

**SYDNEY RADIO CONTROL SOCIETY - incorporated
CLUB NEWSLETTER**

**Quarterly General
Meeting**

To be Held at
Toongabbie Sports and
Bowling Club
12 Station Road, Toongabbie
9624 6230

Friday Evening
1st April 2005 at 8PM
Dress rules apply



Agenda:

- Apologies
- Previous Minutes
- Matters arising
- Presidents Report
- Treasurers Report
- Secretaries Report
- Other Business

Please note that any article, technical or historical fact or fiction other than the published minutes of general meetings of the club, express the opinions of the writer of such articles and do not necessarily become fact. The club accepts no responsibility for any outcome of any incident that may or may not be attributed to any matter printed in the club newsletters

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THE 2004 – 2005 COMMITTEE

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CLUB EVENTS 2005

<u>EVENT</u>	<u>DATE</u>	<u>ALTERNATE DATE</u>
Hog Day	Sunday 19 th June	
SRCS Club Scale Day	Saturday 30 th July	Saturday 13 th August
Kevin Gray Memorial	Saturday 27 th August	Saturday 10 th September
SRCS Scale Rally	Sunday 16 th October	
Pattern Day	Sunday 30 th October	Sunday 13 th November

PRESIDENT'S LETTER

Hopefully everyone reading this Newsletter enjoys flying at SRCS, otherwise why would they still be a member? Of course if there is anything that we can do to improve, the Committee is always keen to hear constructive ideas. As I always say, it is your club and the members determine what happens.

So why do people join and continue to rejoin? We have, what I believe is, a friendly group of members, who like most such groups involve themselves with friendly banter at times, which is enjoyable provided that it involves willing participants. We also have reasonable facilities and a place to fly seven days a week. The environment that we provided is, I think, one of the safer flying sites around, without being unduly bureaucratic. It is as much controlled by what the members consider acceptable as it is by any rules that we have. If these fail and there is ever a serious accident then we are also protected by the MAAA insurance policies.

But what happens if someone flies with us who are not covered by the insurance policy. This could be if someone is not an MAAA Affiliated Member and does not, or cannot legally, sign the visitor's book. If there were an incident involving them, it could be very serious for anyone inside or outside the club who might have been able to make a claim, and also for the club itself as we control what happens.

Obviously it is up to us all to make sure that we sign in genuine visitors, but what about the other group? They may be people that we know well who have 'forgotten' to rejoin, or people we don't know at all. The Club produces members' badges every year with the intent that they are worn. This not only helps to remind us of names for those we only see infrequently, or are new, but it also enables other members to be able to confirm that people who they do recognise have rejoined, and so are also insured.

For sometime now the wearing of badges has not been as common as we would like. The Committee have now decided that to protect us all, badges must be worn at all times members are at the field. Obviously new members may have to wait a few weeks before they receive their badges but should have a receipt if asked. If established members do not have a badge with them, they should also be asked to show that they are current members. The Committee and the club has an absolute right to refuse to let anyone fly, including someone such as myself, if they cannot satisfy those present that they are in fact a current member.

The committee hope that everyone will cooperate in this. There is nothing embarrassing about asking someone if they are a member, if it is done politely. If this stops a serious financial problem to another member this is well worthwhile – that member might be you.

Despite that fact the we fly in the middle of a large paddock, noise does travel and we have heard that, as a perception, our noise have been reported as 'loud' several kilometres away under unfavourable conditions. Of course, because we do not own the land we fly from it, potentially it would only need a few complaints to Roadmaster for them to form a view that they would rather be good neighbours to local residents than look after us. They could throw us out and we would have absolutely no legal footing to

complain. If we owned the land then we could fight any accusations with the local Council and would almost certainly win, provided that we were behaving responsibly, as the noise level would be measured at the boundary and would be OK. However a landowner can just consider perceptions.

To put some control in place, we have a noise level requirement of a maximum of 98 dBA at three metres with the engine at full throttle. The club has a couple of noise meters to check this but in practice we only do a test if an aircraft sounds loud as a general consensus has formed over the years about what 98 dBA sounds like.

To exercise responsibility, when we moved the allowable flying time forward to be able to start at 8 a.m. the club decided to impose the MAAA noise level of 96 dBA during the period from 8 a.m. to 9 a.m. Any aircraft flying, or engine running, in this period has to be specifically tested to this level. It applies to all aircraft including electric powered ones. Whilst it is true that some electric gliders are very quiet and would never approach this level there are also electric aircraft that are quite noisy, usually generated by the prop. As it is impossible to specify a subjective point where testing has to start, the agreement was that all aircraft have to be tested even if the test is a formality. There is a noise testing procedure, which is quick and simple, so there is really no excuse. Any Committee member will provide advice on this but it is best to prearrange the test to avoid frustration.

As most of you will know there is a growing group in the club who are successfully competing in pylon racing. Whilst at the lower competition levels the aircraft met our current noise levels, to be competitive in the more senior levels they cannot. There may well be a proposal at the next QGM to modify the noise requirement, not for a general increase in level, which could be considered irresponsible, but to allow a limited amount time for preparation for events. This may involve an acceptance of a higher noise level for a specified, and modest, period of time under very controlled conditions to assist in the increasing profile of SRCS at these events. I personally hope that some arrangement can be agreed, but equally everyone's one view is important. If you want to express yours, be there on the 1st April.



***Happy and safe flying
Mike Close
President***

DECEMBER 04 QUARTERLY GENERAL MEETING

MINUTES

The Quarterly General meeting was held at the Toongabbie Bowling Club on Friday 3rd December 2004. Mike Close opened the meeting at 8.06 p.m. Minutes were recorded by Norm Bantin

PRESENT

Mike Close	Bill Barrett
Norm Bantin	Rick Rapley
Ewald Klinkenberg	John Cahill
Matt Holloway	

APOLOGIES Paul Toyne

MINUTES OF THE PREVIOUS ANNUAL GENERAL MEETING 03-9-04

The minutes of the previous AGM held on 03-9-04 cannot be accepted until next years AGM.

MATTERS ARISING 03-9-04 AGM

- Mike Close has asked Turtle for some different options to upgrade the track and is waiting on a response. Rick Rapley can obtain rip rock that may be able to be used but we would need a Bob Cat for spreading. We may need some of drainage for the low areas.
- Bill Barret expressed further concern of the rubbish being left at the field in particular pieces of propellers, rubber bands and bits of aircraft not to mention the cigarette butts. Matt Holloway has made a sign and regular clean ups are to be carried out from time to time prior to the commencement of Flying.
- Mike Close to review the changes to the SRCS Club and make formatting changes before sending to Ewald to submit to the Department of Fair Trading,
- The sleepers have now been marked at 2.4 intervals and members are to park within the markings.

SECRETARIES REPORT

Nil.

CORRESPONDENCE IN

Proxy vote form from Paul Toyne Re Special Resolution.

TREASURER'S REPORT

Members – Associate 12, Junior 1, Life 4, Pensioners 8, Senior 88 – Total 113

Balance Sheet

	This Year	Last Year	\$ Difference
Assets			
Current Assets			
Cash On Hand			
Westpac - chq a/c	\$1,494.63	\$1,275.61	\$219.02
Petty Cash	\$10.00	\$10.00	\$0.00
Total Cash On Hand	\$1,504.63	\$1,285.61	\$219.02
Investments			
Westpac term deposit	\$15,674.21	\$14,882.23	\$1,292.24
ANZ term deposit	\$28,931.13	\$27,305.25	\$2,495.85
Total Investments	\$44,605.34	\$42,187.48	\$3,788.09
Total Current Assets	\$46,109.97	\$43,473.09	\$4,007.11
Other Assets			
Deposits Paid	\$50.00	\$50.00	\$0.00
Total Other Assets	\$50.00	\$50.00	\$0.00
Buildings			
Furniture & Fixtures			
Equipment at Cost	\$16,568.73	\$15,475.73	\$1,093.00
Less Accum Dep	-\$8,545.64	-\$6,389.92	-\$2,155.72
Total Furniture & Fixtures	\$8,023.09	\$9,085.81	-\$1,062.72
Total Assets	\$54,183.06	\$52,608.90	\$2,944.39
Liabilities			
Long-Term Liabilities			
Total Liabilities	\$0.00	\$0.00	\$0.00
Net Assets	\$54,183.06	\$52,608.90	\$2,944.39
Equity			
Retained Earnings	\$52,608.90	\$49,290.22	\$1,948.45
Current Year Surplus/Deficit	\$1,574.16	\$3,318.68	\$995.94
Total Equity	\$54,183.06	\$52,608.90	\$2,944.39

Profit & Loss

July 2003 through June 2004

This Year

Last Year

Income

Club Clothing	\$540.00	\$0.00
Donations	\$0.00	\$1,150.00
Gate Keys	\$605.00	\$190.00
Interest	\$2,417.86	\$1,370.23
Joining Fees	\$1,155.00	\$1,545.00
Member Fees	\$17,961.15	\$14,046.20
Misc Income	\$11.00	\$0.00
Scale Day	\$813.95	\$547.00
Total Income	\$23,503.96	\$18,848.43

Expenses

Badges	\$0.00	\$112.20
Bank Charges	\$48.55	\$19.29
Club Clothing	\$1,232.00	\$0.00
Competition Prizes	\$93.04	\$440.40
Consumer Affairs	\$56.00	\$56.00
Equipment Hire	\$0.00	\$81.81
Equipment	\$136.67	\$629.35
Field Maintenance	\$264.05	\$262.01
Food & drink	\$0.00	\$34.25
Gifts	\$0.00	\$138.71
Hall hire	\$340.00	\$700.00
Locksmith	\$872.16	\$126.00
Mailing	\$874.00	\$310.00
Depreciation	\$2,155.72	\$996.79
MAS fees	\$14,054.75	\$10,092.50
Postage & shipping	\$256.25	\$149.65
Printing	\$48.85	\$21.90
Scale Rally	\$639.56	\$699.25
News letter	\$858.20	\$349.84
Field upgrade	\$0.00	\$199.80
Toilet Services	\$0.00	\$110.00
Total Expenses	\$21,929.80	\$15,529.75
Net Surplus / (Deficit)	\$1,574.16	\$3,318.68

SPECIAL RESOLUTION

As advised to members in the newsletter and on the Web Page 21 days prior to the meeting, the Special Resolution "That the total annual SRCS fee's for the Secretary, Treasurer and Newsletter Editor be paid by SRCS" was put to the meeting.

Mike Close discussed the issue at length as explained that the Secretary, Treasurer and Newsletter Editor have defined roles and carry out actual work as apposed to the President, Vice President and the Ordinary members who although contribute to the running of the club have no real work. Mike noted that the MAS NSW and MAAA make some type of payments to the working officers.

Ewald calculated that the cost to each member of SRCS would be approximately \$4.00 per year.

The Committee proposed the Special Resolution that "That the total annual SRCS fee's for the Secretary, Treasurer and Newsletter Editor be paid by SRCS" and Rick Rapley seconded the motion.

Further discussion took place and Rick suggested that the fees be paid only at the end of the term of office. The Special Resolution was then modified to read as follows: -

"That the total annual SRCS fee's for the Secretary, Treasurer and Newsletter Editor be paid by SRCS at the end of the finial year"

A vote by show of hands was taken, 7 in favour, against nil – Motion carried

OTHER BUSINESS

- Matt Holloway asked about large model inspections and Mike Close informed the meeting that an application to MAS NSW is required for the form as it is a controlled document. Both Mike and Col Bruce are official inspectors.
- A discussion took place on the condition of the road into the field and the damage done by recent heavy rain. Mike noted that Blacktown council would not repair it and he would discuss the matter with the Turtle boys.
- Rick Rapley has passed a noise test and can fly from 8.00am.
- An instructors Course is to be held at the MAS NSW State field on March 19th and 20th 2005.
- Mike Close presented Matt Holloway with his Instructors Certificate and badge after successfully completing the Instructors Course at the State field – congratulations Matt.

Meeting Closed at 9-23 PM.

Tips picked up by a newcomer to SRCS –Rex Broadbent

1. Chocks are a good idea. To hold the aeroplane after it starts – two poles, high enough to reach above the wings each side, wrapped in rubber anchored in the ground.
2. Fuel tank. To be able to pull it out easier, put a tape around it with a loop out the back.
3. To line up the nose wheel/tail wheel to run straight: With radio on, roll the aeroplane on the cement in the garage to see if it turns left or right.
4. With an inverted engine, when fuel collects to make the pressure impossible to turn the propeller, tip the aeroplane towards the exhaust to drain the engine.
5. To check the idle mixture. After starting the engine, throttle back to idle, and then hold the nose up 45°. If it cuts – too lean. If it speeds up the rpm – too rich.
6. To smooth any outer surface, cover in epoxy thinned with??
7. To make it easier when the propeller is running to adjust mixture, put an L-shaped lever into the control: there is an Allen key holder in each mixture control.
8. Use synthetic fuel – it is much cleaner than castor oil fuel.
9. Use window spray to clean the wings and fuselage after flying.
10. When the engine is mounted inverted, store the aeroplane upside down, so the oil doesn't collect around the glow plug.
11. When connecting up to batteries, attach black first, then red - the wires only become live when red is connected.
12. Every crash is fixable.

PILOT FUNNIES- Provided by Rex Broadbent

Here are some conversations that the airline passengers don't hear.

Tower: "Delta 351, you have traffic at 10 o'clock, 6 miles!"

Delta 351: "Give us another hint! We have digital watches!"

"TWA 2341, for noise abatement turn right 45 Degrees."

"Centre, we are at 35,000 feet. How much noise can we make up here?"

"Sir, have you ever heard the noise a 747 makes when it hits a 727?"

From an unknown aircraft waiting in a very long takeoff queue: "I'm f...ing bored!"
Ground Traffic Control: "Last aircraft transmitting, identify yourself immediately!"
Unknown aircraft: "I said I was f... ing bored, not f... ing stupid!"

O'Hare Approach Control to a 747: "United 329 heavy, your traffic is a Fokker, one o'clock, three miles, Eastbound."
United 239: "Approach, I've always wanted to say this... I've got the little Fokker in sight."

A student became lost during a solo cross-country flight. While attempting to locate the aircraft on radar, ATC asked, "What was your last known position?"
Student: "When I was number one for takeoff."

A DC-10 had come in a little hot and thus had an exceedingly long roll out after touching down.
San Jose Tower Noted: "American 751, make a hard right turn at the end of the runway, if you are able. If you are not able, take the Guadalupe exit off Highway 101, make a right at the lights and return to the airport."

There's a story about the military pilot calling for a priority landing because his single-engine jet fighter was running "a bit peaked."
Air Traffic Control told the fighter jock that he was number two, behind a B-52 that had one engine shut down.
"Ah," the fighter pilot remarked, "The dreaded seven-engine approach."

Taxiing down the tarmac, a DC-10 abruptly stopped, turned around and returned to the gate. After an hour-long wait, it finally took off. A concerned passenger asked the flight attendant, "What, exactly, was the problem?"
"The pilot was bothered by a noise he heard in the engine," explained the flight attendant. "It took us a while to find a new pilot."

A Pan Am 727 flight waiting for start clearance in Munich overheard the following:
Lufthansa (in German): "Ground, what is our start clearance time?"
Ground (in English): "If you want an answer you must speak in English."
Lufthansa (in English): "I am a German, flying a German airplane, in Germany. Why must I speak English?"
Unknown voice from another plane (in a beautiful British accent):
"Because you lost the bloody war."

Tower: "Eastern 702, cleared for takeoff, contact Departure on frequency 124.7"
Eastern 702: "Tower, Eastern 702 switching to Departure. By the way, after we lifted off we saw some kind of dead animal on the far end of the runway."
Tower: "Continental 635, cleared for takeoff behind Eastern 702, contact Departure on frequency 124.7. Did you copy that report from Eastern 702?"
Continental 635: "Continental 635, cleared for takeoff, roger; and yes, we copied Eastern... we've already notified our caterers."

One day the pilot of a Cherokee 180 was told by the tower to hold short of the active runway while a DC-8 landed. The DC-8 landed, rolled out, turned around, and taxied back past the Cherokee. Some quick-witted comedian in the DC-8 crew got on the radio and said, "What a cute little plane. Did you make it all by yourself?"

The Cherokee pilot, not about to let the insult go by, came back with a real zinger: "I made it out of DC-8 parts. Another landing like yours and I'll have enough parts for another one."

The German air controllers at Frankfurt Airport are renowned as a short-tempered lot. They not only expect one to know one's gate parking location, but how to get there without any assistance from them. So it was with some amusement that we (a Pan Am 747) listened to the following exchange between Frankfurt ground control and a British Airways 747, call sign Speed bird 206.

Speed bird 206: "Frankfurt, Speed bird 206 clear of active runway."

Ground: "Speed bird 206. Taxi to gate Alpha One-Seven."

The BA 747 pulled onto the main taxiway and slowed to a stop.

Ground: "Speed bird, do you not know where you are going?"

Speed bird 206: "Stand by, Ground, I'm looking up our gate location now."

Ground (with quite arrogant impatience): "Speed bird 206, have you not been to Frankfurt before?"

Speed bird 206 (coolly): "Yes, twice in 1944, but it was dark, -- and I didn't land."

While taxiing at London's Gatwick Airport, the crew of a US Air flight departing for Ft. Lauderdale made a wrong turn and came nose to nose with a United 727.

An irate female ground controller lashed out at the US Air crew, screaming: "US Air 2771, where the hell are you going?! I told you to turn right onto Charlie taxiway! You turned right on Delta! Stop right there. I know it's difficult for you to tell the difference between C and D, but get it right!"

Continuing her rage to the embarrassed crew, she was now shouting hysterically: "God! Now you've screwed everything up! It'll take forever to sort this out! You stay right there and don't move till I tell you to! You can expect progressive taxi instructions in about half an hour and I want you to go exactly where I tell you, when I tell you, and how I tell you! You got that, US Air 2771?"

"Yes, ma'am," the humbled crew responded. Naturally, the ground control communications frequency fell terribly silent after the verbal bashing of US Air 2771. Nobody wanted to chance engaging the irate ground controller in her current state of mind. Tension in every cockpit out around Gatwick was definitely running high. Just then an unknown pilot broke the silence and keyed his microphone, asking: "Wasn't I married to you once?"

Regards
Rex

TOO MUCH, TOO SOON

-by Clay Ramskill

He'd done this several times before -- it was a real crowd-pleaser. Take off and immediately pull nearly vertical, climbing out almost straight up.

Aligning the 60-size "stick" with the runway, he gunned the powerful .90 4-stroke, and then yanked the stick back. With a roar, the Ugly Stick pointed its nose up, but only mushed forward, barely climbing. Completely stalled. The nose began a sickening dive to the left. "I ain't got it!" he shouted as the plane crashed.

Radio problem? CG problem?

No.

All too often we see the above scenario -- after the trainer, a relatively "hot" airplane, with lots of power. And often as not, the appropriate warning sign is there -- the trainer was crashed, not worn out or sold. Then the relatively inexperienced pilot gets a "hot" plane, or an appropriate intermediate plane, but overpowered.

Perhaps there should be an intermediate training program, too. So that a pilot knows he must be able to use appropriate rudder with a strong engine. So he knows that the stall characteristics of an Extra are not the same as on his trusty Eagle 3. So that he knows how to recover from a deep stalled attitude. So that he knows not to get into that deep stall 10' above the runway.

It's bad enough that some individuals end up crashing some awfully nice hardware before they even get the chance to appreciate it properly. There is a safety factor involved also. The fewer crashes, the less likely a crash will occur in the pits, on a car, or someone's head.

Newer pilots need a bit of coaching -- sometimes they need the brutal hard facts: "Son, that plane's too much for you right now." They need some patience -- to take some time to really learn flying on a trainer or intermediate plane before moving up to "heavy iron."

More experienced flyers need to be more involved with the less experienced -- help them get the skills they need before they get into trouble.



33% Pitts Special Σ2-A

I've been asked to write an article about my recently completed Giant Scale 33%Pitts Special, while I don't pretend to be an expert you may be interested to hear about the differences of giant scale versus our smaller more common planes we fly most weekends. First thing I want to do is thank Col Bruce and Robert Zyp who have provided loads of great advice and encouragement during this challenging build and experience. A successful first flight in February 2005 was made due to a lot of their advice and guidance; we are very lucky to have such knowledge and talent in our club. Thanks guys I really do owe you.

I'm one of those people with an unexplainable love for biplanes. I love the way they look and the way they fly. Believe me they fly different to a monoplane. The big draw back is that when you finish building that beautiful wing and stand back and admire your work you get a fast reality check in that you have to start all over again and build another wing. Aaargh!!

So why did I choose to build a Pitts? Easy question. I wanted a Pitts Special biplane the first time I saw one as a young boy at an air show, rawing through the sky with smoke billowing behind it as it tumbled through the air seemingly defying gravity and the law of physics, the sight and sound is unforgettable. The dream of building an RC Pitts Special was to come some 30 years later. I wanted the largest one I could find that would fit in the back of my Commodore wagon. After looking around and some careful measurements of my car I decided on the Pitts Special S2A 33% scale. A Bob Diveley plan. Surprisingly the full size Pitts Special is not that big, so 33% scale should be no problem. (It would prove to be a tight fit) at 80" Wingspan, and a big wide stubby Pitts fuse at 75" long over 10" wide standing over 2 feet tall and with a tail plane of 36" wide and don't forget that extra wing, you have a plane that takes up room fast. Building giant scale planes I found requires lots of research, having a subject that you have an unhealthy obsession for, makes the research enjoyable. For those considering giant scale, my best advise is research, research and ask heaps of questions, giant scale is different to 40/60 size planes in more ways than you realize. Just think a minute, our 40/60 size model planes weighing in at 3 to 5 Kilos regularly pull over 5G's in maneuvers with out us really thinking (a 25kg force). My Pitts is capable of pulling the same G's and more and it tops the scales at 12Kilos dry and over 13 kilos take off weight, (over 60kg force) the stresses on a model this size are tremendous. Suffice to say a giant scale plane does not do a full power dive, well not if you expect to pull out if it.

Well, eighteen months ago I un-rolled the plan sheets on my lounge room floor and dreamed of the day of first flight.

You may think it funny but my first decision was colour scheme, after numerous hours on the Net I found the scheme I wanted, that print hang on the workshop wall providing motivation at times when the building stalled due to exhaustion or when the question arose " how am I going to do that? #@\$@^*!" A plane this big, is a big build, and I must admit I got building burn out on more than one occasion, hence eighteen months to completion.

Construction was actually straightforward, conventional techniques used, just the wood is bigger and more of it, more plywood is used than balsa, most of the joints are reinforced and lots more epoxy, CA, and PVA Glue used than normal. Lucky for me I work for an adhesive company.

Engine Installation

I chose to use a 3W 106-twin cylinder engine with electronic ignition, weighing in at 3 Kg with mufflers. On the front held on by SIX prop bolts swings a 28" X 10 prop. With a 4 1/2" alloy spinner. The 3W 106 is a 6.4 CU in or 106cc two-stroke petrol engine rated at 10.5HP. Fuel tank is a 32oz tank, that's nearly a litre of fuel on board. Mounting of the engine is hard mounted, four 1/4" high tensile bolts through a 3/8" ply firewall, no soft mounts, I can hear your concerns from here. I was too, but I spoke to numerous Giant scale pilots around the world using the 3W's and 3W them selves. All say don't soft mount the twin, soft mounting will cause more damage than good, to the point of bending crank shafts in the engine. A single cylinder engine is a different matter; I soft mount all my big glow engines. Twins have an inherent stability with the opposing twin cylinders so vibration is minimal.

So how do you start such a beast?? Very Very carefully! At start up time that big prop looks very intimidating, and I actually find I am more aware of the danger a prop can cause because it so big. My plane is always restrained with substantial stakes in front of the wings, and a helper holding as well. Over kill you say, when that engine fires and I throttle up, those restraints start to flex from the power, the helper is there as security. Treated with bucket loads of respect like all props and engines (even our 46's with 10X6's should) and wearing a very heavy leather glove a hand start is all that is required.

Radio Gear

I used 8 Hitec Metal Gear High Torque servos in total, one for each aileron rated at 133oz torque each (that's' four, two wings remember) and one rated at 133oz torque for each elevator half, and a Giant scale servo on pull-pull for the rudder rated at 250oz torque, mounted in the center of the fuselage just aft of the trailing edge. The throttle servo is a Hitec 425 BB. All my servo arms are either alloy or fibre reinforced heavy duty and the push rods to the heavy duty carbon fibre control horns are 4-40 titanium pro links with ball links, no quick links or clevises, they give too much slop which can cause flutter on a plane this size. All hinges are epoxied and pinned for safety.

I use two 1700mah 5-cell (6Volt) NiCad packs and two heavy duty switches for the 2 JR PCM receivers, and one 1700mah 4-cell pack for the ignition. And one 1700mah 5-cell pack for the smoke system. That's four big batteries, and four heavy duty switches. The total weight of the batteries alone is about .5kg for this combination. Scary stuff isn't it, some planes don't weigh that much, My initial concerns on this weight were soon dismissed, as they became very helpful when CG balance time came, why use lead when you can use your equipment in the plane to make it balance. No lead was used to balance the plane.

Smoke System

A Pitts has to have smoke! I used the new Sullivan skywriter; with a T join to deliver smoke fluid to both mufflers. It has the reputation of being able to pump a large volume of oil (big engines need lots) without loosing prime in high-G maneuvers. This new system allows you to program the smoke fluid flow rate from the radio TX, believe me

this is a godsend. The smoke tank is 24 ounces which gives me about 3.5 minutes of continuous smoke.

Covering/Finish

The Pitts is covered using a combination of materials, front of the fuse is lite ply sealed with talcum powder mixed in dope sanded to a smooth finish, the talc acts as a grain filler, aluminum sheet for landing gear fairings, open areas covered with Solartex and rib taped, cowl and wheel pants are fiberglass, and all the hinge gaps are sealed with covering. This is a very important step in high performance aerobatic planes, that hinge line gap can cause serious flutter and destroy the plane. Then the whole plane painted with White Knight enamel spray cans, white, red and blue. White Knight is cheap, great to use and Gas and Glow proof. Flying wires on the Pitts are structural so I used 150lb wire trace for all wires. To finish off there is 280 Stainless steel panel screws. Scale Cockpit detail and pilot of course.

She flies great, typical Pitts on the ground so you have to be on your toes, in the air she is solid as a rock, you can really feel her in the air, landing is power on until flare, and the big draggy biplane structure slows her up real fast.

You have to hear the twin exhaust note of a big capacity gas engine, idling it gurgles, then raws just like the real Pitts when the throttle opens.



Matt Holloway

These items can be purchased from the Club Treasurer:-

Club metal badges	\$5 ea.
Club cloth badges	\$5 ea.
SRCS stickers	50c ea.
Club Tee shirt	\$25 ea.
Club Hats	\$15 ea.



POWER AIRCRAFT

ANDREW WOLSKI ACHIEVEMENT AWARDS Flying Proficiency Examination for MAAA Gold Wings

PLEASE NOTE: The following Flying Proficiency Examination must be completed under the supervision of an approved MAAA R/C Pilot Instructor and is subject to the General Notes set out below.

INSTRUCTIONS: Each numbered item below is to be demonstrated to an approved MAAA R/C Pilot Instructor who, upon completion of demonstration, will complete the certificate section.

1. Pre-Flight Training, as follows:	10. Immelman turn, left to right.
a. Dexterity of Pilot with his equipment	11. Immelman turn, right to left.
b. Theoretical knowledge.	12. Three inside loops, left to right.
c. Pre-flight checks.	13. Three inside loops, right to left.
(NOTE) This item must be completed before flying.	14. Cuban eight, left to right.
2. Start-up, taxi and take-off positioning.	15. Cuban eight, right to left.
3. Take-off.	16. Spin, three turns.
4. Outward figure of eight, left to right.	17. Inverted flight, 5 seconds, left to right.
5. Outward figure of eight, right to left.	18. Inverted flight, 5 seconds, right to left.
6. Inward figure of eight, left to right.	19. Three horizontal rolls, left to right.
7. Inward figure of eight, right to left.	20. Three horizontal rolls, right to left.
8. Procedure turn, 90° to 270° left to right	21. Landing circuit, left to right.
9. Procedure turn, 90° to 270° right to left.	22. Landing circuit, right to left.
	23. Landing, roll-out and stop

- GENERAL NOTES:**
1. The flying proficiency examination must be completed in not more than four flights.
 2. The flights may be undertaken over a period of two individual days. (eg., two Sundays within a period of three weeks).
 3. Weather conditions, ie wind direction etc., must be allowed for.
 4. The flying proficiency examination must be completed under the supervision of an Approved MAAA R/C Pilot Instructor.
 5. It should be noted that the emphasis in the flying proficiency examination is laid upon pilot proficiency and achievement, rather than manoeuvre excellence. ie., a well recovered mistake may demonstrate proficiency as well as, or better than, a perfect manoeuvre
 6. The type of aircraft, ie., aerobatic model, sports model, trainer etc., is to be considered when judging manoeuvre excellence
 7. Return award claim, together with the award fee of \$5.00, to the Secretary of the appropriate State Association.

CERTIFICATION OF PILOT FOR THE AWARD OF MAAA GOLD FLYING WINGS

This is to Certify that (Name) FAI No.: AUS:

(First Name then Surname - PLEASE PRINT)

of (Address)

Club: *(Full Club Name)*

Has demonstrated a degree of proficiency in Radio Controlled Flying of Model Aircraft to Qualify for the Award of



In accordance with the Andrew Wolski Achievement Awards



Instructor's Name Signed:

FAI No.: AUS (MAAA Approved Flying Instructor)

Address: Date: