



## *Propwash*

*April 2017*

*From the President.*



Welcome to this April edition of the Propwash, in the previous edition we had a look at the transition that had taken place at the field over the past 18 months, since that publication we have had a few more challenges which I have covered within this edition.

Time has been slipping by whilst we have been preoccupied with the additional upgrades to the stage where it is almost to the end of another very active year at SWARMS.

What does that mean you may well ask, the Annual General Meeting date is fast approaching so time to consider standing for a committee position when the time arrives in June.

A General Meeting is scheduled at the field for April 30th at 10 am, at this meeting the time and date for the AGM will be decided, the September flyin will also be a topic of discussion at this meeting to decide what format the event will take this year.

This was briefly discussed as an agenda item at the last meeting to enable members to give a bit of thought as to what format we should go with this year prior to this meeting, there has in the past an emphasis on Scale models and I don't have a problem with this but we need to see what changes can be made to create a lot more interest and improve the attendance at this event.

A lot of work goes into the preparation for this weekend and a bigger turn out would be more rewarding for the effort that goes into this event.

The taxiways have now been concreted and this certainly has improved the layout of the field both cosmetically and also dramatically improved the safety aspects, the old matting had deteriorated to the stage where members and visitor were subject to slips, trips and falls whilst using the facilities.

The club certainly appreciated the assistance to the tune of \$5,000 passed on to us by AWA to complete the project, without their support it would not have been practical to do this work. This was done with the assistance of a contractor who actually laid the concrete and finished it off, the earthworks were completed by the club. The grass along the edges is already showing signs of recovering through the sand top dressing and with a few showers of rain things will be back to normal in no time at all.

The large trees outside the clubrooms have been trimmed back, I mean really trimmed back, to ensure we have some control over the amount of leaves and bark that was being deposited into the guttering of the clubrooms. This has been causing the water in the toilet catchment tank to turn black as a result of the leaves decaying to the stage where it now has a very strong smell.

When the weather changes, we get a little bit more consistent rain, it will be necessary to empty the tank clean it out and then allow it to refill, this will ensure that we will be able to keep the water clean from here on.

Good to see we have a potentially new member in Allan he has been under going training sessions with the clubs Boomerang 60 and the buddy radio system and is finding out that it is not as easy as it looks especially when you want to get in charge of the plane.

Welcome along Allan I hope your experience with SWARMS is a rewarding one and that you enjoy the challenges of flying model planes around the sky .

On Sunday 2nd we arranged a busy bee to clean up the trees that had been cut back and fallen on the grassed area, it was a disappointing turn up by members but I would like to thank the “very” few who did assist with this job, also thank you the Allan who at this stage not even a member of the club.

I have looked at the definition of a “CLUB” and it is defined as.

*“An organization of people with a common purpose or interest, who meet regularly and take part in shared activities.”*

*I don't see this as actually occurring amongst our members at the moment.*

A club is only as good as it's members so I would encourage you to consider having a bit more involvement with the upkeep of the facilities and assist with the not so nice tasks when they arise to ensure that all members and visitors are able to enjoy their chosen sport. If these facilities are not maintained regularly there will be no facilities available to use in the future as they will deteriorate rapidly.

**There is a round of the IMAC competition being conducted at our field on the weekend of the 22nd and 23rd April, this means the field will be closed for general flying, however, the club will be required to cater for the visiting pilots by providing breakfast and lunch on both days.**

**Please mark these dates on your calendar and assist where ever practical, this provides good revenue to the club over the two day event and one of only two weekends of the year where we are able to raise some funds for the club.**



**Paddy says to Mick, "I'm getting circumcised tomorrow."  
Mick says, "I had that done when I was a few days old .  
Paddy asks, "Does it hurt?"  
Mick says, " Well I couldn't walk for about a year."**



*I was privileged to have flown the B29 on Saturday 25th March, story on the next page, what a thrill.*



On Saturday 25th I had the privilege of assisting Woody with the assembling of his B29 bomber for a scheduled test flight in preparation for him to attend the War Birds Flyin in Perth the following weekend.

After the model had been assembled and with the rectification of a couple of minor faults the plane was fuelled up and we were ready to fire up the motors. Each of the four motors fired without any problems and on full revs they harmonized beautifully.

It was a real picture as she (Dina) taxied down the newly completed concrete taxiway onto the main runway before heading east to the far end of the runway in preparation for take off. The four motors were on song as the throttle was increased to full power and she headed down the runway and the lift off was perfect and the sound decreased as she flew away from the strip.

As the plane flew back over the field it became obvious that the nose wheel had not retracted fully up into the plane but with the flight going to plan it was not a big issue at this stage of the flight as we stood in awe of what we were witnessing and hearing. With each fly past back down the field after a well manoeuvred turn at the end proved to be very impressive and Steve had the plane looking like the real thing.

Then the radio was handed to me, Yes, I flew the B29 and it was a real buzz, it handled better than I had anticipated for a large model and within a very short period of time I was confidently flying circuits around the field just like Steve had been doing.

As the flight progressed it was getting time to consider a landing, now it was time to think very seriously about the nose wheel as it had not come down with the others which was now getting a bit of a concern, however, it was necessary to land so Steve put the plane into a landing circuit in preparation for a landing.

On the final leg the plane was on approach for the runway with the power reduced on the motors the decent rate was rear on perfect as she approached the eastern end of the field.

In over the trees closer and closer to the strip and then within approximately 10 metres from the main runway the worst thing that could happen did happen.

The plane did not respond to elevator and belly landed on the grass causing damage to the undercarriage and wing housing area. The main wheels were broken free of their wing location and some structural damage occurred to the upper wing surface.

It was a disappointing end to what was a near on perfect flight, however, Woody has indicated that all is not lost and the details below are direct from him after reviewing the situation:

Driving home, I was thinking what to do with her, one option would be to retire her & rat all the gear for the B36 I am building. After a coffee, it went thru my mind that she is such a beautiful flyer, looks & sounds unreal especially on the take off, it would be a sin not to fix her up, consequently, I will rebuild her but not immediately.

What I have in mind is to fly her at our scale do in September, will inform Steve of my intentions. Apart from a few minor problems (I had rewired & fitted new fuel lines, hence those couple of minor problems) it was a great flight, the engines started easily, idled well & powered up, no probs. The taxi & take off was magnificent, she flew the 10 minute flight without missing a beat.

The set up for the landing was good, wings & fuse level, no breeze didn't help I feel, she didn't seem to stall, just not enough forward speed for the elevator to work, maybe we could put a bit more throw on the elevator & move the CG back a little.

People often ask why I don't fly her, I'm sure I could take her off & fly for 10 minutes, it's just the landing, the landing yesterday would have been a good one for me. With a light model, no problems but with a heavy model, damage occurs.

***She will repair without too much trouble !!***

Good positive attitude from Woody, so we can look forward, hopefully to witnessing the B29 grazing the skies over the SWARMS field at the scheduled September flyin in 2017.

Another transformation has occurred at the field with the upgrade of the taxiways, they had deteriorated to the stage where it was becoming a safety hazard, as in trip hazard to walk on, when accessing the main runways so the old “Bite the bullet” method was introduced to rectify the problem.

With AWA coming to our assistance by providing a \$5,000 grant for the project the wheels were put into motion to complete the transformation from matting to concrete. The matting was removed to expose the sand base which had to be taken down 85 millimetres to enable us to keep the concrete surface even with the existing grass.

The removal of the sand presented a few problems as the equipment we had, our tractor with a back blade fitted, was not designed to remove the sand. It was perfect for moving it around but we had to maintain designated edges to define the layout for the concrete so could not drag it out away from the existing taxiway.

With the contractor confirmed to start the job it was necessary to get the sand down to the right level ASAP so a dich witch was hired to remove it, this was a real experience with my first time on one of these machines. After several hours the level had been reached and it was now time for the form work to be put in place, The East / West strip was formed on Monday and concrete poured on Tuesday morning, the first section of the North / South strip was also poured with the excess concrete in the load.

On Wednesday morning the form work was removed from the completed section and placed along the second taxiway whilst waiting for the next load of concrete to arrive which was scheduled for 1015 am. By around 1 pm on Wednesday both strips had been completed and the contractors had left the field. The backfill on the first section was completed during the morning, however, the second section could not be backfilled until the concrete had cured.

A few photos of what we had compared to the finished product we now have, it has eliminated the need for maintenance on these taxiway for many years to come.

*The North / South taxiway with matting partially removed.*



*The East / West taxiway matting prior to removal of matting.*



*Matting removed*



*Sand removed to the correct depth waiting for the form work to be put in place.*



*Formwork in place on East / West strip.*



*First section pour commenced on North / South taxiway.*



*First section of the pour commences on East / West strip adjacent to main runway.*



*Completing the pour the next day.*



*East / West taxiway completed.*



*Cleared for take off !!*



There was some disruption to members whilst this project was undertaken, however, with the project now completed it has made it a much better facility for all to use.

The main runways should be our next focus as they, just like the taxiways are deteriorating and will need some form of repair or replacement in the not too distant future, however, this is a big task not only physically but financially as well.

*North / South taxiway completed.*



I have asked previously for members to think about the options we might have available to us to achieve this but to date no one has made any comment on what the solutions might be. Funding for such a big project will be difficult unless one of the members wins lotto and makes a donation for this to become a reality. Maybe we look at doing a little bit at a time over a long period, the other thing to consider is what type of surface do we go for, concrete, grass or bitumen.

If we had power maybe we could do grassed surface and install a bore to keep the surface watered through out the dryer season, another option without power could be to install a bore with a diesel pump that is activated on a regular basis to do the watering. The grassed runways would be the cheaper option but the watering would be the main problem.

These are the types of things we need to be having discussion about in the planning stages to ensure the surfaces are maintained to ensure we have a reliable surface from which to fly far into the future.

Start some discussion over coffee and make some suggestions as to what might be achievable to solve the problem.

**Flight Box Essentials / Field kit**

Everyone is different when it comes to what should be taken to the field in your flight box. Some arrive with the bare minimum, others arrive with enough kit to furnish a Boeing factory, however, there are some essentials that should be considered, here are a few.

**General:**

Sunglasses, even if it is overcast, hat, jacket, water to prevent dehydration and something to eat depending on how long you intend to spend at the field.



**Nitro flight:**

Selected plane or two.

Flight box containing, screw drivers, pliers, glow starter, starter / chicken stick, nitro fuel, spare glow plug, cleaning cloths, charged flight battery and radio.



**Electric flight:**

Selected plane or two.

Batteries, charger, pliers, screw drivers, spare batteries and radio



**ALCOHOL FACTS**

- Alcohol acts as a diuretic (ie. it makes you pee more) hence increasing the risk of dehydration
- A 200 ml glass of beer will make you pass approximately 250 - 300 mL of fluid.
- Electrolytes such as sodium & potassium are also lost.
- One of the reasons we do not combine drinking and flying at the same time, maybe we could place toilets closer to the flight line.

#####

The car won't start," said a wife to her husband. "I think there's water in the carburettor."

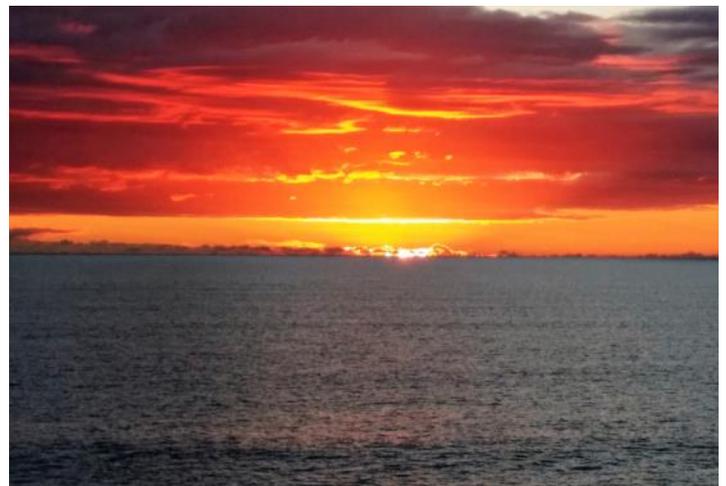
"How do you know?" said the husband scornfully. "You don't even know what the carburettor is."

"I'm telling you," repeated the wife, "I'm sure there's water in the carburettor."

"We'll see," mocked the husband. "Let me check it out. Where's the car?"

"In the swimming pool."

**Sorry to say we will not witness many more of these scenes in the months to come as winter sneaks up on us.**



## *Flying Tips*

### *Fine tuning the C of G*

During the maiden flight of a new plane it is essential to first of all trim it to fly straight and level, then test the stall speed and select a cruise speed that you are comfortable with.

You should find that your model flies level at the selected cruise speed setting, open the throttle a bit from that setting and the plane should climb, close the throttle a bit and the plane should sink. Once this throttle setting has been input to the radio landings will be a whole lot easier from now on.

This is one way to lower your workload, by having your model nicely set up you can control the rate of sink on landing approaches by small throttle adjustments.

The C of G is set prior to the flight, preferably in the work shop long before arriving at the field, if this is done at the field the wind will be an influencing factor and the setup may not necessarily be correct.

After the first flight we need to check if the C of G is set where we want it, there are lots of ways of doing this, however, there's two ways that you can experiment with to get a feel of the planes performance.

- A) Half roll to inverted and see how much push elevator is required to have the plane continue to fly level. If there is a lot of input required, especially on a symmetrical profile wing your model is almost certainly nose heavy.
- B) Alternatively gain lots of height turn into the wind and move throttle to idle, push the nose down into a vertical dive and centralize the elevator. If the model tends to pull out of the dive it's probably nose heavy so move the C of G back a little. If it tucks under it's probably tail heavy.

There is no "right" position for the C of G each plane has a recommended position, however, it's best location is where it makes the plane fly how you want it to. Some pilots like the relative security of having it set a little forward, others find this limiting when doing aerobatic maneuvers

The model may refuse to spin if the C of G is too far forward because when slowed it drops the nose of the plane before it reaches the stall. Some pilots like the model to need a bit of down elevator push when inverted.

Every pilot has a preference so it is important to set the C of G how you want it, but do consciously set it after the plane has been test flown, don't just expect what is says on the plan or box, this is a recommendation only.

After any change to the location of the C of G the cruise speed will have changed because the distance between the C of G and the Centre of the lift will have moved. It may have only moved a click of two on the throttle, but if it has moved out of your acceptable throttle range then you need to go back and revisit the elevator trim.



### *As I Age*

When I was ready to check out and pay for my groceries the cashier said, "Strip down, facing me." Making a mental note so I could complain to my local MP about this security rubbish, I did just as she had instructed.

After the shrieking and hysterical remarks finally subsided, I found out that she was referring to how I should position my credit card.

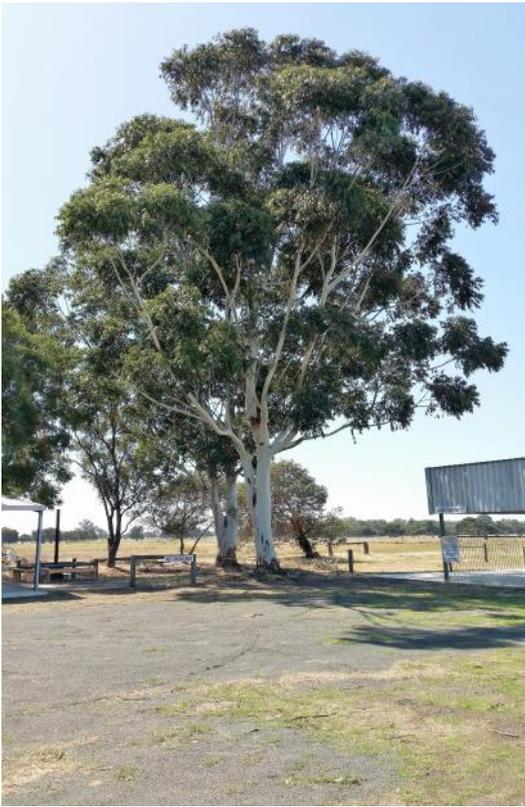
Nonetheless, I've been asked to shop elsewhere in the future.

They need to make their instructions a little clearer for seniors.

*Man, I hate this getting older stuff.*

*We underestimated the actual height of the trees, this is prior to trimming commencing*

*Cherry Picker set up ready to commence first cut.*

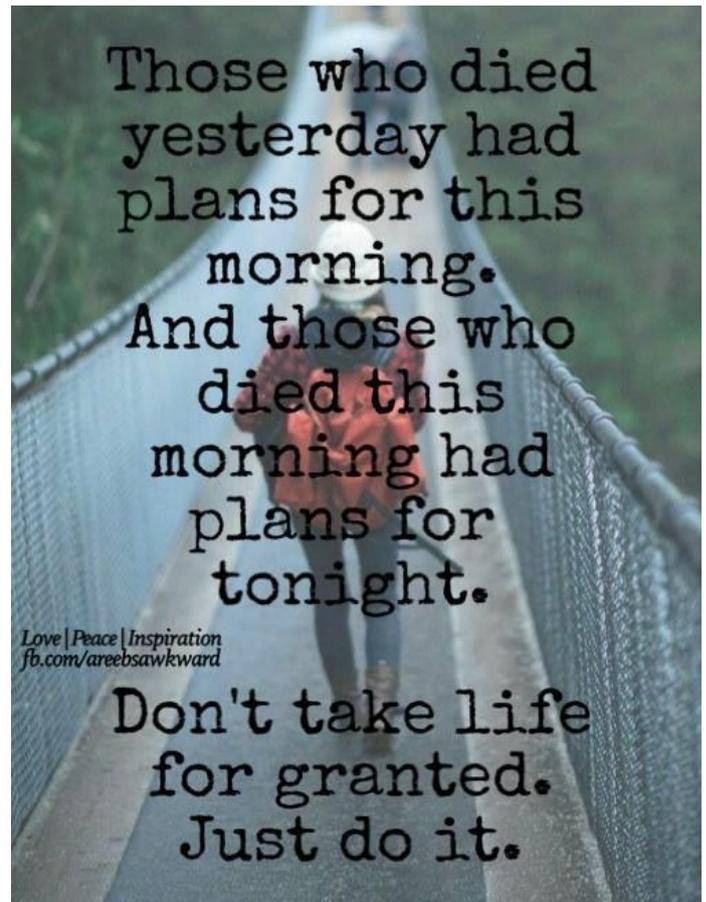


*From the above image to the below image in just 2 hours constant cutting.*

*Removing the last of the branches from the first tree.*



*Trying to reach the last bit of foliage from the extent of the last branch on the first tree. It was interesting to see how he got this bit down, a rope was tied to the top section of the stem and then tied down the tree a little. He then made the cut in between the two knots and supported the bush section in a controlled manner before lowering it to the ground.*



***Go Flying !!***

#####

A local polly boarded an airplane in Townsville with a box of frozen mud crabs and asked a blonde flight attendant to take care of them for him. She took the box and promised to put it in the crew's refrigerator.

He advised her that he was holding her personally responsible for them staying frozen, mentioning in a very haughty manner that he was a local Politician and proceeded to rant at her about what would happen if she let them thaw out.

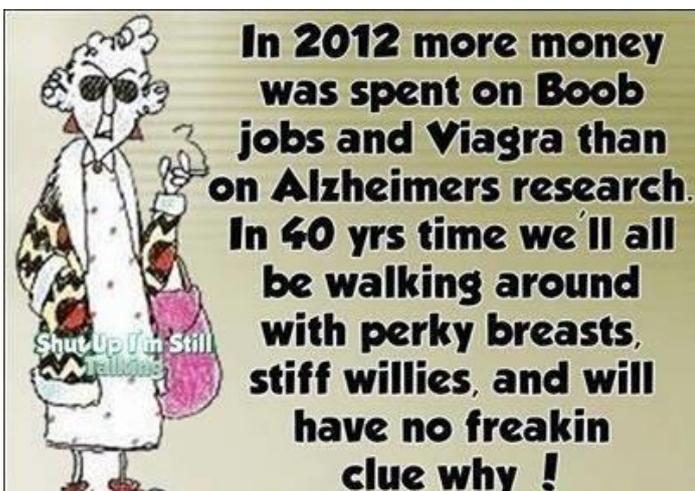
Needless to say, she was annoyed by his behaviour.

Shortly before landing in Brisbane, she used the intercom to announce to the entire cabin, "Would the politician who gave me the crabs in Townsville please raise your hand?"

Not one hand went up, so she took them home and ate them.

Two lessons here:

1. Politicians aren't as smart as they think they are.
2. Blondes aren't as dumb as most folk think.



**Teaching the art of landing:**

The objective: To get the student to the point where they can make consistent approaches from both direction and land.

A note about engine reliability This step requires a great deal of throttle changing. Before starting this step, it would be wise to confirm that your engine will maintain idle, go from idle to full, and in general, perform without stopping or stuttering at all throttle settings.

Are you ready to land? If all steps to this point have been truly mastered, landing will simply be an extension of what you already know. However, if you are having problems with this step, it should be taken as a signal that further practice (especially with step two) is needed.

**Teaching slow flight characteristics:**

Before the beginner can begin learning how to land, they must understand how the plane responds at slower speeds. With the plane rather high, reduce the throttle to just above idle and fly the figure eight pattern. You need to take note of how the ailerons respond more sluggishly. Also how, at idle, it is impossible to keep the plane from losing altitude (especially in the turns). Most importantly, note how if they try to maintain altitude by pulling back further with up elevator, the plane will eventually stall.

As you continue to lose altitude in the figure eight pattern, eventually kick the throttle back up to regain altitude. Repeat this several times. Be sure you can still maintain control even at slow speeds (especially holding a heading into the wind). Be sure you know at what point the plane will stall. And be sure you know what tends to happen during a stall. Fortunately, most trainers are very stable in a stall and no radical controls will be required to recover (though you should be aware that more acrobatic airplanes may not be so forgiving when they stall).

In step two, we had you flying with precision. We had you flying right down the middle of the runway (in an oval pattern). The goal was to hold the heading all the way from one end of the field to the other.

Now repeat this practice (still up high), but this time reduce the throttle for each pass down the middle of the runway. Again, be sure you can hold the heading for the length of the field at idle. Now increase the throttle at the end of each pass. Be sure to practice this from each direction.

[Note: Even though the wind will be blowing from only one direction on a given day, and of course the actual landing must be done into the wind, I recommend having practice approaches equally from both directions (from the left and from the right). This will prepare you for days when the wind is blowing from the other direction.]

**Practicing approaches:**

During the actual approach, you must begin letting the plane come closer to the ground. But first have some practice of the approach pattern up high. maintain a symmetrical approach pattern. That is, the same basic pattern can be used from either side of the field (left or right). This also makes it quite easy to practice from both directions.

Practice a modified figure eight pattern for approaches. Starting with the plane flying right down the middle of the field from right to left, veer off to the right (at about 45 degrees) shortly after the plane passes by. Hold this heading until the plane has made sufficient room to make a left final approach turn. Then begin a long sweeping left turn with the goal being to end the turn with the plane perfectly aligned with the middle of the runway. At this point cut the throttle to just above idle and hold the heading just until the plane passes by. Then increase the throttle and veer off to the left (at about 45 degrees). The heading is held until enough room is made for a right approach turn. Then begin the long sweeping right turn to line up with the middle of the runway. This is repeated over and over again. As you gain proficiency, the throttle is cut earlier and the plane is allowed to come closer to the ground. While all of this may sound a little difficult, if you have truly mastered setting and holding headings, believe it or not, this is actually rather easy! All we are really adding at this stage is the increase and decrease of the throttle.

**The final approach turn:**

Though this is rather difficult to explain you must understand that the nose of the plane must maintain a slightly downward attitude throughout the final approach turn (especially if the throttle is cut). This is how we cause the plane to maintain airspeed as it comes to the ground. The windier it is, the more important this point (and the more severe the downward attitude). While some pilots try to counteract the wind with higher throttle settings, I feel the decent of the airplane allows much finer control of airspeed than throttle.

If the nose of the plane balloons up at the end of the final approach turn, the plane will eventually stall. It will be impossible to maintain airspeed, and if very close to the ground, could result in disaster. As the student is practicing approaches up high, they must pay particular attention to the nose of the airplane.

### ***Actually landing***

Once you have progressed to the point where you can consistently align the plane with the runway and bring the plane to within twenty to thirty feet from the ground, you are finally ready to land. Once again, remember that beginners tend to rush this. You must determine when they're ready. If anything, a little more practice than necessary won't hurt.

Landing (if done right) is really nothing more than letting the airplane drift to the ground. If you do it right, you will not be having to force down elevator into the approach to get the plane to come down. It will do so naturally because of the low (idle) throttle setting.

During the last twenty to thirty foot of descent, you must keep the wingtips nice and level. As when taking off, you have to be ready with sharp, precise corrections to keep the plane on the center of the runway.

Again, the natural tendency of the plane at idle will be to descend, so if the proper heading is maintained, it is a relatively simple matter of waiting until the plane comes to the ground. When the plane drifts down to within about 1-2 feet above the ground, gently pull back on the up elevator to cause the plane to flare out.

Your first few landings tend to be a little rough. Though the correct amount of approach practice should help you overcome nervousness, landing can be especially unnerving. Beginners tend to panic when low to the ground. They forget which way to turn, especially if minor aileron corrections are necessary.

Remember that if approaching from the right, right is your friend, meaning if they panic, giving right aileron will take the plane in the direction away from the pits. If approaching from the left, left is your friend.

***Dumping the plane is always better than flying into the pits.***



Practice, practice, practice Though a beginner's first solo is a great confidence builder, do not think you have mastered landing just because you have done it once. As with taking off, every landing will be different. While you will be very anxious to begin flying by yourself at this point, be sure you have practiced landings over and over again - in several directions and in different wind conditions.

One excellent way to practice landing (and taking off) is with touch and gos. After landing (without killing the engine), have the taxi back, take off, and land again. As you gain proficiency, reapply throttle as soon as the plane touches down, performing a true touch and go.

### ***What about dead sticks?***

It is likely that at some point during training you had a few dead sticks. To be able to handle them, you should also practice them, since sooner or later, we all have to land without power. One obvious way to practice is to simply cut throttle and pretend the engine is no longer running. At first, have the plane in a nice approach position so you can land with relative ease.

As you continue practicing, get the plane into more precarious conditions when you cut throttle. Be sure you are prepared for this if and when it happens.

### ***Are you ready to fly solo?***

The whole point of RC training is to get the beginner to the point where they no longer need the instructor's help. If you have successfully completed the four steps we have given, you should be ready, however, this does not mean that you are an expert pilot.

The practice you have done has been with close supervision. In the real world, there will be no instructor there to take control when things go wrong. You could still get the plane into rather precarious situations. This knowledge should inspire you to be quite cautious for a while.

***Catch you when we fly into the next edition.***

