



Rob Luck drives Production Proto 001.

You peel off the Peninsula Freeway near Mornington and ahead lies the 34 corners of the steep ascent to Arthur's Seat, 314 metres (1600 ft) above sea level). On this day we get a completely clear run all the way to the summit and the Nagari carves the corners like a vet race car, accelerating relentlessly between the tight hairpins and dancing, slightly tail-out, through the fast kinks in between. There are just two positions – foot flat on the throttle, foot flat on the brake. You can tell if a car is good if it will maintain that discipline right through a course – no throttle feathering or coasting to corners. And the Nagari is good. Thoroughbred. It just delivers, whatever you throw at it.

You know when you are going pretty quick when an experienced motoring man in the passenger seat is braking ahead of you. So it was with Campbell Bolwell on this day – bravely strapped into the second seat and inviting me to do my worst – or best.

'Are you getting a bit of oversteer on the fast ones,' he says calmly, while trying to pull the armrest off the door.

'Yes,' I say ' but we are near the limit and the kinks here are mainly off-camber. '

In fact, the tail just steps out a fraction and virtually self-corrects. Nothing more than a flinch on the tiller, or you can drive it through the drift with the throttle.

The automatic is sensational to use in this application – you can left foot brake into the tight corners, while shunting down the gearbox for the right slot. Going up the box you can leave it to self-shift at its own limit as the computer selects the ideal intersection of torque and revs, flaring smoothly in the up-shifts so that all the engine output is maximised.

This is a great road, famous for its remarkable variety of challenging curves, but it is not billiard-table smooth. One of the impressive things about the Nagari is the way it catapults you through bumpy and undulating curves without shifting a millimetre off-line. Enormously confidence-inspiring.

We tear-on over the summit, and run the ridgeline right down to Red Hill and beyond, carving through the vineyards and sleepy farmlets of highway C789, experimenting with different shift techniques (manual, paddle, auto) and shift points.

Then we do it all again in reverse. And again. Too much fun.

The action photos attached were shot on this road. Look closely and you can see just how flat and neat the car handles the turns, despite near-the-limit pace.

Supercar is one of motoring's most overused epithets, mainly due to journalists trying to outdo each other. But few of them have identified the true supercar specifications lurking under the Nagari envelope. And few cars are more misunderstood than the new Bolwell Nagari. Because this car is all about power-to-weight ratio, not absolute power.

This is the real magic of this machine – a car as revolutionary in supercar circles as the Honda NSX was in its day.

Everyone understands the traditional supercar approach – you take the biggest, fattest, most powerful engine you can find and then you construct a monolith around it. Think most Ferraris, Lamborghinis, Mercedes sports, Bugatti Veyron. Think massive V10s, V12s, some loaded up with super or turbochargers.

The problem with this approach is that everything has to grow big to accommodate the engine – the chassis, the suspension, the brakes. You end up with behemoths that take massive amounts of engineering and grow to 1.5 tonnes or more, invoke huge forces to accelerate, corner and brake and require shares in an oilwell to drive. Supercars they may be but super-efficient they are not.

The Nagari starts from an entirely different perspective – how about a chassis platform that weighs 25kg and a central capsule that turns the scales under 100kg. All courtesy of radical, lightweight, super-strength materials cleverly engineered for strength and rigidity.

Not only do you get a central chassis 5 times more rigid than the average sportscar, but one which is probably 2 to 3 times stiffer than almost any supercar out there.

The bonus is a capsule that attains safety standards undreamt of outside race-car technology – now think Indycars, carbon-fibre/composite engineering marvels that can smack concrete at 400km/h without nerfing the driver.

When you start from this approach, you immediately start drawing paychecks. A small, lightweight motor is easily accommodated in a super-compact engine compartment that guarantees economy of overall dimension and weight. Easy to build this powerplant into a lightweight one-piece chassis frame, and fix-it to that capsule with just four bolts (quick-release couplings for electrics enable it to be dropped quickly if required).

Now your package has grown to about 550kg – body, engine, transmission, drives.

Easy then, to accommodate lightweight but strong, high-tech suspension – fabricated wishbones (front) and radius rods (rear) suspending magnificent fully-cast (to aircraft standards) uprights to carry wheels, and race-standard brakes.

After adding body panels, cockpit fitout, every luxury you could imagine for a supercar (from aircon to TV rear vision), an accommodating boot, and the final external hardware, you have a package that hits the scales around 850kg. Absolutely unheard of in supercar circles.

Now you have some real performance choices.

Choice one is the basic engine – a 3-litre all-alloy V6 quad-cam, 24-valve 'cooking motor' extracted from the Toyota Aurion in stock standard format, producing 200kW and 336Nm of torque.

This is in fact the base powerplant for the Nagari, and the one I tested in this car – Nagari 001, the first production prototype.

I ran this car against the clock and the figures are pretty revealing. I'd like to be reporting a very detailed set of figures, but QANTAS managed to lose my luggage, then lose my test computer altogether. So with replacement equipment, I recorded zero-to-100km/h times in manual selector, paddle and auto. In the end, the auto-select squeaked in, but all three methods produced times ranging from 5.1 to 5.4 secs.

This of course puts the Nagari in Porsche Carrera territory and some other pretty good company besides. But it needs some qualification. It was impossible to break the car loose on kick-start except by selecting manual and holding on the brake for several seconds. Then – just a chirp.

This clearly indicates very tall gearing and a review of specs back at the factory confirmed this.

The standard six-speeder has two overdrive ratios at the top end and fourth is 1 to 1. The other three ratios are spaced to provide reasonable performance in an Aurion with the best possible fuel-economy - a key requirement in this marketplace. An example is first gear, which runs to more than 75km/h on this car.

This does not suit the Nagari at all, and a simple change of final drive would quickly drive acceleration times well below the 5-sec mark. Carefully selected gearbox ratios would provide further gains – likely down to the high 3-secs level.

The upside is fuel economy. Aurion delivers 9.9l/100km (28.2mpg) from 1.5tonnes with this engine. The Nagari will deliver about 6.5l/100km (43mpg). That's the flip-side of an efficient power-weight ratio.

Of course there are upscale engine options available off-the-shelf and early reports and Bolwell's own pre-release spec sheet indicated a supercharged version. The Aurion's supercharged engine (from the TRD) produces 241kw at the same 6500rpm and 400Nm of torque at a lower 4000rpm (on PULP instead of ULP which the standard mill will drink).

Apart from this 25%+ increase in engine performance, the Toyota blown motor produces a claimed 300Nm of its torque in a near-flat curve from 1250 to redline. This is another feature which would greatly enhance the Nagari's performance as this four-lobe Eaton TVSW-blown engine is less peaky than the standard-aspirated motor.

You can do your own paper-calculations but it is likely this engine would propel the ultra-light Nagari into the low-3sec zone. Personally I would like to see Bolwell shoehorn a supercharged motor mated to a close-ratio transmission and high final drive as soon as possible so that the true potential of this genuine supercar can be assessed. We might all get a pleasant surprise.

Certainly, for a premium of say another \$50,000, you would have arguably the world's best performance-for-money supercar.

Of course, if this car was on the market in Supercar HQ (Germany) by now there would probably be a Brabus-Nagari and a few other super-supercar derivatives. Given the ultimate potential of this engine (modifiers can easily extract 300kw from it and still have a tractable drive) it is not hard to imagine a high two-second supercar. That would certainly make folks sit up straight in their Recaros.

Meantime, the existing car has all the credentials for a high-performance sportscar. Most impressive is the lunging power available in the mid-range or 'overtaking zone'. Press the throttle and the car explodes forward with seamless and almost imperceptible up-shifts which makes for safe and instantaneous overtaking. The same characteristics mean unlimited performance and responsiveness in the twisty bits.

The choices offered by the transmission should suit all drivers. Automatic provides the best all-round performance and offers drivers unique control and additional safety through left-foot braking. The combination of automatic and left-foot braking is the new-generation 'heel-and-toe' for enthusiasts and something every competent driver should master and utilise everyday when driving autos.

For those who want to become more involved in the shifting process, there is the choice of sequential shifting or the steering-column paddles. The paddles fitted to the Nagari are well-suited to the car and make paddle-shifting a cinch in all types of corners. However the sequential shifter may prove easier for most.

Contrary to the experience of most supercars and what you might expect with the Nagari, there are no blind-spots when on the road. The buttresses do not impinge on lateral vision and the mirror choice works really well. The only place care may be required is in awkward reversing manoeuvres in garages. Otherwise it is fine. And the all-round visibility is excellent.

Bolwell has down-scaled the brakes slightly retaining four-pots on the front but opting for standard two-pots on the rear. The initial prognosis was clearly overkill for a vehicle of this weight. With some absolutely vicious trail-braking on poor bitumen or gravel-strewn blacktop, I got a little ABS pulsing, but otherwise brakes performed like race-car brakes.

Despite the screwed-down, super-flat handling, the ride quality is very good – smooth, with no pitch or bottoming. It is one of the least-tiring high performance cars I've driven. Like a Porsche, you could live with it every day.

Faults? Remarkably few. Punching hard on a couple of very tight, quite rough hairpins, we shook loose an inner guard panel which later needed adjustment. Some people find the body shape a bit too retro and others think it is too busy. Personally I think a problem is most of the photography to date hasn't brought out the best angles of the car and I concentrated on this during my photo shoot. I think the results show the car in a completely different light. It is also worth noting that the body finish quality is absolutely outstanding and the interior is pretty good too.

Most issues I have centre around the transmission and final drive ratios. And of course I'd like to see that upscale motor slotted into the quick-release engine chassis. I don't think I'm alone there.

If this car had been launched in the UK or Europe, I would guess there would be orders for a few hundred backed-up. In Australia, it has been slowed by the size and relative immaturity of the sportscar market, and to some extent the dreaded Aussie cultural cringe. But a major factor that has worked against it is inadequate reviews from journalists who simply don't understand the car.

I believe the answer is firepower. Hit the market with a serious power-up version and the performance figures will do the talking. And the car will sell itself.

For \$200K there is nothing on the market in terms of advanced technology and performance for money. For \$250K or so, it will be a serious ball-breaker in the supercar ranks with refinement to match the best.

Breakout: Rob Luck – Short Profile

As Editor of Sports Car World, Rob Luck broke the first news and undertook the first road tests on the Mark 7 Bolwell. What was not known at the time, was that Rob ‘engineered’ a series of leaks and ‘scoops’ with Bolwell to create the unprecedented level of interest in this type of car at the time. This was a breakthrough marketing concept that has since been utilised by many major manufacturers.

This was the start of what became a lifelong affiliation with the Bolwell brothers and key staff.

When the ‘Holden crisis’ arose as the Bolwells were planning their Mk7 successor, Rob stepped in with a solution. He persuaded Campbell and Graham to consider re-engineering the car for a V8, then did the famous deal with Ford to get engine supply. At the time Rob thought this would be an excellent fit with the Mk8 nomenclature, although the shift to a name instead of a type had already been mooted.

Rob’s family later acquired the original Barry Mayne Nagari racing chassis which was mated with an original Nagari convertible body. With the help of Wayne Draper (then Director of the Automotive Design Institute at RMIT), Ford design staff, Bob McWilliam of GT HO fame, and many others including Bolwell enthusiast Karl Helene, Rob set about building the ultimate ‘retro-Nagari’.

It involved comprehensive re-crafting of the original Nagari convertible body in such a way that the original lines were retained although the body was completely re-sculpted. This concept for a retro sports car was later emulated by leading manufacturers such as Ford for their GT40 and Mustang.

The car, dubbed Nagari 2000, was exhibited at Motor Shows across Australia under the auspices of Rob’s then magazine, Australian Road & Track, winning ‘People’s Choice’ awards at various venues. Expressions of interest were taken for more than 25 vehicles at a price of \$200,000, but Rob and his family decided not to proceed with a manufactured version. This car is now being converted from show/race condition to road condition by Glenn Goldfinch in a new state-of-the-art workshop in South Sydney.

When Campbell decided to produce a new Nagari he again conferred with Rob who agreed that the ideal design approach would be based on an ultra-light, ultra-stiff reinforced central cockpit capsule.

Rob has followed the new Nagari from the drawing board and was recently invited to do the first full test of the current production proto.

He spent a great deal of personal time with Campbell, reviewed the factory and drove and photographed the car extensively. This is the first of some reports Rob has agreed to provide exclusively for Slipstream.