

HOLDFAST BUZZ



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Jeffo Loves His Visionaire



General Alert

The annual HMAC
Buy and Sell day is
coming up on
Saturday
November 2nd
from 0830 am
Details on P7

John is all rugged up against the winter chills. That Visionaire gets a real work out when John gets a chance to fly it. He is well known in the Club as a very good Instructor. He is also a hard working Committee man and regular competitor in the Pylon racing and the occasional Combat event.

The HMAC newsletter is your vehicle for sharing information, experiences, building projects, etc. with your fellow members. If you have photos of your latest model, a construction in progress or handy tip you'd like to share, please send it to The Editor at buzz@holdfastmac.asn.au for inclusion in a future edition of BUZZ.



Kirk Winters

"We have our very own, HMAC club only, Fun Fly scheduled for Saturday the 9th of November. "

From the President

The new committee is trying to do as good a job as the previous. Your new committee is in the process of change and in some instances, learning new systems and accounting software etc.

We have an extraordinary group in that the new committee are focused on bringing vigour, vibrancy and refreshing our club facilities.

I am very happy to say that in my very short time as president, that you have a dedicated committee that will do their best for the benefit of our club. We have new ideas from some of you, the current membership, and committee members. This will be followed through; however, your club needs you to help the club.

Friday the 6th of September social evening was a great night and well attended. We had Gary Petts give a presentation "Remembering Australia's Few - 84 Years On". Gary is an Australian aviation historian and author. His presentation was very professional and enjoyable. Thank you, Gary, for your excellent presentation.

You may be aware that a small group of volunteers led by Bryan has spread fertiliser on our turf and pits area on 23 September. This will be followed by more work and careful irrigation. The turf will be monitored with top dressing and weed control to follow in due course. Please be aware that improving our field and club in general cannot always be done when the weather is no good for flying, in this case, the winds had to be calm and rain imminent. Your patience will be rewarded with an improvement to the flying area.

Signage with more street appeal to prospective members and the public who just come in to our club to watch, is now the focus of your new committee. Stay tuned for an update soon.

Regarding our LIFT training programme, the weather has been unpleasant for quite some time and many Sunday training sessions and Come and Try sessions have been

cancelled.

To our current and very important LIFT students, the good weather will eventually return, and we will soon have you flying solo. Remember that the journey of learning is not to be rushed, rather enjoyed.

To our experienced flyers, we need more instructors and if you can help, it will be greatly appreciated by the instructing group. If you have silver wings and ready to do your gold, then you would be a great candidate. If you have gold wings you can be a Club Instructor without immediately doing the MAAA instructor course. Come and learn to be an instructor It is a rewarding experience to give back to new members.

Don't forget the upcoming HMAC buy and sell day on Saturday November 2nd. Bring anything you wish to sell, or you may even get a bargain from one of the sellers or our sponsor Modelflight. We will be providing a tasty BBQ breakfast continuing throughout the morning until sold out. Please support our BBQ fundraiser and raffle ticket sales.

We have our very own, HMAC club only, Fun Fly scheduled for Saturday the 9th of November. The event starts at 1:00pm. Bring whatever plane or helicopter you like and join with your fellow club members to fly and chat. Maybe fly what you bought the week before! Your club will be putting on a free sausage sizzle from late afternoon.

Fly well, fly skilfully, fly fun.

Kirk.



Pylon Racing Results

1st September

Event cancelled due to inclement weather

It has been a bad month of Sundays for Training and even Pylon Racing Next Event
Sunday 6th October
(Long Weekend)





Friday Night Social Meeting October 4th "Make your own Decals"

Terry Gold has been experimenting with the CriCut machine often used in craft hobbies. He has been able to very accurately produce decals for one of his scale models. And he discovered a special connection between the WW1 pilot of this SE5 and Adelaide.

Why not come along to the Social Meeting at 7.30pm and enjoy sharing Terry's story as well as chatting with other Members? Free coffee and biscuits.





"I've never owned a horse, let alone a mustang"

P-51 Mustang By John Jefferson

The name Mustang brings to mind some classic animals and physical objects that proudly use that descriptor as their instantly recognisable means of identification.

To start chronologically, the mustang is a free-roaming horse of the western United States, descended from horses brought to the Americas by the Spanish conquistadors.

Then we have the North American Aviation P-51 Mustang, a long-range, single-seat fighter and fighter-bomber predominantly used during World War II and the Korean War.

Finally the Ford Mustang, a series of American sporty motor vehicles manufactured by the Ford Motor Company since 1964.

I've never owned a horse, let alone a mustang, although I did ride one many years ago. Once was enough.

I've never owned a Ford Mustang, although I have coveted one once or twice, particularly the model used in the 1968 film *Bullitt* starring Steve McQueen.

That brings us back to the P-51. In 2005 I bought a foamie Parkzone electric powered P-51D. This was an early generation electric model which had a geared in-runner electric motor utilising a 9 cell 1000 mAh nickel-metal hydride battery, operated with a 27 mHz transmitter and receiver. It was a hand launched, three channel affair; ailerons, elevator and power (no rudder), a wingspan of 1000 mm and weighed 820 g. It was a reasonable performer but nothing to rave about. I ended up giving it away after a few flights.

Fast forward to 2024. Earlier this year, a model flyer, not a Holdfast member, donated his models and equipment to the club as he was going overseas to work and live. Because of the rather poor quality of most of the gear the club offered it to members free to take away. I spotted a box which contained a Parkzone P51D Mustang. Yes, it was exactly the same model I had back in 2005. After a bit of yes, no, maybe, I picked it up, checked the contents and thought why not!

At home in the workshop/hangar/man cave I decided not to use the original geared in-runner electric motor and 9 cell battery pack but to upgrade to 32 equivalent out-runner motor powered by a 2200 mAh, 3s LiPo battery. Transmitter and receiver would be a 2.4 gHz system. Easier said than done.

Taking out the original motor revealed a plastic firewall moulded to accept that particular motor. My outrunner would not fit on the plastic firewall, so I made a new firewall from 3 ply, drilled holes to accept the new mount, then epoxied it in place.

The original battery holder was a plastic cage mounted vertically from the underside. My LiPo would not fit so I removed the cage. It was obvious that I needed to make a battery tray and hatch to access the battery. My only option was to cut a section off the top of the forward fuselage, which was easily achieved. The new hatch cover was reinforced with balsa edges and fibreglass inside to give it rigidity; as was the inside of the hatch. I made a battery tray from light-ply and epoxied that in place. A new receiver was installed as well.

Continued over

Once that was done I had to work out an appropriate ESC and prop combination to suit the motor, taking into account my final product would be heavier than the original due to the new system.

After testing different ESC ratings and prop sizes using my Watt & Amp meter I settled on a 100 Amp ESC and APC 9x6 electric prop. The meter showed peak 60 Amps and 530 Watts, which should be more than enough for a foamie.

Next task was to determine the centre of gravity. Unfortunately the original manual which was in the box did not specify a CG position. In my collection of plans I had a P-51 so I used that plan's CG position, adjusted for the size differential between the two models and came up with what looked like near enough to one third of the chord from the leading edge at the wing root, which is our usual conservative starting point.

I was curious about the wing loading, which was not specified in the manual. Google found a reference to the original model which was 14.6 oz/ft². Due to the heavier gear I used my new wing loading ended up at 19.2 oz/ft²; not ideal but still acceptable.

First time at the field, ready for its maiden flight there was a problem with the ailerons, even though they were working OK while testing the setup at home. The right aileron worked while the left did not. No flying this day.

At home I found the problem. The original arrangement used a single servo to operate both left and right ailerons. This was done by using a thin wire which was connected to the servo arm, running through a plastic tube inside the wing and coming out in front of the control horn – on both left and right wings. The problem was that the left plastic tube shattered, probably due to old age, and the wire flexed inside the wing, not being able to move the control horn. Luckily I had some spare wing servos which I fitted one to each side and adjusted the settings on my transmitter.

Maiden flight day, I co-opted a club member to launch the model for me, and help with trimming as I would more than likely need both hands on the transmitter to manage a safe launch and maintain control. The model was twitchy and kept pitching up; all available down trim had to be used to tame it. As I landed the prop broke because I didn't use the original flexible one which would bend out of the way while belly-landing.

Back at the drawing board I thought I'd revisit the CG. Google again and I found a free CG calculator where you input relevant wing and tailplane measurements and it comes up with what should be a more accurate CG position based on calculating the mean aerodynamic chord of the tapered wing. Indeed it was 4 millimetres forward from what I had; not much but hopefully should make a bit of difference.

Another day at the field, the model had its original prop fitted but without a spinner because the prop centre was thicker than that on an APC and there was no room to fit a spinner back plate. Launch by helper and away she went. This time it was more manageable, still needed trimming but getting closer to a better handling machine.

I reckon another two or three flights and it should behave the way I want it to.

IJ

Would you like to know more about Centre of Gravity calculations?

The HMAC Website has an excellent aid which is readily available. Just go to the Index /Technical Articles/Aircraft Super Calculator with your tape measure and model at the ready. You can enter the numbers and calculate what is apparently a very accurate position. Flight characteristics can change dramatically when the CG is changed. Take Care!



John's neat Mustang will look really great with a new spinner.

Thanks for another great story of "Scratch Modification"!





Neat conversion of the original NiCad compartment to a LiPo battery storage area. The firewall and nose has also been modified.

BUY & SELL DAY

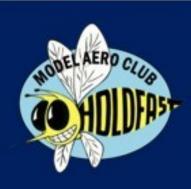
Sat Nov 2nd 2024 09:00am



This popular event continues at our Club field once again this year. Admission is free but you must provide your own setup (table, chairs, shade etc.) if you bring items for sale. No commission taken. Selling direct.

The field will be open from 8:30 am to set up. MAAA members with Bronze Wings or higher are welcome to fly at the field (no turbines). A sausage sizzle will be available. If last year's event is anything to go by, there will be some great bargains to be had!





Free Admission

Sausage Sizzle & Refreshments available

Come & Fly Too Must be MAAA member with at least Bronze Wings

Proudly supported by

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RC

HOLDFAST MODEL AERO CLUB

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The Club Scene



<u>September Social Meeting:</u> Guest Speaker Gary Petts gave an interesting and well illustrated account of RAAF airmen who fought in the Battle of Britain. The meeting was very well attended. Gary and Kirk are pictured above.





- (L) Treasurer Stewart Jackson gave his magnificent five cylinder radial Saito a run on the bench. What a nice purr!
- (R) New Member Ian Briggs with his very smart 3D printed sports model ready and waiting for a test fly.



UPCOMING EVENTS

Pylon Racing

October 6th at 1.00 pm (Daylight Saving starts)

Social Meetings

7.30 pm
Show and Tell
Coffee and a chat

Friday November 1st
7.30 pm
Show and Tell. Plan for
an early start next
day!
Coffee and a chat

Buy and Sell Day

Saturday November 2nd On the grass from 0900. Bring Cash. Bargains galore. BBQ brekkie

Christmas Function

Sunday December 1st Brighton Metro Hotel Buffet Lunch Watch out for Booking sheet shortly

HOLDFAST MODEL AERO CLUB

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Newcomers to r/c modelling are catered for by setting aside every Sunday morning from 10 am when qualified instructors will teach all aspects required for the safe operation of the model. During the training period no other models are allowed to fly, ensuring the least possible distractions to the student.

New Members

(No New Members this month)

Shortage of Instructors and Assistants

We really are short of Instructors! If you are a competent Silver Wings flyer you could probably pass the Gold Wings test with a bit of practice. Then we can give you some practice at being an Instructor under supervision. You can then operate as a Club Instructor.

Flying Achievements

No New Wings achievements this month



Guess who's coming soon!



Bind-N-Fly Basic



KEY FEATURES:

- Officially licensed Mike Patey designed scale replica of this one-of-a-kind bush plane
- · The most convenient, practical, affordable and easiest-to-fly DRACO RC plane yet
- Can be flown in smaller spaces and more places due to micro-sized unique capabilities
- Many functional scale features include LED navigation, landing, down and other lights, plus working flaps
- Detailed scale features include moulded-in wingtip skids, surface features, antennas, steps and many more
- 4-blade prop paired with a factory-installed brushless outrunner motor, powered by a 3S and 4S compatible 300mAh battery



E-flite Turbo Timber Evolution 1.5m STOL RC Plane Bind-N-Fly Basic



HobbyZone Carbon Cub S2 1.3m RC Plane Ready-To-Fly Basic



Hangar 9 Ultra Stick 10cc RC Plane Almost-Ready-To-Fly

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