

SBD Events 2021

Matt Hillam and Steve are sharing the 2.0L XE powered SBD Dallara Carole will be driving her Hayabusa SBD OMS CF04
Zoe will be driving the SBD 1.6L EcoBoost Westfield

Due to the pandemic, the motorsport season didn't start until the middle of April.

Goodwood, 17th April - Regis Sprint

Steve: 2nd Overall - 75.76s Matt: 3rd Overall - 76.55s Zoe: Ladies FTD - 93.51s

Report:

Bright & sunny day, cold to start but the air temperature warmed up quite quickly.

We weren't able to get the new wing on the SBD Dallara in time, so the car was pretty much the same as last year. The car felt quite nice to drive, however it didn't feel absolutely comfortable to go flat out through 'No Name', but we couldn't get anywhere near the times we were doing last year. It may be that the track temperature wasn't quite enough and the tyres weren't giving all the grip plus they are getting on for 2 years old now. Fastest by quite some way in practice but then Steve Miles managed to put a PB in, which Steve managed to get within 6/100th off, but couldn't managed to go any faster than that so well done to Steve Miles for getting FTD.



The SBD Westfield had the new intercooler ducting and repositioned radiator, the air temperature and water temperatures considerably lower than last year, back down to levels we had never seen before. Probably need a little bit more work on the ducting, just to get the last bit out of it. Zoe was going well and her times were coming down, unfortunately a coil connection failed on her second timed run when going down the main straight. This slowed her down dramatically, we could see it was going to be a much quicker run. Unfortunately we didn't have time to fix it for the third timed run.





Goodwood, 8th May - Bailey Sprint

Steve: FTD - 77.49s Matt: 2nd Overall - 80.20s Zoe: 2nd in Class - 98.34s

Report:

We were hoping to carry out lots of tests with the new wing and mods to the floor of the SBD Dallara, unfortunately it rained a lot in the morning so it wasn't ideal for testing. The car felt nice to drive even in the pouring rain and it allowed Steve to analyse the new gear change software still further while Matt and John Hughes looked at the data coming from the front wing. Fortunately the rain stopped and track began to dry, but we were still on wets until after lunch. The track was now almost 100% dry so we were getting more useful information. Unfortunately it was realised there is some kind of measurement error in the model and the wing isn't

in the perfect position to get the correct air flow into the tunnels. So the information we were getting was slightly skewed. Matt and John managed to make some adjustments to the wing position but were unable to optimise it for the day. Steve had forgotten to re-connect the rear roll bar for the dry track, which should have been a bad thing but it gave us some useful information and some ideas on how to improve the mechanical grip still further. There is definite improvements in downforce as Matt & John could see from the data but it is a question of now putting everything together and getting everything to work correctly. This is likely to take some time as there is a lot of changes that need to be integrated and tested but that's development!



Pembrey, 5th & 6th June

Steve:

Saturday - 3rd in Class, 3rd in BSC R5-97.22s (SBD Dallara) Sunday - 2nd in Class, 10th in BSC R7-120.26s (SBD Westfield)

Matt:

Saturday - FTD, 1st in BSC R5-93.91s, 2nd in BSC R6-103.71s YouTube Video

Carole:

Saturday - 2nd in Class-105.72s,11th in BSC R5-108.13s, 9th in BSC R6-116.75s Sunday - 2nd in Class - 116.12s, 9th in BSC R5-116.12s, 9th in BSC R6-117.12s

Zoe:

Saturday - 4th in Class, 12th in BSC R5-128.79s, 10th in BSC R6-134.53s

Sunday - 6th in Class, 11th in BSC R7-142.49s

Report:

Our trip to Pembrey was a weekend of highs and lows. The lows started about 10mins from our workshop when we got stuck in the traffic on the M25! A long 7 hours later we got to Pembrey, but at least the weather was now bright sunshine.

Steve & Matt were sharing the SBD 2.0L XE Dallara and once again we were testing new aerodynamic changes with alterations being made throughout the day. The new British Sprint Championship Top 12 style had been introduced at the beginning of the season, which means that although there were still 2 run offs, points could be gained for each one. Both Steve & Matt qualified for the run off, Matt qualifying faster and getting to go 2nd and have the benefit of the warmer tyres. Matt won the run off with 93.91s and Steve Miles finished 2nd with 95.94s. Both drivers then went out to qualify for the 2nd top 12, Matt went first and once again qualified, however when Steve went off the start line, unfortunately a grub screw in the throttle system had worked loose so he had to abort the run coming up Hatches Hairpin. Unfortunately because he failed to finish the run, he didn't qualify for the run off. We fixed the throttle in time for Matt to compete in the Top 12, this time he finished 2nd to Steve Miles' 1st. At that point, the rain which has been drizzling on and off all day, started coming down heavier so we packed the cars away and retired to the hotel.

Next morning, when we were checking the car, Steve noticed a notch out of the cam belt, which meant that the Dallara has to be retired from competing that day.

Zoe, who had been competing quite happily on her own on Saturday in the SBD 1.6L EcoBoost Westfield, then found she had a codriver – Steve! She had been gradually getting faster over the day despite the changeable conditions, also qualifying for both BSC run offs. On Sunday, we were competing on the Clubmans circuit and the weather was sunny with a few clouds.

Zoe was going out first for the runs and once again gradually improving her times. Although Steve had to re-adjust to driving a Westfield again and having no downforce, to carry him round the corners, he felt that the car wasn't handling very well. He made some small changes to the set up during the day in an effort to improve the handling. Both competed in the 1st Top 12 run off, however because the temperature of the tyres is very different for the first and second driver, for the 3rd timed run, it was agreed that Steve would go out first to feel the difference. Off the start line he was going well even if it was a little lively at the rear, unfortunately the rear stepped out just on the entry to Woodlands and Steve had to make a small correction which forced the car slightly wide, causing the car to head towards the edge of the circuit and touched the grass causing a spin, which launched the Westie into the air when it hit a bump in the grass, which ripped the floor off (it stayed in one piece!), he then spun another 360 degrees and stopped facing the wrong way but back on the track! And that was the end of the Westie's day. YouTube Video











Snetterton, 26th & 27th June

Steve:

Saturday - 4th in BSC R11: 83.42s, 4th in BSC R12: 81.76s Sunday - 6th in BSC R11-83.07s, 6th in BSC R12-80.69s

Matt:

Saturday - FTD, 1st in BSC R9-79.78s, 1st in BSC R10-79.79s

Sunday - FTD, 1st in BSC R11: 78.38s, 1st in BSC R12: 78.90s, New BSC Class Record YouTube Video

Carole:

Saturday - New PB: 92.41s Sunday - New PB: 90.36s

Report:

Matt won FTD on both Saturday (79.33s) and Sunday (78.38s). Also he won all 4 BSC run-offs, including breaking the BSC record by 1/2 second on Sunday's 1st run-off, so gaining an extra point.







Also at Snetterton was Malcolm Boorman in the Hayabusa powered OMS









Also at Snetterton were Terry Holmes & Graham Porrett sharing the TeGra Racing 3.5L V8 Judd Lola, which is controlled by our MBE9A9 ECU managing engine, gearbox and traction control.



Lydden, 17th July

Steve: 3rd in BSC R13 - 69.14s, 4th in BSC R14 - 68.44s **Matt:** 1st in BSC R13 - 67.29s, 1st in BSC R14 - 66.77s

Carole: 10th in BSC R13 - 74.36s, 10th in BSC R14 - 73.92s New PB: 72.96s

Steve's report:

We had another good result at the weekend, the car is steadily improving, we are fine tuning the balance of the car before we begin to add downforce. We are still running very old Pirellis, which are still working extremely well and we plan to do this for as long as possible until the car is in a place that is in a place that both Steve & Matt like. We have made quite a few set up changes from the previous meeting, although they were fairly small, they have a significant effect on the cars handling.



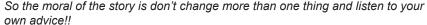
Since Lydden was extremely hot, the larger tyres we use were coming into their own, even double driving it is quite often difficult to get them to the correct temperature. On some colder events, the smaller tyres used by many of the cars heat up quick and give an advantage and the temperatures seen looked as if the smaller tyres were only good for one run at their best and once they go over this, unfortunately they don't recover quickly. I feel particularly bad for Steve Miles, who was doing some storming driving and achieved FTD, but when he got to the points scoring runs, on one particular run he looked to doing a storming drive and caught a slower car on track. He came back round for his re-run, but they sent him straight to the line. He should have taken some time to let the car and tyres cool as everything was overheated, unfortunately once on track for his re-run, the tyres were no longer working, so through no fault of his own, it destroyed his points scoring.

On one of Matt's runs, in the heat of the moment, only one number got changed and this wasn't noticed by us. There was some confusion and unfortunately either his time got accidentally deleted or lost. Fortunately Roger (Borough 19) has realised the error, in the meantime since Matt's time hadn't appeared. After some time, Matt went off to find out what was wrong. We had then started to strip part of the car down, ready to make some changes before the next runs. Eventually, we were told the time couldn't be retrieved and he would have to do a re-run, fortunately for Matt. We hurriedly put the car back together and managed to get a great run in and scored maximum points.

Obviously it is a real shame for Smiles, because it could have been fight between Smiles & Matt as they were both driving brilliantly on the day and deserve to score the points for doing great jobs and although if they had both failed to get good times, I would have increased my points score along with many other drivers. I don't want to score better points because of technical reasons, I always want to score points because I have performed better than other drivers out on track.

I am now going to use up one of racing driver excuses as to why I am generally not doing as well as Matt – last year when we were at Goodwood and I had a spin, at the next event which was Castle Combe, the car didn't handle at all well and we assumed that we had damaged something on the front suspension. What is now looks like though is that we made the fatal mistake, which we should never do and tell all our customers never to do, is to change more than one thing at a time. The problem was that one of the changes improved the car, the other change made the car significantly worse, but overall the car seemed to be as quick, it wasn't until we got to another event, that the car seems to handle very strange. This sent us off in the wrong direction and we have been gradually dialling all the changes back out the car and the closer we have got back to the original settings the faster the car is getting. Still not quite there yet, because the aero changes that have been added to the car end up being classed as two changes at once, so even though the car is nearly back to its original settings, we have to take account that the aero dynamic

Matt is obviously more comfortable with the way the car currently feels and doing a great job. I hope that over the next few events, the car can be dialled in to something that makes me feel comfortable and we can get a proper fight between the pair of the us.





changes can have a huge change to the feel of the car.







Goodwood, 7th August

Matt: FTD - 76.78s <u>YouTube Video</u> Steve: 2nd Overall - 76.84s

We were hoping to go to Goodwood for lots of testing with aero set up and further development of the new gearbox control strategies, however before we arrived it looked as if it was going to be raining all day. Luckily the rain held off and although Matt went out for Practice on wets, the track had already begun to dry, he caught another car on track and was given a re-run. We had made a lot of changes prior to Goodwood to the damper settings, car rake and front mono-shock. Matt said the car felt quite stable and did nothing unexpected. We quickly changed the car to slicks and he put a good steady, but quick lap in and said the car definitely felt compliant and didn't suggest any changes. Steve then drove the car and it felt very smooth and comfortable, but the track was still very damp on the corners meant that we weren't driving the car to the apex and decided to leave it alone for the 1st timed run.

For the 1st timed run, the track was still damp at the places that you really wanted to be driving through, so care had to be taken. With the amount of rear wing we were using in order to test the stability and aero balance, the car was much slower down the straights. Steve was faster than Matt for 1st timed run, but because the track still wasn't dry, we couldn't get a complete idea about how the car was feeling overall.

During the lunchbreak, the sun came out and it got really quite warm, unfortunately just as lunch finished, it started to cloud over again and the closer we got to going out, the darker it got. Matt was first and got a nice run with a bit of sunshine, however by the time Steve had got in and got to the start line, there were a few spots of rain and looked very dark over the other side of the circuit. The car felt again nice and stable for both drivers, Steve tried something different through St Mary's to see if the improved stability had helped with the rear end grip, it was definitely better and proved that more speed could be taken through the corner but both driver reported that the grip out of Woodcote was still limiting and the car felt unstable. As Steve finished his run, the heavens opened and the meeting was abandoned after that. We now have a good idea what the issues are with the aero balance and John Hughes has taken all the information so he can make changes to the aero parts in the model. We are now hoping that some the changes can be implemented prior to the next British Sprint Championship round at Blyton Park.

Steve had been testing and making changes to the gearbox strategies throughout the day and good progress has been made ready for more software updates.

A memorial was held at the circuit for the Rob, the marshal who had sadly passed away in an incident at Brands Hatch the previous weekend. He was supposed to have been marshalling at Goodwood on the Saturday and from the people that spoke before the minutes silence, we realised that he was known by many, if not all of the marshals at the meeting and had been the Mayor of our local town. We are always grateful for all the marshals that come along and look after us during the day without whom we wouldn't be able to compete.













Lydden, 18th September

Steve: FTD - 67.00s YouTube Video

Matt: 2nd Overall - 67.07s Carole: 6th Overall - 73.22s

The event at Lydden went extremely well, fortunately it was a really hot day which warmed the very old Pirellis, which gave us the chance to properly test John Hughes' new floor design. Both Steve and Matt could instantly feel a difference, the aero balance was far more consistent and definitely biased to the rear to match the weight balance of the car. It was the first time that we both said that we could apply full throttle at the apex which we had never been able to do before, even on new tyres. Lydden has quite an old surface and uneven gradients, which was ideal for testing set up changes. The way the car was now working, the car was now producing high speed understeer so we made aero changes for each run and mechanical changes on separate runs to test the changes. We made a significant number of changes throughout the day and although the times, particularly for Steve were pretty consistent apart from one run. The slowest lap only varied by 0.15s but within each of these runs, we could feel the changes in the characteristics of the car. After the event, we compiled the data and set the car up on the Sunday ready for the next British rounds at Blyton Park on the 25th & 26th September. We have ordered a new set of tyres since the current set have done over 140 heat cycles and are over 3 years old.

We made a list of small changes to do at the event because the new tyres will definitely react differently and the circuit is significantly different to Lydden. Extremely pleased with the result and the feedback we have given to John Hughes will allow him to move forwards with the aero design, which he is working on currently, which should potentially double to overall downforce. He is working on the drag in order to minimise its effect. These will be ready to test after the season is over, ready for 2022.







Blyton Park, 25th & 26th September

On Saturday, the Eastern circuit was used and on Sunday, the Outer circuit was used.

Steve

Saturday - 4th in BSC R23-64.85s, 5th in BSC R24-63.36s

Sunday - 4th in BSC R25-57.23s, 3rd in BSC R26-57.08s

Matt:

Saturday - 2nd in BSC R23-62.75s, 3rd in BSC R24-60.94s

Sunday - FTD,1st in BSC R25-56.07s, 2nd in BSC R26-56.47s

Carole:

Saturday - 12th in BSC R23-82.46s, 12th in BSC R24-73.24s

Sunday - 10th in BSC R25-64.96s

After Lydden, we made some fairly major set up changes to the SBD Dallara based what we discovered during the day. We bolted on the new tyres from the start of the day because we knew the new ones would be quite different. The car instantly had more grip, but the balance of the car with the new tyres was quite different and it took us quite a few runs to get the car dialled in more. It is also a circuit we haven't been to since 2019 and an extremely technical circuit, which Steve has only done a few times before, where Matt has a lot more experience there. We took a lot of advice from Alan Mugglestone on how to approach some of the corners and he also explained that as the old front tyres had worn, they give up grip sooner than the rear due to the number of heat cycles that have gone on.

Steve was particularly comfortable in the car, the new aero changes to the floor have made the car very consistent in feel, which gave him the opportunity to spend more time learning the circuit and less time worrying whether it was going to go in the scenery. He made significant improvements over the weekend. Matt, who although was doing better than Steve, wasn't relaxed and getting the best out of himself and the car. By the end of Sunday, the car was feeling very balanced and Matt looked like he was going to get a win being 0.8s up at the curved split, unfortunately overdrove Bunga Bunga and threw it all away. Once you have messed up there, it is impossible to regain it and finished 0.06s to give Steve Miles another win. We can't be too disappointed since he is one of our customers and doing a brilliant job, getting it together at the point he needs to, so well done to Steve Miles.













Anglesey, 2nd & 3rd October

Steve:

Saturday - 8th in BSC R27-60.14s, 4th in BSC R28-62.53s Sunday - 6th in BSC R29-82.67s, 6th in BSC R30-81.47s

Matt:

Saturday - 11th in BSC R27-62.91s, 5th in BSC R28-63.72s Sunday - 1st in BSC R29-79.09s, 1st in BSC R30-78.99s

Carole:

Saturday - 9th in BSC R27-61.77s Sunday - PB 87.85s

The Anglesey weekend weather was not what we were hoping for, Steve quite enjoys driving in the rain but not necessarily sitting in it! We were both struggling all day to get any kind of grip, where normally in the wet the SBD Dallara has been really good, it could be that the wet tyres are now very old in the region of 3 years. Matt was struggling more than Steve and the day was ok but no more than that. Steve analysed the data and had reverted to some older traction control calibrations for the very wettest settings.

Since we were using the weekend as a test session, it was decided to make some dramatic changes overnight to the car ready for Sunday to try and achieve some grip in the cold weather, which we were hoping would be dry, but even from the beginning of the day the car had no grip and whoever got the cold tyre run effectively had no grip to the point where the car would understeer and oversteer through a corner. It was slightly better for the second driver but still not great. Steve made further changes to the set-up, which should have at least improved the rear grip, even if it compromised the front grip, but none of this worked and the car would over-rotate in every corner, particularly in the slow speed corners. Matt was able to deal with this better because he likes a sharper front end, where Steve prefers to lean on the rear of the car more into the entry of the corner. Whatever we did, we couldn't get the tyres to switch on.

Steve was more comfortable in the car on Saturday, whereas on Sunday, Matt was more comfortable and was able to put in some good times and winning both BSC Top 12 run-offs.

Steve has now spent a lot of time looking at the data and hopefully has some ideas as to what the issue was and we will be testing them at the final rounds at Castle Combe.

Well done to Steve Miles for winning the British Sprint Championship.









Castle Combe, 23rd October

Steve:

7th in BSC R31-121.40s, 7th in BSC R32-120.99s

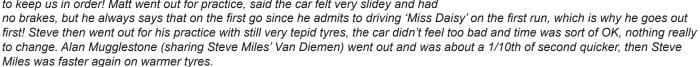
Matt:

6th in BSC R31-119.95s, 5th in BSC R32-120.35s

Carole:

2nd in Class, 9th in BSC R32-126.90s

Steve & Matt had turned up to Castle Combe along with John Hughes who was on hand to help out. We persuaded Zoe to come down as team manager for the day to keep us in order! Matt went out for practice, said the car felt very slidey and had



Steve would normally be comfortably faster on practice, but we just assumed at that point because we hadn't been there in a while and needed to get in the groove. On the 1st timed runs, Steve would go first on the cold tyres, once again we couldn't get any grip and Matt, although with slightly warmer tyres, said the car was still sliding around and we weren't going any faster than practice. The same happened through all the runs in the day and whoever got the second run, got a little bit more heat and was therefore was a bit faster. Unfortunately when it was Steve's turn on T3, whilst he was waiting to go off the line, one of the cars caught light causing mayhem and obviously not good for the owner of the car as we think it was his first time out since buying it. Hopefully the car is repairable, but this delayed matters for at least 30 minutes, by which time the tyres were stone cold and the temperature had dropped even further, so the time was even slower than what they had been doing in the morning. We were both kind of confused at the end of the day as to why we were both so slow and after several conversations with Alan Mugglestone, he has confirmed that the Dallara is so kind on its tyres, which is great for lap after lap circuit racing but not ideal in a sprint on a very cold day!

We now have some ideas as to what to do and there will be some major changes to the car over the winter to improve this, as well as the doubling of the downforce and if all goes well with minimum drag penalties.

The current engine has performed well for two seasons, however we have also been developing a new engine design. We are hoping all the components are able to come together and we still have reasonable weather, when we plan to test in December, so

watch out for updates.











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