



Propwash

June 2017

From the President.



As we enter into another flying year for 2017/18 it is a good to start by reflecting on the past 12 months. The AGM was held on 11th June and the following members were elected to serve the club for the next year.

<i>President</i>	Ron Waller
<i>Secretary</i>	Dennis Milligan
<i>Treasurer</i>	Ray Anderson
<i>Canteen Manager</i>	Troy Lucy
<i>Propwash Editor</i>	Ron Waller
<i>Safety Officer</i>	Eddie Meester Steve Green

Only one change occurred on the committee, this resulted from Scott standing down from the secretary roll and Dennis Milligan was elected as secretary all other committee members were elected unopposed to the committee for 2017/18:

The club fees were set the same for this year as the previous year, members are financial until the end of the month of June, you will need to make arrangements with Ray to update your membership at your earliest convenience prior to this date to ensure that you are covered by insurance.

The gate code will remain the same until the end of July, all financial members will be notified of the change when it is implemented.

Field improvement projects have been ongoing throughout the year with the recent completion of the taxiways to a concrete surface and the removal of the trees adjacent to the clubrooms.

This will almost eliminate the problem we have been experiencing with the gutters being clogged with leaves and causing the water supply to the toilets to become contaminated and black in appearance.

The number of members in the club is declining which is of concern, it has declined slightly over the past four years due mainly to the average age of our members, I would like to throw out a challenge to current members that over the next twelve months you each encourage one new member to get actively involved with the Radio Control hobby at SWARMS.

We have an excellent training facility and the offer to new members ie: free training up to solo status on our equipment should be a big incentive for them to get involved, however, the numbers will not increase if the general public don't know about us as a club and what we have to offer.

The other incentive for new members is the \$50 reduction in membership fees for new members who have not previously been registered with MAAA.

The IMAC competition held at the SWARMS field over the weekend of 22nd and 23rd April was a successful weekend for the competition pilots who attended. These weekends would not be what they are if it were not for the sponsorship of DLE Engines, thank you to Scott and Jackie for your continued support it is much appreciated.

Thank you to the members who assisted with the preparing of the breakfast and lunches over the weekend, the visitors were appreciative of the quality and quantity provided. Saturday evening they did their own BBG so the club was not required to assist here. Thank you to DLE Engines for providing the food for the meals over the weekend.

September FunFlyin

I believe that the club has made the right decision after lengthy discussion at a recent meeting about some changes to the scheduled long weekend flyin.

The number of visiting pilots has been declining over the past couple of years and some of that has been to do with the weather over those weekends, however, we have no control of the weather but we do have some control over how to increase these number again.

It was agreed that the weekend should be open to all types of aircraft for the two day duration with allocated time slots for Scale Models, Jets and helicopters.

On previous flyin weekends we have had numerous enquiries relating to what type of aircraft can be flown on what days and with the emphasis placed on Scale Models only for the Sunday it has deterred many from participating, it is anticipated by opening it up to all types of aircraft for both day it will entice more participation.

With the inclusion of a few special display aircraft over the weekend we should also be able to get more of the general public to the event. An advertising program will be intensified closer to the event, hopefully with radio and newspaper coverage we will achieve an increase of personnel as spectators over the weekend.

The advertising flyer has been modified to reflect the changes and has been distributed to club secretaries and to the MAAA calendar for inclusion. I hope that with the change to the program and the advertising program we can get the event back to what we have experienced in the past. Copy included on page 9 of this edition.

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It was good to see Brady present at the AGM last week more so the fact that he is getting back to full health again after a bad year. He has resumed his mountain bike riding so flying looks like it is his next goal.

Will be good to see his face around the pits again enjoying his flying once more.

I was talking to Anthony last week and he advised me that he was in the process of construction a Boomerang 60 ARF and fitting it out with a 15cc petrol motor so it will be good to also see him out at the field in the near future.

A familiar site when they were both around the club previously entrants in the SWARMS Master Chef series.



Red Bull glider transfer of person from on one glider wing to the other in full flight.



Good to see Woody has made the headlines again in an article in a UK model magazine RCMW, article and photos by Bruce Corfe. (Page 14)

The 2016 Scale Rally also got a good write up in the same magazine, thanks again to Bruce (Pages 12 - 15). Bruce has been attending the Scale Rally weekend for several years and has always managed to get an article and photos in one of these UK magazines.

Thank you to Bruce for promoting our event with fellow modelers over seas.

Some interesting update articles from the President's Report: 2017 MAAA Council Conference

The 2017 MAAA Annual Council Conference was held in Launceston on the weekend of May 20th and 21st. This important meeting offers an opportunity for club executives to get together and address issues facing the MAAA for the benefit of its members and the sport.

Recruitment and retention of members

Council acknowledged that the MAAA has an aging membership base and that a majority of clubs have an issue with the recruitment and retention of members. A range of ideas were put forward and it was accepted that all members must help to recruit younger members and to support the "Towards 11000" initiative. Other ideas included combining the Australian Model Flying Day with national come and try days. Progress on turning ideas into actions will be communicated as it arises.

A New National Training Standard

In accordance with the MAAA's strategy for continuous improvement, Council adopted a version of Model Aero Sports South Australia, MASA, one day Instructor Training System as the National Standard. This course is a modification of the original and focusses on train the trainer techniques. Funding was also approved for a national Chief Flying Instructors meeting in Adelaide to brief all CFI's.

Insurance

Council approved an insurance proposal which resulted in a \$10,000 saving on last year's policy. The package also includes an automatic \$10,000 property/burglary cover for all clubs with a subsidised excess of \$1,000 per claim, and the general insurance excess a nil excess payment for the first claim.

2017/18 Budget

The 2017/18 budget was reviewed in detail and Council decided to half the amount available for overseas competitors' support. Overseas competition is a vital part of the sport for Australia but Council considered the amounts offered previously were too high compared to the total budget, and the return for the general membership.

Membership Fees

Lastly but to most members the most important budget decision related to the setting of membership fees for 2017 – 2018. Council agreed the fees would remain the same, i.e. Seniors \$60.00 and Juniors \$30.00

Your IMAC breakfast eggs were not this big a mess Scott, there is potential for you as cook at the next breakfast. we host .



Exactly what you want to see before your flight. Someone fixing the engine with duct tape.



My wife just opened my car door for me.

Would have been a nice gesture had we not been going 70 mph.

Found this interesting article relating to the tips of aircraft wings recently and included these points for your perusal.



In a clever marketing move, Qantas has added its logo to airplane winglets, so that every time a passenger snaps a photo from the window, the flying kangaroo will be within frame.

But these wing tips have a much more important function than to look good in photos.

Winglets, or wing tips, are there to reduce something called vortex drag, Qantas explains in a new blog post.

"When an aircraft is flying, air flowing over the top and bottom of the wing creates a long spiral (or, vortex) that forms behind the tip of the wings.

"Even though these spirals look pretty impressive, the drag they create isn't ideal.

"Drag places additional resistance on an aircraft, which means we need to use more power and burn more fuel to counteract it."

By adding winglets, which have only been introduced in recent times, they reduce the amount of air "swirling around at the end of the wing" and reduce the drag.

Not only that, but the winglets give the airplane greater stability, leading to a smoother take-off.

Savvy plane spotters can even identify an airplane by the shape of the winglet.

"All of our Boeing 737s have blended winglets which curve up from the end of the wing. Our colleagues over at Jetstar operate similar-sized but Airbus manufactured aircraft called A320s whose winglets are called sharklets," the airline said.

"On our A330 and A380 aircraft the wingtip is triangular in shape while on our Boeing 787-9 Dreamliners (the first of which arrives this year) the entire wing is curved up into what is known as a raked wing tip."

Snippets around the pits.

For some time now I have been associated with two passionate flyers each Sunday who regularly get me to test fly their new or repaired planes and I do not have a problem with that task, however, it will be less stressful for me when they get their radio exponential sorted out ie: is it + or -

I do feel a bit better now because on Sunday I seen that Ray was also put in the same situation with one of these planes and it proved that it is not just me who is put into these stressful situations. I do love a challenge but I have been suffering a bit of Post (almost crash) Stress Syndrome as a result of some of these flights can only hope it gets better from here on.

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Hey Dennis and Troy I did not include your names in the above article so you can remain anonymous.

I have just refurbished my delta wing and also made these two happy with the eagles colours on top (Dennis) and the tigers on the bottom (Troy) this is good for an adrenaline rush.



A few photos from the recent IMAC competition held at the field. The aim of the competition is to get your name inscribed on this trophy as the top gun pilot for the weekend.



The competition planes came in a variety of sizes, shapes and colours.





This plane was a bit late getting his pyjamas off for the completion.



With the competition over the pilots pose for the traditional photo at the end of a very good weekend.



The competition proved to be so intense the judges had gone for a coffee here.



Scratch built program.

I was recently a little bored and was looking at something to do in the shed and I came across a free plane in one of the RCM&E magazine that I liked but it was far to small and designed for electric power.

I continued to debate the plane verses size and made the decision to have the plan "Blown up" nothing to do with terrorism, so went to Office Works and had it increased 27% which took the plane from 38 inch wing span to 78 inch wing span.

To make the job easier I had two copies of the plan printed and cut one up as templates to mark out the balsa, way to go, as previously on scratch builds I have marked the sections out on paper and then cut them to size before transferring them on the balsa.

It has been a very rewarding project with the plane now completed and has been successfully test flown, the write up on the small model in the magazine was quiet impressive and the larger modified model did not disappoint. Strait off the building board and into the sky with very minor trim required to fly straight and level.

Construction phase

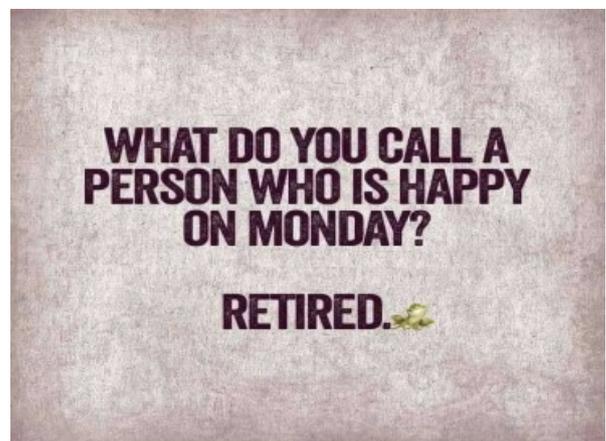


The finished product

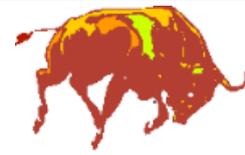
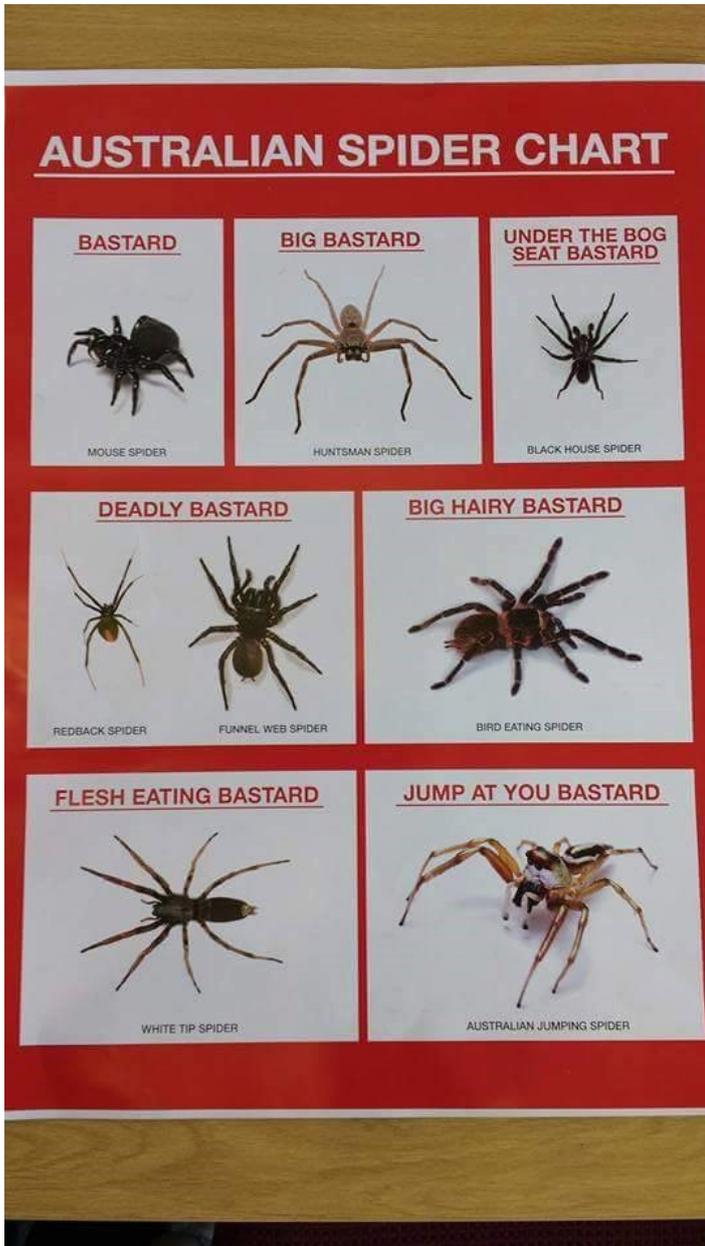


It is named Oodalally, it is 50s slang an exclamation of pleasure, excitement, dismay, or any strong emotion really. A rather versatile euphemism, I thought and well suited to R/C Pilots. It was designed for performance and that is what it does, fitted with an OS 46 motor it has plenty of power for all the aerobatic maneuvers and a real buzz to fly.

If any one would like to do a scratch build the plans and the templates would be available at verrrrrry reasonable cost, scratch building can be very rewarding and satisfying but can also be time consuming.



With the club rooms, machinery shed and pit area not being immune to spiders I thought the spider chart below might be beneficial to members to be able to recognize the type of spider should you have the misfortune to be bitten.



A week after John bought a bull, he complained to his friend, "All that bull does is eat grass. Won't even look at a cow."

"Take him to the vet," his friend suggested.

A week later John reports back to his friend, and he's much happier.

"The vet gave him some pills, and the bull serviced all of my cows!" he told his pal. "Then he broke through the fence and bred with all my neighbour's cows! He's like a machine!"

"What kind of pills were they?" asked the friend.

"I don't know, but they've got a peppermint taste."

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Do you need to go to Specsavers ??

Best wishes to Trevor McGuigan our resident chef who is recovering from a recent hip operation, hope your up and about the pits again sooner rather than later all the best for a speedy recovery. Seen here working with his hard working apprentice over a hot stove at the 2016 Funfly..





FUN FLY-IN

SATURDAY

8:00am: Fun Fly (open to all aircraft)

10:00am: Pilots Brief

6:00pm: Barbecue (Please RSVP)

SUNDAY

9:00am: Fun Fly (open to all aircraft)

10:00am: Pilots Brief

MONDAY (Public Holiday)

Open Field

FREE admission
23rd ~ 24th September 2017

Every pilot who flies
goes in the draw for a
DLE-20 Engine

Ron Waller - 0419908165

Scott Pittick - 0488142352



**TIME SLOTS ALLOCATED THROUGHOUT WEEKEND FOR
scale - jets - helicopters**

FOOD, DRINKS AND OVERNIGHT CAMPING AVAILABLE

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www.swarms.org.au
www.facebook.com/SWARMSWA

JGoff

Don't Mess With Old Geezers

An old geezer (like me) became very bored in retirement and decided to open a medical clinic. He put a sign up outside that said: "Dr. Geezer's clinic. Get your treatment for \$500, if not cured, get back \$1,000."

Doctor "Young," who was positive that this old geezer didn't know beans about medicine, thought this would be a great opportunity to get \$1,000. So he went to Dr. Geezer's clinic.

Dr. Young: "Dr. Geezer, I have lost all taste in my mouth. Can you please help me ??"

Dr. Geezer: "Nurse, please bring medicine from box 22 and put 3 drops in Dr. Young's mouth."

Dr. Young: Aaagh !! -- "This is Gasoline!"

Dr. Geezer: "Congratulations!

You've got your taste back. That will be \$500.

Dr. Young gets annoyed and goes back after a couple of days figuring to recover his money.

Dr. Young: "I have lost my memory, I cannot remember anything."

Dr. Geezer: "Nurse, please bring medicine from box 22 and put 3 drops in the patient's mouth."

Dr. Young: "Oh, no you don't, -- that is Gasoline!"

Dr. Geezer: "Congratulations! You've got your memory back . That will be \$500."

Dr. Young (after having lost \$1000) leaves angrily and comes back after several more days.

Dr. Young: "My eyesight has become weak --- I can hardly see anything!!!!"

Dr. Geezer: "Well, I don't have any medicine for that so, " Here's your \$1000 back." (giving him a \$10 bill)

Dr. Young: "But this is only \$10!"

Dr. Geezer: "Congratulations! You got your vision back! That will be \$500."

Moral of story -- Just because you're "Young" doesn't mean that you can outsmart an "old Geezer" Remember: Don't make old people mad. We don't like being old in the first place, so it doesn't take much to tick us off.

%%%%%%%%%

Found these interesting photos on a South African Sourcing Club site.

Ready waiting for the tow plane.



This pigeon was spotted sitting on the wing strut of the cub tow plane after releasing from glider, Cubs are slow but this seems a bit odd.



This is the clubs own design tow plane, C of G would be interesting to work out



I experienced a bit of drama whilst driving home from the field on Sunday 4th, coming through the intersection onto Heinz Road onto Forrest Highway with the sun just setting on the horizon when a four wheeled drive came out of the sun and made contact with the rear left side of my plane trailer.

The impact caused the trailer to be pushed sideways against the curb breaking it off the car and rolling it onto its side on the medium strip, I had been flying all day and not had an incident and here I crashed three planes all at once, final analysis determined I may have had radio interference on 2.4 you can not fly three planes at the same time no matter how good the frequency is.

The club trainer sustained damage to the tail fuselage and fin with large hole in a section of fuselage.



A second Boomerang 60 was severely damaged when a transmitted case became dislodged and landed on the fuselage just behind the wing, the tail section was completely demolished. Undercarriage was spread out with wheels realigned.



This sports model also came off second best with fuselage broken tailplane split and damage to the wing on both sides, I hope the insurance company comes good with cover on the content of the trailer.



#####

Little Johnny sits next to a pregnant woman on the bus and keeps staring at her.

"What's the matter?" asks the woman.

"Why are you so fat?" Johnny asks.

The woman just smiles. "I have a baby inside me."

"A good baby?"

"Yes," says the woman proudly. "It's a very good baby."

Johnny is horrified. "If it's so good, why did you eat it?"

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Paddy's in the bathroom and Murphy shouts to him. "Did you find the shampoo?"

Paddy says, "Oi did, but it's for dry hair and I've just wet mine."

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The Irish have solved their own fuel problems.

They imported 50 million tonnes of sand from the Arabs and they're going to drill for their own oil...

AND SO ENDS
ANOTHER WEEK
WITHOUT ME
BECOMING
UNEXPECTEDLY
RICH.

SWARMS

SCALE RALLY 2016

Glodetrotting Bruce Corse attended during his annual chase for the sun in Oz



Vince Belshaw and helper restrain Vince's new Balsa USA 1/3rd scale Boeing Stearman as he revs the Moki 250 seven-cylinder radial four-stroke.

S.W.A.R.M.S is the South West Associated Radio Modellers Society - a small but thriving club, situated deep in dairy farming country in the South West of Western Australia, near the country towns of Bunbury and Capel (cheese-making capital of WA). The club (current membership 35+) has been in existence since 1974 and has its own flying field, previously leased, set in idyllic grassy countryside populated by Friesian cows and gum trees. Club

secretary Scott Pittick said that despite the smallish membership, the club has excellent facilities - a large flying area, distant from habitation, with a big mown area and concrete runways, large club building with catering/ coffee-making facilities and a fire (it gets cold down here in winter), new toilets, a sizeable tool-shed and huge new ex-factory covered areas. Of note is the new club pits area/ hangar, which is enormous, and adds to the already excellent facilities at the SWARMS field. (UK



Burbling past the Paperbark trees, the big Stearman looks wonderfully realistic on a low, slow pass with the big Moki on song.



Low pass by Shane Ballingall with his Sebart MiG 29



Neat control layout in the Skymaster turbine MiG 29.



Shane's KingTech K180 turbine in the Skymaster MiG.



Shane's two MiG 29s, Sebart electric version in the front and Skymaster turbine model behind.

readers take note - the covers are for keeping the sun off models and modellers...) Club President Ron Waller told me that members can fly at any time of the week which suits the shift workers and farmers in their off season. Club days are held on Sundays. Interest groups include Scale, Sport, IMAC and increasingly, Seaplanes. Members are determined to make SWARMS the best-equipped club in the State - they've already got the best canteen!

Once a year the club hosts a Scale Rally Day, a for-fun event to which all comers are welcome; there is no competition or judging, just lots of models and lots of flying. The Friday had been a fun-fly day with last minute preparations for the Rally, BBQ and strobe-lit night flying before some happy club members took to their tents. I made the 200km trip down from Perth on Sunday, along with several other flyers, arriving just in time for the advertised pilots' briefing at 10 a.m. The day had dawned sunny but cold and pretty windy so the on-tap tea and coffee from the canteen were popular and welcome. In fact, in an effort to stave off the winter chill, Ian Clapp used his

container of jet A1 fuel and fuel-pump to get the wood-fired outdoor space-heater going, to warm up frozen mitts - Health and Safety eat your hearts out! (sorry Steve!)

Jet Action

First model off the blocks was Shane Ballingall's electric Sebart MiG 29, which has two 70mm fans with vectored thrust and runs on 4S 3700 LiPos. The EPO foam model is fairly well 'weathered' as Shane uses it as a practise model or fall-back when the weather or conditions don't suit his big turbine models. The foamy coped well with the wind and Shane chucked it around in his usual spirited manner. Unfortunately he didn't think the weather and SWARMS' runway would suit his larger, identically marked turbine MiG (pictured next to its smaller Sebart brother). The custom paint job on both models is as seen on MiG 29s at a Russian air-show. Shane's big Skymaster MiG is powered by a single Kingtech K180G RXI. The jet exhaust has a bifurcated pipe with vectored thrust allowing the model to do full 3D aerobatics. The model features all JR Propo radio gear with JR's incredible

new 28X 2.4GHz DMSS 28-channel XBus transmitter and JR high voltage digital servos. Carrying a 4.5 litre fuel tank, this gives Shane about 5 minutes of flying time - he flies in a highly un-scale but wildly exciting full-3D style - inverted flat spins with a turbine model, anyone??

Model of the day for me was Rob Woodhead's Ford Trimotor, 'Southern Cross', flown for Woody by internationally famous pilot Steve Coram, Chief Flying Instructor at the MAAA (Model Aeronautical Association of Australia). Woody takes over when the model is in the air. The model has taken one year to build, scratch-building using ply, balsa and fibreglass. The engine nacelles are from ply. Six metres of stainless steel tube went into the undercarriage and struts. The power comes from three Saito 30cc 3-cylinder radial petrol engines. Four gutter bolts from Bunnings hold the wings in place. Ray Anderson contributed two of the Saito motors to the project - at \$1500 each these are quite an investment. The 'Southern Cross' was the steed of Charles Kingsford Smith, pioneer Aussie aviator and subject of many books and TV programs - his story is well worth





Woody Woodhead restrains the 'Southern Cross' Ford Trimotor.



Three lovely Saito 30cc three-cylinder radial engines power the 'Southern Cross'.



In flight the Trimotor looks super-realistic.



Humphro's OS 80 FS -powered 1.7m span Sportsman Aviation Victa Airtourer.



The Victa Airtourer leaps off SWARMS' runway. It is very realistic in the air - but - where's the driver?!

investigating. Woody's model is definitely 'stand-off' scale but he has really captured the essence of the 'Southern Cross'.

The smart Great Planes Super Skybolt belongs to Ian 'Humphro' Humphreyson. His Skybolt had only had 2 or 3 flights the last time I saw it and still needed decals and cockpit detail adding. It still does - come on Humphro! The OS 80 FS-powered 1.7m span Sportsman Aviation Victa Airtourer also belongs to Humphro. This one is well-campaigned and is a model of an interesting Australian prototype, also manufactured under licence elsewhere and even pressed into military service. Victa's main manufacturing products are... lawnmowers!

Scott Pittick's huge Composite ARF Super Extra 330 flies most years at the Scale Rally. The Extra has a 3.1m/ 10ft span and is DLE 170 2-cylinder 2-stroke powered, with a 28.5 x 12 three-blade carbon prop.

The model is flown in 3D style by Scott with huge, fast manoeuvres - the DLE-powered machine sounds fantastic (except when the air-stream gets under the fully-deflected flying surfaces, when it howls!)

The other really stand-out model for me on the day was the Balsa USA 1/3 scale Boeing Stearman, pictured. Vince Belshaw from the Kalamunda club has spent two years building and finishing the kit, and it shows! Covering and painting alone took two months. Powered by a Moki 250 seven-cylinder radial four-stroke petrol engine and weighing in at 27kg, the model has outstanding presence and is flown very realistically by Vince with big, slow

aerobatics and low fly-bys. Brilliant and well worthy of a closer, more detailed look.

Warbirds!

Warbirds were thinner on the ground this year. Ray Anderson is no stranger to the pages of Flying Scale Models and it was great to see his VQ Models Northrop P61 Black Widow in action again (the model was the subject of a feature in the March 2016 issue of FSM). Ray's electric Black Widow has 14 servos including those on retracts and runs 2x4-cell high-voltage

Hyperion 4400mAh LiPos in each engine nacelle, with an option to upgrade to 6-cell packs. With Hyperion 90A ESCs and Eflite 90 motors pulling



The Fw190 'Würger' or 'Shrike' a.k.a. Butcher Bird was one of Germany's most feared fighters of WWII.



This is Ian Clapp's electric VQ Fw190, re-covered and painted and with new retracts.

50A continuously on each side, the Master Airscrew 3-blade 14x9 or 15x7 props both pull the same amps but a 16x8 is close to overload. The props were a nightmare to balance! The P61 is Ray's most complex model to date and his first large multi-motor electric.

Ian Clapp's electric VQ Models Fw190 has been re-covered and painted and has new retracts, following some earlier damage. Ian says the Butcher Bird now looks better than ever and flies just as well. Although it is at the smaller end of the spectrum compared to some of the models exhibited at SWARMS, the VQ 190 looks great and is equally convincing in the air.

Conclusions:

It's always a pleasure to visit a well-organised model rally and SWARMS is one of the best. The opportunity to see some superb models and talk to their ever-enthusiastic owners and flyers, in a really scenic part of Western Australia is not to be missed. Add to that the excellent and ever-improving facilities at the Capel field and you have a winning formula! We'll be back! ■



The slinky (evil?) shape of Ray Anderson's VQ Models P61 Black Widow on the apron.



Ray's shiny electric P61 in it's element - silent but deadly!



Ian Humphreyson's Great Planes Super Skybolt looks extremely smart.



Scott Pittick's Composite ARF Super Extra 330 - 3.1m/ 10ft span and DLE 170 2-cylinder 2-stroke powered, with a 28.5 x 12 three-blade carbon prop.



LINKS

S. W. A. R. M. S.
Many more images:

www.swarms.org.au
<http://tinyurl.com/SwarmsRally>

I currently have a couple of trainee pilots so I have included these tips again for their reassurance.

“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 maneuver. 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. Assuming that the student is using a buddy box, the instructor will 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 maneuver 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 maneuver 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 maneuver required to learn to land.

If at any time, the student should get into trouble, the instructor can 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.

Catch you when we fly into the next edition.

