

## **NO NAME** *as yet !*

Introduction and explanation :-

We have a fantastic group spread over 4 destinations ( and mounting ) all with differing types of models being flown plus an excellent website run by John Julian and Ian Jemmeson who keep us informed of anything untoward via email.

BUT.....we also have “show and tell” at most smoko’s and the details are promptly forgotten by the time the bikkies have been consumed and we get back to our models

SO this is what this scribbling is all about.....putting “ stuff” down on paper so that it can be easily downloaded by your own printer and kept for future reference. Also and most importantly thumbing through old, and long since defunct, mags and finding stuff that may ....or maynot..... be of interest as page fillers.

The most popular types of airborne stuff seem to fall into the following categories :-

**RC** ready to fly

**RC** proper or homebuilt

**Differential Thrust** ..... ready to fly

**Differential Thrust** ..... homebuilt. Design, building, motors, painting , trimming

**Rubber** indoor and outdoor, sadly a dying art but very skilful and invaluable for other disciplines.

**Plans**.....look what I found in old mags plus members creations

**Techno-babble** ...absolutely no idea about this and am happy to let others do a page or three about radios, esc’s servos etc etc. I am JR mode 1 flyer and open TX leaves me cold

**Where did you buy that**.....pics and things from leads to motors to planes

**Homemade tools**.....simple but very useable items that can be made at home.

**Glues** and other things

Most of us who deem ourselves hobbyists are highly skilled adepts at scroungeing, bin diving, picking up left over or unwanted “things” and generally using stuff that is free. We also become adepts at converting free stuff to be useful for our own needs and also adapting things to do what we want. Let us all know ifffffffffff you have done something.

BUT occasionally we have to buy stuff, and where do we get it.....that’s where the smoko sessions come in.....you find it and tell me and I can relate it to all. Great if an internet reference can be added.....there is a name for that linking stuff which no doubt I will learn someday.

With luck we can persuade a member at each venue to collect information and I can then collate what’s going on and what’s available and most importantly where.....”simples”.

### ***Its your newsletter !***

Now I freely admit to hating those beautifully crafted and almost unbreakable planes but realise that they do fly well and can actually be flown slowly-ish inside. But take away the gyro stabilisation bit and see how well they perform. Not my sort of flying but hey, what the hell, I admit to being in a minority.

JJ....food for thought for the next Birdy..... Fly them WITHOUT the gyro bit in action and see who fairs best !.

The internet has changed our hobby with very few magazines remaining and RC GROUPS taking over. RC Groups.....some very good honest appraisals by Laurie Clarke, Peter Mack, Greg Egan, Andrew Halstead, John Julian etc but what really P’s me off is all the crap by numptys who must have a say but without any constructive content. “I got it yesterday and will fly it soon...” that sort of inane dribble....and sadly most blogs are full of it ...NUF SED .....I rarely use RC Gripes, but by crikey there is a helluva lotta good stuff on it and its gotta be better than watching the idiot box.....not better than building something though.

Humour MUST be part of our hobby, so it will be included if and where applicable.

Oops !!!!!.....A bit of very bad transportation and sadly it cost two crushed models but taught me to standardise my box sizes . I now use the 38 Litre packing crate from Bunnings aisle ?? And cost \$2.65 and that seems a good size and strong.

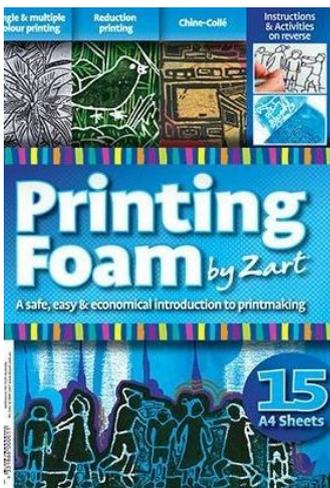


WE all have our preferences, be it coreflute, plastic, polystyrene etc and lets see how YOU do it. Might save a model



Glues next with UHU Por having a name change to **UHU expanded polystyrene** and now they have added three more with **Creative, All Purpose** and the megga sized **Universal**. I got mine at Spotlight My nose tells me they all smell the same, I haven't tested them yet. Although I did use the universal to join two slabs of Depron and used a peg to apply pressure. Join was strong but the depron seemed crushed where the pressure point was.

UHU Por never really set rock hard there was always a bit of give in the joint.



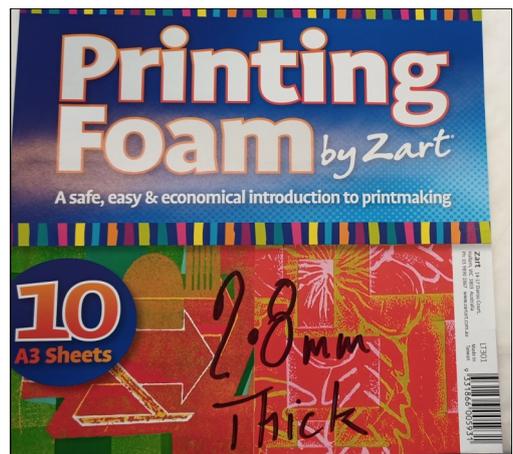
Locally available Depron type foamboard comes from :-

**Zart**  
**Lexton Road**  
**Box Hill**  
**9890 1867**

**Printing Foam** in A3 is 2.8 mm thick while same stuff in A4 size is 3.5 thick

**Construction Foam** is same stuff in A3 is nearly 5mm thick..

Dont ask !



***If you use Li-Po batteries in a ducted fan jet..... is that Li-Po suction***

## My Prop Keeps leaping off!

*Rod McCubbin*

If you fly one of the Volantec/Eachine models that we enjoy flying indoors, then you probably experienced the frustration of having the prop fly off even on a gentle landing or if the plane goes nose down on landing or gently bumps into an immovable object such as a wall or one of your fellow Flyers.

### The leaping prop options

The Volantec/Eachine models all tend to use a two-part prop saver prop connector.



The part pictured below slides onto the shaft as a snug fit.

It is a bit fragile and can tend to crack/break with a heavier or repeated impact.

The other half of the pair, sits inside the rear of the propeller, being held in place with a screw through the front of the spinner. It is the white component in the black propeller shown below.



This half is very robust.

But the propeller tends to pop off rather too easily for me, even with a minor impact. Particularly after it has been popped off a number of times.

The XK model plane use a slightly different two-part prop saver shown below.



The part show on the left in both of the two pictures above, is embedded through the propeller into the spinner and secured there with a screw through the spinner. The part on the right ( in both pictures above) is a tight fit onto the propeller shaft with the saucer shaped section facing the front of the aircraft.

For my use, the black, XZ prop connector has two advantages over the white equivalent.

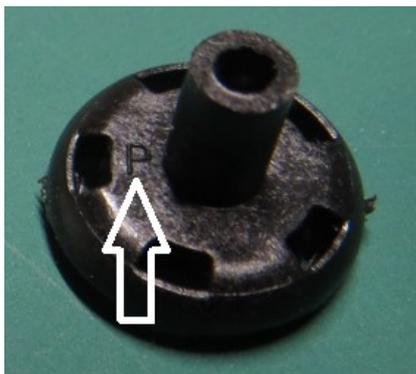
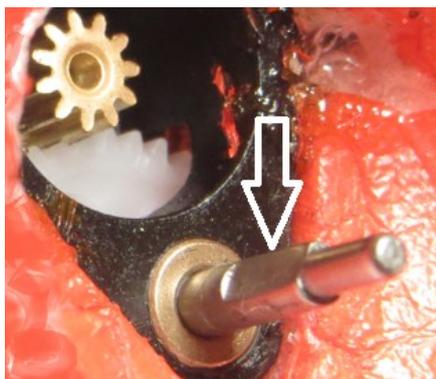
The prop will come off in a heavy impact but in a minor impact the prop (using the black connector) is less likely to come off than the white one.

The component on the shaft is more robust than it's the white, Volantec equivalent.

As far as I can tell, the prop shaft for both the Volantec and the XK planes are extremely similar if not identical. It is therefore practical to upgrade prop savers to the XK variety if you so wish.

The prop shafts have a thinner section at the front and a thicker section behind that, which goes into the gearbox.

If you look closely, you will find that the thicker section of the prop shaft has a flat on one side.



The XK prop saver has a very small letter P printed on the back of the flat section of the prop saver. This needs to align with shaft's flat section when pushing it onto the shaft.

When mounting/pushing a *prop* with the XK connector onto the shaft, I find that a small rotation works well in that it gets the saver's locking pieces into alignment which is needed for the two to join correctly.

### **Wobbly prop shaft blues**

Have a look at the pic of the motor shaft above. You can see a brass bush where the shaft goes into the black plastic gearbox mount.

RVB alerted me to the fact that it can come out of the plastic housing, particularly in the Eachine/Volantex Mustang. If that happens the motor shaft wobbles about. To fix, pull off the prop saver (see below) then push the brass bush firmly back into the plastic housing. If you are tempted to affix that with a tiny drop of CA glue, then be super (no pun intended) careful not to get any glue on the shaft! One option that may assist this is, to put a tiny drop of oil on the shaft *first*.

### **Pulling prop saver forward/out of the plane**

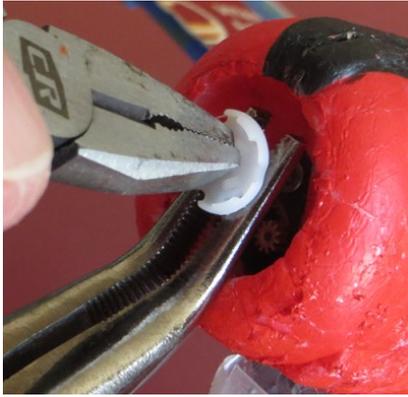
If the prop is pushed back into the plane in a prang, then the prop tends to hit the front of the plane. In which case you need to ease the prop saver (and prop) forward along to shaft.

RVB pointed me at a YouTube click that showed the technique.

You put long nose, bent plyers into the plane behind the prop saver.

You then place a metal object again the front of the prop shaft e.g. the nose of a small pair of plyers.

Then push the shaft *into* the prop saver i.e. into the bent plyers. This can actually need quite a bit of pressure to achieve this.



I suspect there may be an advantage in not having much, if any, of the shaft protruding out of the prop saver part on the shaft. I suspect if it protrudes a long way then it makes it hard to get the two halves of the prop saver to mate. I may be totally wrong on this point.

### **How to stop the prop saver being pushed down the shaft and into the plane**

A short spacer tube, made by cutting off a very short section (3mm~6mm) of lolly pop stick, can be slid onto the shaft behind the prop saver. This shows as the white tube in the example below.



Even if a crash tries to push the prop into the plane, the spacer fixes that, BUT does transfer the impact to the brass bush/plastic mount. After such a mishap it is a good idea to pull the prop saver a tiny bit forward so the spacer is not rubbing on the brass bush when the prop is spinning.

### **Lubricating the spinning shafts**

There seems to be two schools of thought here.

I find that if the prop becomes reluctant to turn, then a tiny drop of sewing machine oil on the prop shaft bearing and/or motor bearing does wonders – thank you to GP for this suggestion.

Others have warned that oil invites dust. In my case & GP's, it was use oil or not fly the plane.

GE suggests a Teflon spray works better, particularly if done before the plane is first flown. He also cautions, do NOT do this to the motor bearing, else the Teflon can get into the motor and coat the brushes stopping them functioning! [Assuming brushed motor.]

### **Where to obtain XK connectors (and prop components)**

Lots of Aliexpress suppliers have these. To date the 'WLT Toys Factory Store' seems to offer best value for money. I have a few available at the moment if you just need 1 or 2 .

Rev 221204

*Excellent article Rod, just what we all need.*

*The other option for keeping the prop on the plane is.....learn to land smoothly .*

*A large dollop of UHU can achieve similar results as i found with my Ember .....Mr Ed*

## Simple way to measure prop thrust

Rod McCubbin

Concept courtesy of MB.

It can be very helpful to be able to measure the thrust of different props on a particular plane/motor.

I have found it surprising

the significant differences in thrust for props that look very similar; and

the thrust differences as you increase the throttle for different props.

Measuring thrust can be done relatively easily as described below by using mini measuring scales or quality kitchen scales.

The set up consists of a table with .....

A support/arm e.g. length of 2X1 timber. One end of which is clamped to the table and other end is sticking out from the table.

The width of the support needs to suit the scales you are using

On the end of this support in free space, place an accurate set of weighing scales, *turned off*.

Place a shortened ruler or an icy pole stick (etc) across the scales so both ends protrude into free space.

Let's call this the 'cross member'.



A length of light string loops over the 'cross member', so the ends hang down towards the floor.

I then have wooden clothes peg on each end of the string for attaching to the plane.

Suspend the plane by pegs (under the tail) so motor is closest to the ground.



### Running the tests.

Turn on transmitter (throttle at zero) and power up receiver in the plane.

NOW turn on scales.

Hopefully the scale 'auto zeros' to 0g (some scales have a button to set this). If not, then write down the weight with the prop not spinning e.g. 200g.



Using the radio, turn up the throttle to say 25% and write down the thrust at 25% e.g. 6g OR 206g depending on the no throttle reading on the scales.

If the plane tends to rotate against the spinning prop, you may need to provide something to limit the travel of the wing.

Repeat the test at say 50%, 75% and 100% throttle, recording the thrust for each throttle setting. OR just record at 50% Thr and 100% Thr.

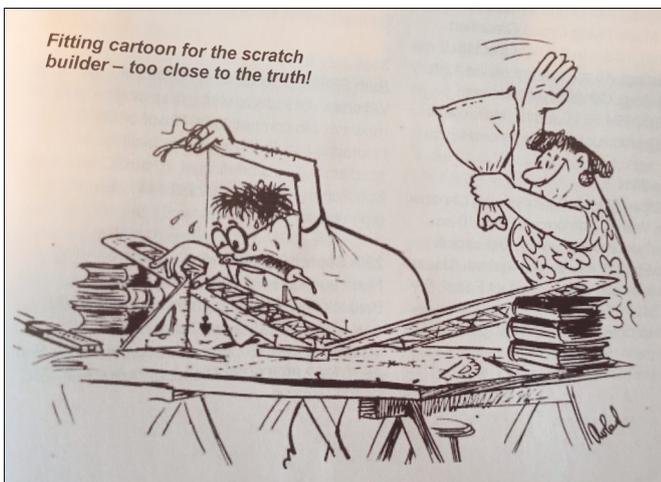
Shut down the receiver and radio.

Swap to another prop that you wish to test and repeat the above.

### **How much current does each prop use?**

A very useful extension of this, is to measure the current drawn from the battery at the test points.

This requires a suitable multi meter in series with one lead of the plane's battery. Be careful the multi meter leads don't snag on anything and distort your reading.



WHOOPEE landing strip at Mullumm Mullum and for Diffyfrust models as well

**So, what kind of results do you get?**

Below the 3 props compared for the Drift Bug V3 as per the pictures above.



Prop	Size	50% Thr	100% Thr
Original Grey Prop	90mm (approx. 3.5 inch)	11g	15g
Yellow	4X4.5 (inch)	13g	22g
Orange Prop	4.5X30 (inch)	17g	22g

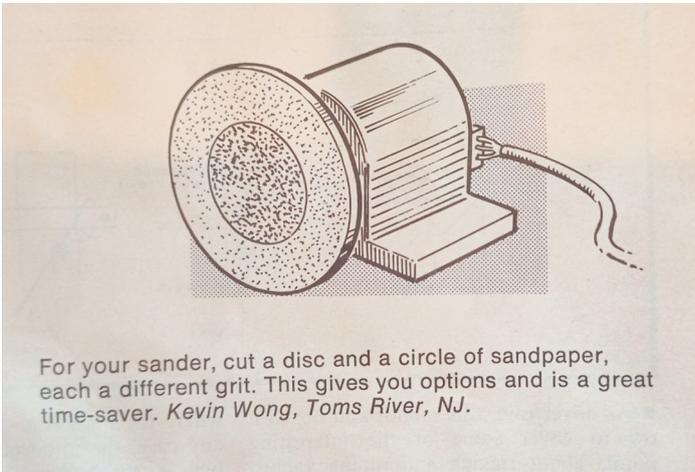
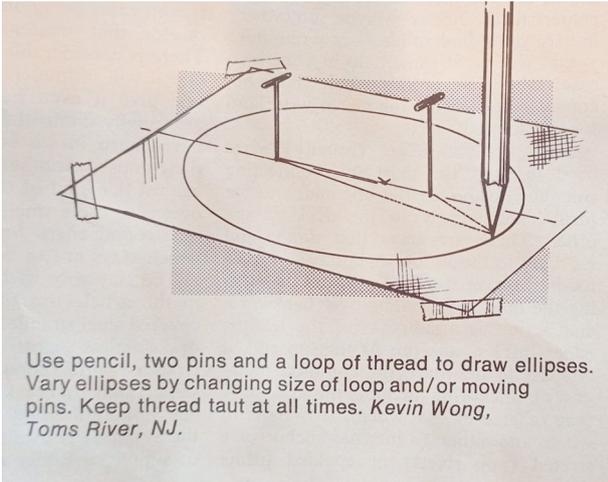
For a 1M glider motor I measured just at 100% Thr

Prop	Current	Thrust
Fixed 5X3.1	1.8A	39g
Fixed 4.7X4.7	2.15A	48g
Fixed 5X4.5 Flat Nose	2.59A	80g
Fixed 5X5	2.40A	50g

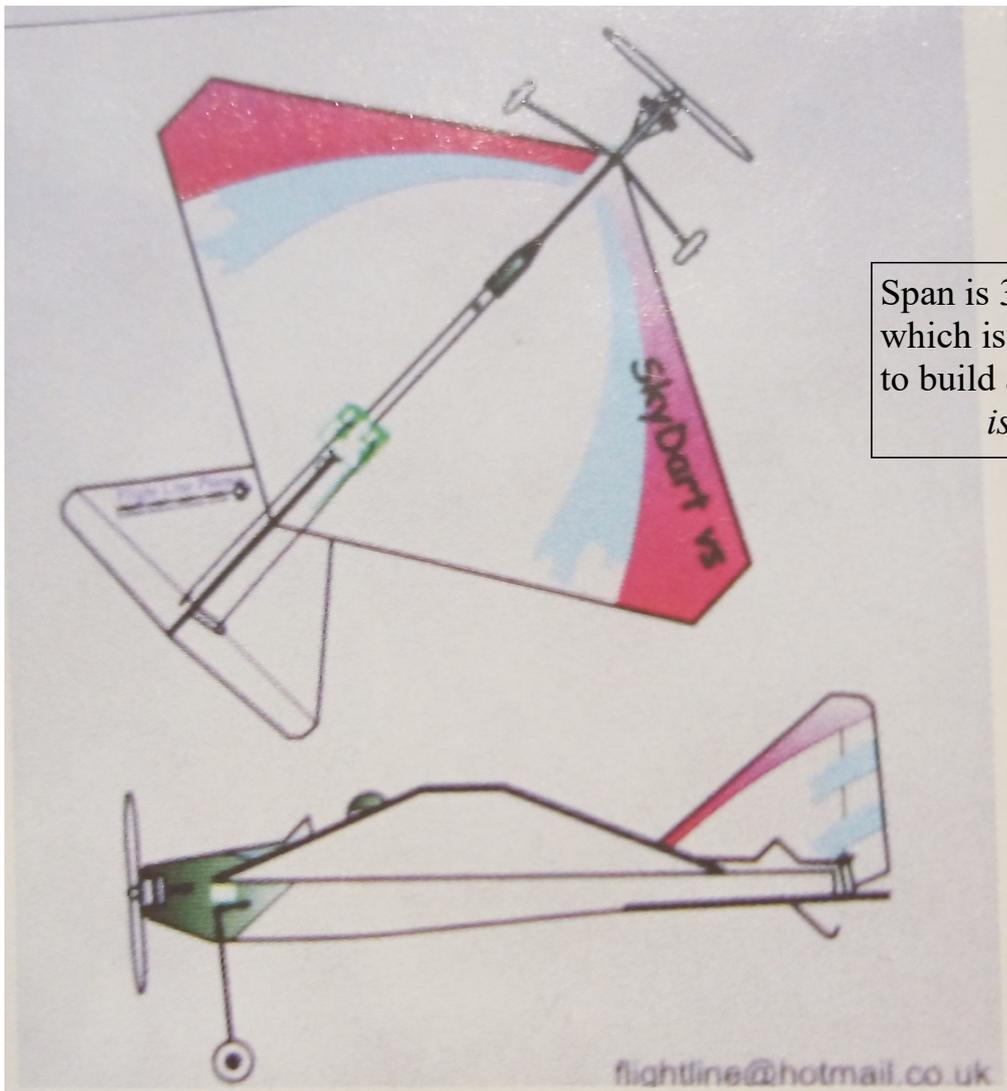
Rev 221104

**Just had my first UFO experience.  
Told the wife her cooking was terrible.  
Flying saucers everywhere.**

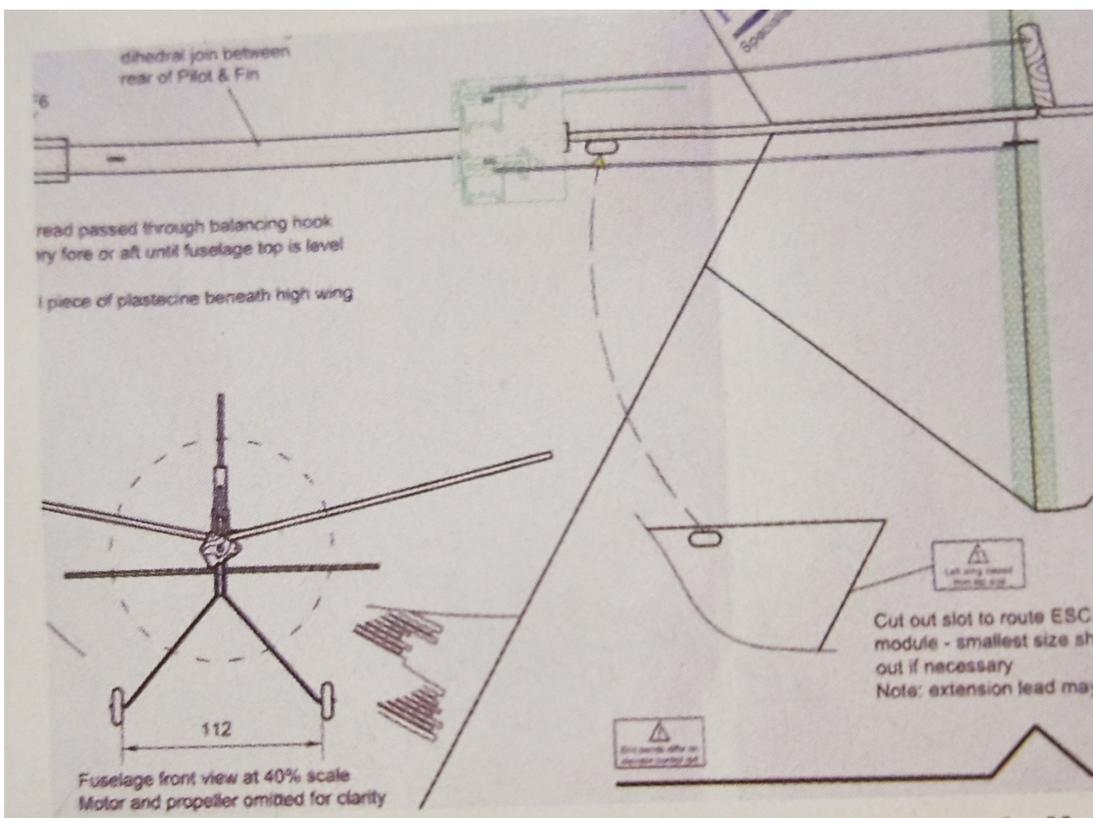
## Results of thumbing through old mags



*Humour HAS to be a big part of our hobby  
Have you seen my planes ??????*



Span is 373  
 which is all we need  
 to build a model  
*isn't it ?*



Steve Vallve, the control-line expert, donated two control line kits which have had their parts traced round so anybody who wants to make a “ Star Wars X Wing” or a “F-16 Fighter Jet” can just ask for some paper copies. The original kit manufacturer went out of business yonks ago . Thanks Steve.



**HOW PRETTY IS THIS.....Its Ian Jemmeson’s PAAGEBOY**

A typical free fright sport power model which suffered from a shortish nose length due to that lump of metal up its front end plus a heavy prop. Solution for us is to increase the nose length by 10-15% so that it looks right but instead of lead or bluetack as nose weight use heavier wheels. Plenty to choose from and reduce the span to under 550mm....who will be the first ?

## DID YOU KNOW

“THE BIRDY” inaugural comp was the very prestigious front cover of VARMS Aspectivity mag No 402 Aug 2007 and we all had to make flying machines from a meat tray and within 1 month for the next meeting .....great fun.... and we could launch from the ground or the stage . Creative juices really flowed or crashed and burned but we had a helluva lotta fun doing it.

John Bird is on the right hand side



A bit about me.....I started modelling with Keil Kraft rubber jobbies at the ripe old age of 11 and in the UK when my first dope covered wing (KK Mig 15)) was being dried over an open coal fire.....One minute it was there and WHOOSH the next I only had tips in my hands. Dope is highly inflammable as I found out plus singed eyebrows and a right old earbashing from Mum. I will stop playing with combustables someday ?.....well maybe as I get older.

I think I have had a bit of experience in most fields from 4 wire servos and Deacs plus a small dabble in indoor rubber, right up to today when my absolute favourite is slope soaring. Which is probably why I get bored going round in circles .

### What tools do I need ?

The simple answer is..... everything.

### How do I keep wire still while I solder them.....

blue tack.....just ask The Blue Tack Kid himself, ( Andrew Halstead) where and when he uses the stuff.

**What is an EBENEZER.....**the way to discovery can be found in this epistle

WE need a name for this twaddle so the first member to come up with a decent one will get a lifetime subscription absolutely free

Till the next time..... *MR ED*