



MANY OF US HAVE EXPERIENCE OF BSA'S BOTTOM OF THE RANGE, SMALL CAPACITY TWO-STROKE SINGLE, INVARIABLY AS A CHEAP FIELD BIKE OR COMMUTER, A 125CC LEARNER BIKE OR, FOR OLDER READERS, AS A GPO TELEGRAM DELIVERY VEHICLE.

Bonnie Bantams

TEAM ROOSTER BOOSTER'S SALTY CHICKEN WINGS

Throughout its production period from 1948 to 1971, the Bantam was never really thought of as a sporting machine, although there were numerous bikes converted for trials use, and even as

circuit and road racers, including racing at the TT! And, although every Bantam owner would kill for a little more speed, that statement in itself would suggest they were never ideal top speed bikes...

Not that suitability for any given objective has ever played a part

in custom bike building, and nor should it be – which makes it all the more pleasing for us to be able to bring you these two little Beezas. Let me rephrase that; these two record-breaking little Beezas!

Karl Meredith, Stephen Roberts and Nick Spalding have all had a





brazing to be done on the heads prior to the porting work, thus preventing the exhaust port from breaking out through the barrel. That barrel tuning spec was the result of meticulous calculations by Karl, with the machining work undertaken by renowned scooter tuner, Mark Broadhurst. A Mikuni flatslide carb provides fuel for both bikes, with bespoke expansion chamber exhausts by Pete Hoy at TDR Scooters spitting out the burnt hydrocarbons.

While the engine components were being dealt with, Malcolm at Metal Malarkey, deep in the Shropshire undergrowth, was making a one-off frame for Steve's bike, modifying Karl's frame, and fabricating swinging



Bonnie Bantams

barrels must be used, along with

lifelong interest in motorcycles, they all work at the same place, and all three are, pretty much, of a certain age. An age at which a gentleman is wont to say 'stuff it' and blow a significant sum of money on a ridiculously fast and expensive vehicle in what some folk would judge as being a vain effort to recapture their youth. Of course, us blokes know that we've always wanted the 'boys toys', and that the 'certain age' just happens to coincide with a bit of spare cash, and the sudden realisation that if we're going to do something, we really need to do it now!

Being avid engineers (all three work at the CastAlum die-casting company in Welshpool), and wanting to do something truly British, they came up with the idea of building a pair of BSA Bantams to use in top speed events. Or, to be precise, at the Southern California Timing Association's Speed Week meeting at Bonneville Salt Flats.

By using Bantams as their base models, the trio, now operating under the name of 'Team Rooster Booster,' would be racing in the Vintage classes, for which the SCTA dictates that standard crankcases and

points ignition and fuelling by carburettor. Of course, that doesn't mean that the crankcases and barrel can't be modified, while carbs can be of any origin! To split the three riders into three classes, Karl retained the production frame, Steve opted for a 'special construction' frame to put him in the APS category, and Nick was to ride Karl's bike in a class with a different fuel (VF, meaning any fuel can be used, rather than the VG class, which uses a specific 'gas' dispensed at the venue), although in the event, they didn't actually use different fuel, instead, just modifying the bike a little to conform to the regs, with a remote fuel cut-off device fitted to the handlebar.

All of this is getting ahead of ourselves, though, because the



project began by modifying the original 125cc two-stroke single to make it considerably faster, and that tuning work comprised more than just a spot of porting and changing of jets. Oh no, work on the engines began a full eighteen months before the bikes hit the salt, and involved

a virtually complete redesign of the engine, albeit still using the standard crankcases and barrel, as per the rules.

As the standard engine only revs to about 5000rpm, it was clear that vast improvements could be made if the engine could rev higher. The fact that the two bikes now kick out at around 12,000rpm suggests that the bespoke cranks, with a reduced stroke of 54mm, work rather well. With a connecting rod from a KTM 200 bolted onto the crank, a Yamaha YZ125 piston sits in the reworked barrel beneath the cylinder head, which was machined to incorporate some additional cooling fins. While these fins do, indeed, provide extra cooling, the primary reason was to allow some



arms for both. Malcolm provided a wealth of knowledge for the builds, not just for the chassis work, but also in sourcing various components for the bikes, like the digital rev counters and the embossed leather seat on Karl's bike.

With time passing swiftly by, one of the two engines was fitted into a spare frame in order to carry out some dyno tuning, with an output of 18bhp being recorded. This may not sound like much, given the intensive amount of precision machining and ultra-fine tuning involved, but you have to remember that the original Bantam was hard pushed to squeeze out even half a dozen bee-haitch-pee...

When I called in to see the bikes at the CastAlum HQ, the team was frantically involved in preparing the chassis for their trip across the Atlantic. The engines were going to be travelling separately, as hand luggage, in order to provide a bit more fettle time for the motors.

Of course, this meant that the bikes would have to be built when Team Rooster Booster arrived Stateside, and a camp site in Wendover became a temporary workshop before five sweltering fourteen-hour days out on the salt. Yes, the first time that the bikes moved under their own power was when they left the line of the four-mile course. No pressure there, then!

Previously, the class records had stood in the mid-60mph region. That may sound rather sedate when it's lower than our national speed limit, but then again, Bonneville is nothing remotely like a motorway. It's over four thousand feet above sea level, for starters, so there are significant reductions in oxygen levels here. And then there's the quality of the racing surface. For big horsepower machinery, the salt is a problem because it doesn't give the traction required, but for small capacity, low power vehicles, it's

the drag of the salt that pulls down speeds.

The thin air issue was resolved by the air filters being replaced with tea strainers (now there's a truly British modification!), while traction problems were addressed by tweaking the gearing, although the standard three-speed gearboxes meant that the shift into top gear dropped the bikes out of the powerband. The answer, discarding all sentimentality and mechanical sympathy, was to violently slip the clutch, which proved to be surprisingly effective.

As we mentioned earlier, the trip to Bonneville was an unqualified success. Karl's MPS-VG bike clocked an average speed of 79mph (a new record) and, when it was converted to MPS-VF spec for Nick, ran an average of 82mph (another record). Finishing off the week in fine style was Steve's APS-VG bike, clocking



SPEC: KARL'S (THE SILVER ONE)

ENGINE: BSA Bantam 125cc, welded and modified crankcases, new oilways, larger bearings, barrel porting position changed and aluminium shroud made, one-off crankshaft with 54mm stroke, KTM 200 con rod, Yamaha YZ125 piston, cylinder head machined, new inlet stub, Mikuni TM32 flatslide carb, exhaust by Pete Hoy at TDR Scooters, aftermarket points ignition, barrel tuning to Karl's spec by Mark Broadhurst.

FRAME: BSA Bantam frame modified by Malcolm at Metal Malarkey.

FRONT END: Yamaha YB100 forks, yokes and wheel.

REAR END: Bantam hub, alloy rim with stainless spokes, Hagon shocks.

MISCELLANEOUS: Ragged Edge Racing fairing and seat, modified Bantam fuel tank by Metal Malarkey, embossed leather seat.

PAINT AND FINISH: Paintwork by Shropshire Classic Sprayers.

STEVE'S (THE RED ONE)

ENGINE: BSA Bantam 125cc, welded and modified crankcases, new oilways, larger bearings, barrel porting position changed and aluminium shroud made, one-off crankshaft with 54mm stroke, KTM 200 con rod, Yamaha YZ125 piston, cylinder head machined, new inlet stub, Mikuni TM32 flatslide carb, exhaust by Pete Hoy at TDR Scooters, aftermarket points ignition, barrel tuning to Karl's spec by Mark Broadhurst.

FRAME: One-off twin cradle steel frame by Malcolm at Metal Malarkey.

FRONT END: Honda 125 front end, no brakes, Honda Dream 50 wheel, speedo from John at Digital Speedos.

REAR END: Honda Dream 50 wheel, Metal Malarkey swinging arm, Hagon shocks.

MISCELLANEOUS: Honda Dream 50 tank and seat unit, Ron Ponti race fairing.

PAINT AND FINISH: Paintwork by Shropshire Classic Sprayers.

THANKS FROM BOTH TO: "Mal at Metal Malarkey, John at Digital Speedos, TDR Scooters, Mark Broadhurst, Rex and Deb Caunt, Peter Savage, Shropshire Classic Sprayers, Colorado British Vintage Motorcycle Club, CastAlum for the use of their machinery and space in the training room to build the bikes ... and for employing us!"



Bonnie Bantams



an average 84mph and, yes, that was a new record, too. Remember, those speeds are averages, and both bikes clocked over 85mph on their final runs, and they were getting faster every day the team spent on the salt. They should be even faster now, as they're just about run in... Astoundingly, each engine has clocked less than twenty miles. Having said that, both engines seized at some point, one undergoing a frantic total rebuild within four hours before making its return run!

All three records set by Team Rooster Booster broke those that'd been held by Americans riding Harley Hummers, some of whom were more graceful about the fact than others; to quote one rider; "These damn Brits are kickin' my ass."

I think you'll find that you mean 'arse,' my good man.

words & photos: **DAVE MANNING**