



2024 NZSCA 1/24th Scale National 8-hour Enduro

Wellington Slot Car Club

Saturday 9th March 2023

Before the race, predictions were rife about how different it would be to race brushless cars:

“There will be much more tire wear with the faster cornering speeds”...

“People will run big tires to over-gear their cars”...

“Overtaking will be impossible”...

None of these proved correct.

The 2024 Enduro was a very successful introduction for 1/24th Brushless Production racing. Six teams participated, all six used only one motor for the duration, only one team had a motor move (after countless crashes) and (most of) the cars were nicely balanced and easy to drive.

The race started fast with Marlborough, Rainbow and WOT closely matched and just easing away slightly from the rest of the field. After two heats WOT had opened up a 22-lap lead over Rainbow, but Marlborough had dropped back to 5th, 80 laps behind Rainbow, after a major chassis bending incident that took ages to sort out.

In the third stint Rainbow closed the gap to just 25 laps behind WOT, while Marlborough lost a lot more time to repairs. WOT was able to put just a few more laps up each hour, and by the end of stint 6 they had 115 laps on Rainbow. PEG maintained 3rd place, Henderson 4th, Marlborough 5th and Silver Streak 6th.

In the seventh stint it looked like Rainbow were back in with a chance, cutting the gap to just 39 laps as WOT struggled on Black with a lack of grip and rubber that took forever to “come in”. PEG had been putting in some good distances and opened their lead over Henderson to 125 laps, with Marlborough just 34 laps further back. The boys from Blenheim almost set the greatest one-hour distance of the race with 664 laps on Orange, (Rainbow did 665 on Green) drawing 500 laps ahead of Silver Streak, whose car was now much the worse for wear after many smashes.

As is often the case, it all came down to the eighth stint. Could Rainbow on Orange catch WOT on Yellow?

It was not to be. They did not quite have the pace to haul WOT in, and then a bent axle just 15 minutes from the end put paid to any chance. The finishing order was WOT and Rainbow, PEG, Henderson, Marlborough, and Silver Streak.

What did the teams have to say?

Silver Streak – Alex Johnson, John Dunweg, Ron Thornton – 6th place – 4,264.83 laps

How not to win a race... It was always going to be a tall ask for Silver Streak Racers to finish any other place but last. Based on our combined ages adding up to just over 210 years, youth was not on our side. Living distance from the track plus irregular club attendance made for rusty driving habits.

To say the car had more hits than Elvis Presley is an understatement. We had to fit our second body on our first lane change. The car suffered a severe impact from behind and kept drawing the body into the rear tyres. Reinforcing fitted to the back of the body failed. Lesson learnt, running larger diameter tyres with smaller wheel arches pulled the body inward. The larger tyres also created handling issues and generally slowed the car down for all of us. Next time we'll run smaller tyres.

The motor coming loose surprised me knowing how I tightened the screws initially. Looking at the gear mesh at the end of the race shows the motor moved again but still retains mesh, just. A case for Loctite on screws or an additional retention bracket?

Apparently we had two types of bodies – MK1 and MK2. MK2 is a wider version of MK1, and when MK1 is pinned to the chassis it is forced to spread. This caused the front spoiler to deflect downward in the middle, causing zero ground clearance and rubbing on the track. Semi cutting around the wheel arch area Cleave Tech style alleviates this problem but now the body hinges up and down and still rubs. Cutting some of the lower edge of the spoiler away at the front and removing the reinforcing tape across the front of the body as suggested by Steve Murch helped reduce friction.

Not changing the lane sticker before attending to other maintenance issues saw the car placed back on the track in the lane it was last on. Result, a high impact crash at full speed. Yes another lesson amongst the many. If you had a trouble free race and stayed in the slot I congratulate you. In our case I swear we created the most entertainment!

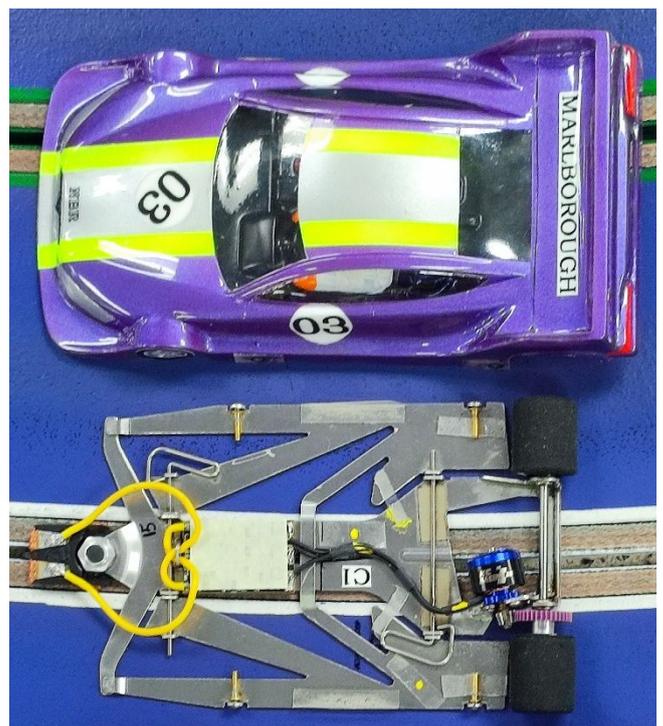
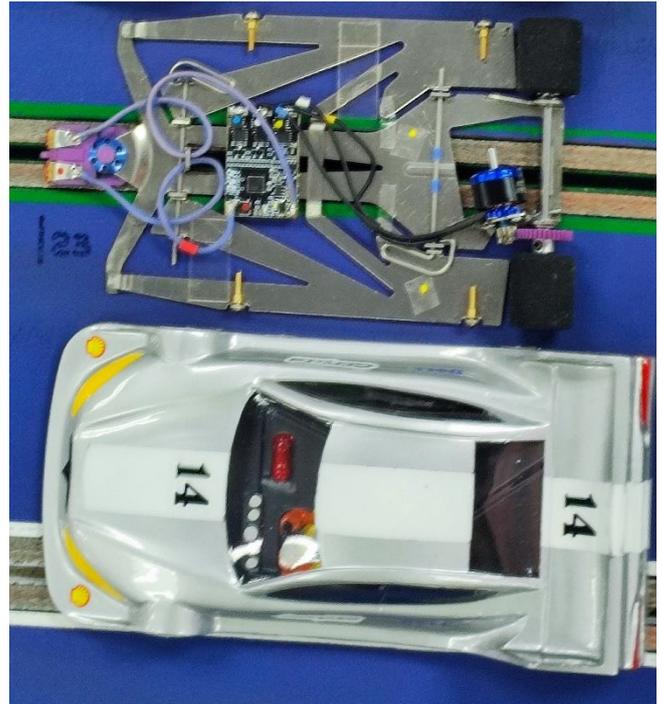
Team Marlborough – Nigel Boyce, Neil Bidwell, Andrew Bidwell, Adam Bidwell – 5th place – 4,854.40 laps

Our race started well with us in the mix in 2nd place. After the first hour the top 3 were separated by 14 laps. We soon realised this was going to be a close race and all the small details mattered. Unfortunately, into the second hour of the race our car jumped onto another lane and at full speed went straight into the barrier.

This caused our chassis to be completely bent in the front end, while we had to straighten the chassis as best we could, we dropped right down the order losing over 200 laps in the process. Our fight was now to catch as many laps back as we could. We managed to claw back to within a couple laps from 4th but in the end it wasn't enough.

Brushless cars are easier to drive and are more forgiving in the corners, but this means you end up pushing them very hard and for twenty minutes, it was more physical on the driver's side also.

Overall, the cars are more than two tenths quicker than last years, and the right balance was found we believe. On a mechanical side the motors held up well. These cars all seem to be more comparable to each other and therefore puts a more even playing field which is more down to the driver and for those car builders, making everything as efficient as they can, the small details count even more now. Another great event, and a successful start to brushless racing at NZSCA level.

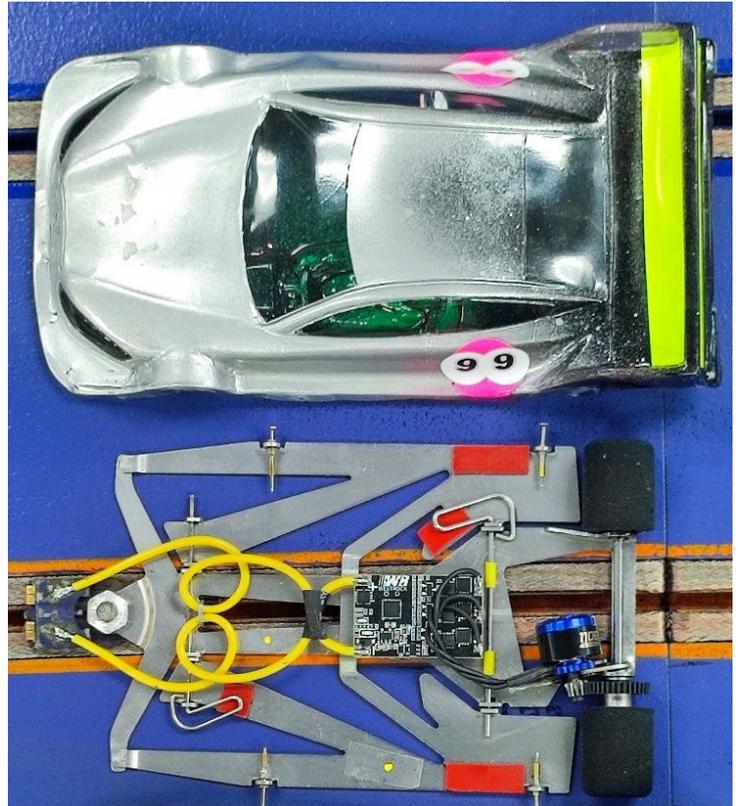


HMMRC – Ivan Bailey, Paul Caplan, Steve Murch – 4th place – 4,887.95 laps

HMMRC at an enduro! Remember us? It's been a while!

Yes, finally HMMRC got a whole team of actual members out in the wild to run a team at an endurance race. Being early adopters of brushless racing at a club level meant we were really keen on the new class at a NZSCA event.

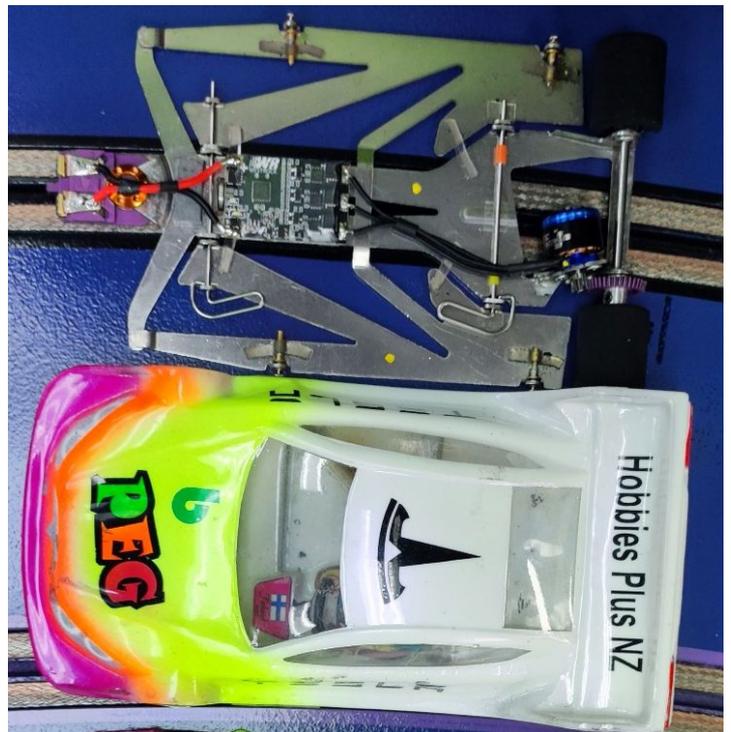
After settling into 4th position at the end of our first stint we had visions of overcoming the lads from Palmerston North whilst the Marlborough gents snapped at our heels, especially near the end.



PEG – Eben Brand, Gill Andrews, Paul de Lautour– 3rd place – 5,055.69 laps

Our car lacked some straight-line speed - if I didn't get a great drive out of a corner, they would catch me towards the end of the straight. So I had to make up time through corners where I could get a jump on other cars. I noticed after our club race on my car that the rotor had a lot of play, so replaced the bearings, but the play remained. Used Loctite 222 to lock in the rotor crown end bearing, and still had some play, so moved on to replace the shaft with a 0.01mm larger diameter one, which then got rid of all the play. After that the motor needed balancing which I didn't bother with (didn't check it before, may have already been out of balance). I gave the 2nd motor a similar treatment, only didn't replace the bearings. We used the B car in the race, motor and bearings still fine after eight hours.

There was a lot of carnage in the race early on, and though I never felt the need to straighten the chassis, we realised it was bent as with low tyres the chassis was picking up in the middle of the centre section. Postmortem showed it was much worse than expected, but hey, the car still handled ok so I decided to not lose the laps to straighten it; Henderson was very close...

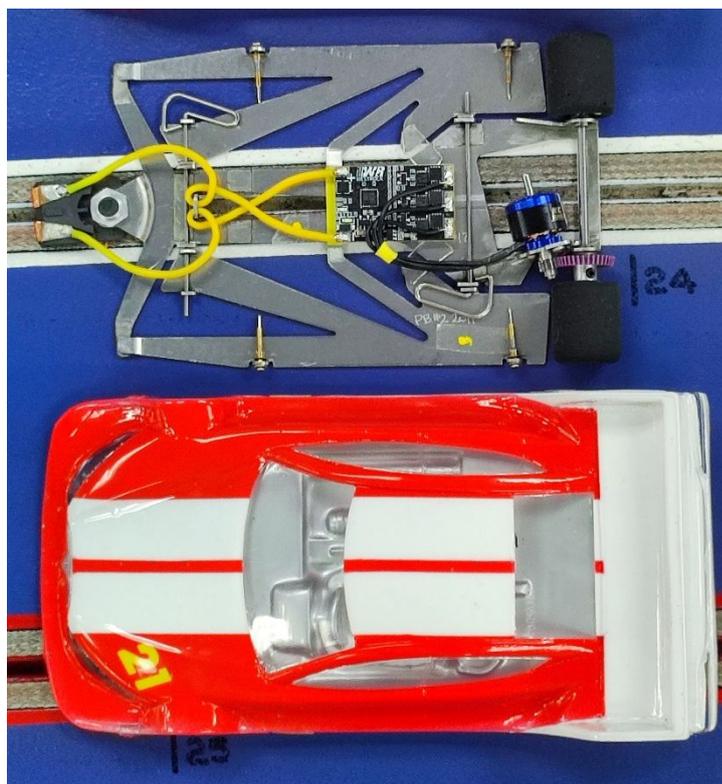


The chassis was more munted than I've ever seen after an enduro, I suspect on account of higher speed on average across the teams, and quite big handling differences between cars. A few got badly bent out of shape so ended up handling terribly. A lot of that damage happened early on when cars should still have been good, showing people will need to learn more about setting up these chassis (present co. inc...) and also how to drive them well at the higher speeds. For the last half of the race, I was again at 105+ % 😊

Overall, a great day, did some more learning!

Rainbow Racing – Paul Belchambers, Chris Parkes, Russell Levy – 2nd place – 5,080.31 laps

Our car was good from the outset, TQ'ing and throughout the race setting the fastest lap in the final heat. The new brushless gear handled the race effortlessly and the myths around low tire diameter and high grip were completely dispelled. We ran high grip rubber almost to the deck at the end of the race with no noticeable drop in performance. Minor hiccups cost us a laps; changing tyres too early at the start, stripping a grub screw and losing a wheel, and a bent axle all set us back. Well done Old Timers, definitely a case of the best drivers winning the day.



Wellington Old Timers – Chris Dillon, Allan Tucker, Steve Murrey – 1st place – 5,151.25 laps

Our car was a dream to drive, and we rarely fully exploited its very high corner entry speed. Crash damage was limited to a pan hook hung up below the front wing. And a few squashed bodies from heavy hands. Car was quicker as the tires wore down and we could run the rubber lower, with more chassis rubbing than would have been possible with a 23 gram brushed motor. Less pendulum effect I guess. We used four pairs of tires, two pairs of braids, and a hell of a lot of adrenaline over the last set of tires, which did not provide the expected level of traction! Other drivers were impressively considerate about allowing overtaking on the straights. Thank you. 5:5.



DISTANCE COMPARISONS - BEST PER LANE - 2022 vs 2023 vs 2024									
	RED	WHITE	GREEN	ORANGE	BLUE	YELLOW	PURPLE	BLACK	Total best
2022 · JK C43 · PS 4002FK · Saloon	618	618	607	608	616	609	596	580	4852
2023 · JK C43 · PS 9000 · Saloon	603	617	640	627	613	608	598	591	4897
2024 · JK C43 · KC 4500kv · Saloon	653	655	665	664	656	653	644	612	5202
Difference	50	38	25	37	43	45	46	21	305
%	8.09%	6.15%	4.12%	6.09%	6.98%	7.39%	7.72%	3.62%	6.29%

Statistics: 9/03/2024 6:40:34 PM - 2024 NZSCA 8 hr Enduro - Laps / Overall best - Enduro 8 Hr - Heat race (3600 Sec)

Pos	Driver	Comment	Qualify result	1-Red	2-White	3-Green	4-Orange	5-Blue	6-Yellow	7-Purple	8-Black	Most laps	Total Laps
1	W O T	Chris D, Allan, Steve Murrey	15.93	653.23	655.83	661.46	661.47*	656.02	653.34	644.98	564.92	661.47	5151.25
2	Rainbow R	Paul B, Chris P, Russell Levy	16.21	633.80	645.99*	665.20	621.51	616.80	642.81	641.35	612.85	665.20	5080.31
3	P E Gs	Eben Brand, Gill, Paul dL	15.46	631.70	641.97	646.14	650.05	633.99*	633.84	617.71	600.29	650.05	5055.69
4	H M M R C	Ivan, Paul Caplan, Steve Murch	14.47	592.54	625	605.81	626.84	603.15	619.75	615.81*	599.05	626.84	4887.95
5	M S C C	Nigel, Neil, Adam, Andrew	15.79	603.71	632.70	648.65*	664.31	552.34	618.88	521.53	612.28	664.31	4854.40
6	S S R	Alex. John, RON	15.90	576.99*	508.71	597.42	454.71	532.82	556.51	525.46	512.21	597.42	4264.83
	Laps ->			653.23	655.83	665.20	664.31	656.02	653.34	644.98	612.85		

Next Event

New Zealand Slot Car Association 2024 1/32nd Scale Nationals

Henderson Miniature Motor Racing Club
Rangeview Road, Sunnyvale, Waitakere, Auckland

Friday 10th to Sunday 12th May 2024