



Ross Brawn brought the team abandoned by Honda back from the brink, well enough to dominate the opening Grand Prix of the season



Zero to hero

How Brawn came back from the brink

In the summer of 2008 Honda evaluated both mechanical flywheel and battery electric Kinetic Energy Recovery Systems (KERS) solutions. The latter echoed (if only distantly) Honda hybrid road car technology. *F1 Race Technology* suggested to Ross Brawn that ultimately the choice of KERS might be decided by the marketing strategy of the team's paymasters in Japan. In response Brawn made it clear that he personally would make the call, based purely upon competitive consideration, with no interference from Japan. He made it very evident that in appointing him Team Principal, Honda had given him full authority to do the job unshackled and with no corporate dictated compromises.

It was this faith in Brawn by Honda that ultimately led to the Brawn GP team's success at the opening Grand Prix of the 2009 season. When in November 2008 Honda's main board made the decision to pull out of Grand Prix racing it gave its Brackley, England team until the start of the 2009 season to finish its new car, find an alternative supply of engines and find a new owner. At first there was talk of an encouraging number of potential buyers but none of them emerged as a party to whom Honda was happy to pass the reigns rather than shut shop. However, Honda did have sufficient faith in Ross Brawn ultimately to let him have full ownership and to support his effort to build a solid financial base going forward.

The Virgin Group had been involved in discussions over future

ownership and on the eve of the 2009 season opener in Melbourne, Australia it signed as a major sponsor of Brawn GP. Group owner Richard Branson made it clear that his successful business was investing in Ross Brawn, echoing the faith shown by Honda. Of course, getting from the black day when Honda sent all of its V8s from Brackley back to its Bracknell, UK engine preparation base to the red-letter day when the Brawn-Mercedes-Benz first ran on track had been far from a straightforward process. "Several times over the winter it was difficult to see the way forward," Brawn admitted in Melbourne. "With a big corporation like Honda, you don't get quick decisions..."

The car that Brawn GP rolled out onto the Melbourne pit road was essentially the Honda 1090 design for 2009 adapted to take the Mercedes-Benz V8 and retaining the transmission originally designed for it, whereas the other Mercedes-Benz customer team, Force India, had opted for a complete drivetrain package, including a McLaren-developed gearbox and the MBHPE KERS plus engineering cooperation. For logistical reasons Brawn GP had decided to start without a commitment to running KERS. However, the KERS tests it had undertaken as Honda were indicative of the amount of preparation it had put into its 2009 car, which traced back to before Brawn even arrived as Team Principal on November 26 2007.

In fact the Brawn BGP 001 was the culmination of a project that commenced within days of confirmation of the 2009 regulations,

in late October 2007. That was when Honda tasked the small Super Aguri team in Leafield, England with initial investigation into the 2009 rules. The team had done an amazing job of converting a four year old Arrows well enough to set seventh fastest race lap at the 2006 season closing Brazilian Grand Prix. For its second year (2007) Super Aguri received a (2006-specification) Honda 1060 and developed its own aero package, as in 2006 running a 50% scale model in the Teddington, London wind tunnel used for many years by McLaren (prior to that team's current facility, which came in 2003 as an integral part of its new 'McLaren Technology Centre').

The 2007 Super Aguri car proved a thorn in the side of the factory Honda team but nevertheless the private squad failed to find the sponsorship it needed to stop it being a financial drain upon Honda. The future of the team at the end of the 2007 season was thus uncertain, which is when Honda tasked it to start research for the 2009 rules.

In July 2008 Red Bull technical chief Adrian Newey remarked to *F1 Race Technology*: "The 2009 changes were announced last October and then it really comes down to a resource battle – for instance, I have been told that Honda is currently using four wind tunnels. It becomes difficult to compete with that!"

It would seem that the four tunnels in question were Teddington, the two tunnels at Honda F1 in Brackley and a tunnel in Japan. By this stage Super Aguri had been closed down but its small aero team led by Ben Wood had been taken under the wing of the Head of Aerodynamics at Honda F1, Loic Bigois and had thus been able to continue its work in preparation for 2009. It would seem that the wind tunnel work in Japan was short lived and that the Super Aguri project was moved from Teddington to Brackley, which meant that for the most part Honda used two tunnels – matching in this respect Williams and Toyota.

So it was that the small Super Aguri research project grew into the Honda 1090 – which before long the team was called upon to convert

ROSS BRAWN



Team Principal, Brawn GP

Ross Brawn studied instrumentation in the atomic industry before starting his career in racing as a machinist at March Cars in 1976. He worked as a mechanic for March before taking another machinist job, this time at Williams Grand Prix Engineering. At Williams he rose to become a technician in the R&D department and then an aerodynamicist. After eight years at Williams he joined the short-lived Force team as an aerodynamicist, then at the end of

1986 he was appointed Chief Designer for Arrows.

The competitiveness of Brawn's designs for Arrows led to him joining TWR where he designed the 1991 Sportscar World Championship winning Jaguar. TWR's involvement with the Benetton team then led to Brawn becoming its Technical Director, overseeing the 1994 and 1995 World Championship wins. Brawn then followed Michael Schumacher to Ferrari, where he was Technical Director until taking a sabbatical from racing in 2007. At the end of that year he joined Honda as Team Principal and early in 2009 he bought the team.

to Mercedes-Benz power. Clearly a considerable amount of research had been done into the requirements of 2009 but the disruption of the unexpected Honda withdrawal and consequent change of engine were not in the interests of making the late-arriving Brawn-Mercedes Benz BGP 001 the most promising of the class of 2009...

Nevertheless, all involved had done a superb job and the upshot was a Brawn-Mercedes-Benz BGP 001 quick enough to take the front row at Melbourne and to finish first and second in the race, Jenson Button leading from pole to chequered flag.

Above all this was another amazing chapter in the story of a schoolboy who had an article published on re-winding slot car motors, who went on to start a career in racing on the shop floor at March Cars as a machinist. A driven racing enthusiast who went on to gain experience as a mechanic, technician, aerodynamicist and racecar designer before overseeing as Technical Director of Benetton and then Ferrari no less than seven World Championship titles for Michael Schumacher.

Where will the Ross Brawn story go next?



Early testing of the BGP 001. Photograph: Francesc Clariana

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