*The British* Steam Car

Challenge



### **British Steam Car Team Diary**

Date: Place: From: Wednesday 02nd September 2009 Weybridge, Surrey Don Wales - Test Driver

Back home now! I would just like to extend my thanks to a few people.

First of all I cannot thank the team enough. I really appreciated their dedication and hard work in extremely harsh conditions. It is thanks to them that we had a car to run out on the lakebed. I know that many a time it would have been easier to throw in the towel, but they did not and with true Brit Grit they continued and gave both Charles and myself the opportunity to get the car into the record books. A million thanks guys! We had a great team spirit which I hope will stay with us all for many years to come.

Secondly, many thanks to all of you in the UK and overseas who have sent goodwill and congratulations messages. It has meant a lot knowing that you have supported and followed us through the highs and lows of this great adventure.

Thirdly, to Charles for allowing me to drive his car and giving me the opportunity to part of this wonderful piece of Land Speed History

Last but no means least, to Francesca, Charlotte and Joseph for supporting me through my quest. It would not have been possible without their love and support.

Now lets see what we can do with the Electric record!!!!

Date:Tuesday 25th August 2009Place:Edwards Air Force Base, CaliforniaFrom:Don Wales - Test Driver

At last we have a record (subject FIA ratification).

The day started as normal with the 4.30am alarm call and everyone slowly congregated in the hotel foyer drinking coffee and juice. There was the usual banter between us and everyone seemed to be confident, It had to be today. The car was given a good clean yesterday and owed us a good run!

At Edwards we all got ready to enter the lakebed. I was taking the turnaround refuelling rig to the far end, where we waited for the car to arrive. One of my tasks was to operate the airjacks from the laptop, but I could see that the car and computer were not talking to each other. So we wasted a few minutes, because the car controller had shut down. Once up on its Jacks the team performed a slick turnaround. The outward run was approx 132mph.

The fill process seemed to take an age, we were informed that we had 7 minutes of time left, but the car was still filling! Once released the car accelerated away very well indeed and reached the other end in good time at an average of approx 147mph with a peak speed of 151mph. The average for the two runs was 139mph!

The turnaround team were jumping up and down, hugging each other. Knowing that we had broken the record was a great release for all of us. All the hard work and ups and downs (mainly downs!) had paid off. The team had overcome huge obstacles to achieve this record. Its been harder (both physically and mentally) than most of us thought.

The drive down the runway was interesting because the USAF were doing some low level high speed fly pasts. We had to time our drive between each sortie and looking out for fast jets flying very close, our own private air display!

Tomorrow Charles has given the keys back to me and we are going for whatever the car is prepared to give us, hopefully an average of 150mph would be good!

This might be the last time that the car is ever driven, so hopefully it will be nice to me with a couple of fast passes!



## Date:Saturday 22nd August 2009Place:Edwards Air Force Base, CaliforniaFrom:Don Wales – Test Driver

Just a quick weekend update. We had our best static test on Saturday.

We managed to get the hottest steam yet! However, it has come at a cost. One of the water bladders has burst. We have two bladders on the car to hold the water for the boilers. We have spares but its a long job to change them. We also have got some contaminated water which has got into the water supply system. The lakebed surface when disturbed throws up a talcum powder like cloud and this gets everywhere.

So the whole water feed system needs to be flushed and cleaned. This means a very busy day on Monday and no timed runs. hopefully we will be ready for Tuesday!



# Date:Thursday 20th August 2009Place:Edwards Air Force Base, CaliforniaFrom:Don Wales – Test Driver

Yet another bad day for Steam Car Record Breaking at Edwards! The temperature is slowly creeping up and is forecast to be very hot again tomorrow and Friday with thunderstorms on Saturday.

I had another go with the BBC camera at the turnaround end. This time I managed to get the right pics, second time around! It was really interesting to view things from outside the cockpit, which I normally do not see. However, I could tell that the outward run was not very quick again through the viewfinder. This time we had Clive's team as the turnaround team and again it was a very slick operation, but the car took an age to fill. It was a close call to get the car away within the hour.

The car moved away painfully slowly, but picked up speed. The outward run was 129mph\* again, but during the return run the car got a puncture and also was losing steam pressure through the measured mile.

The car recorded a run of 104mph\* giving us an average of 117 mph.

( \*approx speeds)

I know that record breaking is not easy, but this car is making us all work very hard for it. I am beginning to think that maybe it should repainted a certain blue colour. Campbells don't like the colour green!!

Tomorrow is another day and I will watch the attempt from the base camp on top of the portacabin where you can view the whole course in the distance! We need a good day with a speed of 140mph plus, wish us luck!

# Date:Wednesday 19th August 2009Place:Edwards Air Force Base, CaliforniaFrom:Don Wales – Test Driver

Today was the first day that I have actually seen the car driven by someone else! I knew that this day would come sooner or later and I did not know how I would feel, especially as this was our first timed attempt! My role has always been as test driver and back up for Charles, but it was hard to be a bystander whilst the main event was going and I was not directly involved. However, hopefully my time will come once we get the bloody car to work properly!

I was positioned at the turn around end with a BBC camera. I had careful instructions on how to use the camera. After all I am a photographer and know my way around cameras. Wrong! I managed to get the car coming towards me as a long shot and then jumpy wide angle shot. Somehow, I managed to then turn off the camera for the detail shots of the car being turned around. In the view finder I had great footage of all the action of preparing the car for the return run, but it was not to be! I realised half way through that I had turned the camera off - twit! Tomorrow is take two of my audition for BBC cameraman of the year!

The car only managed a one way pass today of 129 mph. The start team had a problem

with the gas fill, so it was a slow run. Nicks Turn around team was a great team effort, the car was ready in plenty of time, but water was coming out of the turbine, which indicated a stuck throttle. So no return run and back to base camp for a new throttle valve. The mechanics did another supreme effort of replacing the huge industrial size valve. We then had a very good static test, with a new modification on the gas fill, which proved to be a great success.

Another late finish in over 101 f.

## Date:Monday 17th August 2009Place:Edwards Air Force Base, CaliforniaFrom:Rebecca Nicholls – Press Officer

Don arrives with us tonight, therefore in the meantime I wanted to give you a quick update of the team news today. Its my first day at Edwards and I can see how incredibly hard it must be for the team to work in such extreme heat.

We arrived at the base at 5.00am, the security check process went smoothly and drove the 12miles to where we are stationed on the lakebed just as the sun rose. It was beautiful. It was a chilly start, but soon heated up to 104f and at first even the car was cold and the gas wouldn't fill up. Around 7am it was all systems go, Charles made his first run reaching 148mph. The crew turned her around in less than 50minutes (they have it to a fine art).

During the second pass Charles had to stop as one of the 139 sensors had shut the system down as a safety precaution. The sensor turned out to be faulty and has since been replaced. No big issue. The team also replaced a flowmiser, as it was stuck open and throwing wet steam in to the dry steam affecting the cars speed and performance.

The FIA have just joined us, and will be setting up the course tomorrow. Attempts will commence on Wednesday. Ironically the date co-incides with both the Barber Nicholls run and when Don Wales achieved his Electric record. No pressure!

In the meantime the course is undergoing further "fodding" - 1 extra mile (7 miles in total). The car is peaking at 3.8miles, and as you are probably aware a land speed record is on a measured mile, 2-way pass with 1hr turn-around. At the moment the car is peaking slightly late, so this should balance it out. The speeds they are achieving are certainly record breaking, so now we just need the timings guys all set up and plenty of luck on our side!

### Entry Date: 07 August 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

We had two good days of testing and after the mid week depression to finish the week on such a high was exactly what we all needed. It was evident that all the hard work and team drills had paid off.

The car was set up on the lakebed in a bitterly cold wind; we were all glad of our protective suits today, which normally we boil in! I was strapped in as usual, Jerry told me that I should be prepared to lift off at about 120 - 125mph but if it felt ok I could carry on.

#### The car was ready and I sent off without delay.

The car had 2 minutes of burn time and we were using 3 1/2 miles of track. The boilers were still to run a bit cold at about 270 degrees c rather than the available 400 degrees c. It was our best run to date, I lifted off momentarily at 125 mph but everything was running good so I put my foot back down. The car touched 131mph and I then started to slow down, as tyre pressure light had come on.



We had gone faster than the official world record of 127mph, but we still have a lot to do. We need to maintain the speed over a measured mile, accelerate quicker, and do a return run within an hour. We know that the car has the potential. We went out and celebrated, which is why today's entry is a little late!

I flew home on Saturday and was looking forward to seeing the wife and kids; it's been over 4 weeks. I will fly back on the 17th August in preparation for the timekeepers. Charles has agreed that I will have the opportunity to try for the Kilometre record, which is great news as a test driver.

In the meantime Charles's has taken over at the helm and this week will be familiarising himself with both track and the car. The team will also be carrying out more improvements.

My blogs will stop momentarily and start again when I return.

#### Entry Date: 06 August 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

I am pleased to report that the car ran beautifully this morning. We have been carrying out low speed tests to check Jerry's software modifications and today were one of the last ones. We tested the slam acceleration which still needs a little more "tweaking", but reached in excess of 95mph again with just 90 second burn time. Tomorrow we are upping the burn time to 2 minutes so we should exceed 100mph and use approximately half of the track that we will have available come attempt time.

No matter how hard I try to avoid getting into trouble out here, I fail. I was told off for speeding again by the Lakebed Management Team that patrols the lakebed! Having just carried out our 95mph steam car run, Charles suggested we take his new Dodge Viper for a high speed test of the prepared course. Naturally I obliged, but did warn him that it will get covered in lakebed dust both inside and out. We obtained clearance for a high speed run to test the track. So into the driving seat and off we went! That car is certainly mean in second gear, but great fun snaking away. The first run was 140mph, second run was 160mph. One of our guards joined me for a passenger ride as I reached 185mph. Adam also jumped in for a quick short burst sideways. It was awesome.



When we got back to South Base the Lakebed Management Team was having a word with Matt about speeding on the lakebed, even though we had permission. I consider myself told off. Boys and there toys hey!

#### Entry Date: 05 August 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

Today had to be the worst day for the team's morale as we had high expectations of a good run. There was a huge full moon setting over the lakebed as we arrived. I was strapped in to the car and waited for it fire up, which she did with a sense of purpose, but I could feel and see the burners cutting in and out intermittently. We had a blocked miser, which hasn't happened since Thorney Island. After carrying out several successful runs, it was hugely disappointing for us all.

I went into chef mode cooking breakfast and washing up whilst the team worked intensively on the car. We then had another issue to contend with, battling a very strong and hot wind. We took down all the tents to save them from being blown away; the mechanics were working without shade or shelter, which was a thoroughly unpleasant experience. It was a tough day.

#### Entry Date: 04 August 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

Today was cloudy and only in the late 80's which is over 20 degrees cooler than the past few weeks. It took the customary 1 1/2 hours to get our weekly passes on to the base and through the security process.

We had a good static test with the turbine running whilst the back of the car was raised on its air jacks; it was then slowly dropped back down as a slam test to help improve acceleration.



We are currently down to only half of the crew numbers, as some of the team returned home for a well deserved break. But we have enough to run the car on one way passes and continue the testing. I return home at the weekend and return with fellow team members on the 15th August in preparation for the arrival of the FIA and timed runs!

Sadly, Lynne, Wilbur and Stuart have other commitments and are unable to return – they will be really missed.



#### Entry Date: 31st July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

All the equipment had been prepared for an early entrance to the Lake bed. We were informed that we had to be off the Lake by 09.30hrs as there was a chance that the Space Shuttle might land at Edwards. We were all excited about that prospect of witnessing it land.

Our first run was purely a rolling resistance test of the surface. The car was very slow to move away and acceleration was sluggish. We only had 90 seconds of fuel on board (the record runs will have 2 1/2 minutes). The car peaked at about 70mph before the burners switched off and I coasted for approximately a mile before coming to a stop. This was good news and demonstrated to the team that the surface of the lakebed is less 'sticky' than the Tarmac we are use to at Thorney.

We practiced a full turn-around, and had just enough time to carry out a return run within the one hour regulations. Jerry tweaked the software to stop the steam going through the bypass system and improve its acceleration. The return run was the best to date and reached 94.9mph with the 90 seconds burn time.

We saw it as the perfect opportunity to take a picture of the team with the car, as a few members are flying back to the UK on Monday (we will post it to the site shortly).

We were off the lakebed by 09.00hrs but the Shuttle landed in Florida which was a disappointment.

The team is getting good practice in loading and unloading the car and turning her around which is vital to the record attempts. It has been a challenging but rewarding few days. On Friday night Charles treated us all to a steak dinner to thank us all for all our hard work.

On Saturday the car had routine checks and maintenance.

Video footage of today's run has been uploaded to <u>Videos</u> for you to watch.

#### Entry Date: 28th July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver



At last we had movement on the Lakebed! All teams were in position by 7.00am ready for our first run. I was strapped in by Richard and eventually given the thumbs up my Mike and off we went! The profile of the run was to replicate the test carried out at Thorney Island. The Throttle lag is currently approx 5-7 seconds but it seemed longer as we made our slow get away. I also felt that the acceleration was not a good as Thorney. This is because we are producing more steam than expected and its opening the by pass valves and not going through the turbine.

We reached 77mph over a very short distance of just 1km which was comparable to our tests at Thorney. We were due to do a high speed return run but the gas rig had trouble refueling. So we settled for the one run and will replace this gas pump tomorrow. Jerry found out later that the boilers were not performing to their full capacity so this in theory means that we have at least 20% more power than we had originally thought.

The team has since taken the decision to delay the record attempt to the week commencing 17th August. It's important that the technical issues with the support rigs are resolved before an attempt is made. In addition, the FIA officials have to leave on the 4th August to attend Bonneville Speedweek. However the FIA are free from the 17th August after they have carried out their duties at Bonneville and can return to Edwards to witness

#### the attempts.

In the meantime, the team will continue fodding (clearing foreign object debris) from the course, and hope to have the complete 6 mile stretch cleared by the end of this week. Further fodding walks will be done the week of the run.

Video footage of today's run has been uploaded to <u>Videos</u> for you to watch.

#### Entry Date: 27th July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

Today (Monday) we had some excellent news, we took delivery of an FOD BOSS! (foreign object debris remover) This is a replacement for us manual operators. It's a mechanical device that is pull behind a truck and scoops up all the FOD, its positively brilliant and is certainly faster than us! We can scrape a 30ft wide track in about 6 passes at 15mph. We now only have 2 more strips to do and will then walk it as a final check.

The new gas pumps have now been fitted to the car and a successful static test was completed late today. So it's back on the lakebed tomorrow early to repeat our Saturday schedule of tests but now with more track available we might get a decent head of steam up and see what we get!

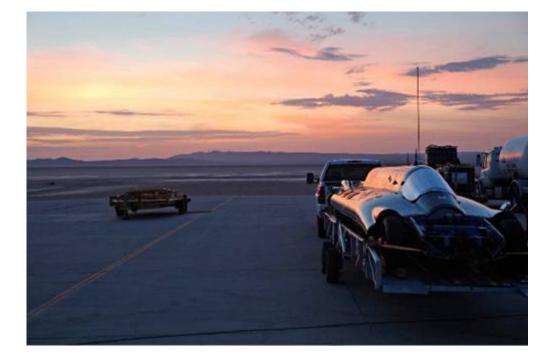
So an early night tonight and up at 4.30am again!

#### Entry Date: 25th July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

We were up nice and early, the alarm was set for 4.00am and we were all on the base by 5.00am. All the equipment and the car were made ready for the short journey from our base to the lakebed and our runway.

We had made out a distance similar to Thorney Island where we ran in April to get some comparison data. We had a start team and a turnaround team to do two runs. The second run would be a coast down to find the rolling resistance of the track and I would get the car up to about 100mph.

The sunrise was spectacular and the teams set up their stations. The Edwards AFB fire crews came out and we went through an 'unconscious' extraction from the car, which I always look forward to...NOT!



The refueling process started and I got ready to be strapped into the car full of excitement. Richard was just doing up the seat belts when the run was stopped; the gas was taking too long to be pumped onto the car. So we returned back to our base and aborted the test. It turned out that the pump was partially blocked with a piece of masking tape!



We continued fodding (clearing the track of foreign object debris) and have now completed 2 1/2 miles.

So it was another day of record breakers luck! However, it was still a good day for practicing getting everything out onto the lakebed. We also had a lot of time with Charles getting him familiar with the car and start up procedures.

Monday is another day; the team will be fitting new gas pumps. The time keepers have also been penciled from Wednesday through to Tuesday. So we need a bit of good luck now!

### Entry Date: 23rd July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

This morning was positively cold on the lake bed, a chilly breeze, ideal fodding weather! The mechanics and technicians got going on replacing three boilers and all the plumbing that goes with them.



Whilst I organised or rather press ganged a merry team of Fodders. We managed a whole 4/10ths of a mile before breakfast a new record. We were treated to some great air displays from our American hosts. We were Fodding at the start of the main runway where it crosses our track and got to see take offs and landings at close hand.

We came in for a late breakfast and went straight back out again and achieved another 3/10ths! The midday temperature has dropped by a whooping 8-9 degrees F today was only 107 F almost woolly jumper weather!

The mechanical team worked late in to the night to get the car ready for static tests first thing tomorrow morning. It was a tremendous effort, well done!

We hope that the tests tomorrow will be successful and we can move onto the lakebed on Saturday for track and car evaluations.

### Entry Date: 22nd July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

My family has often told me that I am accident prone and clumsy. Well today I cannot be blamed for all the breakages! The count so far today is two boilers and one broom. The boilers were in the car during our static test before breakfast to establish the throttle position. This time we hoped that the wheels would at least move, and move they did for a whole two revolutions whilst I applied the throttle. The test was declared a success but we needed one more test to open the throttle fully.

Whilst we were having breakfast the puddle of water under the car had widened and it was suspected that a boiler had blown. On closer inspection two had given up. It normally takes two days to do one boiler change. However it looks like the team will do it one; this

is a fabulous effort by all the mechanics. They are even considering changing an old boiler for a new one at the same time, as a precautionary measure which might save time later on. We will probably lose all of tomorrow but at least it will save time in the long run. So Fodding again! Hopefully Friday and Saturday will see the car on the lakebed prior to high speed runs next week!



#### Entry Date: 21st July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

Mixed news today! The heat is relentless, everything is hot to touch and that includes race suits and team fire protection overalls, ouch!

We had our usual early start and got into our first test very early, but this was stopped after the steam blew over the Steam deflector, which had not been fastened down properly! The deflector is there to push the steam up into the air and away from scalding anyone.

So we had another go but it takes nearly another hour to reset everything and the heat is increasing. We had installed our dry ice around the inverters, however further modifications were needed to improve airflow. These took another couple of hours! So I thought 'FOD' but we were denied access to the lake bed and our runway because of a test going on from the base! So no Fodding today!

Generally the car seems to work in three's and the next test was the third of the day, but it was getting towards midday and mighty hot. So if the car worked on this occasion it would work out on the lake bed in the severe hot conditions. Success we had a very good 90 second burn and I was able to perform a throttle test. The throttle test was not a complete success and another was planned after lunch.

Rob performed his usual magic and we set up again, but it was now too hot. This time the rigs let us down, fuel in the pumps was vapourising! We were pushing our luck with the temperatures and will have to work earlier on the attempt days. Tomorrow is another throttle test!!

Entry Date: 20th July 2009 – Edwards Air Force Base, California

#### From: Don Wales – Test Driver

It was the team's day off on Sunday, so I went to visit the Mojave Air and Space port where Voyager took off for the first non stop flight around the world. The airfield is used as storage for unwanted civil aircraft both airworthy and for scrap. Again it was a very hot day!

We welcomed cameraman Joe from the BBC who has come over on a fact finding mission to make sure that they don't miss anything for a documentary that they are producing. Our Principle Driver Charles Burnett III also joined us.

Well Joe got the full disappointment of a day with the steam car! It took Joe and Charles over two hours to get clearance through the security check point. When we eventually got to the base camp it was clear that there had been some rain overnight with damp patches clearly visible. I was worried that the track might be soggy.

So we were late starting and the day was hotting up nicely! We went into our static test program, but it became too hot. We had problems with the air valves, and getting the air onto the car and then the inverter began overheating. Hopefully tomorrow we will be able to redo these tests and get back to the plan of running the car on the track mid week.

That meant more fodding in the mid morning heat and an inspection of any water damage. Luckily the track is still very dry. This is partly due to a nice hot wind that has started up, so I now know what a roasted turkey feels like in a fan assisted oven! Joe joined us in our merry band! Jerry and I marked out a piece of track with a GPS ready for the first proper runs on the lakebed.

We were also treated to various aircraft coming in very close to us as we are now very close to the main runway.

The reason that this mail is later than usual is because I had tried to get clearance to send a picture of the refueling aircraft coming into land!, but unfortunately the clearance was not given so the picture cannot be used.

The weather forecast warns of more hot weather to come in this freakish blip so we need to take extra care and precautions for both the team and the car. As a result dry ice has been ordered to help keep the car cool and enable us to test for a bit longer during the mornings.

#### Entry Date: 17th July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

At last, the car is steaming and we are all baking 114 f today with hotter forecast again for tomorrow - oh joy! It has been our most successful to date.

We successfully carried out two static steam runs which provided Jerry with a lot of information to sort out for tomorrow!

The early indications are that the car is producing more steam due to the altitude at Edward's and the high temperatures, it means that there is a bit more power and hopefully a bit more mph once we get running!

We also carried out another foreign object check but it was so hot that we could only

managed an hour, however we did clear the worst bit and got going a lot quicker. Just another 5 miles of stretch to go. We also watched a V2 bomber fly around a bit!!

Over the course of the next few days video footage will go live on the website, the first of which can be seen over on the <u>Videos</u> page. Please remember to visit it, each day we have been doing a team diary (such as this one) to keep you as up to date as possible.



#### Entry Date: 16th July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

Today we were well and truly fried and baked 111f! Too hot, but mad dogs and English men in the midday sun.... We carried on working well into the afternoon!

The car was ready for its first steam test after yesterday's repairs. We wanted a test before it got too hot; we had a short burst of the' Dam Busters' theme tune to get us in the mood!

But after breakfast it refused to fire up. We found a blocked miser but fixed it, and then a refueling rig expired, so we had to change over rigs. Each time we restarted the refueling process we managed to get a little bit further into the process. However it was now getting too hot for the car. So in future we will have much earlier starts!



Once it was decided the car was not going to be fired up I organized a FOD crew. We have formed a very select team and it's hard to join without knowing the special 'hand shake' and all the right terminology that Richard and I have made up whilst suffering heat stroke out in the middle of the lake bed!!!! However, we welcomed two new members to our select band today namely Lynne and Mike!! We have a lot more to do; generally the track is in good shape with the odd patch that needs attention to! We drove the whole 6 miles and on the way back managed to get the Dodge people carrier up to 100mph without any police cars chasing us today!



After lunch, which was another feast, we practiced turning the car around. This is vital for us to get the car refueled after its outward run and returned as quickly as possible. By now it was really very very hot and I got a burn on the palm of my hand from the bodywork whilst climbing out of the car!



Tomorrow is another day, but the forecast is for more hot weather peaking on Sunday, oh joy!

#### Entry Date: 15th July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

Third day on the lake bed and so far the hottest! It's been hot but today was bloody hot! We got to our base camp just before sunrise and I was able to take a few snaps of the car being positioned.



After breakfast we took another trip over the 6 mile course and continued clearing the stones and foreign objects from the' gravel pit'. This Fodding lark is becoming a bit of a habit. 3 miles of Pendine sands was a piece of cake compared to the 6 miles of Edwards. Finding 'shells' is common on both tracks!!

We got called back early because the car was going to be steamed up! We all got dressed into our nice black protective gear to run through a complete fill of the car and then into steam as a static test. However, the car had other ideas! We expected problems and I am sure that there will still be more before we actually run the car.

On this occasion a new problem reared its ugly head! Whilst filling the gas tanks from the refueling rigs it turned out that the pressure inside the car's tanks was higher than that on the rigs, so the pump could not push the gas onto the car. This was due to the higher temperatures inside the tanks! Hopefully this will be fixed for tomorrow and we will try again.



So it was back to the lake bed for the Fodding team and more sweeping! Our camp is on the southern side of Edward and its about 8 miles back to the main gate along some very straight roads with various speed limits on them. Needless to say that I was pulled over for speeding, doing 67 in a 55 limit! I guess the lake bed limit might have to be extended for the record attempt! Luckily I was let off with a caution!

#### Entry Date: 14th July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

Another early start we arrived to our base just as the sun rose over the mountains, it was beautiful. The air and visibility was really clear and we sensed that it was going to be hot.



After another superb breakfast cooked by Rob, I don't how he manages it! I was able to

drive the course in the hire car and lead a team of 'Fodders' to clear a large area of small stones. We ended up actually sweeping the lake bed but Stuart took it a little too far and turned up with a dustpan and brush! The task was too big for us and we will try again tomorrow but some industrial sized brushes!

The mechanics had another tough day. The car required a new load sensor and Chris Lack had to use the base facilities to adapt a faulty water filter, so we didn't generate steam. However, these are just little gremlins that the car has encountered during transit and although rectifying the faults is time consuming it's nothing fundamental and the team is optimistic of steam over Edwards tomorrow.

Every day takes us closer to the first firing up on US soil.

#### Entry Date: 13th July 2009 – Edwards Air Force Base, California From: Don Wales – Test Driver

What a first couple of days! We arrived mid afternoon on Saturday into over 100f dry heat! We got up earlier on Sunday to drive to another nearby dry lake called El Mirage and watched a SCTA sanctioned race event, which is a smaller event than Bonneville but the entrants will be going to Bonneville in August. It was great to soak up the atmosphere and to get us in the mood for our coming event.

Today we were up at 4.30 and in the cars for 5.00am for the trip to Edwards AFB. Its 30 miles away to the base, we arrived before sunrise but it took a long time to get access due to the strict security. We then drove the remaining 6 miles to where our main pit station is and made ready the tents and equipment. An excellent English breakfast was cooked by Rob!

This was the first time that I had seen the car since our April tests. It now has the sponsor's logos on it and drivers names!



It turned out that a sensor in one of the gas tanks had failed during shipment, so the technicians had to strip it out and replace it! This took most of the day. The temperature was really cooking by midday well over 100f and its forecast to get hotter over the next few days.





Our camp is positioned in the Southern corner of the base just away from the main runway. We get to see and hear all sorts of aircrafts taking off and landing during the day. Maybe we might get a closer look later! We have a nice concrete perimeter track to work on which then leads onto the lake bed course. However, we have to be escorted onto the lake so I have yet to drive on it!



Our plan is to carry out more checks tomorrow and hopefully to get some steam going.

Early to bed again tonight!

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