surfaces, which are pre-slotted and drilled for the horns. However, you do have to make pin holes for the CA to wick into, using that plastic-headed pin I mentioned earlier. Moving to the fuselage, one can now fit the formers, which might perhaps be a good time to have a look at them. Taking Former 1 as an example, this has been laminated from two layers of 1/8" ply, and has rebates to take the fuselage sides; it's chamfered to give the required side thrust, and also at the bottom, to match the fuselage shape. All holes are pre-drilled - three for the engine mounting, and two for the fuel tubes. The tube holes are chamfered on the inside, to protect the silicone tubing. This one former is more complex to manufacture than all the formers put together in most kits!

Also in the kit you'll find an assembly jig, which is basically a piece of plastic with various slots cut in it. This has a number of uses, the first one being when it acts as a square for setting the formers upright. Next it is used at the rear end, in conjunction with the building board, for fitting the rear formers, and ensuring that your Banana does not have a banana shaped fuselage... The jig's final task is to aid the positioning of some complex little blocks and slotted plywood parts, that locate / support the fin and tail skid. Of course, everything fits exactly.

Towards the front of the fuselage, on the top side, an access hole has been cut for the very neat 1oz. tank (provided). This has a hatch-style cover, in three layers: the outer part, the centre - which is the same as the hole in the fuselage - and the inner section, which slides under the top for a snug fit. As you can imagine, putting this together would call for some care, and a mistake would be easy

using CA glue. Don't worry - the hatch is ready made, and even the screw holes are drilled.

Three hours of leisurely work saw a completed fuselage, with a tail ready for finishing. I had not touched a knife; everything fitted, and no problems were found at all.

WE'LL BE RIGHT BACK...

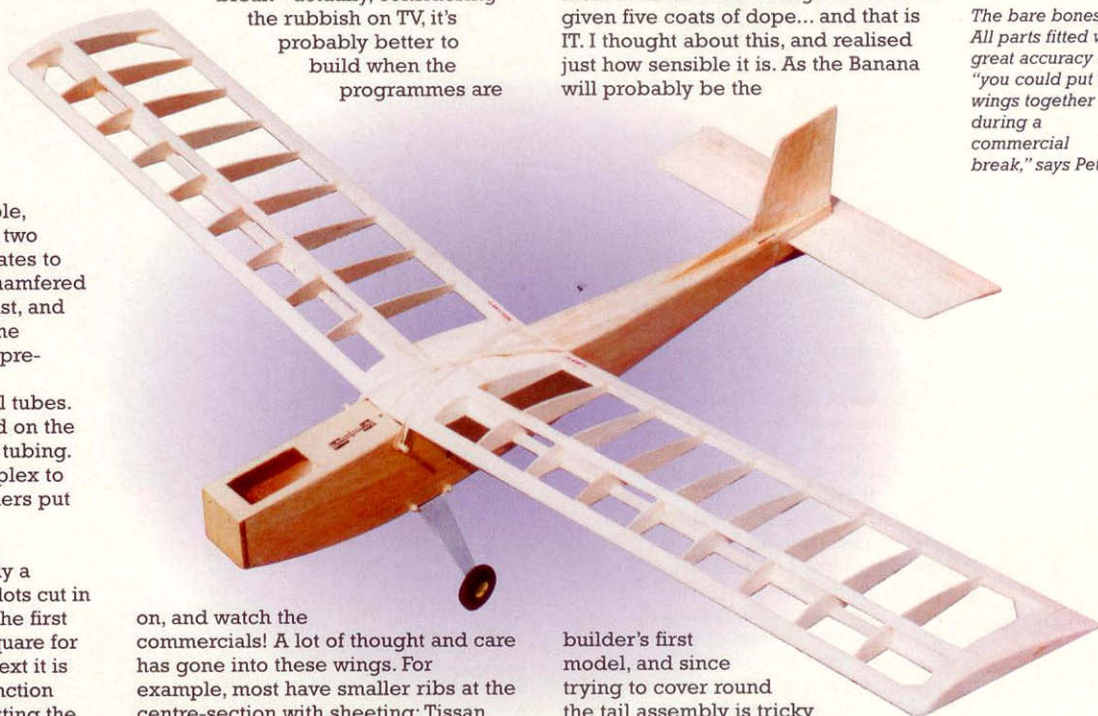
Now to the wings, which I can go into raptures over. You could put 'em together during a commercial break - actually, considering the rubbish on TV, it's probably better to build when the programmes are

If you assembled the wing dry, you could pick it off the board in one piece. Every spar and rib fits its slot to perfection; not one is sloppy, and not one has to be forced. When both wings are joined together, the root rib angle is a perfect fit. I built my wing from scratch, and lifted it off the board in six minutes.

DOPE FINISH

I have to say, the instructions for covering and finishing this model are most unusual. The fuselage and tail are given five coats of dope... and that is IT. I thought about this, and realised just how sensible it is. As the Banana will probably be the

The bare bones. All parts fitted with great accuracy - "you could put the wings together during a commercial break," says Peter.



on, and watch the commercials! A lot of thought and care has gone into these wings. For example, most have smaller ribs at the centre-section with sheeting; Tissan Haifa, however, make things easier by providing a 1 1/2" wide rib with spar slots cut in, and the correct angle for dihedral on the root end. There is also a slot for the dihedral brace.

Next bit to consider is the spars. Due to the dihedral, the top one will be a fraction shorter than the bottom spar - nothing that a bit of sandpaper wouldn't finish off. However, both are pre-cut to the exact length required, and colour coded for top and bottom. So, you don't need sandpaper.

Trailing edges can be crushed by the wing fixing bands, so generally we use pieces of plywood to strengthen them. However, Tissan Haifa have cunningly cut a recess in the thin training edge so that when you insert the ply, it's invisible. Nice.

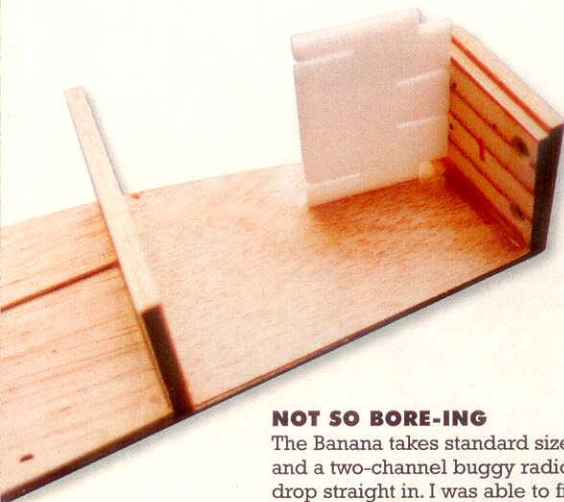
builder's first model, and since trying to cover round the tail assembly is tricky for anyone, it alleviates the need for potentially disastrous ironing. A few coats of dope give a good enough finish, and anyone can do that.

I applied four coats of sanding sealer, one of fuel proofer (which the instructions don't mention), and a layer of Solartrim at the front. The wings are covered with Solarfilm, as provided in the kit - and here I have my one tiny criticism. Even cutting it very carefully, I didn't have enough to give me the necessary overlaps on my last piece. A few inches more would allow for the less experienced modeller to make a mistake, whilst providing a few scraps for patching. As anyone can burn through Solarfilm, that patching is very likely to be needed.

BOTTOM LEFT: What's this? knife-edge? Not a hope... this one's as stable as they come.

BOTTOM RIGHT: With so many trainers on the market, how does a beginner choose? Well, if its 'comprehensive' you're after, this one can't be beaten. Even the engine's thrown in for £89!





That front former saves a lot of work and really is a super component

Sadly, not all of the kits by Tissan Haifa are available in this country, but hopefully this one will be popular enough to change all that.



Tissan Haifa supply a handy jig which has several uses, including squaring up the rear end (as shown here).

NOT SO BORE-ING

The Banana takes standard size gear, and a two-channel buggy radio will drop straight in. I was able to fit my Fleet 7-channel Rx, and that's massive by modern standards! Screw holes for the servos are pre-drilled, as are those for switch mounting, and the control horns - they've even opened one up for taking the aerial out of the fuselage. With the gear installed, its time to fit your engine, which is screwed down. I thought there was a screw missing in my kit, because there were only three in the packet - but the way this one connects to its backplate means you can only use three.

Very light in weight, the wheels hang from an aluminium undercarriage, which has bolts with exactly the right amount of plain shank. No hassle, no binding wheels, no rapid wear. I am no longer surprised...

I have a tip for you regarding the fuel tank: If you

happen to have a nasty thump, it will move forward, with the result that both the filler and supply tubes will be driven into F-1; this punctures the fuel lines. After discovering the latter, I glued a small block of wood to the back of F-1, which instantly

prevents the problem.

The last job is to stick wing seating tape to the fuselage. Unlike most that I have used, this one does not seem to come loose, which makes a



Wonder why it's called 'Banana'?!

nice change! I've given up using the tape we get in this country, because it comes off so easily.

IT'S A FLYING BANANA!

For once the weather co-operated. I had been waiting for three weeks to test a new scale model but, within a day of finishing the Banana, we had a calm, dry Sunday, and it was time to go.

I was a bit dubious about ordinary 'D' cells lighting the glow head for any length of time, but decided to try them anyway. I need not have worried - they worked continuously while I found the settings, ran the engine in, and made several flights. My first flight? Well, the model was hand-launched, and it went off into a steady climb. A couple of clicks of rudder trim, plus another two for elevator, and it was flying straight, level, very smooth, and in a responsive fashion, without any signs of being twitchy.

Take your fingers off the sticks, and she will sort herself out from any strange position that the novice might get her into. In my opinion, that is essential for a basic trainer. The engine provides enough power for a steady climb; she's not too fast, and doesn't vanish into the distance too quickly. A novice would need someone to help them out for a few flights, but should soon be able to handle this model safely by themselves. Fellow club member Mike Deal, who flew for the camera, enjoyed the Banana immensely, though he did wonder why it would not climb with lots of 'up' elevator... but then, he's used to the screaming .40 mounted in his Spitfire!

We also tested the strength of the model. I could give all sorts of valid reasons and excuses but, to cut a long story short, the Banana was eventually launched over concrete with her radio switched off. She impacted vertically, ten feet in front of our launcher, causing the battery to move F-2 forward - the top skin started to lift in one place, and the elevator cracked. That was when we made that discovery about the fuel pipes.

A few minutes work at home, and the Banana was completely repaired. Now that's a tough model!

HUGE DISAPPOINTMENT

Here, we have the most perfect and complete kit that I've ever seen. It goes together without any problems, and you only need the bare minimum of tools. Get some radio, glue and fuel to finish the job, and you'll have a truly excellent basic trainer. £89 may seem expensive, but remember that you don't need any extras; even the engine is there, and that's worth the best part of £30. I've seen numerous kits that contain foam lumps, veneer, a couple of plastic mouldings, a few bits of wood, and two scrappy, almost useless sheets of paper instructions, which cost just as much as this.

The tragedy comes when our happy novice, having built the Banana, decides that the hobby is for him. Sadly, he'll probably go out and buy his second kit only to discover that 'pre-cut' doesn't always mean that the parts will fit, and 'complete' won't necessarily mean that the hardware is included.

DATAFILE

Name:	Banana 2000
Model type:	Basic trainer
Manufacturer:	Tissan Haifa
Available from:	Ripmax dealers. Tel. 0208 282 7500
Price:	£89.00
Wing span:	39"
Wing area:	243 sq. in.
All-up weight:	20 1/4 oz.
Rec'd no. of channels:	Two - rudder / elevator
Engine:	Tissan Haifa Banana .049 (made by Cox)