

Finally on the Flats

AFTER CONQUERING THE HEIGHTS OF MOTORSPORTS FOR DECADES, LYN ST. JAMES FINALLY ACHIEVES A MAJOR BUCKET LIST ITEM: UTAH'S BONNEVILLE SALT FLATS

Commentary by Lyn St James

What is Bonneville Salt Flats Racing? Why is there such a mystique about it? And why does just about every racer want to go there? I was fortunate to finally get the opportunity to run on the salt at the Utah Salt Flats Racing Association (USFRA) 31st Annual World of Speed event. After wanting to run on the salt for many decades, it finally happened, and I'm starting to understand it.

Bonneville Salt Flats Racing is the ultimate mechanical challenge. It combines creativity, design, and the engineering ingenuity to build something to a diverse set of rules, that will go fast on an unknown surface. The only area where there's no compromise is in safety—the tech inspectors take no prisoners when it comes to this. Everything is thoroughly checked (even all the drivers' gear, in-

cluding underwear) to the highest degree of FIA safety specs. There's a huge diversity in the types of vehicles that show up to run on the salt: production cars, custom built race cars, modified street machines, motorcycles, trucks, two wheels, three wheels, four wheels, wings, no wings, hot rods, just about anything and everything the mechanical mind can imagine. And the unknown surface—well, that means every time there's a meet on the salt, no one knows what condition the salt surface will be in until the day(s) of the meet. It varies based on the weather over the last season, the current weather conditions and the constant deterioration of the salt. It takes place on public land managed by the Bureau of Land Management (BLM), so authorization has to come from the BLM to schedule the race meets. Many variables, many unknowns—yet people spend all year (or years) to build/prepare a vehicle to run on the salt, and of-

ten an event will get canceled either prior to the scheduled dates, or even while on site.

Literally and visually, the Salt Flats are a phenomenon. The area is a remnant of the Pleistocene Lake Bonneville and is the largest (46 sq.mi.) of many salt flats located west of the Great Salt Lake. Speed runs have taken place here since 1914. But I think there's a mystique when one looks out over this massive white surface, surrounded by mountains, and often you see a mirage that looks like the surface is actually water. Depending on the clouds and sun, everything set against this white surface takes on such artistic forms. Jaw dropping.

The salt is very coarse, in some places really hard, in other places quite mushy (like slush), quite crusty, and there are ruts and potholes. It's never really smooth. And it sticks to everything!

Just about every racer wants to go there. It's the combination of history, engineering ingenuity, limited access (at best three to four times a year), the

wide range of types of vehicles and, of course—the SPEED!

I've wanted to run on the salt since the 1980s, and over time quite a few people knew about it. At Amelia Island last March, Bill Warner had a special display of land speed record cars, and while I was drooling and taking photos of the cars, I ran into Ted Wenz of Savannah Race Engineering, who knew about my desire to run on the salt. He asked me if I was still interested in doing it, and of course I said, "YES."

He connected me with John Goodman of Wichita, Kansas, who was building a Lakester to take to Bonneville, hopefully later in the year. John and I started emailing back and forth, and the wheels were now in motion. I joined the USFRA and got the rulebook, so I could learn what a Lakester was and what I needed to get or do as a driver.

A Lakester is a streamliner with four exposed wheels, and there are many difference classes based on engine size. John's has a 2.0 Cosworth BDG engine, so the category is G/GL for engine size, Gas Fueled Lakester. The current record in that class is 211.463 mph.

I had to upgrade my nomex, which was fine except for the race suit (they are so expensive and this would likely be a one-time use), so I was hoping to figure out how I could borrow a suit. I ran into Yves Morizot, founder of Stand 21, at the Rolex Reunion at Mazda Raceway Laguna Seca, and Stand 21 came to the rescue. They had one suit (FIA 20 grade) that just might fit me. Voilà! Thank you, Stand 21! So I was ready (at least for the things I needed to do).

DAY 1: I decided to rent a car and drive from Phoenix, which would give me flexibility in my traveling days. I left Phoenix on Tuesday, September 12, expecting to arrive in Wendover, Utah that night. I almost made it, but had a tire blow out on my rental car just past Ely, Nevada—so I ended up spending the night in Ely and had to wait for a replacement rental car the next day (crazy car had no spare tire, just one of those stupid pumps).

DAY 2: As I drove into Wendover, the marvel of the Salt Flats appeared off to my right, and I just had to stop and take a photo. I arrived Wednesday afternoon and immediately went to the Bonneville Salt Flats. Everyone was just starting to set up; the folks at registration recognized me and gave me my car and pit pass, but I couldn't officially register until the car arrived and passed tech. After I checked into the hotel, I got a call from John saying they had arrived. (They had three flat tires on the drive from Kansas.) It rained during the night, at least at the hotel, which was only about ten miles from the Salt Flats.

DAY 3: We agreed to meet at the course at 9am, where I met John for the first time, along with his crew: Izzy, Glen, Bones, Wayne and, a little later, Stainless. The sky was dark, ominous and looked threatening for the entire day, but the only place it rains is in Wendover, not on the course.

The first order of business is to take the car through tech. This was a newly built car, so tech inspection seems to be more critical than usual. If you've seen the movie, *The World's Fastest Indian*, that's what it was like going through tech. John Goodman is an experienced record holder on the Salt Flats, but hadn't been there since 1999, so he was a bit nervous.

And then there's me, a Salt Flats rookie but somewhat "known entity," so there's quite a bit of attention being paid by everyone. Almost two hours later and after much discussion, we left the tech area with a list of things that needed to be changed or the car cannot run. Stainless (a true legend/veteran Salt Flats record holder) has arrived on the scene, and the consensus is they'll be able to fix things, so let's work on fitting me and John in the car so we can do our "Bail Out" tests (after being tightly strapped into the car, the driver has to release everything and be able to get out of the car unassisted in less than 30 seconds). Love the optimism in all racers!

While I make a lunch run to town (drenched in rain), they fit John in the car and he passes his Bail Out. Then they start fitting me in the car (not an easy task). Most critical is being able to see and reach everything in the cockpit. About three hours later, the tech inspectors show up to observe my Bail Out. The canopy weighs about 20 pounds, isn't hinged and the latches are hard to reach. But I get it done (in 21 seconds). As I look up at the sky, there's a rainbow!

We leave the track and decide to meet for dinner at the Copper Kettle Diner (not many options in Wendover—other than the casinos in West Wendover, Nevada). A good day!

DAY 4: The driver's meeting is scheduled for 8am, with another rookie driver's meeting at 9am. Everyone is able to take their personal/tow vehicles down both the long course (7 miles) and short course (5 miles) to observe where the mile markers are, lines marking the course, and other important landmarks.

It's incredibly windy and hazy, so it's pretty difficult to see much of anything. I'm in information overload at this point. "Floating Mountain" and other references are discussed. I'm used to finding braking zones, turn-in points and apexes, but they're right in front of me. Now I'm having to look

KEEP RIGHT >>



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at quarter-mile posts, mile markers and having a difficult time seeing them at 20 mph. Relax! Patience is required.

One high point of the day was the arrival of 14 school buses full of high school students from the area. How cool to see so many kids excited to be around these vehicles, asking questions and taking photos. They stay for a couple of hours. I find out later that some of the buses got a chance to drive down the course, since it was closed due to the winds. What a great experience for the kids!

The wind never lets up: gusts over 20 mph, so the track continues to be on hold. But our crew is now more focused on fixing the things that need changing from tech inspection. This mostly has to do with how the fuel lines are run—and isolating the driver compartment from potential flow if the fuel line were to leak or break. A solution is dis-

cussed, and before work is started they discuss the solution with the tech inspectors, who seem to agree. Work begins. About 4pm, work is completed and tech inspectors come back for final sign off. YES! We can now officially register and be ready to run tomorrow.

Let's start the motor and do a systems check. Grind/grind/grind—the car won't start. At this point, I determine there's absolutely nothing I can offer, and I'm completely windblown from the elements, so I decide to go back to the hotel.

DAY 5: I arrive at the track about 8am, and the crew are making last minute adjustments to the car to get it ready to move over to the short course. Perfect conditions! Cool (low 50s), sunny, no wind. About 8:30, one of the fastest streamliners—the record holder Vesco Terminator II—makes a pass

and everyone stops for a few minutes to listen to what the speeds are (they announce this on AM radio 1610 and CB radio): 315.664 mph at the quarter mile, 338 mph at the 1-mile, 395 at the 2-mile, 420.499 at the 3-mile, final trap speed 430.524. Not a record run, but really fast!

About 10am, they get the car loaded onto the trailer to get in line on the short course and load the van with as much support equipment as they think they will need. It's like the paddock is transported to the line (which is now the pits). And the line is long: 38 cars ahead of us. This reminds me of my early drag racing days; hurry up and wait in line to make a pass that will only last a few seconds/minutes. There are three lines on the short course: one for the 130 mph club cars, one for 150 mph club cars, and one for Land Speed Record cars (which is the one we are in—the longest line).

There is very little activity—time to wander around, but not much to see. Things get really quiet, and we realize the course is shut down. A communication glitch with the officials threatens safety, so the delay is over one hour.

When we're about third in line, John gets suited up and warms up the engine. At about 3:45 (five hours after we put the car in line), the starter waves John to "go." I'm in the van, the push vehicle. We push John at the starting line, and off he goes. Since this is his first pass, he's not to exceed 150 mph, and even though he only has to go to the 3-mile marker, he seems to disappear into the horizon. It's a successful run (clocked 138 mph between the 2- and 3-mile markers), but he's not happy. The car is unstable, but he needs to get back in line for his second run (between 150-175mph). They inspect the car and begin making suspension adjustments while it's in line.

There continue to be delays, some vehicles take runs and darkness begins to threaten. Though scheduled to stop at 5pm, they run until a little after 6pm, when one car seems to go off course immediately after leaving the start line. End of day!

We keep the car in line so it will be able to go out early the next morning, and after that it will be ready for me to run the salt. But we're done for today. I've been here for four days, but still don't know what it's like to drive fast on the salt.

DAY 6: I arrive at the track at 7am. There's cloud cover on the horizon, but you can see the sun peeking out as it comes up. Weather is perfect—cool and soon to be partly sunny. John goes out about 9:15am and gets a good run—174 mph.

While walking around the pits, I look over and see someone I recognize, but didn't expect to see here—Ray Evernham, who tells me he's doing a documentary on the Bonneville Salt Flats. He said Erin told him I was going to be here and said let's



do an interview. I get suited up and we do that.

Now that John has his first two licensing runs done, it's time to get the car ready for me to run. This involves installing the seat insert, pads and additional seat belts (cheek belts). At about 12:15 I get my first run down the salt!

You've heard the saying "flying blind." Well, my first runs down the salt were literally driving blind. I've never done anything in racing quite like this—no real seat of the pants feel, and can't see much at all. Between the vibrations, distortion in the canopy, the bright white salt, the wide space between two blue lines marking the edges of the track (done with environmentally safe fluid) and looking for the mile markers at both edges of the track, you really have no idea where you're going!

I also can't read the GPS gauge on the steering column that indicates speed. And that's the ONLY indicator to give you any idea of how fast you're going (no tach, no temperature gauges, no gear indicator), so I just shift by the sound of the engine. They give me "speed goals" for each gear, but since I can't read the speed, it really doesn't matter. I know the goal is to stay between 125-150mph to get my "D" license. Luckily, I achieve that with a 142.40744 mph.

When they check over the car, they realize the battery is down, so they put a battery charger on it and work on the GPS speed gauge. I abort my next run after the 1-mile because the inertia switch tripped and shut the car off (we didn't realize what it was until John got to the car and saw it had

tripped). At 3:30 I get back in and do a second run, but I can't shift into 4th gear, so I top out in 3rd gear at about 157 mph, which at least earns me my "C" license (150-174 mph). We get back in line, and at 5:40 I get in my third run, but still couldn't get it into 4th gear. I'm getting really frustrated. Long lines, so much work and time spent taking any part of the body off the car to work on it, it's like time stands still. And then when I *do* finally get on the course, something (or maybe me) isn't working.

We call it a day and decide to go to the Salt Flats Café for Mexican dinner. Good call! Time to gather the troops—but my throat is sore and I feel a bad cold coming. The weather is predicted to be windy tomorrow (Monday), which means the course may not even be open. I mention to John that if the track is open, it might be good for him to run the car and check out what's happening with 4th gear. It was left that we'd just see what the weather would be, and they'll check the car out in the morning. I go back to my hotel feeling under the weather (literally) and thinking my getting any more time on the salt is becoming unlikely.

DAY 7: I got a good night's rest and slept in a little, since I figured I wouldn't be running. My cold wasn't any worse, so I figured I'd get some cold medicine, stop at the course to see everyone, go to impound to get my license, and get ready for the drive back to Phoenix. As I'm checking out of the

KEEP RIGHT >>

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hotel, my phone rings and it's Gary from the team, who says, "get suited up—they found the problem with the shift linkage and we're getting ready to run with you in it," so I hustle over to the course. I arrive about 9:30, and the crew are working on the car. Conditions are perfect—no wind, cool (60s), partly cloudy. We load the car on the trailer and transport it to the pits. There are only a few cars around, which is great—NO LINES! There's excitement in the air, and I hear John say "I have a good feeling about this." YES!

I'm going down the course, and the car shuts off two times, so I push the inertia button down twice and keep running (got into 4th easily), but when it happens the third time, I know we aren't going any faster, so I abort the run and go down the turn out area. Bummer!

John and Stainless decide how to fix it so it won't happen again, and we take it back to the start line.

I noticed on my last run how much my situational awareness had improved. Even though I couldn't see any better, it just seemed easier to see what I needed to see. And things now felt like they were happening almost in slow motion rather than fast forward motion. As I looked down the course, I felt the left side of the course looked a bit smoother (plus that line was used for the slower cars the last few days and probably had gotten beaten up less), so I talked with Stainless and told him I'd try to stay closer to the left side.

I learned later I was right, because the workers had "dragged" the left side of the course up to the 2-mile marker that morning (they drag wooden pallets behind trucks to pack down and smooth out the ruts in the salt).

My confidence level had also improved, so as they pushed me from the start line and I dropped the clutch at 30 mph in 1st gear, I was "ON IT" full throttle—and went through the gears aggressively—yes, I'm going for it. All my shifts were by sound (still can't read that damned GPS gauge, and when I do see a number, I don't like it—it's too slow). Sailed into 4th gear—throttle down, just past the 2-mile marker, when the front of the car takes flight and turns toward the right! I go into a couple of spins—pull the parachute lever (which, because I was going backwards, didn't deploy) and land, dug deep into the salt headed up course. I "Bailed Out" (fortunately had practiced that earlier in the week), and by the time the course workers were there, I was out of the car.

I was fine—and amazingly the car wasn't too bad. Fortunately it stayed upright, the nose box was somewhere down course, and the undertray was all torn up, but the cockpit, engine bay and rear body work were all attached and, other than being covered in white salt, were all good.



This was not how it was supposed to go. I knew I didn't do anything wrong; in fact, I felt pretty good about how I handled it.

Then one of the course workers came up and told us my speeds: 177mph at the Quarter (2-1/2) marker (which would earn me my "B" license), and between the 2-3 mile markers (which I was traveling airborne) the speed recorded was 273.63078 mph. How could that be?! The only thing we could determine was I tripped the timing line.

It's hard to put into words how blessed and grateful I am for the opportunities I've had in racing. Running on the salt has been a goal for decades, and to finally get the chance to do it was amazing. I've been asked, "is it what you expected?" and my reply is, "I had no idea what to expect, and kept an open mind." I'm glad I did. In my opinion it is the ultimate challenge and test of courage, commitment, and determination. The patience required, the problem solving, the ability to brave the elements and the determination to keep coming back (whether it's to go for another run or get ready for another year) is beyond anything else I've done in racing.

I've raced SCCA (amateur and pro), IMSA, Indycar, off road, go karts, FIA, vintage, but nothing compares to running on the salt. Yes, there are rules, but there are so many ways to do it which can be successful or get you in trouble.

To some degree I think it's a throwback to what racing used to be like (race what you bring to the track), but don't be fooled: it's not crazy nor easy.

I want to thank Ted Wenz for introducing me to John Goodman, and thank John and the entire Kansas Twisters for giving me this opportunity and giving it everything they had to give.

And thank you to the Utah Salt Flats Racing Association (USFRA) for continuing the legacy and passion of Salt Flats racing—safe is FAST!!

I want to go back! I want to earn my 200 mph Club Membership! ■

Lyn St. James time sheet breakdowns on the short course (averages):

SUNDAY	1st Run
130 Club (1 mile)	115.15096
1-2 Mile	131.05611
Quarter (2-1/2 Mile)	134.43843
2-3 Mile	142.40744
2nd Run	
130 Club (1 mile)	137.35503
1-2 Mile	149.86149
Quarter (2-1/2 Mile)	157.42704
2-3 Mile	157.44307
3rd Run	
130 Club (1 mile)	132.86531
1-2 Mile	148.56701
Quarter (2-1/2 Mile)	153.60874
2-3 Mile	158.42839
MONDAY	
.....aborted	
4th Run	
.....aborted	
5th Run	
130 Club (1 mile)	151.70051
1-2 Mile	166.04504
Quarter (2-1/2 Mile)	177.99668
2-3 Mile	spin/crash