THE INSIDER NO 3

One of our members, lets call him Mr Billy to save his blushes, took the heading "**Bloody"** Good Idea seriously and had an argument with a propeller. OK , so it wasn't one of our 1S small things rather a 3S on a large motor and prop.
OUCH ! Ouchouchouchouch.. *Urgh !*
A BIG hole in the flesh, stitches lots of them and an overnight hospital stay and just because he was fiddling or adjusting his Tx settings *without disarming* his model. Sorry about the pun Mr B. Fortunately no residual damage and the arm healed. Some wag said the scar looked better than a tattoo.

So be warned iffffffff you play with big boys toys expect big injuries !

Question Time :-

Engines can be Steam. Diesel, Petrol even Air and Water powered
Motors can be electric or clockwork
BUT
Can somebody please tell me what the hell an Electric Engine is ?

Again answers an a $20 note please.

However Andrew Halstead sent me in the following very interesting stuff he said he found on the interwotsitthingermejig.....at least I think that's what he said .
"Engines" historically are large, complicated creations that pumped a mine dry, drove all the machinery in a factory etc. Eventually replaced by an insignificant revolving cylinder the size of an oil drum - the electric motor. He also included a reference to the following solenoid information. There are a lot of things like this that reciprocate using solenoids. Google " solenoid engines, images" and you will be "smockraffled" (*his jargon not mine !!!!.....Mr Ed*)

Not our modelling but fascinating all the same and well worth a look, thanks Andrew.

https://www.stirlingkit.com/blogs/news/a-solenoid-engine-or-an-electric-motor-which-one-is-better-stirlingkit

https://youtu.be/x4im3M9IFcI

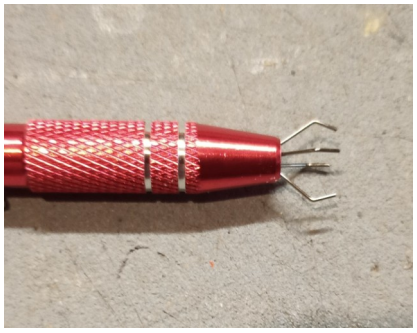
A closed mouth gathers no foot

Bloody Good Ideas

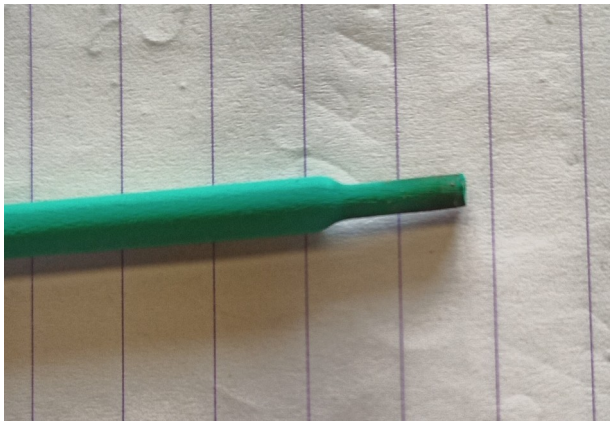
WARNING

UHU Universal
v
Depron

The UHU Creativ seams to be working well but looks to be scarce on shelves. Iff anybody has a source let us all know please



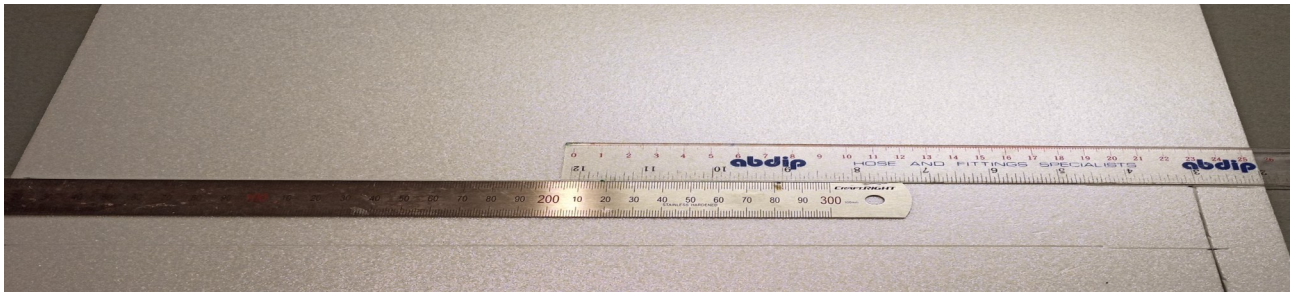
I got this beaut picker upper gizmo grabber from Ali Express via MORDEN STORE https://www.aliexpress.com/item/1005002663057190.html and 3 cost me under $10 delivered. They have lotsa fancy stuff .....Took a few weeks to get here but what the hell cant buy them here. Originally for grabbing silicon chips.....but I prefer a knife and fork.



For the hobby newby's its simply called

Heat Shrink Tubing

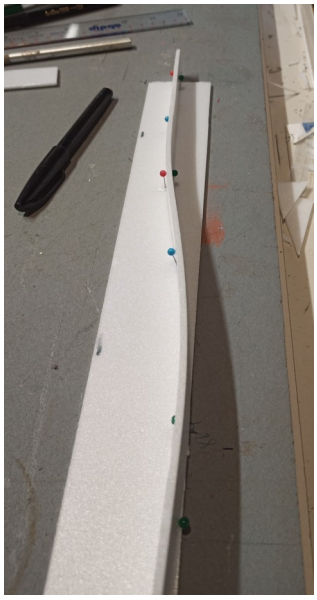
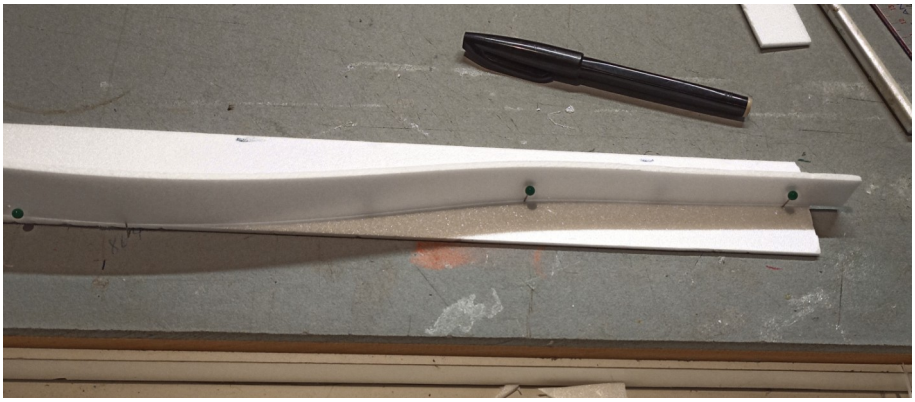
available in vastly different sizes and colours from Jaycar . Easy to use to cover and isolate electrical joints or wire to carbon push rods . Simply cut to a small length, slide on to wire, solder join join then slide H/S tube over join and shrink with a heat source. Soldering iron does the job but so does a lighter flame. Tubing shrinks to approx half its size . Bloody good stuff and I have a helluva lot in my workshop.



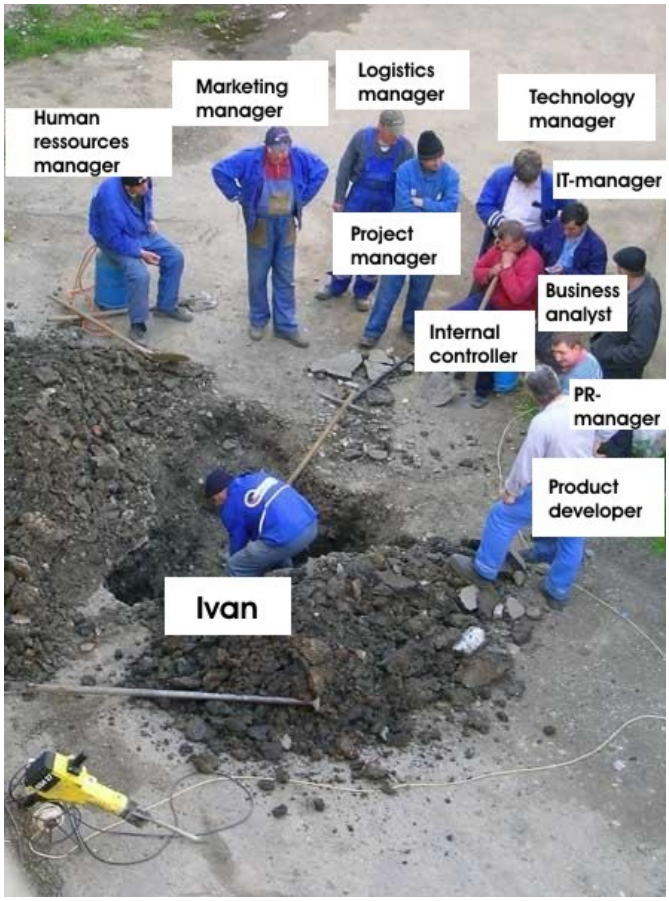
Its frustrating when marking a line and you run out of ruler.....so this is self explanatory I think




What was it from No2 ? .....Simple peg with a hole drilled for soldering a battery connection.
OK not really for indoor use but as a guide to adaption and misuse of common objects.

How do you get a nice curve .....
"simples" use a small "lump" of depron and pin it at strategic points ....hey presto a nice curve and easy to draw along.
Blue tack could be used instead of pins of course.



Screw U

https://www.aliexpress.com/item/4001054261856.html

For all those little bolts and screws we need but never have.
Well this site seems to have the lot from csk self tappers to fredded Cup Head screws. The box is probably the best feature and cost effective cos it keeps them all in one place.....until you drop the box of course....then the magnetic grabber comes in handy. Give it a look , well worth the time but double check EXACTLY what you have ordered

BLOODY GOOD TIP

When motorising a newly built model always double check that the motor /gearbox is fine

before

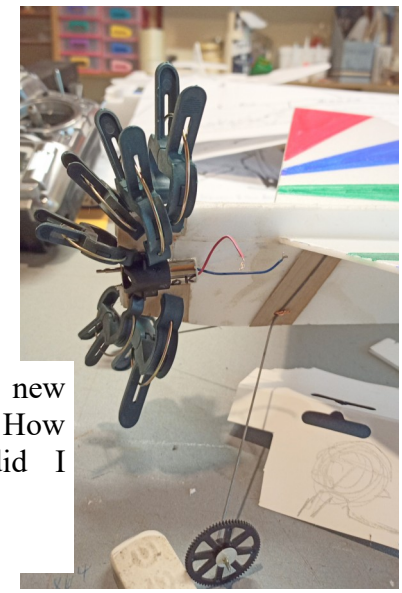
glueing it into the model.....

dont ask me how I knew that !!!!!

Readers Models

SKYDART MK 1

Some people should NOT be let loose with crayons or texters!!!!!



Mk2 with its new shorter nose . How many clamps did I need.

All of them !

Skydart Saga : well it was made from just one sheet of A3 size depron type material and I used the article from last edition to the letter for dimensions etc. Then I did a silly thing and increased the nose moment.....didn't fly too well. T'was an airborne dog to put it mildly. Nose was shortened and gear moved rearwards to approx CG position. Battery can be moved for minor adjustments. U/C was strengthened by spreader bar and WOW whatta transformation.....It wasnt a bad plane. As with most homebuilds there is always room for improvement but now the CG is correct I can scoot it around on one wheel while landing. One small problem remains.....I bushed the wheels with brass tube and they spin way tooooooo fast.....LOOK OUT no brakes! A very easy build and once fettled a not too bad flyer, and as cheap as chips

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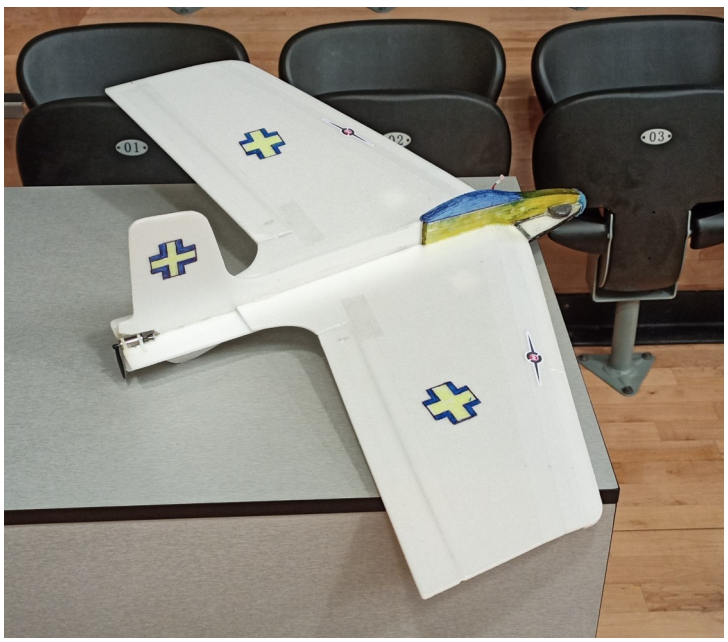
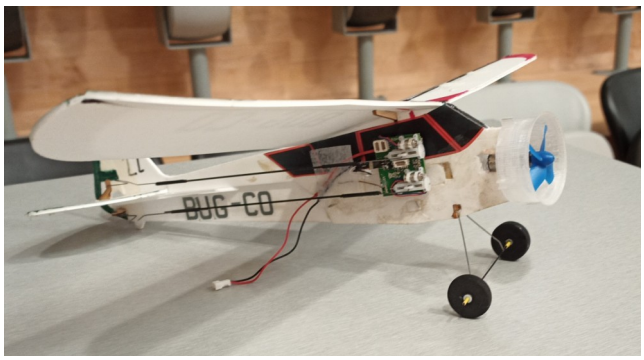
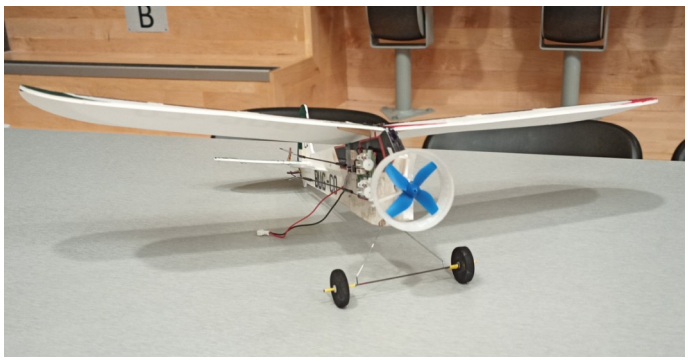
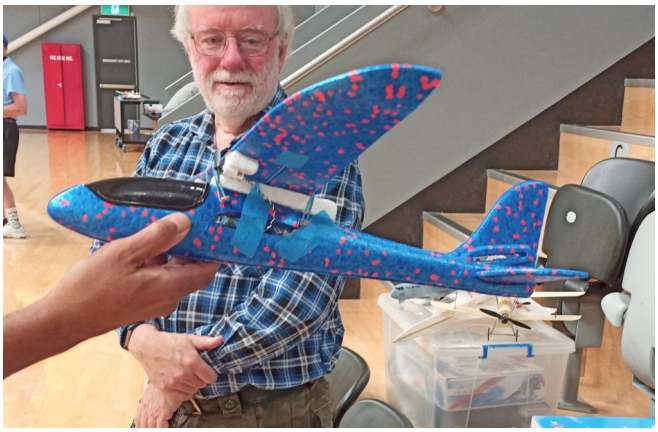


Noel Hyslop's Me163 with minimal markings that makes it look a pretty as a picture. Test frights were just that...FRIGHTS .... But Michael Best soon had it sorted once the prop had been replaced. Makes sense to have an oversize skid or anything to protect the driving force, especially with a pusher. It flew beautifully while we were upstairs but unfortunately very poor photos from phonecam operator.





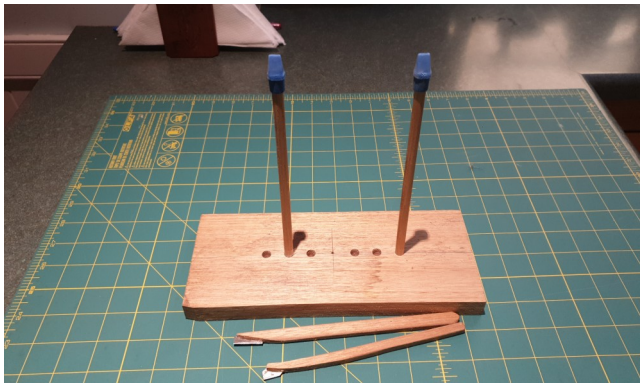
I had this beaut little ducted fan lying about from Wes's parts box, but what to put it in ? Well my Minimum Cub had the motor overheat yet again and fall out and this time it wasn't going back in. Horrid little beast !. Funny sort of plastic foam they used, which is strong but doesn't like hot cars and warps all over the place. Cub was on the workbench and was next to the fan unit. Why not I thought , will be a bit on nonsense, so onto the nose it was grafted. Looks can be deceiving but it dont 'arf fly well. Plenty of Oomph and very tractable power range from that tiny little direct drive prop. U/C needed strengthening cos it collapsed and broke the 3dD printed shroud but that lovely man Prof Greg has made me a new one that shows promise during bench tests. Have a squiz at that U/C.....err seem to have read about "wheel-keeper-onerers someplace" , keep going and you will see what I mean.



Tuan Packeer holding his much modified plastic fantastic, with Prof Greg gleening knowledge. Being a relative newcomer to our hobby Tuan hasn't amassed piles of "stuff" that we cant possibly do without. Our wives call it junk....nufsed about that . So with a piece of EPO (**E**xpanded **P**olystyrene **O**rrible) foam he elevated the wing topside with the motors and grafted a differential rx thrust unit into the body of the beast. He got the angle if incidence spot on, which is always a problem with these kids toy gliders, and the power output from the twin set up was also just right. Just goes to show what can be done with a bit of ingenuity, a few rubber bands, a lump of foam and a few scraps of tape. No idea what D/F system he used or what it came from but...hell, who cares, it flies and flies well..... Well done Tuan.

Had an email from Frankston flier **Rick Miles** letting us all know that he has 40 sheets of 3mm depron 700 x 1000 that can be bought for $10 a sheet and collected from his shop in Langwarrin. Give him an email first at **frmrick@aapt.net.au** cos like me doesn't always answer his phone (0420936868). Also has this beaut little micro Gentle Lady with power pod. Not sure of size at this stage but .....lovely work. He also showed some homemade knives he uses....Personally I am not keen due to wood giving way under stress but they are not my fingers doing the pushing or pulling. Also was a very nice adjustable Cof G balance device. Rubber pencil ends, I presume, soft ends that wont damage any models.

Stop press...30 inch span



Andrew Halsted's balsa Bird of Time classic glider design scaled down was originally to have had a pop-up propulsion system but is coming along slowly without it. Maybe it will have twin motors or even ducted fans , who knows I suspect Andrew doesn't ....yet . Free plan from Outer-zone ....Google it

You can have 2 of my best helicopter pilots for free. They're called Andrew and Harry

22:33

FRANKSTON centre recently held a comp specifically for the RANGER 600 models. And why not, because they are relatively inexpensive, fly well and are very popular, especially with novices due to the large expanse of virtually unbreakable EPP foam at the front . Designed specifically for hitting walls by mode 2 pilots so I am told. What a shame they cannot be easily converted to Mode 1. The following is the report on the days events.

Hi Colin, report as requested.

5 owner pilots entered the comp and were given the task to perform.

Pilots were to stand at a designated spot and fly 6 anti- clockwise laps and during the 7th had to land nearest the spot.

Ron van B was nearest with just over a metre followed by Shane Gillard.. Steve then generously loaned his model to 3 other pilots who had never flown a Ranger 600 before and all 3 did very well. Mike Hulse and son Spencer exceedingly so. Spencer was closer than Ron but as he is not a IA member could not be given the prize. Ron was given a bottle of red and Shane a bottle of white. I thank all pilots for entering and hoped all enjoyed the morning.

I thank the anonymous donor for the prizes. Consideration is now being given to running a time comp for helicopters. .....Graham.

Many thanks for the report Graham and perhaps other venues can hold similar events culminating with THE BIRDY later in the year.

Neodinium Magnets

Those incredibly powerful little metal lumps that are very hard to pull apart. Well they are available in a multitude of sizes , round, square, oblong and of all thickness's and strengths at :-
www.alphamagnetics.com.au/

Web Addresses ?

Are they considered as
INSIDER Trading.....I wonder ????
Thanks for that Mr Halstead .

Brass tube and also stainless steel toobs in small sizes and short lengths are available from, where else but, ali express :-
https://www.aliexpress.com/item/1005004366311619.html

I couldn't do without one of these ....
I've got one in each toolbox and workspace .
Its a very simple plug in battery checker .
AOKoda 1S battery checker

https://www.aliexpress.com/item/32845371184.html

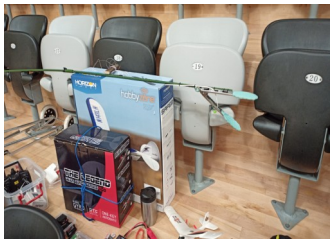
Mission Impossible or Impossible Mission

Unfortunately a certain Mr Thomas Cruise was otherwise engaged so it fell on a team of indoor stalwarts to undertake this seemingly impossible mission. The task was to recover an E-flite Cub from where a very erratic flyer had landed it pre-covid. For this article's sake it might have been Brian the Basher **BB** or Clumsy Colin **CC** or even Dangerous Dave **DD** but I cant recall his actual name so lets just give him the initials **DD** for now cos we probably know them all although under other names, dont we ?. . Anyway t'was a long long time ago, about 3 years we think. Venue was Mullum Mullum Stadium, Donvale and in typical DD fashion it was hidden behind one of the 4500 high screen walls. Now anybody who knew DD also knew how he flew, which can politely be described as erratic or wall moving and for those who didn't know him.....he hit anything and anybody and didn't give a monkeys who it affected or offended or even damaged. I think it is fair to say that many fliers at Waverly, well lets just say, we spent many, many, many hours every week refettling his planes. He was an avid fiddler of any Rc Transmitter buttons and switch's, probably still is, and we all excelled at getting them airborne for just a few seconds before a wall or floor rushed out to interfear with the said plane. Never DD's fault always somebody else's or something ..never DD. Nufsed on DD's flying.....WE all landed before he went flying.....

Anyway **Rod McCubbin** heard that it was there and as the few remaining model shops had none he decided to get it out. This was at a group discussion, at smoko of course, how else do things get done ? Mechanical grippers were the obvious choice and **Tuan Packeer** and **myself** both came up with ideas .....Errr, One small thing that we overlooked was we seemed to have forgotten about that bloody great big wall thing in the way. Then we would have to grip and lift something that was totally invisible to us.....Oops, back to the drawing board and more coffee. I should add at this stage that the Mullum Mullum centre does brew very good hot coffee. The centre has a ladder that only they could use but ifffffffffff the climber had the underside of his feet above 2 metres it would be classed as a height job and need an expert or qualified person. No go that route. Oh well, another cup of coffee and back to the drawing board as they say.

Lots of sketches, phone calls, etc and we had the first contraption made for the next weeks adventure. But I get ahead of myself because **Rod** insisted on knowing exactly where it was and came up with the ingenious idea of strapping a phone onto a pole that sent videos to his laptop so we knew exactly where and how it was positioned. Unfortunately it also showed us that we would have to clear the 150-300mm wide wall which also had an obstruction over it . Another limiting factor was a bloody great lump of structural steel overhead. This limited our working area to approx 600mm high on top of the wall. Not exactly a lot in which to lift and swing the plane from its grave.

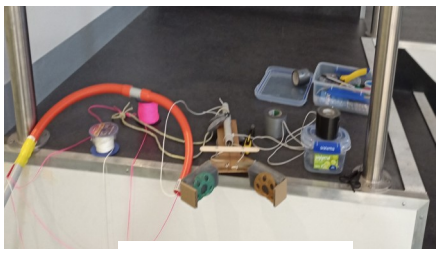
Great, now using things in stock in the "garidge" we can try a contraption consisting of 20mm dia plastic electric conduit with long bends and builders string running through it. The mechanical grabbers had been discarded in favour of **Rod**'s own invention that could be radio controlled. Well we are a Radio Controlled club after all, aren't we ? Unfortunately that contraption failed due to the very heavy Mk 1grabber thingy dangling from the end of a thin cord via the very flexible plastic conduit. It did work but not very well. Oh well . .....Back to the drawing board.....again.....more coffee !



Tuan and his gripper. wonder if his wife has found her kitchen tongs yet?..... Own Up Tuan.

Got One MUM !

Hospital style picker upperer

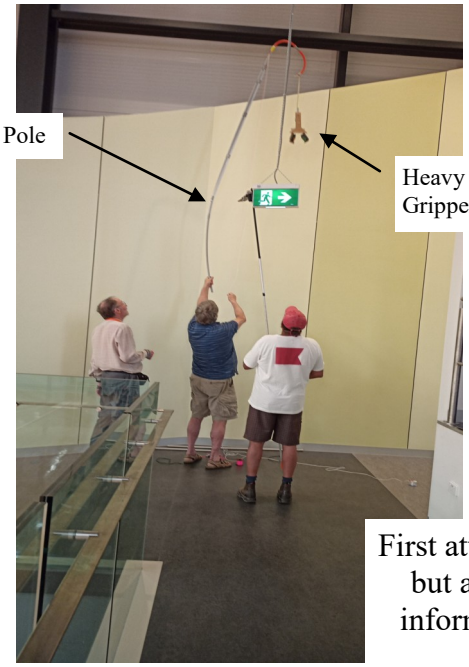


Mk 1 equipment

More conversations on the phone and next week Rod announced that he had the solution. Having seen his car packed to the gills with “stuff” Rod emerged looking .....confident ?
Right, so with car cleared and “The Stuff” transported to the balcony Rod set to work erecting his contraptions. Eventually he called “Its Time” from up on the balcony .....so up to the balcony we went.
Tuan Packeer, Andrew Halstead , Colin Smith and Rod McCubbin.

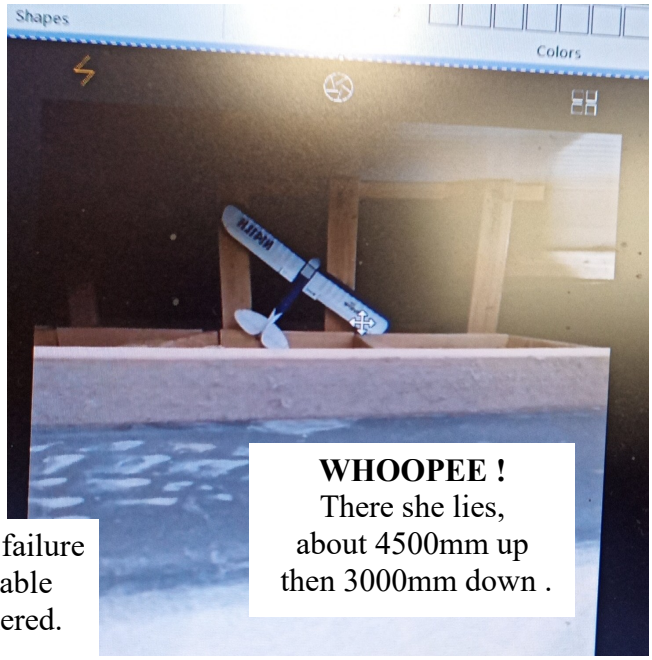
Tuan Packeer, Andrew Halstead and Rod McCubbin discussing finer points of Mk 1 grabber

First image from stick cam, so now we know how the titanic hunters felt.



Larry Curly and Mo ?

First attempts and failure but a lot of valuable information gathered.

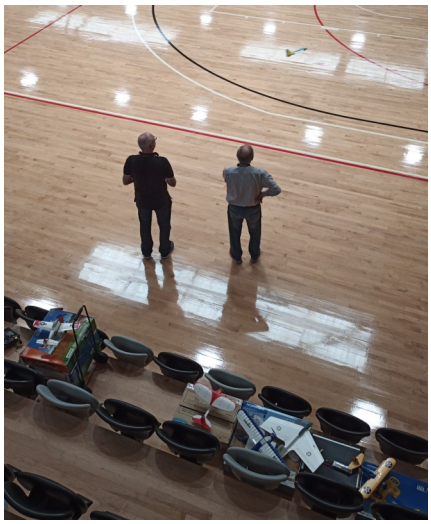


WHOOPEE !
There she lies, about 4500mm up then 3000mm down .

OK , now we had assembled up on the balcony area the following...
No 1....Phone securely attached to a long pole. Rod had measured the wall height the previous week and it was 4500 high but with only 600 clear above it before structural steel intervened.
Operator **Tuan Packeer** manhandling the eye of the operation.
No 2. ...Laptop computer to receive signals from phone.....bumma !... only 3 mins time before it cut out and had to be reset. *Handler* **Colin Smith** doubling on snap camera for record purposes.
No 3..... Mk 2 Grabber thingy consisting of a very heavy duty servo operating clamping arms with very soft foam and non slip whotsits all glued to lumps of cardboard. Top surface had another servo for rotating the gripper to better align with the plane fuselage although the cord had a mind of its own by twisting at the worst moments. *Operator* **Rod McCubbin** .....*Jeez this bloke thinks of everything .....Mr Ed*
No 4.....VERY Long 4600mm and robust pole with 500 mm long arm fixed at 90 degree arm on the very top combined with heavy duty cord around a couple of pully’s .
One end attached to the Mk 2 grabber by a highly testicle device called a knot ! and the other to the highly sensitive hand of the pole holder ....*Operator* **Andrew Halstead**
No 5....The only instruction issued was **WORK VERY FAST GUYS** before the camera dies again !.

Off we went with **Andrew** having to lift the rigid nearly 5 metre rod sideways..... carefully allowing the unweildly top arm, with its grabber on the end, up and over the top of the wall.
Taun was busy keeping the camera steady so we could see what was
actually happening.
Left a bit.....
bit more ...
too much....
Lower it down more and nearer the target.
STOP IT SPINING !
Remember that **Andrew** had to watch the laptop screen that was being held in front of his eyes by **Colin** and twiddle the cord to steady the grabber all the while getting an earful of instructions from
Tuan, Rod and **Colin**.

Tuan keep that camera still !
Right you are,
Your right over it,
careful,
careful...careful !
DROP and GRAB
came the call .
GOTTIT !
Finally it was very carefully and surprisingly quickly hauled up and over the wall to cheers and thunderous clapping from the assembled multitude .



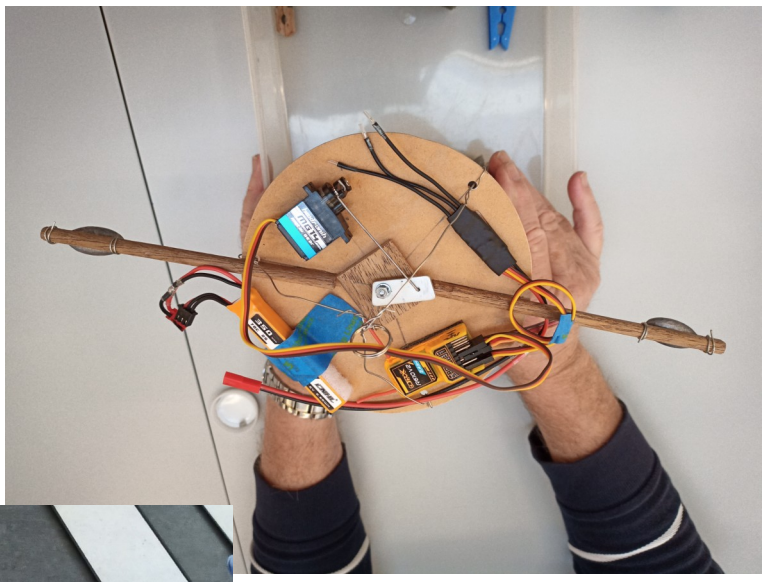
With all the frenetic activity going on above Michael Best was test launching
Noel Hyslop's Me 163.
Another success story

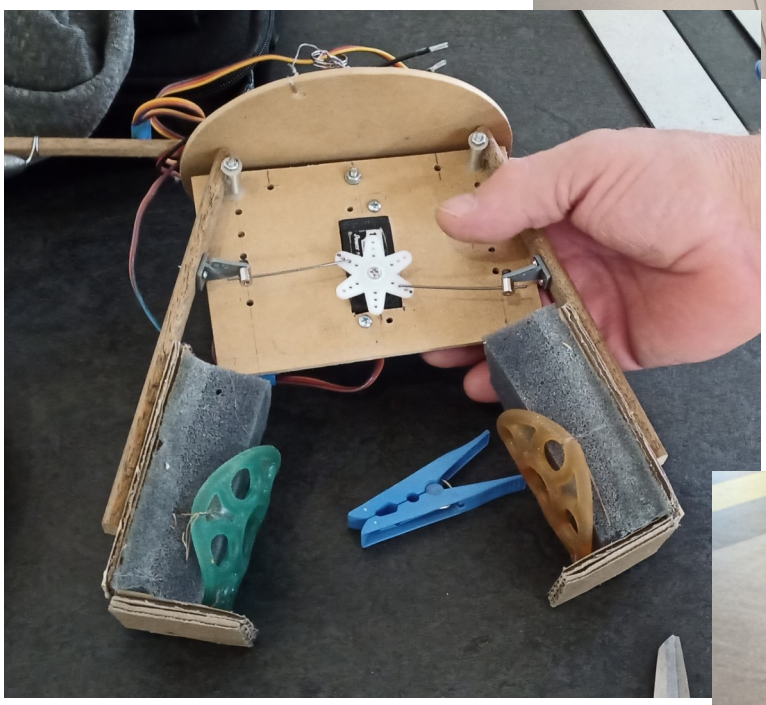
OK, so the 4 of us collectively expressed our sigh's of relief because it looked like it had been grabbed between the wing and tail but looked to only have a slender bit of each in its jaws so was very precariously grabbed. Careful down was not an option.....more coffee to celebrate.

Why do toasters always have a setting that burns the toast to a horrible crisp, which no decent human being would eat?

Grabber Mk2

Topside showing small servo for twisting and turning to align with the model. Lipo and ESC to give Rx constant and reliable current to handle big load from gripper servo. Dynamic weights for stabilisation





Underside showing very heavy duty servo operating those powerful grip-ping arms from Mdf and "structural" cardboard with very soft lumps of thick foam and kids plaything's adding a non-slip faction.

Peg is left over from his washing and ironing !

Proof that it flies again, battered but not beaten and look....only one aileron working !

FYI
It went in costing about $180 ish and was rescued worth $280 ish depends who has one for sale. 1S stuff no longer available?. What a shame !!!!!!

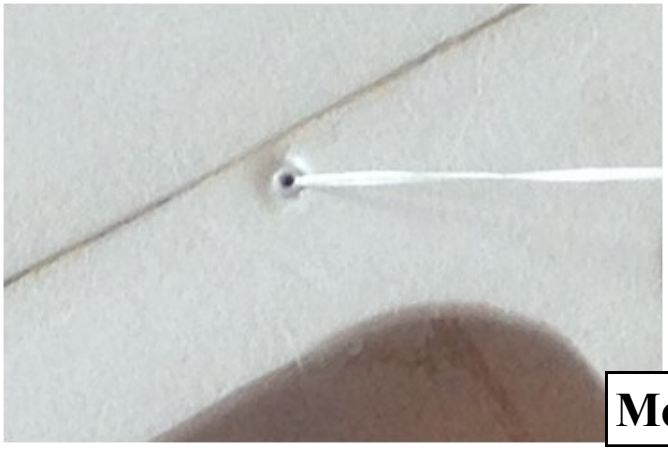
Tiny Tubes and what to use them for .....Laurie Clark

The little tubes in the picture are from children's lollipops. If you have grandchildren they might be able to get you some, or you can find them discarded in children's play-grounds. The most useful ones are the ones with a 1mm hole down the middle, such as the rightmost one above with a 1mm drill bit in it to make the point. However the ones with larger holes also have their uses.

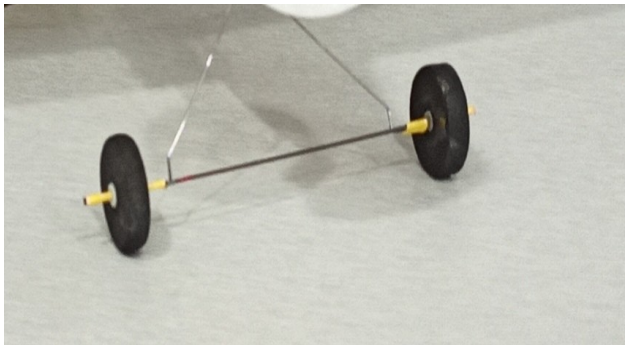
What do I use them for?

1 .Grommets in foam wings if I want to brace the wing with thread, such as in these photos if my MIFO Bug where I am using dental floss as bracing because it does not stretch readily.

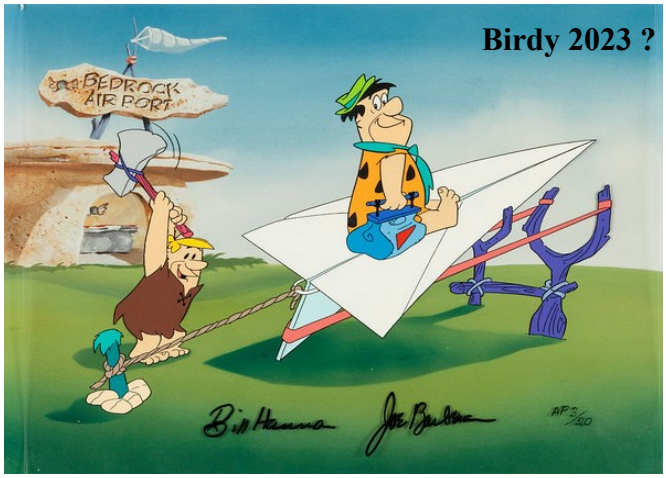
You can also use Kevlar thread

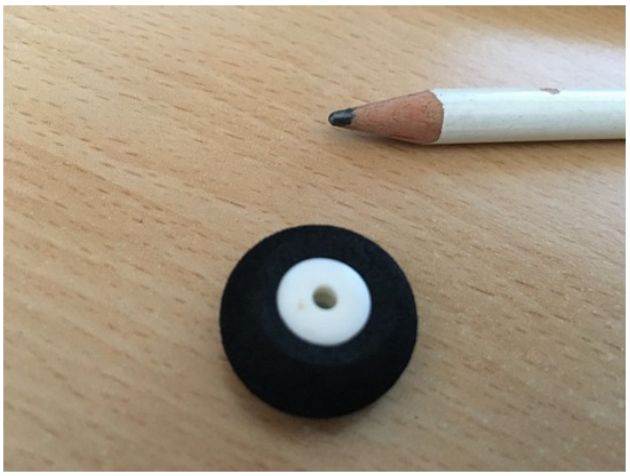


MoFo



Mr Ed's cub U/C complete with insulated axles





Inserting in wheels where the hole in the wheel is much to large for the wire I want to use for the undercarriage. Take the tube with the 1mm hole and insert a piece of it in the hub, securing with a drop of superglue. Here's an example of a wheel very suitable for one of our indoor models, but with a wheel that is far too big: You may have to drill the hole to fit the outside diameter of your tube.

Here is an example of the undercarriage I made to turn my Eachine Sport Cub 500 into a Bush Cub by fitting much bigger wheels. In this case I had to use a very small black tube inside a larger white one to get the size I wanted. This undercarriage is made of wire that is about 0.9mm in diameter, whereas the original hole in the wheel was about 3mm.

Another type of tube I use is the insulation from very fine wires. Just ringbark the wire with your modelling knife and pull the insulation off the copper interior. I use that for fixing the Z bend on push rods so they can be easily put in a different control horn hole if needed.
To do this, first straighten the Z bend very careful to turn it into an L bend. You may need two pairs of narrow nosed pliers to do this. Then put the end through whichever control horn hole you need. Then push a carefully chosen piece of insulation onto the end of the rod to retain it in place. The insulation must have a hole that is small enough that you have to apply plenty of force to get it on. This will mean it will never come off, except when you pull or cut it off later with your knife because you want put the rod in a different hole on the control horn.
Of course if you have any doubt you can also apply a little superglue just to make sure the insulation piece never comes off. *A tip when using superglue....grease or oil any metal bits before glueing.....dont ask how I knew that .....MrEd*
These photos show what I mean, with an untreated control rod on the left (Eachine Me109) and one that has been treated on the right (Eachine Sport)

Thanks Laurie , all good stuff

Differential Thrust Models

With the ever increasing price of ready to fly models and their associated rx components skyrocketing through the roof I reckon its only fair to give the El Cheapo side of the hobby an airing. Andrew Halstead or Mr Bluetack as he is sometimes referred to is the resident Mullum Mullum expert on twin engine Diffyfrust machines, along with Prof Greg Egan of course. So this is just the tip of the iceberg as to what can be achieved for a very modest outlay, plus you get all the pleasure of fettling said creation.

Just a few picky's to wet the appetite

Andrew with Concord after its nasal modification . Honestly..It started out about 4 ft or 1220mm long !

Odd shaped Fuz but its French so waddya expect

Andrew informs me that while he is incapacitated after a minor op he will try to put a few words on paper explaining everything there is to know about the inexpensive side of our hobby. So fingers crossed next edition should be agoodun.

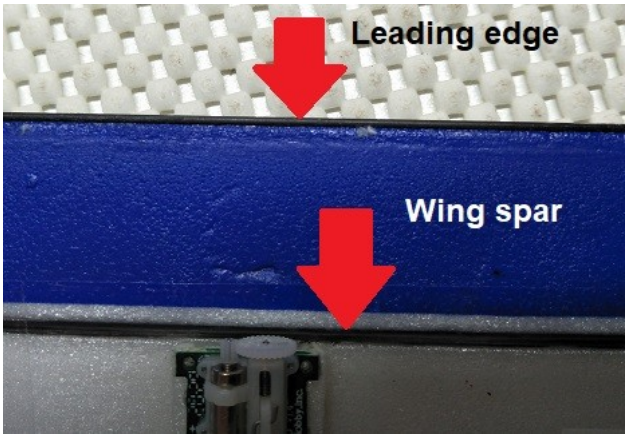
All I know is :-

Black and White is always right

.....at least I think that's what he said !

Stop Press....more to the Mission impossible saga

The Horizon Hobby Sports Cub S2 ,which is the plane that was rescued is a very suitable plane for flying indoors. It is a very light, 1s plane. It can fly very slowly and offers 3 levels of stabilization at the flick of a switch. It has a rudder and ailerons; great for learning to use either/both. The only drawback is that it is a bit pricy and is rather fragile if you bang into things other than persons. So I have coupled together a few tweaks for other owners because DD did a remarkable job on his, as I have discovered. You can provide some protection to the leading edge of the wings by gluing a piece of 0.7mm carbon fibre rod in the tiny groove that exists at the LE where the top and bottom sections of the wing join. I did this on the underside of the wing.



It adds around 0.5g and I used BSI Gold, black lid foam safe glue.
I sticky taped the rod in place at a few locations, then glued the rest by putting a bead of CA along the junction of rod and wing. Next I carefully eased the rod off a tiny bit so the CA went underneath (*wikked*) and then let it snap back in place and in contact with the wing.
Wipe of excess glue quickly before it sets.
Once dry and set the sticky tape can be removed and it can be glued there as well.

Other folks have suggested that sticky tape around the leading edge provides a degree of strengthening/protection to the LE if you don't like the carbon fibre option.

The other section that seems to get quite a bashing is the motor mount and the nose of the plane.
To re-glue the motor mount means splitting the fuselage from front to rear *OR* making the top front into a removable (car) "bonnet". I went with the bonnet concept.

The bonnet is rather fragile, so I strengthen it by gluing two 0.5mm carbon fibre rods inside and pressed into the bonnet shape. The CF does cause the bonnet to want to spread out a bit, so maybe 0.25 rod would be better, but I don't have any; so I later glue a horizontal rod at the aft end of the bonnet to counter the spring effect of the bent rods. Overall the tiny rods certainly strengthen the bonnet.

Using a 1.5mm prop saver will hopefully reduce the potential of a broken prop or prop shaft and maybe take a bit of pressure off the nose if the model collides gently with a wall (who put that wall there anyway?)
Prop saver from Micronwings in alloy or nylon. Prop is Eachine/ WLToys standard 130x70 replacement prop with hole opened to 4.0mm from 3.5mm. I have some on order.

Thanks ***Rod McCubbin*** *for highlighting these improvements....Mr Ed*

The other weak point is the wing near the fuselage. In a crash, the wing can split near the fuselage, with the split starting at the cut out for the aileron. When the plane is new, or after gluing the split following an accident, this area can be reinforced with the simple application of sticky tape top and bottom of wing (Michael) and/or a gluing a short piece of 0.7mm carbon fibre glue across that area (under wing) and just in front of the aileron (Steve).

Any other improvements for the cub....come on let us all in on your secrets.....Mr Ed

Andrew Halstead who is a self confessed free frighter from way back thought we might be interested in these :-

https://youtu.be/wfSOlHn3ezg.....Jetex, for those who dont know what crazy things us oldies got up to in our youth

https://youtu.be/56Z93iPZbVQ..... Multi motor models.....fanbloodytastic not sure if they are free fright or radio assisted but ,jeez what skill in making them.

https://www.youtube.com/watch?v=4htwy17j3_o
What others are doing....rubber etc indoor scale, round and round and not a control line in sight but what fantastic models and skill level.

Remember those capacitor models from The Birdy years ago..... **Have you got any left JJ ?**
Cos this looks like a lotta fun for minimum expense and most importantly none of that B stabilisation that stops proper flying .....anybody got skill levels to build an indoor smaller version ?

https://www.youtube.com/watch?v=fiitDagzPdM

https://www.youtube.com/watch?v=DtFGrmwqRhc

lots of info on this one for a simple model that actually flies well
https://www.youtube.com/watch?v=UVsXdNyZcYc

hanger rat lookalike but with capacitor grunt up front. But second clip shows how to make ducted fan housings.....

https://www.youtube.com/shorts/8bJYyWKWXIM

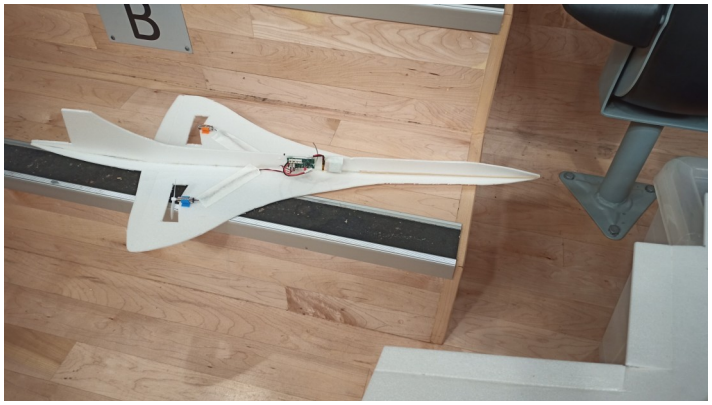
Thanks Andrew just the thing for when its cold wet n windy to sit and drool over other peoples abilities. One day I hope we can do a feature on those small peanut scale models or even get your CO2 powered beasts up and attem.

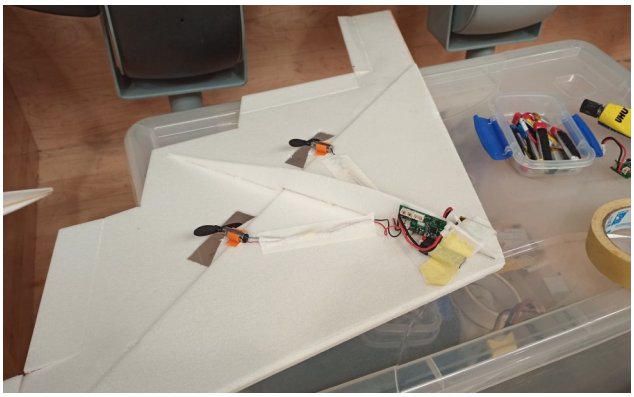
Before you criticize someone, you should walk a mile in their shoes.
That way, when you criticize them, you're a mile away and you have their shoes.

Prof Greg's page

Is there anybody out there who hasn't seen the incredible machines that Greg Egan brings each week. Greg is a self confessed lover of anything with a delta format and has been dabbling in wings of all shapes and sizes for a looooooong time. He is now converting the el cheapo Diffyfrust modules to run via his Taranis Open Tx set-up. I should add that Greg is also an accomplished slope soarer flier with what type of planes.....err..... deltas usually. Again Gregs and Andrews ideas overlap considerably so next edition I wont have to do anything except copy n paste info ???

More pickys to wet your whistle





Chris Hudnot has just sent me info for getting plans enlarged and from a flash drive (*way beyond my local Officeworks capabilities ....Mr Ed)*
SNAP is the place to go and they have outlets in many areas ....check them out

YOUR SPACE .....YOUR NEWSLETTER
Any chance of something from out there ?
What are you building ?
What have you bought and where from ?
Any gripes n moans ?
Send it in to :- Mr Ed (Colin Smith) at
colinkay13@gmail.com 0418743480

STOP PRESS
The new electric vehicle from Varta?

Finally, Mr Billy's first name is.....SillIy !