

## Taming the beast!

### Nitro Harley

At Christmas an architect friend of mine in Chicago saw a clip on the internet from a camera strapped on to a nitro-Harley doing a six second run and was astonished! He knew I raced a motorcycle of some sort but didn't quite realise what it was I did and had never been to a drag race, so I tried to explain it to him. This was my reply!

Taming the beast! (or riding a Top Fuel Drag Bike) so how hard can it be?

There are mainly two types of top-fuel bike, supercharged four cylinder machines and massive, normally aspirated V-Twins. (there are some exotic supercharged, smaller capacity, V Twins) I ride a 2800cc, normally aspirated 'Harley' type bike.

Top fuel bikes have two gears, it's an epicyclic auto box shifted under full power by pressing an air button on the left handlebar at half-track! My bike is pro-fuel, only one gear, no transmission, just twist and hang on for dear life!!! Throttle is in the usual place, right hand, but very quick action; it's either on or off! There is no clutch lever, clutches are 'slider' clutches that work the opposite way round to normal clutches, they are the same as the big Top Fuel Dragsters use. Centrifugal force makes a set of weighted arms progressively engage the clutch whilst overcoming a set of adjustable springs. This process is further controlled with timers and hydraulics. Basically a big 'twist-n-go' scooter! Brakes are reversed however, front on the left, back on the right. That is so you can hold the front brake in the burn out but you must remember not to stop yourself with it after the burn out or you will crash. The burn out is to heat up the massive rear slick and has to be very controlled, hold the front brake and give it half throttle until the tire starts burning then, as you feel it gripping, slowly ease off the front brake and let it go, then stop gently with the back brake. The crew chief runs up and checks everything with a glance, inserts the throttle lock pin so he doesn't get run over, then pushes you back to the start line. You have to line up dead straight and in the groove of sticky rubber you just laid. Your crew chief is your lifeline, he starts you, lines you up, wipes your tire, checks all the time for loose bolts, fuel lines, wires, chains etc. and gives you the OK to stage then arms the computer.

You have just used over a gallon of Nitromethane fuel.

Ignore the crowd of 40,000 people watching you and the flashguns of the press. Focus on the tree and your opponent, the start line marshal's are watching closely, they arm the xmas tree (the blue lights at the top) then you pre stage (first set of yellow bulbs), activate your on board computer, arm your electronic and pneumatic timers, tense every muscle including you sphincter, the motor is banging away with 3000 explosions of nitromethane every minute, the vibrations are numbing your fingers and loosening your fillings. Now the noise is deafening, the nitric acid fumes from the burned nitro are drifting up into your helmet making your eyes sting, the flames are pounding at your right leg, you wrap your right hand right round the throttle until it hurts, hold the front brake with one finger, make sure your feet are positioned so that the G force throws them onto the foot pegs and that you are dead upright. You let your opponent stage first, flip your visor down and lock it, stage (the second set of yellow lights), hold your breath, when the three amber lights go out, NAIL THE SONOFAGUN as hard as you can. KABOOM!

The world turns backwards!

The front wheel jumps in the air, the chassis comes up and whacks you in the chest and you are focussed on the finish line 440yds away. Feels like a semi truck just rear-ended you at the traffic lights. Wow, the bike is pulling your arms out of their sockets, the front wheel is getting even higher as the rear tire grows another few inches in diameter. One second into the run you are doing 100mph and pulling a couple of G's. The back end now feels like its on ice and it starts squirming around. Your brain gets pushed into the back of your helmet and, as you approach 180mph, everything goes into tunnel vision because your brain cannot process the information to the sides. Funnily enough this all seems like slow motion as by now your brain is working flat out on adrenaline. Steering is by keeping the bike upright at all times but leaning off it the opposite side to the way you want it to go. You must however pre-empt the correction and make your move the split second you have an inkling that it is not going straight or it will be too late. If that happens you have to kill it quick or you will be in the wall, or worse, in the other lane, mixing it up with another bike. The cars use parachutes to scrub off a lot of speed but they have proved too dangerous on bikes. You must also listen to and feel the motor under your chest, if it goes too rich it will hydraulic and explode, too lean it will go into meltdown. When you cross the finish line you have to roll off the throttle slowly to bring the front wheel down gently like a plane, then ease on the brakes and kill the fuel whilst wrestling with the monster. Twenty foot, 800lb, drag bikes are made to accelerate, not decelerate, all that

weight suddenly transfers to the front wheel from the back wheel, which only has 5lb of air, stops centrifuging and turns into a nasty, wobbly, jelly, whilst the dead motor acts like a big brake. By no means must you sit up in the airstream above 150mph, it will blow you off the bike. You have to do all the above in less than seven seconds so it is intense to say the least.

You just burned three gallons of very expensive fuel and a lot of parts!

There is a drumming in your head and you realise it is your heart beating. It is quite loud when you kill the motor and the slider clutch dis-engages. You veer off the track onto the return road and stop in dead silence. You take your helmet off, you have a fixed, stupid grin on your face that won't go away and you are soaked in sweat. With shaking hands you pull the plug leads and switch off the ignition whilst checking that you haven't lost any fuel or oil. If you have, you tell the fire crew fast in case the next racers skids on it. Time for big man hugs with your opponent as you wonder who won? Your crew chief arrives on the pit bike to tow you back to your trailer where you go over the data from the run on your computer to make any tuning changes. You now have one hour to tear the motor down and check it, put in new oil, fuel, a clutch pack, four spark plugs, a drive belt, new big end shells, charge the battery and fill the air tank. Test fire the beast to make sure it is Ok and the clutch is biting right, fix anything that broke or came loose. You try to eat a hot dog and a coffee while you work. People ask you for autographs while you are under the bike, covered in oil! You try to be gracious and keep cool. If you have a spare moment you get the hydrometer out and mix up another batch of nitro and methanol to a percentage according to weather and track conditions, hoping that you make it thru to the next round and will need it! Next thing there's a TV crew wanting an interview so you throw on your uniform and pick the right sponsors baseball cap then try to think on your feet as they ask the unexpected question! Time to lift the bike down from it's stands, clip the bodywork back on, get the starter cart ready and charged, purge the motor of any dregs of explosive, get your leathers back on, not forgetting your ballistic vest, and wait to be called. After race curfew and you have done all this again you can shower, have a barbeque and unwind, talk to the fans and socialise with the other racers. If you have a major breakage you might have to work all night to fix it.

The philosophical bit.

This is what it means to 'live' for me and nothing is the same once you have done it. Life changes and you cannot cope with the mundane any more, the adrenaline fix is an all-powerful drug and it takes a mighty big scare to cancel its effects.

Of course all that is just 5% of drag racing. The big part is designing, building and tuning a machine that can do all this. Making it go quicker and faster occupies your every waking moment, you live in the garage. Building the perfect beast.

Now that is another feeling altogether!

Fancy a go? You can at the Bulldog Bash, well on your own bike anyway!  
See you at the track. Ian Turberville

Faster, quicker, faster, until the thrill of speed overcomes the fear of death.

Or you run out of money !

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Mr.Spokehead, a tribute to Jim McClure.