Joining the exclusive RR 200mph club

A Pit Bull/KWS Motorsports BMW S 1000 RR has earned the enviable accolade of becoming the fastest RR in the world to date. Specialists from the two companies joined forces to break the hotly-contested ECTA top speed 1000cc production record (P/P) and the 1000cc modified production (MPS/G) record, with rider Chad Millholland.

The standing mile (1.6km) top speed competition took place at an abandoned World War II airfield near Maxton, North Carolina and this unique event consisted of a rider who from a standstill, accelerates over the mile-long course with a goal of having the highest speed through the traps. Horsepower and aerodynamics are key to success, but both are useless without an experienced rider, so KWS Motorsports enlisted the talents of multi-time record holder Chad Millholland on the RR.

The first record attempt was in the 1000cc Production (P/P) class which allows for unlimited engine modification (standard 1000cc displacement) but the bike must look stock from the outside, including the exhaust. Pit Bull and KWS Motorsports selected the BMW S 1000 RR as it makes significant horsepower in stock form and with a few key modifications, the team felt the production record of 190.464mph was attainable.

KWS Motorsports worked closely with its partners at Web Camshafts to build a new camshaft for the unique valve train of the S 1000 RR. The new cams required an entirely new spring and retainer system that KWS developed with SuperTech and these new valve train parts worked perfectly with the KWS CNC Pro Head. In order to boost power and reliability in the challenging environment of top speed competition KWS developed a set of high-compression, lightweight pistons with CP and installed a set of ultra-strong, lightweight H-Beam rods from Carrillo.

Pit Bull focused on the chassis by developing a new Pit Bull Steering Damper kit and a new line of sprockets for the RR. Pit Bull also installed a set of Worldwide Ceramic Bearings in the OEM wheels and KWS installed a set of Worldwide Ceramic Bearings in the transmission.
KWS Motorsports sent Michael Godin to tune the BMW at the track. Godin spent the first part of the event setting up the RR to fit Chad and setting up the Pit Bull gearing perfectly for the mile-long test of speed. Once the time came for the record-setting run, Michael poured in the racing fuel and Chad launched the bike down the track. To the surprise of everybody involved, Millholland shattered the Production 1000cc (P/P) record in his first attempt by almost 12mph with a terminal speed of 202.06505mph (325.192km/h)!

With the Production record in the bag, KWS Motorsport’s Michael Godin installed a Zero Gravity Double Bubble Windscreen, a more aerodynamic front fender, and a LeoVince Exhaust System and then made an attempt at the 1000cc Modified (MPS/G) record. With a little fine-tuning of the aero package and some more horsepower from the LeoVince exhaust system, Millholland was able to go even faster and break the 1000cc Modified (MPS/G) record with a terminal speed of 203.62452mph (327.701km/h), making this particular RR the fastest BMW in the world to date.

Commenting after the record runs, rider Chad Millholland said: “The Pit Bull/KWS Motorsports BMW S 1000 RR is an impressive package for sure. It takes a lot of horsepower to get a stock package above 200mph and this S 1000 RR just takes off like a rocket from 12,000 rpm to redline. The internal ratios are perfect and the OEM quick-shifter is best shifter I have ever used. The whole package is great and the bike was set up perfectly.”

Interestingly, other RRs have recently been in action on the runway and drag strip in the USA and the UK. At the same ‘Maxton Mile’ land speed event, Chad Millholland’s twin brother Zack was also in action on a Brock Performance S 1000 RR BMW using only bolt-on components. Zack, who is also an employee at BMW Motorcycles of Knoxville in Tennessee, managed to run 200.23mph (322.238km/h) on his RR, using only bolt-on components for this one-mile drag race.

And in the UK, motorcycle journalist for Performance Bikes magazine Kev Smith recently took a virtually stock RR to an amazing 202mph (325km/h) at a Straightliners Top Speed event run in conjunction with the UK Land Speed Racing Association. The magazine had previously logged a GPS-recorded 197.289mph by reducing the rear sprocket by two teeth, removing mirrors and indicators, and taping up the fairing gaps.

Believing that they could go even faster, they fitted a full Akrapovic exhaust system, a rear sprocket with one less tooth and a Power Commander V fuel tuning device for this latest run. On setting the amazing time of 202mph, a crowd soon gathered around the RR, asking exactly what had been done to it. “Basically nothing,” was the answer from Performance Bikes’ Mark
White, who concluded: “Our S 1000 RR remains essentially a standard 1000cc production motorcycle with an off-the-shelf pipe, a sprocket swap and some gaffer tape. With its two-year warranty still intact it has just broken two hundred miles an hour in one mile from a standing start. Astonishing.”

For more information about the amazing S 1000 RR, and to subscribe to the BMW Motorrad Motorsport newsletter (in English or German), please visit the all-new www.s1000rr.com website.