

Propwash

February 2022

From the President



Looks like Bill was good last year and certainly impressed someone as he fronted up at the field with this new EDF recently.

It was given its maiden flight on Sunday 16th January and after the routine few clicks of trim proved to be a very stable model and I thought easy to land. Bill may have a different story !

Welcome Back SWARMS Members.

Hope everyone had a great Xmas New Year break and are all enthused with the prospect of a better years flying ahead. Some of you may have been lucky and received gifts that fly, or at least vouchers to pick your own, if not then must assume that you were naughty. No matter what we hope to see you at the field enjoying yourself with the new or old faithfuls up in the blue. When you do get to the field you may also encounter new members that have signed up over this period so make them feel welcome as you always do.

The field has been looking really good and thank you to those involved with the mowing and edging that has been occurring. There is also a stack of roofing sheets and other bits laying in close proximity of their end destination, that would be the pavilion roof. With some luck it will be in place for the winter that is coming.

Some of you may know but for those that don't Simone and I have sold our house in Margaret River and are moving to Perth. We are to be out mid February and settle at our new abode then as well so you may not see me for a bit while this happens. I however will still be calling SWARMS home and in reality not much difference in travel time anyway.

For now not much news from me but I am sure Ron has plenty in the following articles. Stay safe and look forward to catching up with you at the Field.

Cheers

Bill Darnell



Like all new foam models these days it is very detailed and finished off to a very high standard.

Hopefully there are many safe hour flying ahead.



From the Editor



The new year has commenced with a lot more of what we have already experienced in the past regardless of any New Year resolution you may have made, it has to improve soon maybe when we have had all three of these.



We have had some new members join in the New Year and I wish to extend a **“BIG”** welcome to them from SWARMS members and trust their time with us will be both challenging and rewarding.

Mark Hyrb who has previously been involved in the sport at a club in Perth comes to us after having a break from flying, he recently moving to Yalyalup and has decided to get back into flying and to do so he has joined the club.

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Jeff & Ben Tonkin a father son duo have decided to get involved in RC flying they visited the field on Sunday 16th January to learn a bit more about the hobby, they were impressed with what they seen and heard about the club so have now joined and are looking forward to being guided in the finer details of the sport we wish them all the best and hope their stay with us is a pleasurable experience.

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For those new pilots who are currently undertaking their training lessons and for those who are about to commence I have included some very useful tips for you on Page 10 of this edition.

These are to give you an idea of what you are about to experience and how to respond to instructions from your instructor throughout your training program up to solo status.

This year we have proposed to conduct another EDF jet Funfly which was held for the first time in August last year, no doubt this will all be determined by what COVID restriction that may be imposed on us at the time if any.

Last year was a big success so hopefully we can get a similar outcome if we are able to conduct the event again this year.



The September long week end Funfly is another date to put in the calendar as this was also a very successful event last year, many of the visitor indicated that they would return for the next one due mainly to the hospitality shown and good time they had in the sky.



Retirement age is 67 years

Life expectancy is 78 years.

Work for 50 years to maybe enjoy 11 years.

Start enjoying life now.

No one is guaranteed tomorrow.

Don't put off going flying until tomorrow, now is the right time to do it!



What a start to 2022 for this member, at the September 2021 funfly Troy was lucky enough to take out the first prize in the raffle this Tiger 60 sports plane.



It was fitted with a 9cc GMH petrol engine and after two flights it was deemed to be under powered, once in the sky it did perform well, however, it struggled to get airborne. A decision was made to purchase something a bit bigger to do the job so the search began across hobby suppliers to get something with a bit more power.

He decided to go for a 17cc NGH engine the same brand as the 9cc as it had to have front carburettor and side exhaust which the 17cc motor had. It arrived just prior to Christmas and it was hastily changed out in preparation for the next stage of the flying programme.

On Sunday 2nd January final preparations were made at the field and it was time to run the motor in, we did have a few problems getting it started, however, that proved to be minor it was just due to someone having their wires crossed and there was no spark to the motor.

After spending time putting some fuel through it whilst secured to the startup pegs it was time to test the power whilst doing some taxiing on the runway and it proved to be a different plane now having plenty of power to get it up and go.

Back to the pits to refuel and then it was time to see what it could do in the sky, lift off was no effort at all and once clear of the runway it was time to do the usual few clicks of trim before handing the radio over to Troy.

The test flights were conducted on around half throttle which proved to be a comfortable cruising speed and Troy was now enjoying the experience, with the flight time extended due to now running a petrol motor it seemed that he did not want to land and was reluctant to come back down.

He eventually came in and the plane was all checked out refuelled in preparation for the next flight which again proved successful.

He smiled when he one the raffle and his smile was even bigger at the end of the days flying.



His comment after the flying session was, "I am amazed with the sound and how well she fly's."

Hopefully there is many happy flying hour ahead for you and the Tiger. (No not Richmond)
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Three wise men caught in the pits talking tactics on how to handle the gusty wind on Sunday 16th January, it proved to be all to no avail as the wind dissipated and it turned into a good day for flying.

*Peter
Rob &
Trevor*



We had some uninvited guests at the field over the past couple of weeks both inside and outside the club rooms. Not only did they visit us they have been very busy devouring some of our stock.

This bag of 4 paper hand towels had been changed from it's normal white colour to this brown mass.



Once we discovered them it was time to do a major clean up, even whilst we were doing that they were still working hard to eat the remaining pieces of the paper.



These disposable drink cups also made a nice meal for our visitors, the concern we had is that they did not clean up before they had moved onto the next item.



The large wooden chopping board that was positioned on top of the main bench was the next item on their menu, they ate their way underneath the board until they came out the other side. I thought it would have been easier for them to walk over the top of the board it looked like it had been done by a router machine.



***Old age comes at a bad time !
When you finally know everything, you start to forget everything you know.***

An elderly aero modeller from a local club decided to prepare his will and make his final requests.

He told his priest he had two final requests. First, he wanted to be cremated, and second, he wanted his ashes scattered in the car park outside the Hobby Tech model shop.

“Hobby Tech!” the priest exclaimed. “Why Hobby Tech?”

“Then I’ll be sure my son will visit me at least twice a week.”

This bi-plane owned and flown by Rob Ballock (I assume he owns it but he has been flying it pretty high recently so it could still be on “Higher Purchase”) looks very impressive on the ground and performs well in the sky.



Not sure about the fun part of crashing, however, every RC modeller would have experienced a similar incident during their association with the sport.

If we did not pickup the pieces salvage what survived and either rebuild or replace we would not have many people still flying.

Dust yourself off and get back in the sky.



Time is like a river.



You cannot touch the same water twice, because the flow that has passed will never pass again.

Enjoy every moment of your life.

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Would you like a new plane, or two, these two planes are for sale

FMS FW 190A New Focke Wulf built but never flown \$425 with battery.

Flightline Spitfire 1600mm flown 3 times \$400

For further details contact Ed, on 0448 802 260



A soldier survived mustard gas in battle, and then pepper spray by the police.

He’s now a seasoned veteran.

News Flash !!

In a shock move, the English Cricket Board has announced that tennis world #1 Novak Djokovic will be their temporary batting coach.

“We acknowledge that he doesn't have any background in the sport but we could not overlook the fact that it took Australia two week to get him out”

Dennis Milligan's new build project is nearing completion, surprisingly Dennis has been a member of SWARMS since 2013 and this is the first complete build of a laser cut kit that he has under taken.



I must admit he has had a lot of building experience, or should I say rebuilding experience from minor to major mishaps that have occurred during his time in the skies over SWARMS with positive outcomes each time, however, the proof of this build will be in its maiden flight.



This versatile tool is a must for every modellers flight box.



What did the kamikaze pilot tell his students?

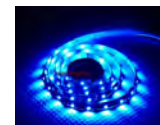
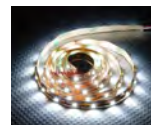
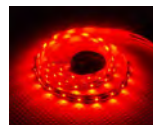
I'm only going to demonstrate this once, so watch closely.

What do you call it when you're sick of being in the airport?

Terminal illness.

Will invisible airplanes ever be a thing?

I just can't see them taking off.



When the weather cools down a bit it might be a good idea to activate some night flying, like a late afternoon BBG meal then settle into some flying.

This proved to be very successful at the Funfly in September with a good number of pilot having a go and enjoying the experience. It was also entertaining for those who just chose to watch.

A club social event to consider over the next couple of months.

Dennis Green who is a Life Member of the club still enjoys the challenges associated with the sport, he is having a few problems with his mobility these days, however, when he fly's now he was a swivel chair he sits on at the flight line so he is still able to enjoy his flights above the field.



He recently purchased a new Bixler 3 kit and upgraded the motor which has given the plane plenty of power to perform anything Dennis throws at it in the sky. It has been test flown and now ready for Dennis to settle into some docile Sunday morning flying.



With Christmas now behind us it will soon be time to see who got what in big boxes from the old man in the red suit.

If you were lucky enough to have been on the good list the results should show up in the air at the field shortly with the construction nearing completion and the maiden flight scheduled.

I asked for a bigger shed but it appears that Santa could fit it in his sleigh so I will just have to do with what I have for the time being.

The resident Eagles caught here showing us some formation flying on a perfect day at the field.



Breaking News !!

I heard a very strong rumour that Trevor has taken ownership of a balsa laser kit, a Dancing Wings Hobby T12. I believe he has contracted this addiction of online shopping, hopefully the symptoms will ease as COVID disperses and things get back to some normality.



1200mm	870mm	≈0.9KG
2212-2216 1000-1400KV	30A	9g*4pcs
3S 1500-2200mAh	9-10inch	≥4CH
ASSEMBLY E → H	FLYING E → H	E-Power <input checked="" type="checkbox"/> G-Power

DANCING WINGS HOBBY

A brief look back in history at where our hobby evolved

The very First example of radio control was demonstrated in New York City in 1898. Its inventor—Nikola Tesla—was a 43-year-old immigrant who was duly awarded U.S. Patent no. 613,809 on November 8, 1898. It was only one of 113 U.S. patents that this prolific genius received during his lifetime. Many electrical engineers and historians regard his basic inventions as the foundation of the 20th century as we know it. In the decades that followed, the military and its suppliers attempted to implement Tesla’s work in various R/C projects—including boats and aircraft—without very much fanfare.

By the middle of the 1930s, miniature airplanes were just beginning to be powered by very small gasoline engines. An R/C contest event was even scheduled for the 1936 model aircraft Nationals in Detroit. It was a little premature; not one entrant showed up! The following year however, must be regarded as the true beginning of R/C.

Several men who were active in amateur radio became interested in the possibility of controlling model planes by radio. Two of these early pioneers were Ross Hull and Clinton DeSoto. Both were officials of the American Radio Relay League (ARRL), which is the governing body of ham radio operators. Hull was a very gifted radio designer whose achievements include the discovery and eventual explanation of the tropospheric bending of VHF radio waves. Since his youth in Australia, Hull also happened to be an avid modeler. Hull and his associate DeSoto successfully built and flew several large R/C gliders in the first public demonstration of controlled flights. Their sailplanes made more than 100 flights. (See the January and August ’38 issues of Model Airplane News). Tragically, Hull died one year later in 1939 when he accidentally contacted 6,000 volts while he was working on an early television receiver. DeSoto died a decade later.

Competitive Flight

The 1937 Nationals R/C event attracted six entrants: Walter Good, Elmer Wasman, Chester Lanzo, Leo Weiss, Patrick Sweeney and B. Shiffman. Lanzo won with the lightest (6 pounds) and the simplest model plane, although his flight was a bit erratic and lasted only several minutes. Sweeney and Wasman both had extremely short (5-second) flights when their aircraft took off, climbed steeply, stalled and crashed. Sweeney, however, had the distinction of being the first person to attempt an R/C flight in a national contest. The other three entrants weren’t able to make any flights at all.

R/C Evolves

The 1938 Nationals were once again hosted by the “Motor City.” Although the R/C entry list had grown to 26 entrants, only five fliers showed up on the field. One of the newcomers was DeSoto, who entered a 14-footwingspan, 25-pound, stand-off-scale model of a Piper Cub that was powered by a Forster twin-cylinder engine. Each of the four separate receivers on board used a gas-filled Raytheon RK-62 tube in a super regenerative circuit to activate its own sigma relay.

His plane placed second, but it isn’t clear whether or not it actually flew. Oddly enough, these first contests required only that contestants demonstrate their R/C systems in a static position on the ground to win a runner-up award.

Walter Good was the only contestant who attempted a controlled flight in the face of the 20mph winds. Even though it ended in a crack-up, Walt was awarded first place. A truly convincing demonstration of R/C flight by a powered miniature aircraft would have to wait until the following year. Eleven R/C fliers showed up at the 1939 Nationals at the Detroit Wayne County airport.

For the first time, a 100-point system was adopted by the judges. Points were given for craftsmanship, actual R/C operation in a static preflight mode on the ground and a variety of flight manoeuvres.



Walter Good launches Guff at the 1947 Nationals. Bill is at the controls; his feet are behind Walt.

The sport has come a long way from those competition planes to the current IMAC competition planes



No story on the early days of R/C would be complete without recognizing the work of Joseph Raspante. Unlike most of the early pioneers of R/C, who were basically model airplane builders teamed up with ham-radio specialists, Joe Raspante was a superb designer and builder of early gas models as well as a competent electronic technician.

His R/C system was unique in that he used a telephone dial to select various control functions. He placed second in the 1939 R/C Nationals and third in the 1940 event. Raspante was generous, and he shared his knowledge with young builders in years that followed. Walter Good remembers that when thieves stole his brother's R/C transmitter from their hotel the day before the 1940 Nationals, Raspante offered the use of his own transmitter.

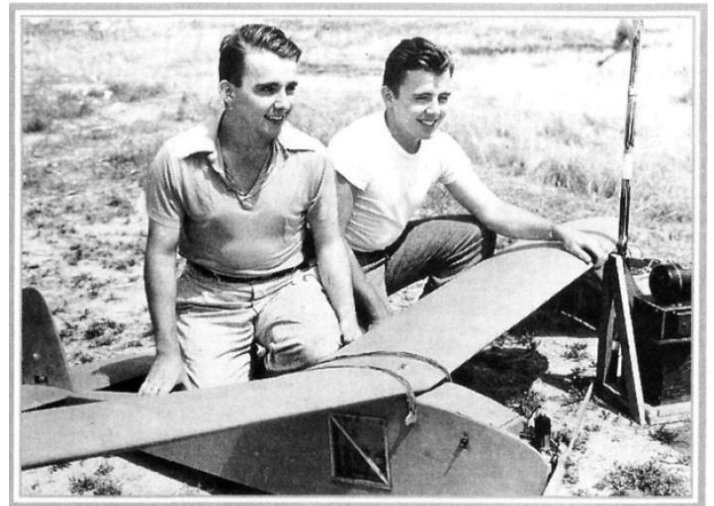
This gesture was especially meaningful, because the Good brothers had defeated him in the 1939 Nationals. Raspante finally won the first place he yearned for at the 1946 NY Daily Mirror contest at Grumman airfield. It was my privilege to see him fly there. With the advent of the transistor and the integrated micro-circuits, today's R/C builder hardly has any of the frustrations of the early pioneers.



Joe Raspante launches his R/C model at the 1946 NY Mirror Meet at Grumman Airport in Long Island, NY.

In retrospect, however, we see that most of the pioneer's dedicated efforts were largely foiled by overly complex electrical designs. But without their perseverance, I doubt that R/C flight would have progressed as quickly to where it is today.

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Walt and Bill Good and their R/C model—the Guff (circa 1939).

The radio transmitters, on the left, have come a long way since 1946, from a boot full to a hand full and with many more features. But with everything it had to start somewhere and we are now all reaping the benefits of the technology changes over the years, who knows what it will look like in another 70 odd years.

Size comparison shown here with a modern 2.4 Spectrum radio compared to the amount of equipment stored in the boot of this car to do the same thing. It must have taken a lot of time to load and set up the equipment for a day at the field and it was reassuring to read that they used to crash back in them days also, I can see by the size of the aerial and the stay wires that it could not have been possible for it to be attached to the radio.



Here's Joe Raspante with his R/C Super Buccaneer at the NY Mirror Meet. Note the car trunk that's full of transmitter equipment (circa 1946).

“Hints for Student Pilots”

There are a few things that a student pilot should keep in mind when preparing for each flight. These will help in getting the feel for the model in flight.

Be *very* gentle with the controls. It takes very little movement to get the model to execute a manoeuvre. Remember that the farther the stick is moved, the more the control surface moves and the more the model will respond.

As long as the stick is held in a control position, the maneuver will continue. This is most important when using the ailerons. When the stick is moved to roll the model, it will continue to roll as long as the stick is held in that position.

Fly it in...fly it out. When a maneuver is executed, it takes equal and opposite controls to overcome it and return to normal flight. A turn requires the movement of the ailerons in the desired direction of the turn. To recover from the turn, opposite aileron input is required.

Keep the model *high*. A Certified Flight Instructor once said, "The two most useless things to a pilot are air above you and runway behind you." By this he meant that if a pilot gets into trouble, he must have plenty of air below him to recover. When landing, the runway that is behind the airplane after touchdown is wasted because there is a reduction in length of runway to take off again in case of trouble.

Keep the model in sight. Do not fly *too* high nor *too* far away. Although the trainer may seem fairly large, it is easy to get it far enough away so that it is difficult to see its orientation. Do not fly into the sun. A moment of blindness caused by the sun can be long enough to lose a model.

Do not become discouraged. There will be times when nothing seems to go right. Each maneuver results in a near catastrophe. Everyone who flies R/C models today has been through this in learning to fly. Do not give up. The next session will be better.

• **DO NOT PANIC.** When a maneuver goes wrong, take all the time necessary to recover from the mistake.

Panic will cause a student to over control in an attempt to recover and cause the condition to worsen in the opposite direction. Although the instructor may seem to be a casual observer standing at the side of the student, he will be watching in case the student gets his model in a dangerous situation.

The first few flights will begin with the instructor doing the take-off and checking out the model. The student should watch the airplane as the instructor explains each control movement as it occurs. This will give insight into what is required to execute a take-off. The same will be true for the landing. Learning to properly land a model is by far the most difficult part of learning to fly. The model is most vulnerable when on the approach to landing because of the close proximity to the ground, its slow airspeed, the reduced responsiveness to control input, and the disorientation due to reversed control.

When the instructor has flown the airplane to sufficient altitude, usually 150 to 200 feet, he will ask the student if he is ready to take control. It is normal to be nervous at this point. The instructor will then give control to the student by pressing and holding the trainer switch. He will tell the student the maneuvers that he wants him to perform and how each one is to be done. He will give him instructions as to how improve each manoeuvre as it is being done.

He will have him perform gentle turns left and right, flying ovals around the field, flying rectangles and figure eights. Each manoeuvre serves a purpose in building the skill of the student pilot. The student will progress to steeper turns, slow flight and stall recovery, each in itself a manoeuvre required to learn to land.

If at any time, the student should get into trouble, the instructor will take control of the model simply by releasing the training switch. He can avoid a mishap and take the trainer back to a safe altitude. The instructor will not let a situation build to a point that is beyond his ability to recover yet he will allow the student time to attempt the recovery on his own.

Ron Waller SWARMS Instructor

It is good that we have several new enthusiastic members who have recently come on board and joined the club and they have all expressed their delight with the facilities we have and it is hard to explain that they have not always been like this. So I have put a few photos up to show them the progress from where we were to where we are currently.

The original runway surface which consisted of conveyor belt matting.



This deteriorate over 30 years to the stage it had to be replaced, the Capel Bowls club was replacing their greens surfaces so we purchased this synthetic matting and placed it on the runways.



This proved to be ok short term, however, strong winds consistently blew it up so with AWA grant money available in 2020 a concrete surface was put in place which will now be there long term.



The original pits building.



In 2015 with grant money from Lottery West and AWA we were able to construct a new pavilion.



With the same grant money the existing toilet system was also upgraded.



The existing taxiways were also covered with a conveyor belt matting which had deteriorate over the past 30years so this was removed and the exiting concrete surfaces were laid.



Taxiways current concrete taxiway surface



We were fortunate enough to have secured some grant money over the past six years to improve the facilities for members and visitor to enjoy a safe venue to fly at and to be able to provide a facility for special events.

This did not occur without a lot of hard work and many hours provided by members to enhance the facilities and it is something to be proud of, there are a lot of clubs within the state who would love access to this type of facilities to enjoy their hobby.

A lot of these tasks at the field are carried out with organised busy bees, which don't occur very often, so if one is called to carry out some tasks to improve the facilities I would encourage you to ensure you place the date in your diary and come along to assist, the field is normally closed for flying during these days until the jobs are completed.

Many hands make light work



I was travelling on a long flight and thought the time would pass faster if I had a chat to the person sitting next to me.

However, the person sitting next to me was a young girl, about four or five years old.

“Hello there,” I said. “I wondered if you’d be interested in chatting to make this flight go faster.”

“Sure thing,” said the little girl. “What do you want to talk about?”

“Well, why don’t we talk about the state of the Australian economy?”

I said, feeling a bit smart.

She looks at me out of the corner of her eye, puts down her crayon and says,

“All right. Before we begin, can I ask you a question?”

I tell her to go right ahead.

She said, “When a horsey does a poop it comes out in long tubes and yet when a sheep does a poop it comes out in little pellets and yet when a cow does a poop it comes out flat and round.

Why is that?”

I look at her, then said, “That’s actually a very good question. I have no idea.”

She then said, “Well how do you expect me to talk about Australia’s economy when you don’t know shit?”

If you needed proof that crashes and other mishaps happen to the best of us, you need to look no further than at the field of any RC models club meeting

As one visitor commented,

“It’s a shame to see the destruction of such beautiful models but I guess it’s part of the hobby.”

This is not something any modellers goes out to do, however, there are so many things that can and do go wrong. (Never Pilot error ha, ha)



The stall.

In aviation, a stall refers to the aircraft's inability to remain in flight. Typically associated with airspeed, stall is the point where the aircraft wants to drop out of the sky. This has nothing to do with the engine running, as stall also affects non-engine powered, glider-type aircraft. As the airplane builds speed, the air pressure under the wing begins to push the plane upward. The pilot, in an attempt to create this lift at slower speeds, can put the flaps down to provide increased lift at slower speeds. When landing, the pilot takes the airplane to a point where it wants to teeter on the edge of flying and not flying, essentially stalling the plane in a controlled crash.

The stall, or more accurately the inadvertent stall, has probably caused more RC planes to crash than any other cause. The safety of your airplane depends on your knowledge of its slow-speed handling and stall characteristics. To minimize the number of crashes due to stalls, the pilot must understand the principles of what makes a plane fly and how to make practical use of the information.

First, we must understand how the wing supports the plane in flight. As the plane moves through the air, the amount of lift is determined by the particular airfoil and its angle of attack (AOA). The AOA is the angle formed by the wing's chord line and the on-coming airstream. The other primary factor in the amount of lift is the speed of the airfoil through the air.

A stall will occur when the AOA exceeds the wing's critical angle of attack. At this angle, the lift suddenly decreases and the drag increases, resulting in the plane losing altitude very rapidly. The pilot has control over the AOA with the elevator. For example, if the pilot inputs up-elevator the tail drops and the nose rises, which increases the wing's AOA. An important point to note is that the plane can be moving in any direction, including straight down, and a stall will occur if the AOA is exceeded.

The only way to recover from a stall is by decreasing the angle of attack below the critical angle by pushing forward on the elevator. By learning your plane's slow-speed and stall behavior, you should be able to avoid getting into an unintentional stall situation in the first place. Take your plane up high; reduce the throttle while increasing the elevator deflection to maintain your altitude. As it slows, note how the plane reacts to your control inputs, and when it does stall, note if a wingtip drops or if it stalls straight ahead. Recover from the stall by lowering the nose to gain flying speed.

Adding power will speed the recovery and minimize altitude loss. Practice this until you can recover with the wings level. All models stall differently, so you'll want to learn your model's characteristics. Spins are an exciting aerobatic manoeuvre when done intentionally, but an unintentional spin close to the ground will spoil your day. A spin cannot occur unless the plane is stalled. If at the moment of stall there is a yawing moment, an autorotation will commence.

The spin is caused by a complex series of events. If rudder is applied as the wing stalls then it will cause one wing to drop. For instance, if left rudder is applied with up-elevator, the left wing will move downward and rearward resulting in a left roll.

The left wing will therefore have a greater angle of attack and slower speed relative to the right wing. The right wing will essentially be less stalled than the left wing resulting in autorotation about the spin axis. In the fully developed spin, the aerodynamic and inertial forces are stabilized into a predictable pattern of rotation.

The rotation, airspeed and vertical speed are stabilized and the descent path is vertical. Unless something is done, the spin will continue.

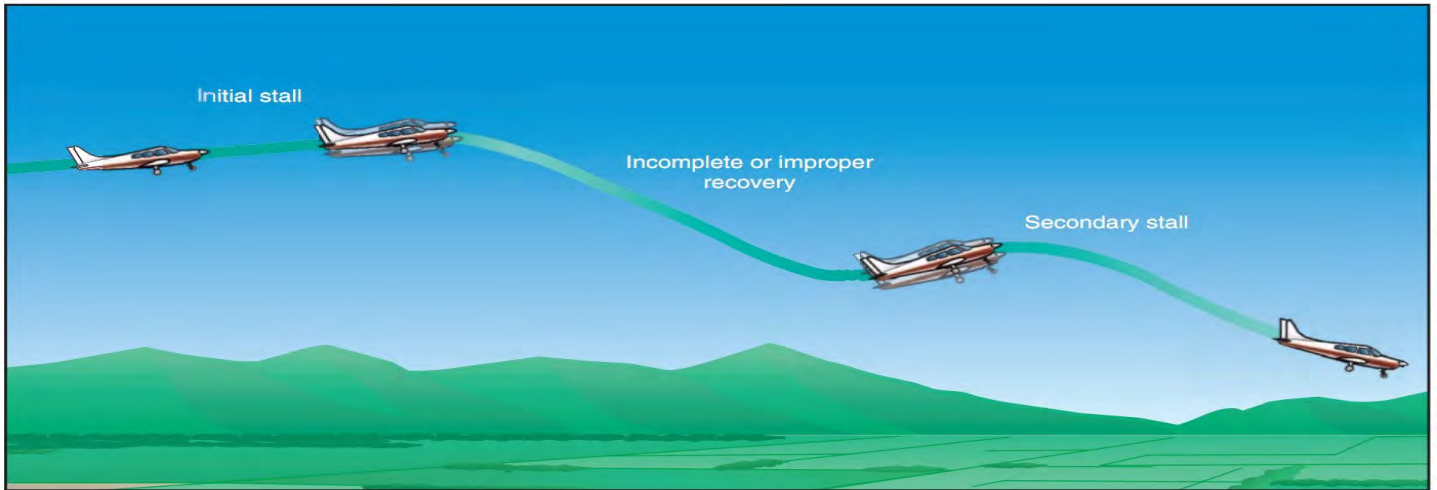
Turns in the landing pattern can lead to spins if a skidding turn is attempted. A skid is when too much rudder is used for a given bank angle. Often a pilot will use rudder when overshooting the turn in order to avoid a steep bank angle. This is the recipe for a spin.

If you find yourself in a spin, most planes will recover easily by letting go of the controls and letting the speed build up. Some high-performance planes require opposite rudder and/or down-elevator to recover. Use caution during the recovery as the speed can build up quickly.

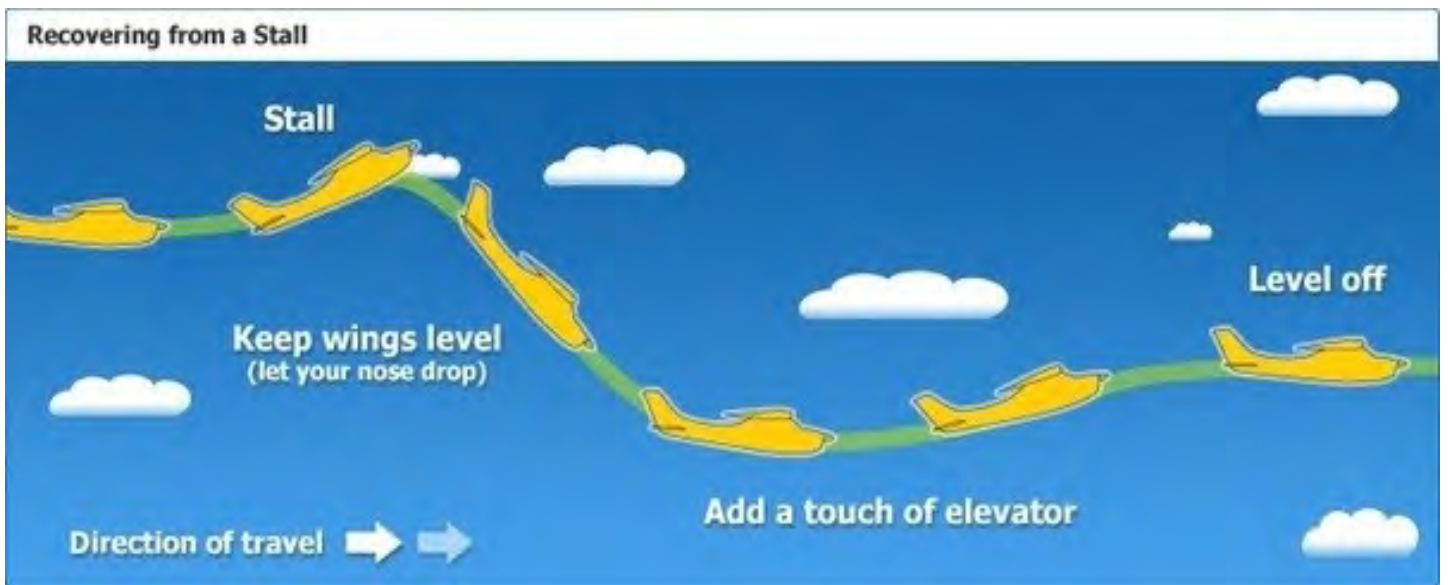
Also, avoid a secondary spin during the recovery by not using excessive up-elevator. Every plane has its own peculiar spin characteristics, so make sure you try spin recovery at high altitudes.



Unrecovered stall



Recovered stall



Life, the start and the end are similar, take advantage of the time in between.



I would like to remind members that this is your news letter and any contribution to the publications would be appreciated, it is a way of sharing any photos, build projects or experiences you may have had, good or bad, whilst partaking in this sport.

I can be contacted via ronwaller@bigpond.com



Catch you when we fly into the next edition in 2022. Happy Safe Flying, regards Ron.

